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Early Medieval Archaeology Project (EMAP)
Report 4.2

Early Medieval Dwellings and Settlements in Ireland, AD400-1100

Vol. 2: Gazetteer of Site Descriptions



Thomas Kerr, Lorcan Harney, Jonathan Kinsella,
Aidan O'Sullivan and Finbar McCormick

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Vol. 2: A Gazetteer of Site Descriptions Version 2

by
Thomas Kerr, Lorcan Harney, Jonathan Kinsella,
Aidan O'Sullivan and Finbar McCormick

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1. Introduction

EMAP initially worked on the first draft of the Settlement Gazetteer (Vol. II) between July and December 2009. Between July and November in 2010, EMAP has written its preceding report (Vol. I), which is a thematic appraisal of the rural, ecclesiastical and urban settlement evidence from early medieval Ireland and explores the types of dwellings, enclosures, unenclosed settlements and related agricultural, industrial and craft activities. EMAP has also added additional site summaries to Vol. II although the time constraints of our research meant it was again impossible to include all significant settlement excavations. We have also updated or re-written certain site summaries based on newly published information or on feedback and comments from site directors.

The updated draft of the Gazetteer consists of 241 site summaries, although excavations on urban sites, and large scale multi-season excavations (e.g. Clonmacnoise, Co. Offaly), have been included as one summary. These represent a select number of key or significant excavations undertaken on early medieval settlement sites in Ireland between 1930 and 2008. These summaries were short-listed for inclusion in the gazetteer based on the quality of archaeological material recovered. Although they represent roughly 10% of the total early medieval excavations undertaken during this period (O'Sullivan *et al* forthcoming), because many of those excavations were of 'no archaeological significance' this present report accounts for a high proportion of archaeological sites of significance. For those excavated post-1970, this was done with reference to the Excavations Bulletin (http://www.excavations.ie), which allowed a complete list of excavations for this period to be drawn up and assessed. Those sites which uncovered structural remains, which had good stratigraphy and dating, and which produced quantities of artefacts and ecofacts were then further examined and a short produced. The short-listing of sites excavated pre-1970 was a rather simpler process and consisted largely of reading published excavation reports. Although summaries of certain ecclesiastical and cemetery sites are also included in the gazetteer, these focus on the settlement evidence from these sites, rather than church architecture or skeletal populations.

In this report, each site summary provides key information in concise form, including the **Site name and County;** the **Type** of site (e.g. 'Early Medieval Settlement Enclosure') the **National Grid Reference**, the **SMR No**., the **Excavation Licence No.,** the **Excavation Duration/Year** (months and years when the excavation was carried out) and finally the **Site Director**, which information is usually but not always linked to the Licence itself. The site summary then provides a concise, focused **site description** providing information on location, site dimensions, phasing and general chronology and any site activities implied by various features and finds. All available **radiocarbon dates** are then provided, both in uncalibrated and calibrated form, in a table towards the end of each site summary (we suspect that this will be a key resource for all researchers. Finally, an individual site's **bibliography** of previous publications or unpublished reports is listed.

The summaries are based on a variety of original sources. In many cases they represent a précis of published work (updated with more recent discoveries where necessary). Published excavation reports were found in a large number of different works and journals, and incorporating differing levels of detail. The major regional and county archaeological journals were a rich resource (e.g. the *Ulster Journal of Archaeology* has large numbers of Northern Irish excavations, and the *Journal of the Cork Archaeological and Historical Society* incorporates many of the excavations undertaken in south Munster); as were the *Proceedings of the Royal Irish Academy* and the *Journal of the Royal Society of Antiquaries of Ireland*. Smaller local journals such as *Ríocht na Mídhe* and the *Clogher Journal* were also consulted. Excavation reports were also found in *festschriften* (e.g. M.J. O'Kelly's excavations at Knockea, Co. Limerick were included in *North Munster Studies: Essays in Commemoration of Monsignor Michael Moloney* (Rynne 1967)), as well as in company-produced monographs

(e.g. *Three Irish Gas Pipelines: New Archaeological Evidence in Munster* (Gowen 1988); *Pieces of the Past: Archaeological Excavations by the Department of the Environment for Northern Ireland 1970-1986* (Hamlin and Lynn 1988)). More recently the series of excellent seminar proceedings and monographs produced by the National Roads Authority (e.g. O'Sullivan and Stanley 2005, 2006, 2007, 2008; Stanley *et al* 2009, 2010) have been instrumental in popularising excavations undertaken on various road schemes in the 2000s.

A large number of these summaries are, however, based on unpublished (or incompletely published) excavation reports. These sites were identified by EMAP primarily from the excavators' previous concise summaries included in the Excavations Bulletin, and were then augmented by a more detailed excavation report received either directly from the excavator, or consulted at the Department of the Environment (St Stephen's Green, Dublin), or the Northern Ireland Environment Agency (Hill Street, Belfast). Internet resources were also highly important in collating these excavations, especially the NRA website (http://www.nra.ie/Archaeology/), which has made available excavation reports on a number of major roadways, as well as the home pages of certain commercial companies, for example the innovative and hopefully influential Eachtra Journal recently produced online by Eachtra Archaeological Projects (http://eachtra.ie/index.php/journal/).

As already mentioned, due to the nature of such works as this, there is always the possibility – nay certainty - that certain key sites have been omitted. The starting date for the gazetteer (1930) means, for example, that H.C. Lawlor's excavations at Nendrum, Co. Down are not summarised here (Lawlor 1925). The general closing date (2005) is dictated by the most up-to-date version of the Excavations Bulletin, but certainly many post-2005 excavations are included here since they have appeared in other publications or websites. Time constraints, and problems in accessing certain reports, have also meant that certain excavations (e.g. those in Limerick City) have not been summarised here. In a similar fashion it has not been able to reproduce site plans for every excavation since a number of excavation reports do not include relevant illustrations. In short, although many settlements summaries have been produced by EMAP in 2009 and 2010 (incorporating an eleven-month period and including the writing of the Vol. I report), unfortunately there is much that has been omitted, largely due to the brief period of time available to us.

A Note on Terminologies

In terms of terminology, we have attempted to use standard terms for site types. The terms 'rath' and 'ringfort', which cover the predominant settlement type from this period, have often been used interchangeably, although 'ringfort' tends to be preferred in the Republic of Ireland, and 'rath' in Northern Ireland. Partly to resolve this conflict, and partly to deal with the issue of 'non-circular' enclosure (Kinsella 2010), it was decided to reclassify all these as 'settlement enclosures'. As such there are five major groupings of early medieval settlement types discussed in this volume (Fig. 1).

●	SETTLEMENT ENCLOSURE
▲	UNENCLOSED SETTLEMENT
★	SETTLEMENT-CEMETERY
✝	ECCLESIASTICAL SETTLEMENT
■	CRANNOG

Key to symbols used in county distribution maps.

The site summaries are divided by county (only counties Carlow and Cavan have a nil return). Within the counties, the site descriptions are arranged alphabetically by townland, with the exception of those sites, such as Lisnagun, Co. Cork (O'Sullivan *et al* 1998), which are more

commonly known by a particular site name. In these cases, however, the townland name is also included to assist in locating the site through the Sites and Monuments Database of the Archaeological Survey of Ireland, or the Sites and Monuments Record in Northern Ireland. To also assist in locating the site the grid reference is given both as a lettered grid square and four figure eastings and northings (e.g. A12345678), as well as the equivalent in the more recently adopted six figure coordinate system (e.g. 123456/123456).

There are other issues too relating to our ongoing uses of terminology in archaeology generally. For example, drawing on the most recent work (Campbell 2007; O'Sullivan *et al* forthcoming) it was decided to reclassify imported pottery recorded in the archaeological record. Thus Phocaean Red Slip Ware is preferred to the earlier A ware; and Late Roman Amphora is preferred to B ware.

In order to maintain uniformity throughout, all radiocarbon dates were recalibrated according to the most recent calibrations curve (Reimer *et al* 2004) using the Calib programme. Marine reservoir corrections were applied where necessary and are so indicated in the radiocarbon table. All dates were calibrated to 2Σ, but the shape of the calibration curve at certain points meant that a number of potential date ranges were returned. The most probable of these date ranges (i.e. 85%+ of 2Σ calibration (equivalent to approximately 80% overall probability)) are indicated in bold type, and the remainder left in normal type. In a number of cases the original radiocarbon dates were not available for recalibration, but a calibrated figure was quoted in the text. This has been included in the radiocarbon table, but marked in red. Within the text those dates which have been recalibrated under Reimer et al. 2004 are indicated thus: A.D., whereas those dates which were pre-calibrated, but not re-calibrated, are indicated thus: AD.

References:

Campbell, E. 2007. *Continental and Mediterranean Imports to Atlantic Britain and Ireland, A.D. 400-800*. York. Alden Press.

Gowen, M (ed.) 1988. *Three Irish Gas Pipelines: New Archaeological Evidence in Munster*. Dublin. Wordwell.

Hamlin, A. & Lynn, C. (eds) 1988. *Pieces of the Past: Archaeological Excavations by the Department of the Environment for Northern Ireland, 1970-1986*. Belfast: Her Majesty's Stationary Office.

Kinsella, J. 2010. A new Irish early medieval site type? Exploring the 'recent' archaeological evidence for non-circular enclosed settlement and burial sites. *Proceedings of the Royal Irish Academy*, 110C, 89–132.

Lawlor, H.C. 1925. *The Monastery of Saint Mochaoi of Nendrum*. Belfast . Belfast Natural History and Philosophical Society.

O'Sullivan, A., McCormick, F., Kerr, T. & Harney, L. forthcoming. Early Medieval Ireland: Archaeological Excavations 1930-2004. Dublin. Royal Irish Academy.

O'Sullivan, J. & Stanley, M. (eds) 2005. *Recent Archaeological Discoveries on National Road Schemes 2004: Proceedings of a Seminar for the Public, September 2004*. Bray. Wordwell.

O'Sullivan, J. & Stanley, M. (eds) 2006. *Settlement, Industry and Ritual: Proceedings of a Public Seminar on Archaeological Discoveries on National Road Schemes, September 2005*. Bray. Wordwell.

O'Sullivan, J. & Stanley, M. (eds) 2007. *New Routes to the Past: Proceedings of a Public Seminar on Archaeological Discoveries on National Road Schemes, August 2006*. Bray. Wordwell.

O'Sullivan, J., Hannan, M., & Tierney, J. 1998. Excavation of Lisnagun ringfort, Darrava, Co. Cork, 1987–89. *Journal of the Cork Historical and Archaeological Society*, 103, 31–66.

Reimer, P. J., Baillie, M. G. L., Bard, E., Bayliss, A., Beck, J. W., Bertrand, C. J. H., Blackwell, P. G., Buck, C. E., Burr, G. S., Cutler, K. B., Damon, P. E., Edwards, R. L., Fairbanks, R. G., Friedrich, M., Guilderson, T. P., Hogg, A. G., Hughen, K. A., Kromer, B., McCormac, G., Manning, S., Ramsey, C. B., Reimer, R. W., Remmele, S., Southon, J. R., Stuiver, M., Talamo, S., Taylor, F. W., van der Plicht, J., & Weyhenmeyer, C. E. (2004). IntCal04 terrestrial radiocarbon age calibration, 0-26 cal kyr BP. *Radiocarbon*, 46, 1029–58.

Rynne, E (ed.) 1967. *North Munster Studies: Essays in Commemoration of Monsignor Michael Moloney*. Limerick. Thomond Archaeological Society.

Stanley, M., Danaher, E. & Eogan, J. (eds) 2009. *Dining and Dwelling: Proceedings of a Public Seminar on Archaeological Discoveries on National Road Schemes, August 2008*. Bray. Wordwell.

Stanley, M., Danaher, E. & Eogan, J. (eds) 2010. *Creative Minds: Production, Manufacturing and Invention in Ancient Ireland: Proceedings of a Public Seminar on Archaeological Discoveries on National Road Schemes, August 2009*. Dublin. Wordwell.

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County Antrim

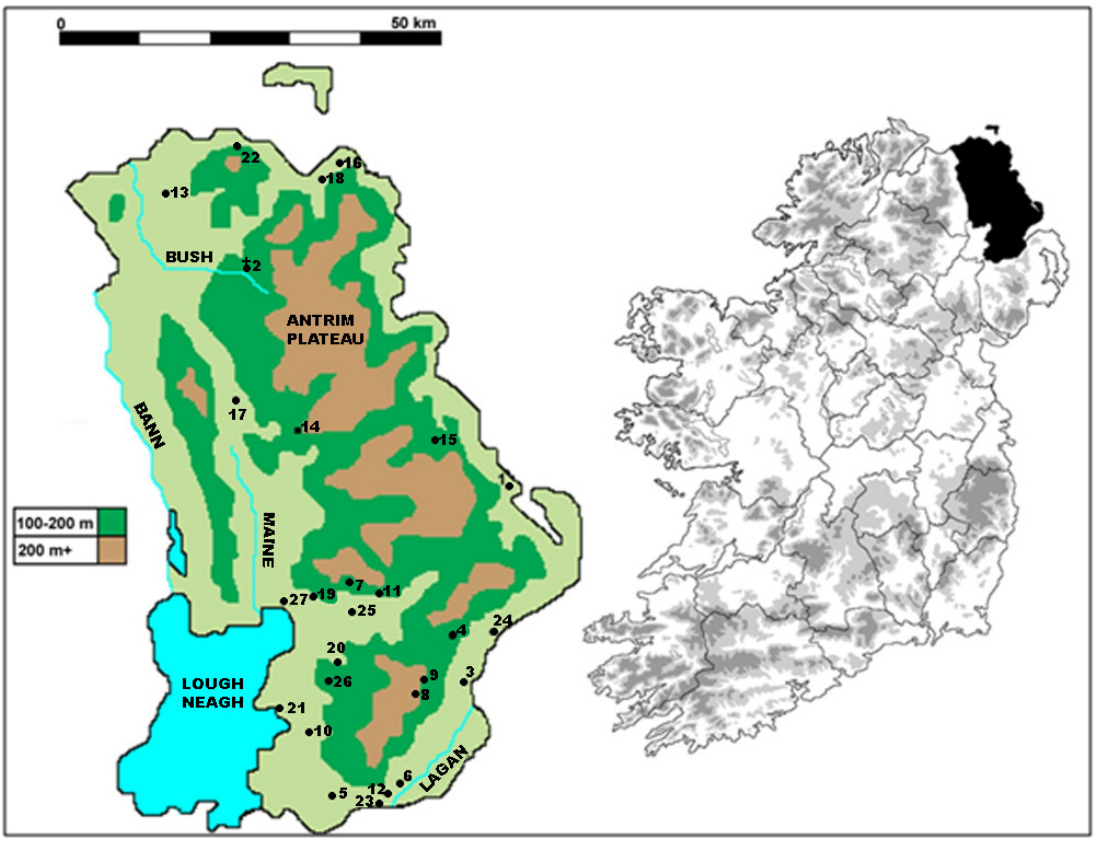


Fig. 1: Significant early medieval excavations in Co. Antrim

1	Antiville	**10**	Ballyvollen	**19**	Dunsilly
2	Armoy	**11**	Ballywee	**20**	Killealy
3	Ballyaghagan	**12**	Brokerstown	**21**	Langford Lodge
4	Ballyhenry	**13**	Craig Hill	**22**	Larrybane
5	Ballylacky	**14**	Craiggywarren Crannog	**23**	Lissue
6	Ballymacash	**15**	Deer Park Farms	**24**	Meadowbank
7	Ballynoe	**16**	Doonmore	**25**	Rathbeg
8	Ballypalady	**17**	Dromore	**26**	Seacash
9	Ballyutoag	**18**	Drumadoon	**27**	Shane's Castle Park

Antiville, Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **D39130328 (33913/40328)**
SMR No: **ANT 040:042**
Excavation Licence: **N/A**
Excavation Duration/Year: **October-November 1957**.
Site Director: **D. M. Waterman (Historic Monuments Branch, Ministry of Finance)**.

A souterrain was discovered during work on a marshy area of a golf course. Upon further excavation this was found to have been associated with a rectangular stone-built house (Fig. 2). Both sites have subsequently been destroyed by roadworks.

The habitation site was defined by a largely destroyed bank and a ditch, enclosing an area approximately 25.5m in diameter (Fig. 3). The ditch was 4.5m wide, but only 0.45m deep on the east side, ranging to 0.75m deep on the north side.

Three phases of occupation were evident within this enclosure. The first phase appears to have ended with the burning of a structure, evidenced by a mass of burnt clay. In Phase II a rectangular dry-stone-wall built dwelling, with rounded corners, was erected. The south wall was shared between the house and the souterrain passage. The dwelling was partially paved, and a hearth was located west-of-centre. Bones, charcoal, sherds of souterrain ware, and flints were recovered from the floor of this building. The souterrain was entered through the south-west corner of the Phase II house. It contained a jumble of animal bones, the staves and bases of several wooden vessels (preserved in peat); and the skeleton of a young human male.

In Phase III the floor of the Phase II house was deliberately covered in peat to a depth of 0.22m, and a hearth was set into the floor. The original structural timbers appear to have been retained, but the original entrance was blocked by a possible corn-drying kiln, and a new entrance was opened up. Animal bones, sherds of souterrain ware, a broken lignite bracelet, and flints were discovered on this secondary floor.

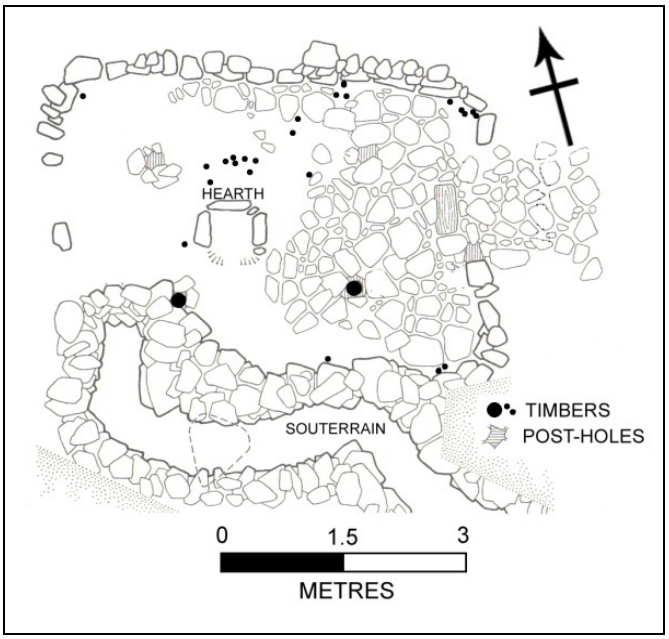


Fig. 2: Plan of Phase II house at Antiville, Co. Antrim (after Waterman 1971, 71).

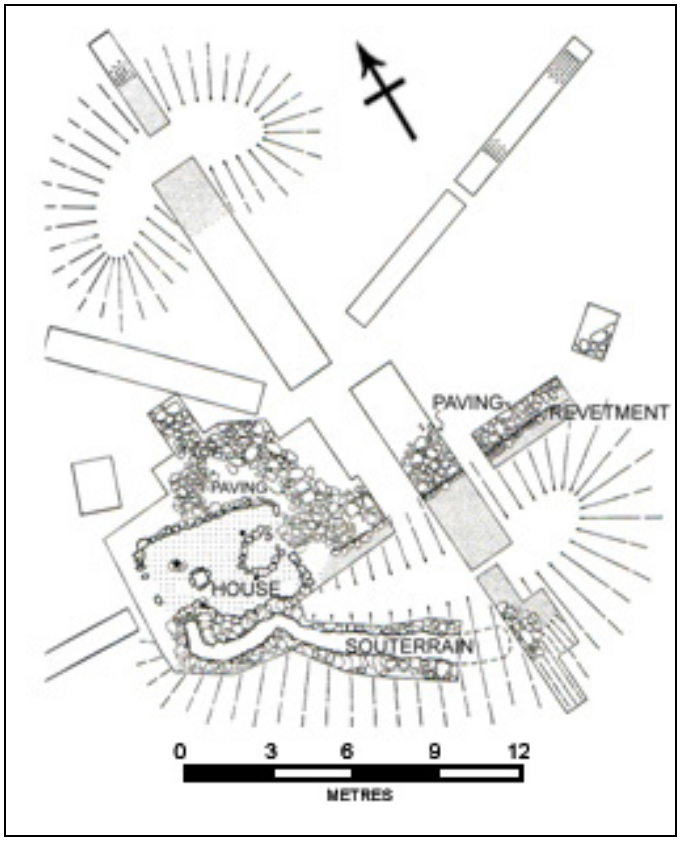


Fig. 3: Plan of Antiville, Co. Antrim (after Waterman 1971, 67).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-589	Charcoal in secondary floor deposit	1220±45 BP	**A.D. 678-895**; A.D. 927-935

References:

Waterman, D. M. 1971. A marshland habitation site near Larne, Co. Antrim, *Ulster Journal of Archaeology* (Third Series), 34, 65–76.

Armoy (Glebe td.), Co. Antrim
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **30778 43325**
SMR No: **ANT 013:010**
Excavation Licence: **AE/04/155; AE/05/50**
Excavation Duration/Year: **1991; 1997; 2004 & April-September 2005**
Site Director: **Brian Williams (NI Historic Monuments and Buildings Branch), Declan Hurl (Environment Heritage Services, DoE), Andrew Gault (EHS, DoE), John Ó Néill & Emer Nelis (Centre for Archaeological Fieldwork , QUB)**

Excavations at the early Patrician foundation of Armoy have identified at least eight early medieval phases of activity which produced evidence for an early medieval enclosure ditch, gullies, pits, structural remains, metalled surfaces, two souterrains and craft-working areas - metalworking features and specialised lignite-working site - as well as a large collection of finds and souterrain ware pottery. The ecclesiastical site is situated on a commanding promontory at c. 30m OD, defined along its eastern side by a steep scarp with impressive views over the Wellwater River valley to its east and south. The site is also associated with an early saint, *Olcan* and is mentioned in various medieval documents. It is believed to be the 5th century Patrician foundation of *Airthir Maige*; an establishment described in the 9th century text, *The Tripartite Life of Patrick* (Nelis *et. al* 2007, 9). The site at Armoy was also situated where the Wellwater met the *Slighe Miodluachra*, the major northern routeway, possibly originating from Tara and ultimately leading towards Dunseverick (ibid, 104).

St. Patrick's church was built in the 1820s and was extended some years later. It is a successor to a medieval church, of which the exposed plinth of the south wall was identified while the truncated remains of an eleventh/twelfth century round tower lie to the north-west of the modern church. The modern church is located within an early ecclesiastical enclosure and a souterrain had been reported within its vicinity prior to excavation. The round tower was investigated by Edmund Getty (1843) who uncovered disturbed human remains (including a skull), capstone fragments, antler pins, horn artefacts and a whetstone within it (Getty 1856, 173-77; Nelis *et. al* 2007, 20). It is probable that the burials found at the round tower predate this monuments and that the construction of the monument was the cause of their disturbance (Nelis *et. al* 2007, 20).

A small rescue excavation was undertaken to the southwest of the 19th century churchyard during the upgrade of the Glenshesk road in 1991 and uncovered part of a large ditch and a souterrain (Williams 1991). The portion of ditch measured approximately 3m wide and 1.5m deep with a northwest-southeast alignment (Nelis *et. al* 2007, 21). The souterrain was partly destroyed but the surviving remains consisted of a main chamber, aligned eastsoutheast-westnorthwest, traced for approximately 6.5m and a side chamber off the main passage, aligned northnortheast-southsouthwest, which measured approximately 5.3m. The passage had been excavated into subsoil, and the stone walls were built using basalt boulders. The souterrain yielded souterrain ware and the remains of a furnace bottom and a human skeleton.

A charcoal sample from the floor of the souterrain produced a date in the mid 7th/8th centuries. It was suggested that it may have been subject to the 'old wood effect', indicating perhaps a 9th/10th century date for the initial use of the structure. This structure may then have been roughly contemporary with the other (Phase 7 & 8) souterrain excavated to the north of the church in 2005 (Nelis *et. al* 2007, 21 & 115). Undated human remains from a single female of approximately 16 years were also found in the side chamber of the souterrain excavated in 1991. No other human remains were found in this area suggesting that this part of the church site was not generally used for burial. The apparent informality of the burial and lack of associated burials in the immediate area might either suggest that the remains were related to the either the use of the souterrain (again possibly pointing to the

use of the souterrain for refuge) or perhaps more likely that the remains relates to the later use of the souterrain in the post-medieval period for a *cilllín* burial (Nelis et. al 2007, 115).

The interior of the current church was excavated by Declan Hurl in 1997 prior to conservation work and yielded 56 burials including one of a leprosy sufferer and the possible plinth of the medieval church (Hurl 1998, 49-50). The excavations beneath the south wall of the church in 1997 exposed a projecting stone 'plinth' which was identified as the south wall of a possible transverse medieval church. After the removal of the interior wooden floor, fifty six articulated skeletons were uncovered within a thick layer of black greasy clay below a deposit of construction debris, up to 1.4m thick. Half of these were adults and most were supine, extended and coffined. One pair of feet was found to be from a leprosy sufferer and other disarticulated remains were also recovered. Burials were also prevalent around the exterior of the church and were uncovered when a concrete path was removed.

The most substantial excavations were undertaken in 2004 and 2005 in advance of a proposed extension of the modern graveyard into an adjoining paddock, *c.* 20m to the north of the modern church. Initial testing was undertaken by Andrew Gault on behalf of EHS and involved the excavation of four east-west aligned trenches spanning the southern extent of the paddock. These trenches produced numerous archaeological features, including structures, putative post-medieval burials and associated artefacts (Nelis *et. al* 2007, 23). Full excavation by John Ó Néill in October-November 2004 investigated an area measuring c. 15m by 10m in the southwest area of the small field. Emer Nelis extended the excavation area to include the area to the north and east in 2005. In total, an area 35m east-west and 25m north-south was fully excavated over the course of the two seasons. Both seasons of excavation produced evidence for at least twelve phases of activity during the early medieval, medieval and post-medieval periods and the results of these have been discussed together below.

The bulk of this activity (Phases 1 to 8) was early medieval in date with souterrain ware recovered from phase 5 onwards. The excavated features included evidence for the creation and maintenance of a site boundary (Phases 2 to 4), land drainage facilities and possible agricultural or horticultural activity (Phases 2 to 5); varied occupation activity, which appears to include small-scale industrial activity (e.g. metal and lignite working), as well as the partial remains of structures (Phases 6 to 8) and the construction and use of a souterrain (Phases 7 to 8).

The earliest activity in the area related to a small number of truncated gullies, post-holes and spreads which directly overlay, or cut into, the subsoil (Phase 1). These features were followed by the excavation of a substantial enclosing ditch (Phase 2). It appears that the initial ditch length within the excavated area was just 7m and terminated some 15m west of the steep eastern scarp which forms the eastern boundary of the site. This ditch was U-shaped measuring 2 to 2.5m in width, and 1 to 1.5m in depth and was accompanied by a parallel U-shaped gully to its south (1.0m in width, and 0.5m in depth), and by a scarped walkway (1.5m in width) along its northern (exterior) side. The walkway served to create a level ground surface by removing some of the gradient upslope to the north. The function of the parallel gully to the south of the ditch is unclear. It may have been intended as a slot trench for a palisade but there was no evidence for this. It appears that the upcast soil excavated for this enclosure was spread to the north and south of the ditch with the result that there was no evidence for an associated bank.

When complete, this ditch may have enclosed the area to the south around the later round tower and nineteenth century church. The only other excavated portion of an enclosure ditch was uncovered in 1991 to the south of the church in the area of the modern road (Williams 1991, 1). This section of the ditch was not excavated, but it had a similar width (at 2.5 to 3m) to the ditch section excavated in 2005 (at 2 to 2.5m) and it may be part of the same boundary feature. It was suggested that the initial boundary feature may have been D-shaped, with an arcing ditch extending from the northeast of the site, curving westward and

southward (e.g. 2004-2005 section) and returning towards the southeast (e.g. 1991 section), with the natural scarp of the eastern side of the promontory providing the eastern boundary of the site (Nelis *et. al* 2007, 109). The extent of the boundary ditch at Armoy can only be speculated but it may have measured around 50m-60m by c80m (Nelis *et. al* 2007, 111).

Contemporary with this initial enclosure ditch were a small number of gullies and pits located to the south (and therefore within the interior) of the enclosure. In the period which followed (Phase 3), a complex series of quite substantial gullies were uncovered which lay upslope of the enclosing ditch and formed a drainage network that eventually fed into the main ditch. At this stage, the ditch itself began to silt up considerably, and elsewhere occasional pits and gullies were found to the south and east of the ditch. Few artefacts were recovered from these levels, though there was abundant evidence for organic remains were recovered from the base of the ditch.

The enclosure ditch was then comprehensively re-cut once it had substantially silted-up (Phase 4). The re-cut was generally V-shaped and the ditch appears to have been extended extended some 7m towards the east, thereby terminating some 8m west of the eastern scarp. The reason for this gap in the enclosure ditch in phase 2 and phase 4 recutting is unclear though it may indicate an entrance or causeway allowing access to the site. Little evidence for the form of entrances to ecclesiastical sites has been uncovered during excavation elsewhere and indeed, beyond the gateway structure at Glendalough, Co. Wicklow (Nelis *et. al* 2007, 107-08). The ditch then appears to have been open to refuse and may have filled up again over a short period of time. The initial silting up appears to have contained largely sterile fills but the fill in the later Phase contained a greater component of occupation detritus, including animal bone and charcoal flecks, perhaps indicating a greater degree of occupation activity in the vicinity of the ditch at this time. Few artefacts relate to Phases 1 to 4, and it is thought that this period of activity relates to the 5th to later 7th centuries AD, during the early medieval Patrician foundation of the church and before the development of souterrain ware.

The phase 1-4 gullies and ditches were sealed beneath an extensive (topsoil) deposit, perhaps resulting from horticultural/agricultural activity across the whole of the excavated area Phase 5). There was with limited occupation evidence from this phase. After this deposit fully infilled the early ecclesiastical enclosure, the site witnessed a busy and intensive period of activity (Phase 6), particularly in the western part of the excavation area. There is no evidence for a definite ecclesiastical enclosure after the infilling of the ditch and therefore the bulk of the occupation evidence at Armoy appears to have occured after this early ditch had become irrelevant. The occupation activity from Phase 6 consisted of scattered evidence for structures surviving in the form of gullies, wall footings and cobbled, paved and metalled surfaces, as well as stone boundary markers, and numerous episodes of small-scale craft/industrial activity (e.g. informal fire-settings and furnaces and a lignite working area).

The informal fire-settings from this phase of activity contained burnt spreads of clay and charcoal and were most frequently found in the remaining dip of the ditch and its vicinity. These lacked formality but commonly yielded slag related to metal-working and, possibly, glass-working. Once these fires were extinguished, there seems to have been no attempt to cover the debris, and the charred material in many cases was spread across the surrounding area. It is hoped that the radiocarbon dating of the charcoal and burnt material from these features can refine the chronology of Phase 6. These fire-settings were found close to ephemeral structural remains consisting of patches of metalling and cobbling, as well as traces of gullies and occasional wall footings. Only elements of structures were uncovered with no footprints of any building fully identified and no evidence for any floor deposits or occupation deposits.

However two discrete occupation activity areas were identified: the first included partially surviving structural remains to the north of the excavated area (outside the now largely infilled enclosure ditch) that were associated with specialised lignite working debitage. The

truncated structures remains in this area were found in association with approximately 1300 pieces of worked lignite, entirely comprised of cores or bracelet centres and broken bracelets and related to the final stages of bracelet production. There were no finished pieces and no lignite was recovered that was unrelated to the final stage of completion of curated rough-outs. The remains indicate a craft-working area during phase 6 but it is not clear if the debitage represented an *in situ* working area, or the dumped deposits of debris.

The remains of another structure were identified in the southeast area of the excavated site. It was heavily truncated by later burial (Phase 10) and comprised two wall alignments, possibly of a rectangular structure, within which were the possible remains of a hearth. A small rectangular setting of stones (putatively located to the 'outside' of the structure) was also identified but its function is unknown. Numerous ephemeral stakeholes, small postholes and occasional gullies, were also found in this phase of activity (6). It is unclear if these represent the remains of lightweight structural elements or fencing. None were associated with the remains of wall footings which may indicate that they represent the placement and replacement of lightweight fencing, perhaps associated with small-scale farming or gardening activities.

At a later date, a drystone souterrain was uncovered towards the eastern side of the excavated area (Phase 7). The upcast from this monument was particularly stony and appears to have been used as a metalled yard area sealing the phase 6 deposits on its western side. It was mainly concentrated in the eastern half of the site, but may have originally extended across much of the excavated area towards the western limit of excavation, where it appears to have been truncated by Phase 8 occupation activity. The souterrain was aligned along a north–south creep and its entrance to the north was probably outside the limits of excavation. The main north–south passage led to a hidden chamber at its southern extent. Part of the way along the passage, another avenue forked towards the south-east in the direction of a steep eastern scarp which delimited the eastern extent of the complex, again beyond the limit of excavation. This north-west/south-east passage may have led to further chambers, but it may also have been an external exit, or 'escape passage', which could have opened at some depth down the face of the eastern scarp, thereby allowing for escape from the site. The evidence for a burnt wicker door or gateway during its initial period of occupation might suggest that conflagration occured within the structure, perhaps indicative of the use of the souterrain as a place of refuge. A second souterrain was found to the south of the existing church in 1991 and may have been roughly contemporary with this structure (See above).

Phase 8 refers to the use of the souterrain (excavated in 2005) and a nearby hearth constructed of schist slabs. Partial surviving structural remains consisting of occasional spreads and gullies, as well as possible wall footings, and areas of metalling and cobbling were again identified in Phase 8. However, the presence of one building was identified by a surviving area of paving and metalled surface within a heavily truncated area some 10m west of the Phase 8 souterrain and nearby hearth. It was tentatively suggested that this paved surface and hearth may relate to the same building. However as the area between the hearth and the paved area was heavily truncated, it was not possible to conclude on their possible association. This association, however, might be suggested by the unique use of schist slabs in the construction of the souterrain, the hearth and the paving and apart from these instances, schist slabs were not employed in any other context at Armoy (Nelis *et. al* 2007, 116). Phase 8 also saw the development of a possible topsoil layer and other occupation activity and ephemeral traces of structural remains in the southwest and southeast of the excavated area.

Phases 6–8 yielded an abundance of undecorated souterrain ware, metal-working slag, furnace bottoms and lignite-bracelet production debris. A deposit from Phase 5 also produced undecorated souterrain ware along with a fragmentary decorated bronze book clasp and a bi-facially decorated and perforated stone. This latter piece depicted a human figure on one face, perhaps of an angel, with the other face containing a floral or tree motif and may

represent a pendant or personal object belonging to one of the clerics (Nelis *et. al* 2007, 112). These artefacts and finds from phases 5-8 therefore suggest a date range from the 8-11th centuries. Radiocarbon dating of the abundant burnt remains from hearths in phase 6 and 8 should refine this chronology. It is towards the end or shortly after this period (*c.* 11/12th century) that the round tower was built but it is not clear yet if any of the excavated features were contemporary with its construction.

The next phase of archaeological evidence dates from around the thirteenth century in the late medieval period (Phase 9). This consisted of more limited and localised medieval activity and related to a number of occupation episodes which post-date Phase 8 and pre-date Phase 10, yet are spatially distinct from each other (9a; 9b; 9c). While the dating of the Phase 9a-c activity may be varied, it is thought that these are Medieval in date. Phase 9ai involved the partial construction of an apparently unfinished building, which may be associated with abandoned foundation cuts, and wall-robbing (or building demolition). The built element of the wall consisted of a small corner area, substantially built with inner and outer wall faces and filled with a rubble core. The abandoned foundation cut would appear to have extended the north-south section of the wall a considerable distance to the south, resulting in a substantial building, if it had been completed (Nelis *et. al* 2007, 118-19).

Subsequently, the completed section of wall was assimilated into a later rectangular mortared foundation or plinth, possibly a *leacht* (Phase 9aii). This feature was constructed using a loose rubble and mortar mix, unlike the stronger construction methods used during the first phase. It is unclear if a long period separated the construction of the phase 9ai foundation and the subsequent re-use of this feature as a basis for the Phase 9aii rectangular structure. This rectangular structure post-dates Phase 8 activity and it can be suggested that Phase 9a relates to a post-11th century period of activity. A small number of pits post-dated Phase 8 features and appear to belong to this Phase 9a activity on the site. These were located 2-3m west of the rectangular structure and were stratigraphically contemporary (as well as possibly chronologically contemporary) with the rectangular structure. These pits yielded sherds of Medieval Glazed Ware, dating to the 13-14th centuries which might suggest that it is during this period that the Phase 9ai or 9aii construction phases of the rectangular structure were undertaken. It is possible that the rectangular structure underwent further phases of use after its second phase of construction (Phase 9aii); the possible re-use of this rectangular structure is hinted at by a shallow clearance deposit which overlay its second phase, but contained elements of building materials not evident in its Phase 2 construction (such as occasional fragment of bricks) (Nelis *et. al* 2007, 119).

Phase 9b focused on activity within the souterrain, which involved the partial collapse of the structure as it fell into disuse (Phase 9bi), before it's central area was re-used and remodelled as a substantial and extensively-used furnace (Phase 9bii). Furnace deposits, slag, sherds of Everted Rim Ware and a large quantity of charcoal were recovered from Phase 9bii. The Everted Rim Ware would indicate a late 12-13th century date for the advent of this activity but it is hoped that radiocarbon dating of the charcoal remains can refine these dates. Phase 9c also post-dated the Phase 8 activity and related to partially surviving occupation activity in the northwest area of the excavation, comprising of the remains of wall footings, paving and cobbling. The date for this occupation activity is not yet clear but it is hoped that its chronology can be refined from radiocarbon dating.

Phase 10 related to burial activity along the southern perimeter of the excavated area, to the north of the 19th century churchyard wall. These burials were poorly preserved but the grave-cuts commonly truncated the underlying early medieval deposits. Some of these burials were probably within the church boundary during the medieval period (although evidence for such a boundary was not found), but it is also probable that others are early modern in date and relate to the interment of individuals outside the 19th century church boundary and its consecrated ground. The concentration of burials close to the existing 19th century church boundary, and the limited extent of the burials to no further than 2-3m within the excavated area indicates that the current graveyard boundary is roughly similar to that of the medieval graveyard. The apparent disturbance of burials by the construction of the round tower and

possibly by the construction of both the medieval and 19th century church would suggest that the area had from been for burial from the later early medieval period onwards. The excavation also uncovered evidence for the internment of infants and indicate the presence of an early modern *cillín* cemetery. These appear to post-date many of the remaining burials and it is probable that some or all of these were buried 'outside' of the graveyard, after the 19th century wall was built. Radiocarbon dating of all these burials will be required to establish the extent of the medieval and post-medieval graveyards in relation to the current church boundary.

Limited evidence was found for the use of the paddock as a garden during the early modern period (Phase 11) and may relate to the use of the plot as part of the rectory vegetable garden from the eighteenth century. This included the deposition of a humic-rich garden soil across much of the area and the partial remains of paths and paving, particularly along the perimeter of the paddock. The nineteenth century witnessed the construction of a rectory and the modern church and it is possible that earlier standing remains were removed during the course of these building works. Phase 12 referred to these modern features including pits and postholes.

The excavations at Armoy have produced a large collection of finds. Approximately 2,700 sherds of pottery were recovered. The majority of the pottery assemblage was souterrain ware, with the remainder either Everted rim ware or medieval glazed wares. The ground stone assemblage from Armoy comprised approximately 60 artefacts which included a unique perforated and decorated stone disc, possible whetstones, axe fragments, a bracelet fragment, hammer-stones and quernstones. The perforated and decorated stone disc contained the incised figure of an angel or religious figure, and can be linked stylistically to 9-10th century. Approximately 800 worked pieces of flint and quartz were also found at Armoy and it was suggested that they largely represented residually deposited material, originally deriving from prehistoric deposits. A small number of pre-modern glass artefacts were also recovered, as well as a possible fragment of enamel. Finally, a large quantity of organic and environmental remains have been preserved which should help with the dating of the various phases.

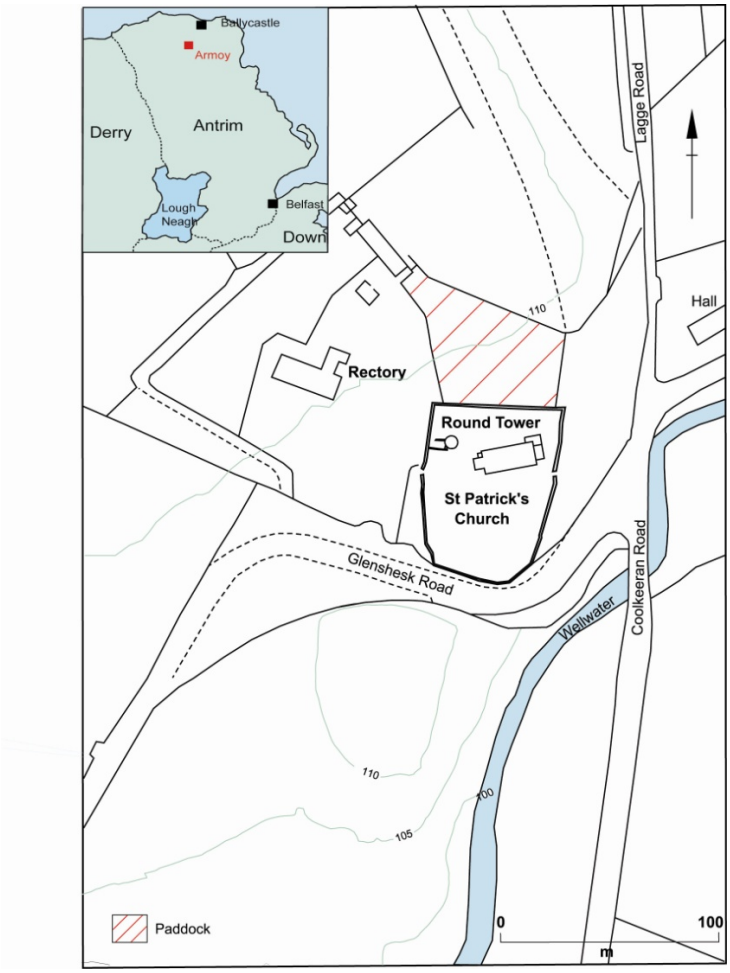


Fig. 4: Plan of Armoy showing excavated area (After Nelis et. al 2007)

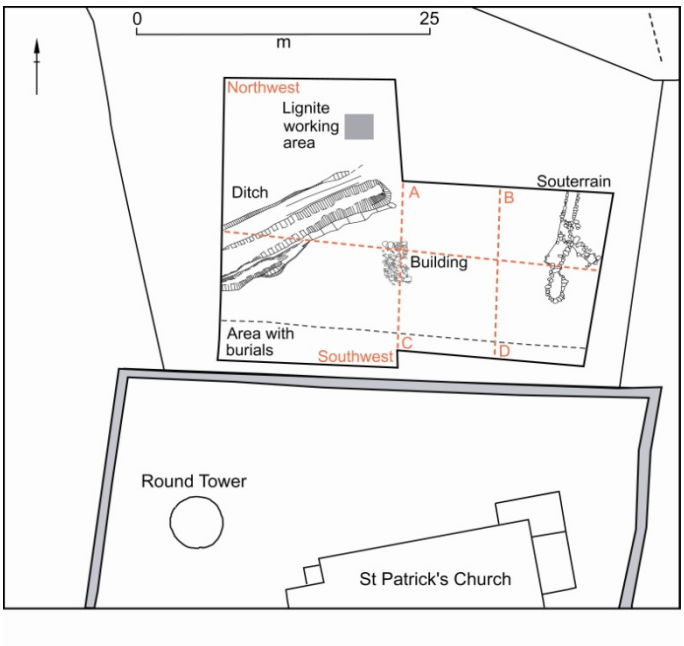


Fig. 5: Excavated area to north of Armoy Church (After Nelis et. al 2007)

Radiocarbon Dates

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	14C Date	Cal. 2 Σ
UB-3484	Charcoal sample from the floor of the souterrain excavated in 1991	1372 ±55 BP	AD 572- 730; **AD 735- 772**

References

Getty, E. 1856. The Round towers of Ulster: Armoy Tower, County of Antrim. *Ulster Journal of Archaeology* 4, 173-77.

Hurl, D. P. 1998. Excavations at St Patrick's church, Armoy, Co Antrim. *Church Archaeology* 2, 49-50.

Nelis, E. 2005. 2005:007, St. Patrick's Church, Armoy, early medieval/medieval/post-medieval church site, Co. Antrim. www.excavations.ie.

Nelis, E., Gormley, S., McSparron, C. and Kyle, A. 2007. Excavations at St Patrick's Church, Armoy, Co. Antrim, Unpublished CAF Data Structure Report: No. 44 (Part 1) on behalf of the Environment and Heritage Service.

Ó Néill, J. 2004. 2004:0008, St. Patrick's Church, Glebe, Armoy, medieval ecclesiastical centre, Co. Antrim.www.excavations.ie.

Williams, B.B. 1991. 1991:011, Turnarobert, Souterrain, Co. Antrim. www.excavations.ie.

Ballyaghagan, Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **J32337844 (33233/37844)**
SMR No. **ANT 056:054**
Excavation Licence: **N/A**
Excavation Duration/Year: **May 1948; June 1950**.
Site Director: **E. E. Evans (Queen's University Belfast); V. B. Proudfoot (Queen's University Belfast)**.

A souterrain was uncovered during construction of a housing estate. The souterrain was located within the much truncated vestiges of an enclosure, the surviving ditch portion of which had been re-cut as a retting pond for flax (Fig. 6). The souterrain consisted of three chambers linked by short passages. There was little cultural material recovered from this excavation. Sherds of souterrain ware were discovered in the souterrain and the lowest occupation layer on the enclosure; and two pieces of worked bones (possibly spearheads?) were discovered in the souterrain.

A supplemental excavation was undertaken two years after Evan's earlier investigation. Thousands of sherds of souterrain ware were recovered from the primary occupation layer, as well as a bronze ring-pin, two iron knives, and a fragment of a jet/lignite bracelet. A bronze buckle was found in the interface between this occupation layer and an upper clay deposit. Bones from domestic animals were also recovered: 85% cattle; 14% pig; 1% sheep/goats. The skeleton of an adult human male was also discovered in the course of this excavation. It was found in association with souterrain ware, but was not necessarily synchronous with the pottery.

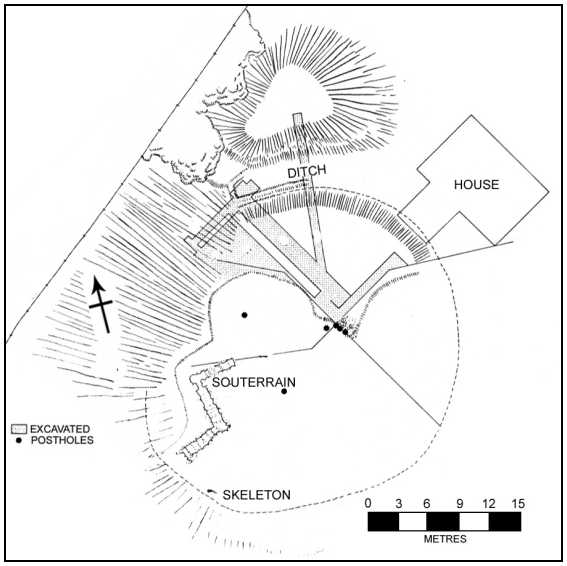


Fig. 6: Plan of enclosure at Ballyaghagan, Co. Antrim (after Proudfoot 1958, 19).

References:

Evans, E.E. 1950. A enclosure and souterrain at Shaneen Park, Belfast, townland of Ballyaghagan, Co. Antrim, *Ulster Journal of Archaeology* (Third Series) (13), 6–27.

Proudfoot, V.B. 1958. Further excavations at Shaneen Park, Belfast, Ballyaghagan townland, Co. Antrim, *Ulster Journal of Archaeology* (Third Series) (21), 18–38.

Ballyhenry, Co. Antrim
Early Medieval Settlement Enclosures.
Grid Refs: **J31228517 (33122/38517) & J31408470 (33140/38470)**
SMR No. **ANT 051:035; ANT 051:036**
Excavation Licence: **N/A**
Excavation Duration/Year: **1972**.
Site Director: **C. J. Lynn (Historic Monuments Branch, Ministry of Finance)**.

Two enclosures were excavated prior to the development of an industrial estate, which did not occur.

The excavation of the interior of Ballyhenry 1 (ANT 051:035) uncovered an enigmatic structure just inside the entranceway. This structure was indicated by the presence of a row of five small postholes which were interpreted as either the wall of a turf-built rectangular house which left no other remains, or perhaps as the 'porch' of a longer rectangular house which spanned the gateway. A possible circular structure in the centre of the enclosure was indicated by a curving gully and posthole.

Finds included three glass beads, two pieces of lignite, and 745 sherds of souterrain ware.

Ballyhenry 2 (ANT 051:036) was a platform enclosure (approximately 1.0m high at the centre), surrounded by a ditch (approximately 4.0m wide), an external bank (approximately 3.5m wide), and a further external ditch (Fig. 7). Despite these substantial remains few early medieval finds and internal structures were uncovered during excavation (e.g. just over 200 sherds of souterrain ware and part of a glass bead). Evidence for earlier settlement (e.g. prehistoric pottery and flint), was found beneath the early medieval layers, and it is possible that the central mound may have originated in the Bronze Age. Radiocarbon dates were taken from the pre-enclosure structures and the enclosure ditches of Ballyhenry 2.

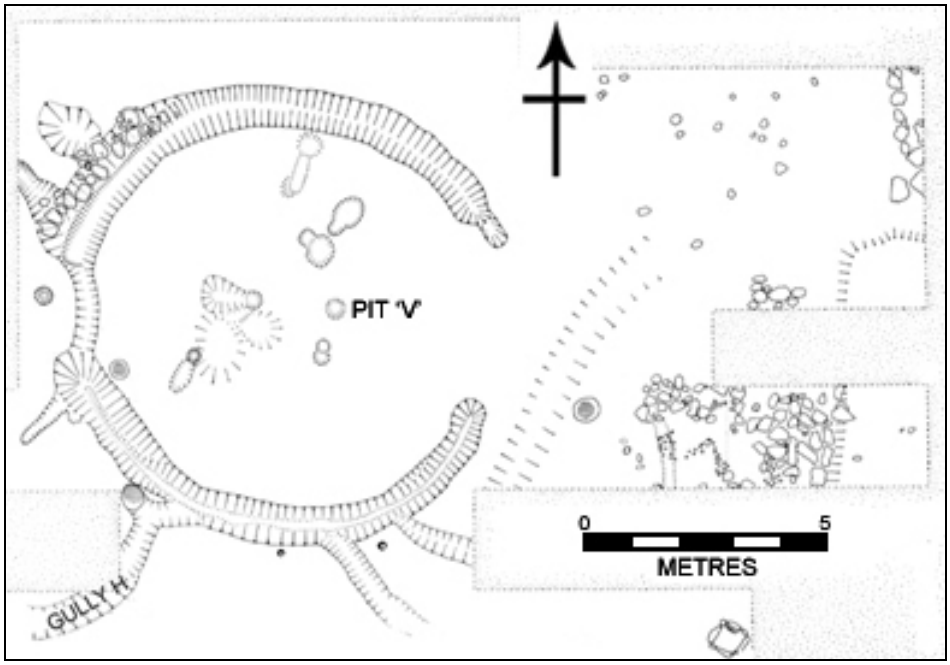


Fig. 7: Plan of pre-enclosure phase at Ballyhenry 2, Co. Antrim (after Lynn 1983, 78).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-943	Charcoal from Gully H	2065±70 BP	353 B.C. – 293 B.C.; 230 B.C. – 218 B.C.; **213 B.C. – A.D. 77**
UB-944	Charcoal from Pit 'V'	2155±435 BP	**B.C. 1293 – A.D. 688**; A.D. 754-756
UB-945	Bottom of inner ditch	1355±40 BP	**A.D. 609-721**; A.D. 741-770
UB-946	Midway up inner ditch	760±65 BP	A.D. 1053-1079; **A.D. 1153-1320**; A.D. 1350-1391
UB-947	Bottom of outer ditch	1055±30 BP	A.D. 897-921; **A.D. 942-1024**.

Reference:

Lynn, C. J. 1983. Two enclosures at Ballyhenry, County Antrim, *Ulster Journal of Archaeology* (Third Series), 46, 67–91.

Ballylacky, Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **J16356487 (31635/36487)**
SMR No: **ANT 063:045**
Excavation Licence: **N/A**
Excavation Duration/Year: **March – April 1962**.
Site Director: **L. Flanagan (Ulster Museum)**.

The site consisted of a bivallate enclosure (approximately 35m in diameter (Fig. 8)), set in a low-lying and water-logged area. Excavation was required as the site was threatened with destruction under a farm improvement scheme.

The enclosure was only partially excavated due to water-logging in the interior and in the inner ditch. Three phases of occupation were identified, with the latter two at least belonging to the early medieval period. The earliest phase was represented by stretches of a timber-revetted ditch within the interior of the site (Fig. 8). It was not possible to relate this smaller ditched enclosure with the surrounding banks-and-ditches, although the excavator suggests that these features may not necessarily be unconnected.

The second phase was indicated by a rectangular stone-built house, with rounded corners (Fig. 9). An extensive spread of charcoal covered the central area of the house, but no other features survived. A layer of humus covering the phase 2 house was identified as the final phase. No features were recorded from this phase, but a number of diagnostically early medieval artefacts were found (a glass bead; a fragment of lignite bracelet; a stone hone; and a number of pottery sherds).

Souterrain ware sherds were found from all three phases; and an unidentified (imported?) sherd of 'brick red' ware with a 'fine sandstone-like fabric' was also recovered from the final phase.

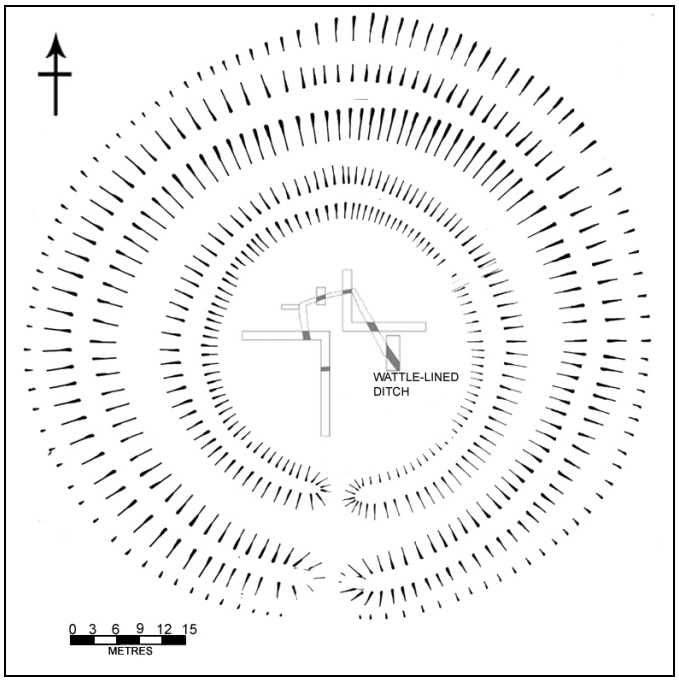


Fig. 8: Plan of Ballylacky, Co. Antrim (after Flanagan 1962).

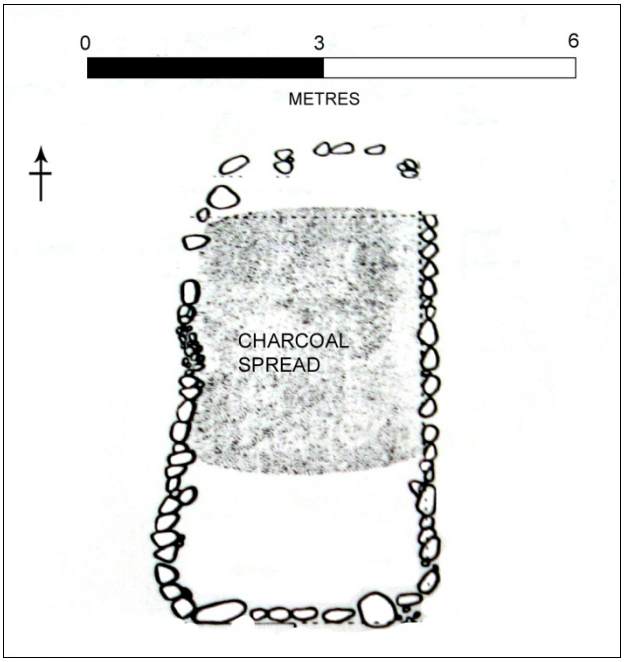


Fig. 9: Plan of Phase 2 house at Ballylacky, Co. Antrim (after Flanagan 1962).

References:

Flanagan, L. 1962. Preliminary report on the excavation of a ringfort or rath in Ballylacky, Co. Antrim. NIEA.

'Ballymacash' (Aghnahough? td), Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **J23726629 (32372/36629)**
SMR No. **ANT 064:026**
Excavation Licence: **N/A**
Excavation Duration/Year: **May – July 1953**.
Site Director: **E. M. Jope (Queen's University Belfast)**.

An enclosure was excavated after permission had been granted to build an individual dwelling in its interior. This site has been putatively identified as ANT 064:026. The site had an internal diameter of 33.5m, with a bank, approximately 1.5m high, and an external ditch. Excavation showed that the site had been modified over two phases of occupation. The earlier phase site had a lower bank and evidence for a substantial square, timbered house.

The enclosure bank was heightened during the second phase. Two periods of house construction were identified with this phase (Fig. 10). The early second phase house was rectangular (approximately 6.1 m^2) with rounded corners. A 'porch' was later added to this structure. Sixteen sherds of souterrain ware, a fragment of an iron nail, and a glass bead were recovered from the hearth associated with the structure. The excavator interpreted that this house was later replaced by a less substantial roundhouse, which may have re-used some of the structural timbers from the earlier rectangular building.

Outhouses were also uncovered associated with the second phase of occupation. These consisted of a drying kiln, an oven, and a hearth (which revealed a number of souterrain ware sherds). Almost 4,000 sherds of pottery were uncovered from this site – the vast majority of which were souterrain ware – and none were attributable to the earlier phase. As well as the glass bead recovered from the house hearth, another glass bead (blue and white) was found in a gully associated with the house.

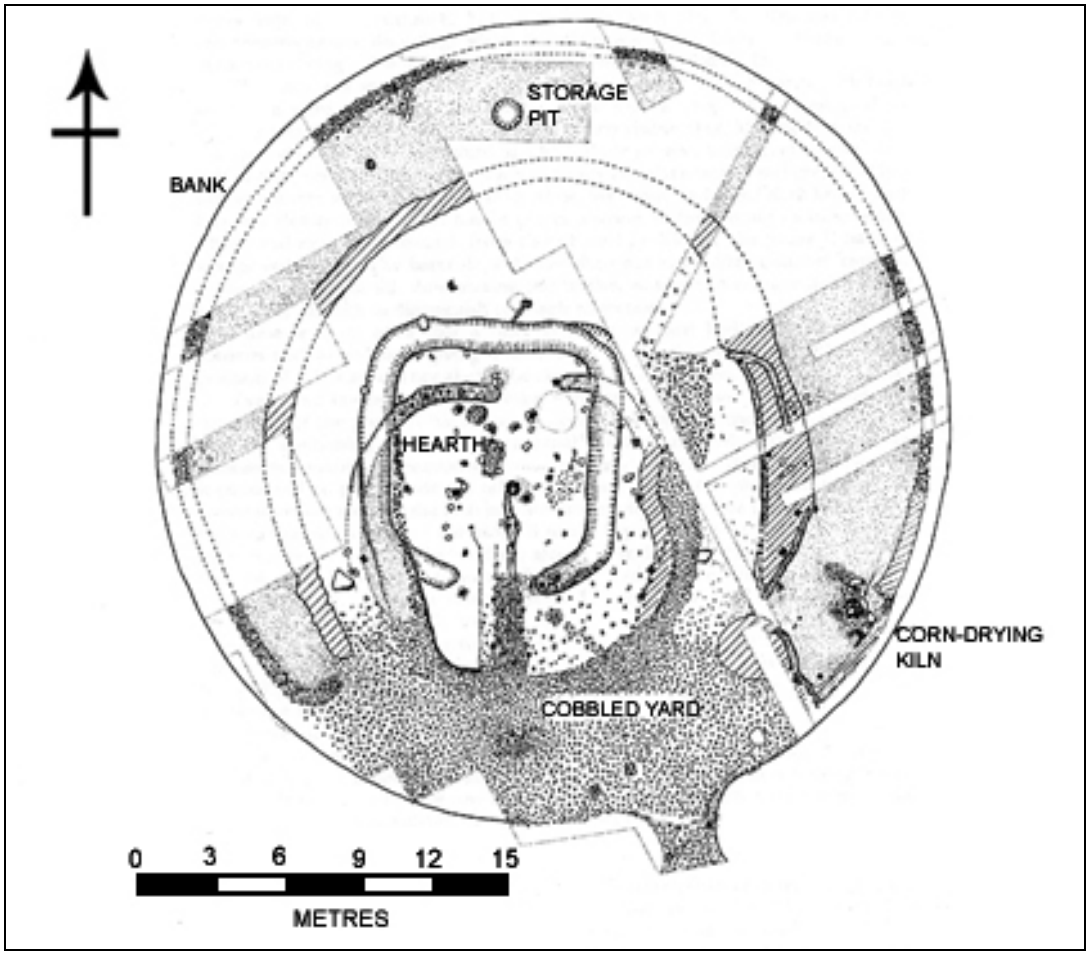


Fig. 10: Plan of Ballymacash, Co. Antrim (after Jope & Ivens 1998, 104).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-2624	Oak (post?) in floor of rectangular phase 2 house	905±75 BP	A.D. 1000-1001; **A.D. 1013-1264**

Reference:

Jope, E. M. & Ivens, R. J. 1998. The enclosure at Ballymacash, County Antrim. *Proceedings of the Royal Irish Academy Section C,* 98C, 101–23.

Ballynoe, Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **J18649058 (31864/39058)**
SMR No. **ANT 044:043**
Excavation Licence: **N/A**
Excavation Duration/Year: **March 1973**.
Site Director: **C. J. Lynn (Historic Monuments Branch, Department of the Environment)**.

This sub-rectangular-shaped enclosure was excavated after the landowner put a drain through the centre of the site (Fig. 11). There was very little trace of occupation, although a possible hut platform was excavated close to the south corner of the interior, and approximately 50 sherds of souterrain ware were discovered in this area. Twenty sherds of everted-rim ware were found in the north corner, but were interpreted as a later accumulation.

There is little occupation evidence and the site also appears to be unsuitable for an animal corral, because the centre is damp and peaty. There is a paved entrance, but this paving does not extend into the damp centre (indicated by the flax pit), where it would have been most needed.

It has been suggested by the excavator that Ballynoe may be some form of early 'ritual' site associated with a spring.

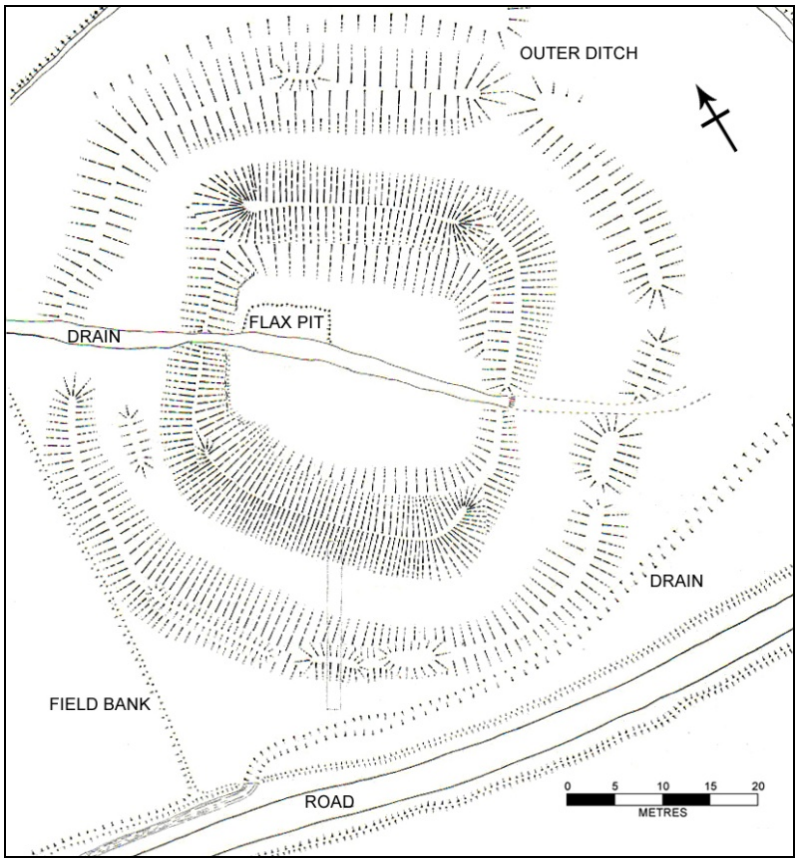


Fig. 11: Plan of Ballynoe, Co. Antrim (after Lynn 1980, 30).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-908	Peat from base of inner ditch	1340±90 BP	**A.D. 540-894**; A.D. 929-932

Reference:

Lynn. C. J. 1980. The excavation of an earthwork enclosure at Ballynoe, County Antrim, *Ulster Journal of Archaeology* (Third Series), 43, 29–38.

Ballypalady, Co. Antrim
Early Medieval Settlement Enclosures.
Grid Refs: **J26537831 (32653/37831) & J26588733 (32658/38733)**
SMR No. **ANT 051:015; ANT 051:016**
Excavation Licence: **N/A**
Excavation Duration/Year: **June – July 1957**.
Site Director: **D. M. Waterman (Historic Monuments Branch, Ministry of Finance)**.

The site consists of a cluster of enclosures. Ballypalady 2 (ANT 051:015), an approximately D-shaped trivallate enclosure, and Ballypalady 3 (ANT 051:016), a bivallate enclosure (Fig. 12).

The inner ditch of Ballypalady 2 had been subjected to at least two re-cuttings; and the ditches between the outer banks had also been re-cut. Two buildings – a circular house; and a stone-and-timber rectangular structure – were uncovered in the interior (Fig. 13). The circular post-built house was approximately 7m in diameter, but had no associated hearth or occupation debris, suggesting that the original floor surface had been lost. The stone-and-timber structure was interpreted as a byre, however a large number of souterrain ware sherds, two glass beads and the stem of a bronze pin were found in the occupation debris associated with this building. It has been argued, on typological grounds, to be later than the circular house.

A series of storm-water gullies drained the surface of the interior. These contained patches of carbonised wood, an occasional sherd of souterrain ware and fragmentary animal teeth.

The entrance to Ballypalady 3 was cobbled, and traces of a dry-stone walled structure were found within the interior. A few sherds of souterrain ware were recovered from between this structure and the inner face of the bank.

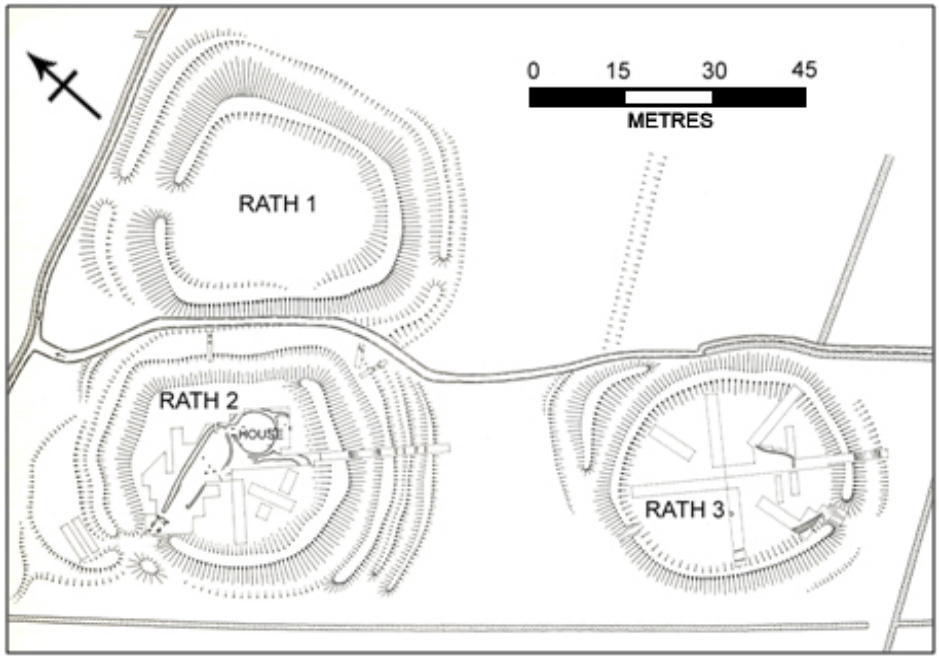


Fig. 12: Plan of Enclosure Group at Ballypalady (after Waterman 1972).

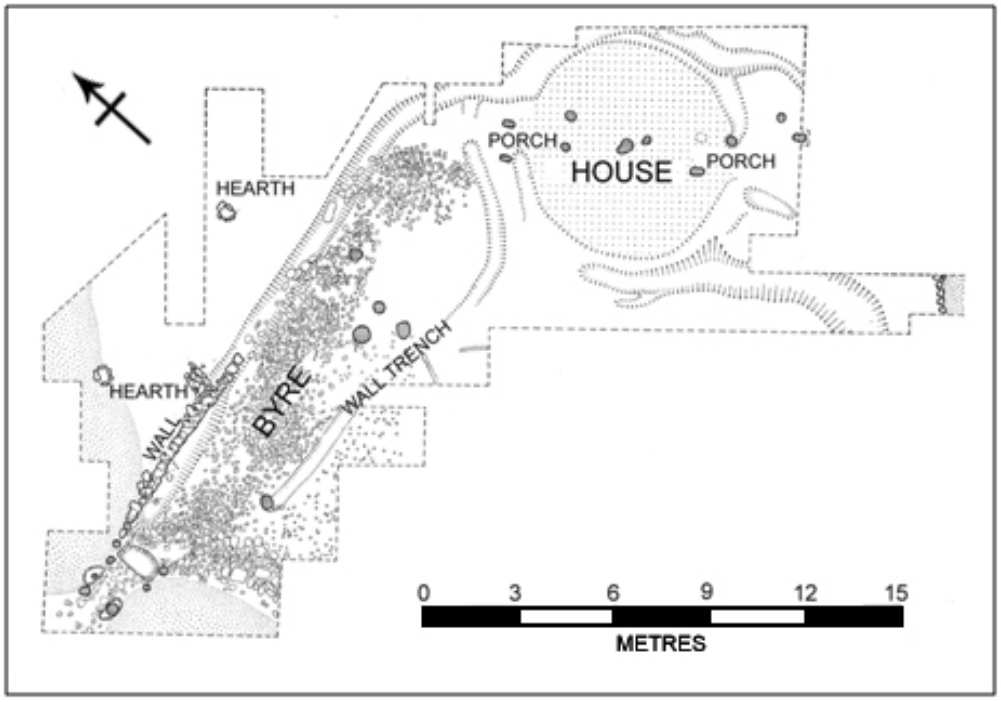


Fig. 13: Plan of interior of Ballypalady 2 (after Waterman 1972, 32).

Reference:

Waterman, D.M. 1972. A group of enclosures at Ballypalady, Co. Antrim, *Ulster Journal of Archaeology* (Third Series), 35, 29–36.

Ballyutoag, Co. Antrim
Early Medieval Unenclosed Houses.
Grid Ref: **J27387954 (32738/37954)**
SMR No. **ANT 056:085**
Excavation Licence: **N/A**
Excavation Duration/Year: **July – August 1981; July 1982**.
Site Director: **B. B. Williams (Historic Monuments Branch, Department of the Environment)**.

Ballyutoag is a collection of early medieval houses contained within enclosure ditches in the uplands and above agriculturally rich soils. Houses A and B within, Enclosure 1 (Fig. 14), were studied and shown to have been occupied contemporaneously. The circular House A went through four phases of construction and rebuilding (Fig. 15). These phases have been dated by radiocarbon from charcoal associated with the relevant period hearths. The radiocarbon dates (UB-2594) for Phase 3 and (UB-2596) for Phase 4 fit comfortably with the evidence of finds and structural remains. These structures appear to have been built from the local basalt – the Phase 3 house had basalt door pillars; and the Phase 4 house had wall footings of basalt.

Unfortunately the dates for Phases 1 and 2 (UB-2638) and (UB-2637), respectively are somewhat anomalous, and as a consequence the date for the earliest occupation of House A, and the duration of use of this house is not entirely clear.

The major finds from these various occupation phases were souterrain ware (Phase 1 – 22; Phase 21 – 14; Phase 3 - 12; Phase 4 – 174), and flakes of worked flint (Phase 1 - 50; Phase 2 – 47; Phase 3 – 117; Phase 4 – 162). Environmental samples from the various hearths revealed the presence of cereal grains – predominantly barley, with some oat, and one wheat-seed.

The radiocarbon date (UB-2595) for the hearth in House B seems to indicate that this related closely with the Phase 4 at House A, and the artefacts recovered were similar (seven sherds of souterrain ware, and nine flint fragments). No evidence for occupation was found in the excavation of House C.

The landscape setting of the hut sites and low number of finds suggests that Ballyutoag was an upland early medieval transhumance settlement.

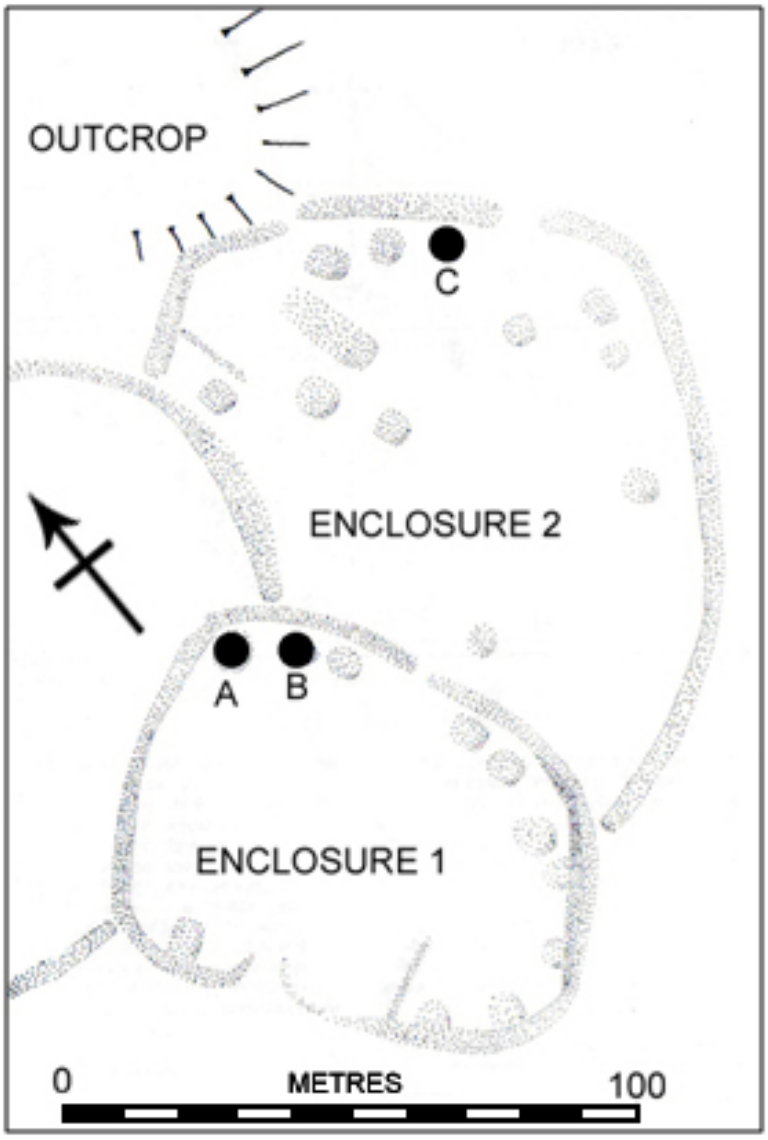


Fig. 14: Plan of enclosures at Ballyutoag, Co. Antrim (after Williams 1984, 39).

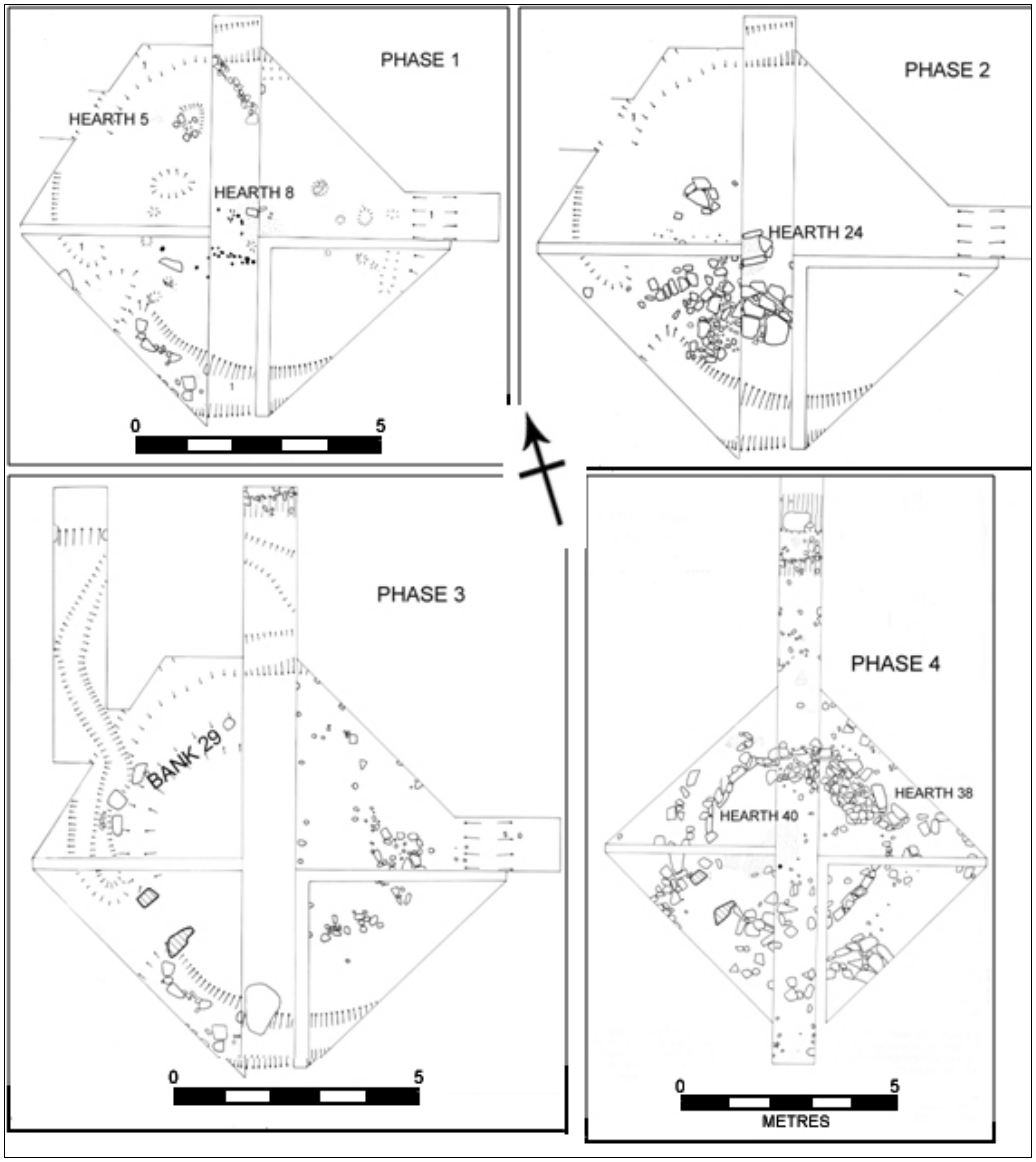


Fig. 15: Phases at House A at Ballyutoag, Co. Antrim (after Williams 1984, 41; 42; 43; 44).

Radiocarbon Dates

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-2594	Charcoal-Top Clay Bank 29	1370±80	**A.D. 538-872**
UB-2595	Charcoal-Hearth 5	1175±55	**A.D. 693-748**; A.D. 765-984
UB-2596	Charcoal-hearth F40	1230±70	**A.D. 662-900**; A.D. 917-966
UB-2636	Charcoal-hearth F38	1240±80	**A.D. 654-904**; A.D. 913-970
UB-2637	Charcoal-Hearth 24	1285±100	**A.D. 594-975**
UB-2638	Charcoal-Hearth 8	1005±115	A.D. 779-794; **A.D. 800-1254**

Reference:

Williams, B. B. 1984. Excavations at Ballyutoag, County Antrim, *Ulster Journal of Archaeology* (Third Series), 47, 37–49.

Ballyvollen, Co. Antrim
Early Medieval Unenclosed House.
Grid Ref: **J13267281 (31326/37281)**
SMR No. **ANT 058:040**
Excavation Licence: **N/A**
Excavation Duration/Year: **June – July 1984**.
Site Director: **B. B. Williams (Historic Monuments Branch, Department of the Environment)**.

A series of rescue excavations were undertaken to facilitate the development of an open-cast lignite mine. One excavation, in an area of level pasture which appears to coincide with a circular cropmark, uncovered evidence for occupation and industry.

A few sherds of souterrain ware, a quantity of iron slag (170 kg), and three tuyères were recovered. Although the artefactual remains suggested that the site had an industrial history, there was no structural evidence for burning or furnaces. A possible irregular-shaped structure was identified in the south of the excavation (Fig. 16). It is suggested that this site may have been a specialist iron-working area, rather than a domestic site.

Further investigation of the local area did not uncover any evidence for an enclosure bank or ditch.

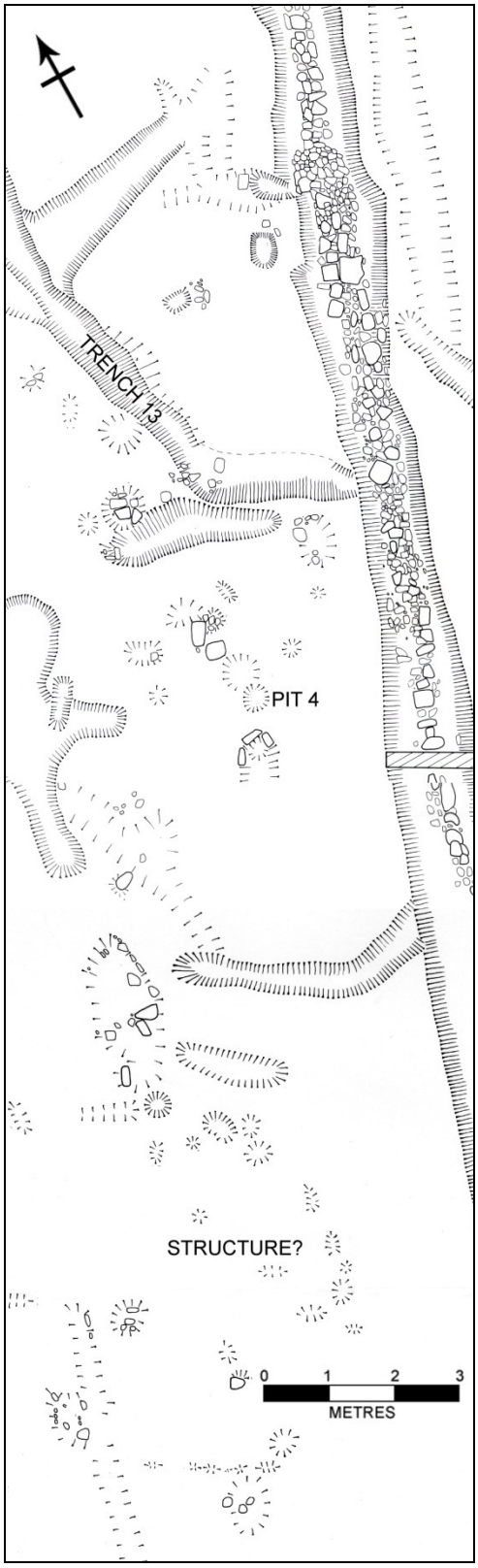


Fig. 16: Plan of Ballyvollen, Co. Antrim (after Williams 1985, facing 94).

Radiocarbon Dates

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-2729	Charcoal from Trench 13, associated with souterrain-ware	1305±65 BP	**A.D. 632-884**
UB-2728	Charcoal from F4 – possible furnace bottom	1365±70 BP	**A.D. 543-783**; A.D. 788-814; A.D. 843-858

Reference:

Williams, B. B. 1984. Excavations at Ballyvollen townland, County Antrim, *Ulster Journal of Archaeology* (Third Series), 48, 91–102.

Ballywee, Co. Antrim
Early Medieval Settlement Complex.
Grid Ref: **J21858987 (32185/38987)**
SMR No: **ANT 050:036**
Excavation Licence: **N/A**
Excavation Duration/Year: **1974; October 1993; Summer 1994**.
Site Director: **C.J. Lynn (Historic Monuments Branch, Department of Finance); N. Crothers (Archaeological Development Services Ltd)**.

The site had been recorded as a 'cyclopean fort' on earlier maps, and was threatened with destruction under a farm improvement scheme. It is located in a boggy field, on an east-facing slope, just above the 150m contour line.

Excavation quickly uncovered substantial remains of nine stone-built structures and three souterrains. The low banks (presumably the features identified as the 'cyclopean fort') would appear to have been constructed to divert run-off water away from the main settlement complex (Fig. 17).

Two of the buildings have intact floor plans. The building just inside the entranceway (House 1 in Fig. 17) is rectangular (7m by 4m) and is approached by a paved path. This structure has a central hearth and a partially paved interior; a souterrain is accessed through the west wall of the house. The souterrain is contained within a wide bank which has a boulder-built retaining wall, and it seems likely that the souterrain was constructed at ground level before being buried by the earthen mound. A possible workshop area was located just to the north of this souterrain mound. This was indicated by areas of burnt soil, charcoal and fragments of bronze-smelting crucibles. The other two souterrains on site would appear to have been associated with less well-preserved structures.

A larger rectangular building (10m by 5m) was located at the rear of the complex. This structure had a paved path running through the centre of the building along its long axis, and this was in turn flanked by post-holes. This building does not appear to have been a domestic structure and it has been suggested that it may have been a warehouse. The possibility that the postholes represent animal stalls was discussed, but disregarded on the basis of size.

Finds from House 1 were typical of early medieval sites – sherds of souterrain ware; iron objects; glass beads; bronze pins; and a quern fragment. A silvered bronze buckle was recovered from the topsoil over the middle building at the rear of the complex. Radiocarbon dates from the site suggest a ninth/tenth century occupation.

The site was tidied-up and consolidated in 1993/4, when further excavation work was carried out on the souterrain at the rear of the complex, and associated structures. Excavations around the souterrain uncovered a series of structures indicated by postholes and associated hearths; and a number of charcoal-rich layers found in association with a nearby area of paving was interpreted as a possible metalworking area.

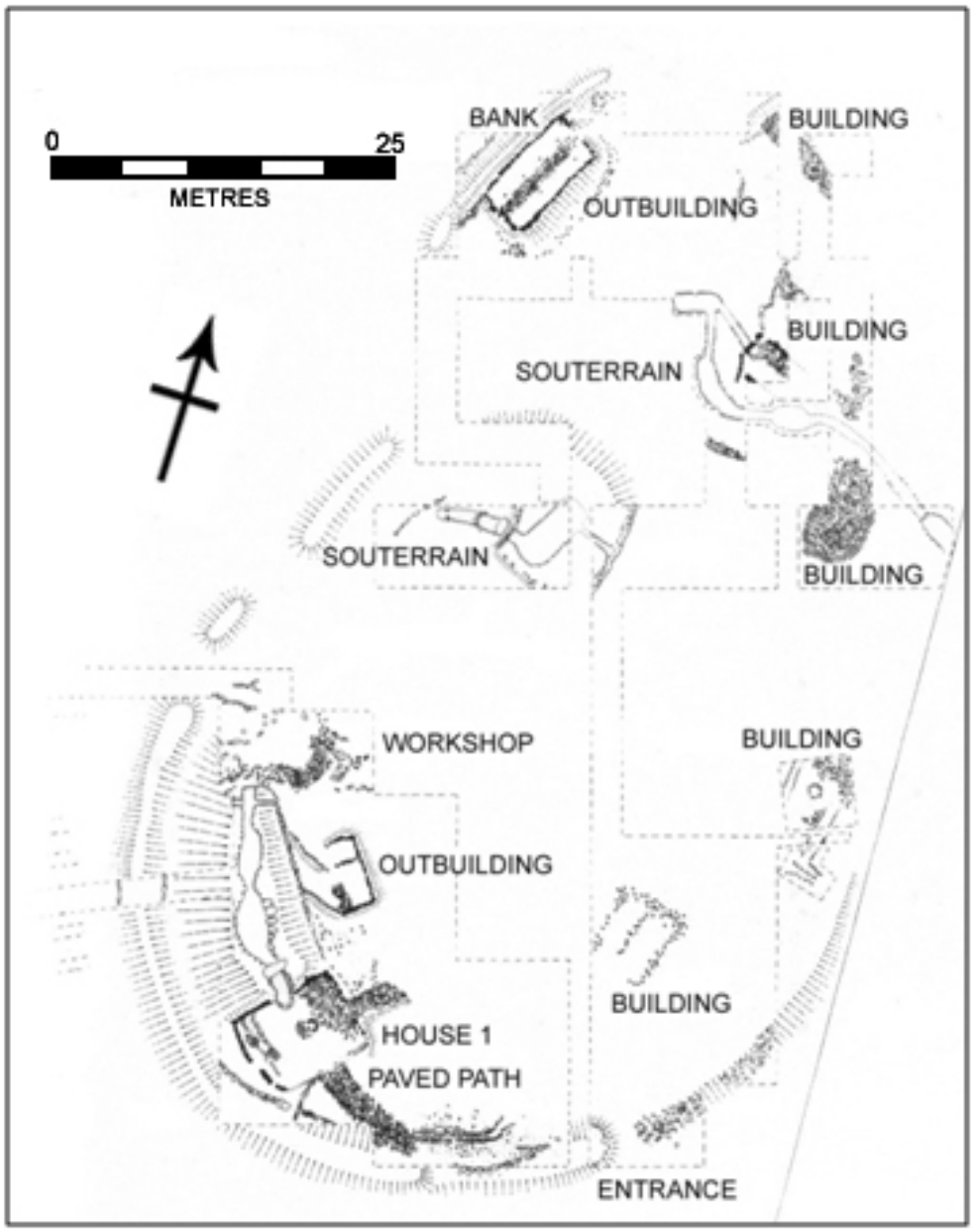


Fig. 17: Plan of Ballywee, Co. Antrim (after Lynn 1988, 33).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-4228	Charcoal spread	1142±59 BP	A.D. 723-740; **A.D. 770-1017**.
UB-4229	Charcoal – fill context 37	1063±51 BP	A.D. 830-837; **A.D. 868-1046**; A.D. 1091-1121; A.D. 1140-1148.
UB-4230	Charcoal – fill context 70	1259±52 BP	**A.D. 664-881**.
UB-4231	Charcoal – fill context 160	1186±25 BP	**A.D. 773-896**; A.D. 924-938.

References:

Crothers, N. 1994. Programme of consolidation and conservation at Ballywee, Co. Antrim. Archaeological Development Services Ltd.

Lynn, C.J. 1988. A thousand year-old farm - Ballywee, Co Antrim; in A. Hamlin & C. J. Lynn (eds.), *Pieces of the Past: Archaeological Excavations by the Department of the Environment for Northern Ireland: 1970-1986*. Belfast, H.M.S.O. 32–35.

'Brokerstown' (Ballymacoss td.), Co. Antrim
Early Medieval Settlement Enclosure Complex.
Grid Ref: **J23556509 (32355/36509)**
SMR No: **ANT 068:007**
Excavation Licence: **AE/06/202; AE/07/082; AE/07/194**
Excavation Duration/Year: **2006; 2007**.
Site Director: **C. Dunlop (Northern Archaeological Consultancy)**.

A possible enclosure had been identified by aerial photography in 1962 which necessitated archaeological monitoring of top-soil stripping prior to the construction of a housing development. A number of archaeological features were discovered during this process. The most significant consisted of a circular enclosure (35m in diameter) with an adjoining annex (25m by 16m), and associated field boundaries (Fig. 18).

The main enclosure was defined by a ditch (4m wide, and a maximum of 1.8m deep); no trace of a bank remained (Fig. 19). The remains of a rectangular house were found within this enclosure. The east and west walls of this structure were defined by two parallel linear slot-trenches (6.5m long); and the southern wall had two linear slot-trenches (2.5m long) with an intervening gap. A large, stone-filled posthole on the internal end of these slot-trenches indicated the presence of substantial door posts. Four other large postholes, arranged in a square in the centre of the house, were used to support the roof. A hearth was located in the centre of the house, and this was surrounded by a series of stakeholes, which have been interpreted as a possible draft screen or temporary internal division. Another rectangular structure (3m by 4m) was located on the west side of this house. No connecting entranceway with the larger structure was identified, and it was suggested that this structure may have been entered through an external door. A drainage gully running through the smaller structure has led to the interpretation that this may have acted as an animal house.

The smaller enclosure was defined by a ditch (maximum dimensions of 2m wide and 1m deep). The main feature identified from this enclosure was a curvilinear ditch which enclosed an area 10m in diameter. It is possible that this represents the drip-gully of a destroyed roundhouse. Several large pits of unknown function were also discovered in this enclosure. Quantities of iron slag found in the ditch of this annex suggest that this enclosure may have had an industrial function.

A putative third enclosure existed to the north of the annex. This was partially defined by a ditch (1m wide and 0.6m deep), and has been interpreted as having been unfinished. The decorated souterrain ware recovered from this ditch suggests that it was a later addition to the complex.

Several early medieval field boundaries were identified around this enclosure, the longest of which ran for 120m; and two unenclosed early medieval houses, defined by a series of postholes (5m x 5m), were discovered outside the enclosure complex.

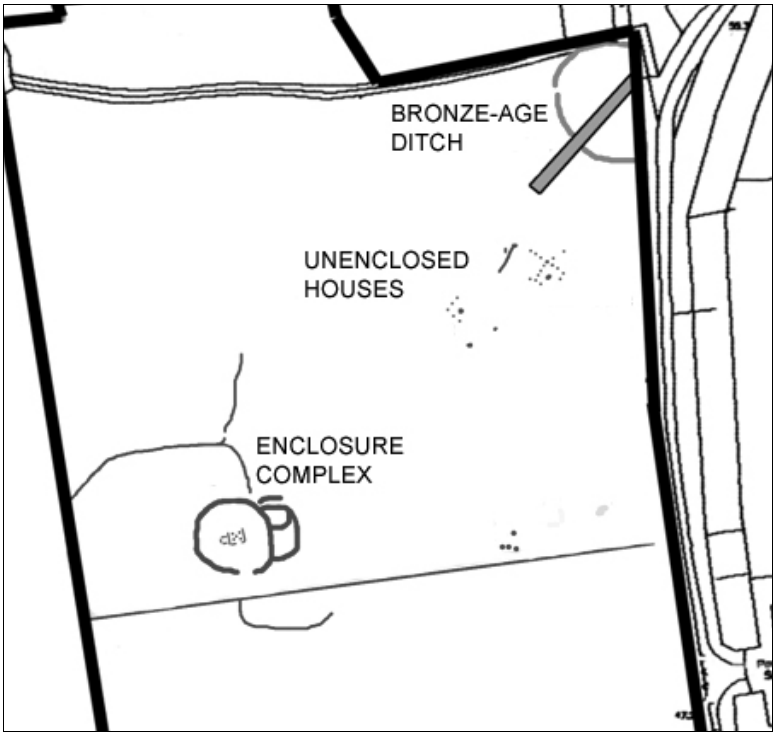


Fig. 18: Site plan of excavations at Brokerstown, Co. Antrim showing enclosure complex and unenclosed houses (after Dunlop 2009).



Fig. 19: Aerial photograph of enclosure complex at Brokerstown, Co. Antrim (after Dunlop 2009).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-9255	Charred oats from hearth of main enclosure house.	1251±21 BP	**A.D. 679-783**; A.D. 788-821; A.D. 842-859.
UB-9256	N/A	595±19 BP	**A.D. 1303-1366**; **A.D. 1383-1406**.
UB-9257	Charcoal from annex ditch.	1272±22	**A.D. 674-776**.

Reference:

Dunlop, C. 2009. Post-excavation summary report for Brokerstown Village, Lisburn. Northern Archaeological Consultancy.

‘Craig Hill’ (Craig td.), Co. Antrim
Early Medieval Unenclosed House and Souterrain.
Grid Ref: **C96453907 (29645/43907)**
Excavation Licence: **N/A**
SMR No. **ANT 007:023**
Excavation Duration/Year: **1954**.
Site Director: **D. M. Waterman (Historic Monuments Branch, Ministry of Finance)**.

A souterrain was discovered during top-soil stripping for a quarry (Fig. 20). Further excavation revealed a series of postholes which delimited a trapezoidal-shaped structure. These were identified with a timber-framed wattle-and-daub house. A stone-lined gutter was located to the south of this structure; and an area of paving was located to the east. Any signs of occupation had been removed in topsoil stripping prior to excavation.

The souterrain was excavated just to the west of this structure. An occupation deposit consisting of charcoal and numerous sherds of souterrain ware overlay the sloped entrance to the souterrain. A bronze ring-pin, similar to those recovered from Ballinderry and Lagore crannogs, was also recovered from the stone and soil covering the souterrain.

Neither house nor souterrain appears to have been associated with an enclosure.

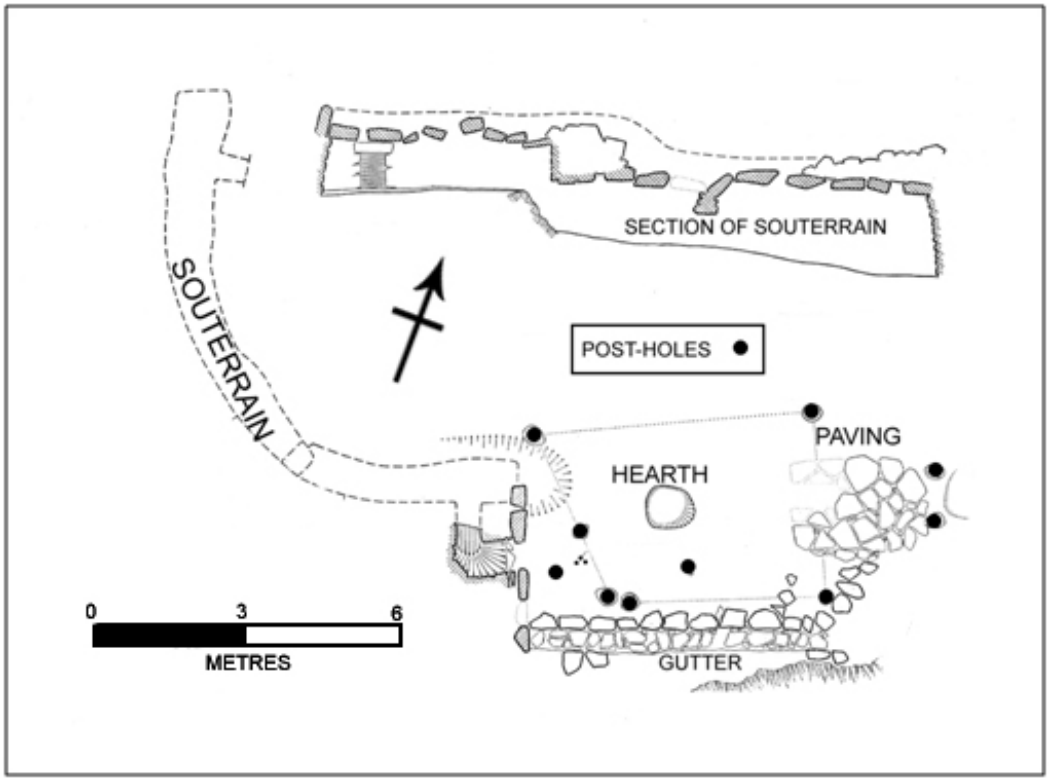


Fig. 20: Plan of House and Souterrain at Craig, Co. Antrim (after Waterman 1956, 88).

Reference:

Waterman, D. M. 1956. ‘The excavation of a house and souterrain at Craig Hill, Co. Antrim’, *Ulster Journal of Archaeology* (Third Series), 19, 87–91.

Craigywarren, Co. Antrim
Early Medieval Crannog.
Grid Ref: **D11800930 (31180/40930)**
SMR No: **ANT 032:043**
Excavation Licence: **N/A**
Excavation Duration/Year: **September – October 1901**.
Site Director: **W. J. Knowles (Antiquarian)**.

The site consisted of a small crannog, formerly located at a depth of 2m in a bog, about 80m out from the former western shore of the original lake. The precise location of this site is now unknown. Lisnacrogher crannog, the reputed nineteenth-century find-spot of an assemblage of La Tène metalwork, was located about 500m to the north. The site was almost totally excavated by W. J. Knowles, George Coffey and a team of nine assistants over a two-week period in September-August 1901.

The crannog was small and circular, measuring only about 14m in diameter (Fig. 21). It was defined at its edge by a lightly built wooden palisade, of cleft oak planks and roundwood ash posts driven into the peat in a regular manner. There was a possible entrance at the north side. The site was constructed of a primary layer of heather and small branches lay on the underlying black mud. This was followed by a second layer of horizontal tree trunks and heavy branches, staked down by oak piles. These trunks were laid lengthways around the edge of the site. This was followed by another layer of heather, making a clean, even surface. The upper-most occupation surface was of hewn and mortised planks laid down, with the north side of the crannog consolidated by spreads of stones.

There was a possible house or hut at the north side of the crannog, represented by a scatter of planks covering an area 2.6m by 2.6m. These were small planks, occasionally drilled and pegged, partly overlying the palisade at one area. There was also a stone-lined hearth beside these planks, which consisted of a single flat stone (0.5m diameter), surrounded by smaller stones, overlain by a layer of white ash. There was also a ‘midden’ of animal bone beside this house. It produced most of the site’s finds, including pottery, a concave scraper, a silvered, plain pennanular brooch, a bronze pin and a finger ring and a bracelet. A sword was found beneath the timbers, and a spear-butt was found near it.

A midden on the north side (beside the house and possible entrance) produced bones of cattle, sheep, goat, pig, deer and horse, including three well-preserved horse skulls. It also produced other finds including an iron pan, an iron rod, a possible barrel padlock key and fragments of decorated, leather shoes.

A range of lithics were also found at Craigywarren, including 50 flint flakes, 3 scrapers, a concave scraper, a lozenge-shaped arrowhead, three polishing stones, spindle whorls and a stone axe fragment. The excavators decided that the flints were not strike-a-lights (presumably because they were un-bruised). However, because there were no cores to indicate on-site flint working, they suggested that the flints were introduced on to the site with stone and gravel during its construction. Alternatively, they may have been seen as exotic or magical items by the early medieval inhabitants of the site, being used to protect food or the house against fire.

Undecorated souterrain ware pottery and clay crucibles were also recovered from site, one of the latter had red vitreous matter on its surface, possibly the remains of melted enamel. A bone trial piece and a bronze bracelet were also found. The finds indicated to the excavators the presence of craft-workers (metal, leather and possibly enamel) and relatively wealthy inhabitants. On the basis of the typology of the pennanular brooch, the site was dated to the tenth century A.D.

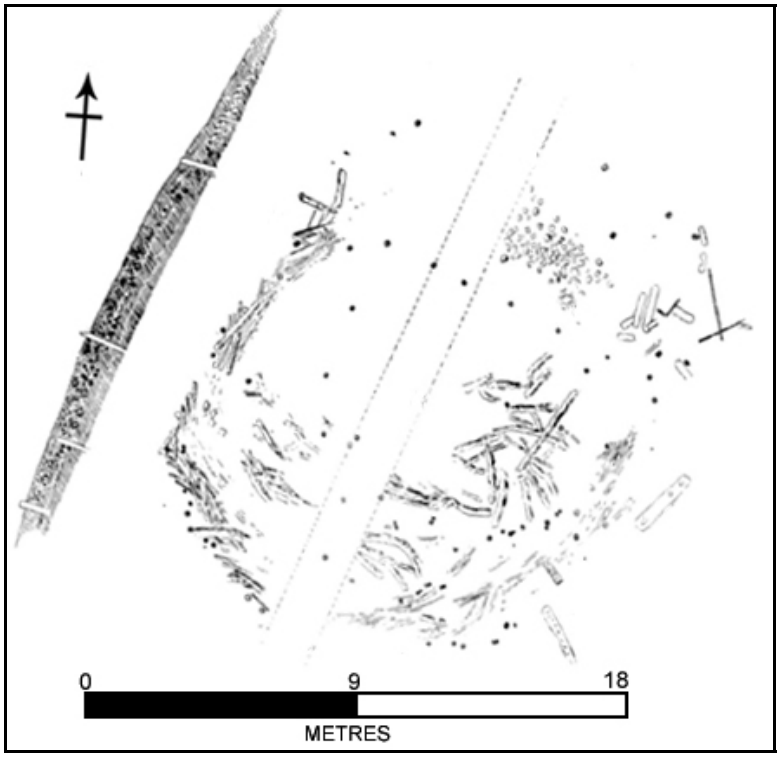


Fig. 21: Plan of Craigywarren crannog, Co. Antrim (after Coffey 1906).

Reference:

Coffey, G. 1906. Craigywarren crannog. *Proceedings of the Royal Irish Academy Section C,* 26C, 109–18.

Deer Park Farms, Co. Antrim
Early Medieval Raised Enclosure.
Grid Ref: **D28660878 (32866/40878)**
SMR No: **ANT 034:005**
Excavation Licence: **N/A**
Excavation Duration/Year: **1985-7**.
Site Director: **C.J. Lynn (Historic Monuments Branch, Department of the Environment (N.I.))**.

The site consisted of a raised mound (25m in diameter on top, and 6m high), set on a north-facing slope. The site was completely excavated as it was to be removed under a farm improvement scheme.

Excavation revealed four major phases of occupation, and the presence of at least 46 contemporaneous and consecutive structures (5.0m - 8.0m in diameter) (Fig. 22).

Although there was some evidence for prehistoric occupation, the earliest occupation phase was represented by a 'ring-ditch', enclosing an area 22.5m by 25m. Two pairs of postholes (one on the line of the outer edge of the ditch and the other pair just inside the inner edge) have been interpreted as representing a gateway into the site. If this interpretation is correct, it would presuppose the presence of an upstanding feature (either an earthen bank or a wooden fence) which would have been associated with the circuit of the ditch. No such feature was identified during excavation. The ring-ditch appears to have been in-filled prior to the construction of the next phase, and ironworking slag and a furnace bottom were found in this in-fill. A radiocarbon date derived from this material (see below) overlaps with date ranges derived from structures within the enclosure, suggesting the possibility that some of these structures may have been contemporary with the ring-ditch.

The earlier ring-ditch was replaced by a banked-and-ditched enclosure, of which only the bank remains (the ditch presumably having been destroyed by the subsequent creation of the mounded enclosure). The bank enclosed a slightly larger area than the ring-ditch (26m in diameter), and had a stone-revetted inner face. The entranceway to this enclosure had an up-hill lie, and seems to have followed that of the ring-ditch. This was presumably not an issue at the time, as water could have drained away into the ditch, but in later phases this resulted in the lower occupation layers becoming water-logged. A number of house structures, related to this enclosure, suggest that there were various phases of construction and abandonment during this phase of occupation. The earlier houses are circular in plan, and are indicated by series of stakeholes, representing the uprights of wicker-walled structures. At least one of these buildings has evidence for internal subdivisions. Roundhouses continued to be built within the enclosure, but there are also examples of 'figure-of-eight' houses, built in a similar fashion. Some of these also show further internal divisions, and, in the better preserved houses, the water-logged conditions allowed possible bedding areas to be identified by the build-up of organic material. Excavations also revealed that the timber door jambs and lintels were regularly recycled and re-used on new structures.

The interior of the enclosure appears to have been raised in stages, with part of the enclosure still being occupied while the remainder was heightened by 1m. This entailed the deliberate burial of earlier structures, and the construction of new buildings on this raised area. By the time the entire enclosure was raised, it stood 2m above the old ground surface, and was surrounded by a wide, deep, stone-revetted ditch. The subsequent occupation area on top of the stone-revetted mound was slightly smaller than that of the earlier enclosure (20m by 22m). The earliest houses built on the mound appear to have been 'figure-of-eight' shaped, but roundhouses were also present during this phase. Some of these structures appear to have incorporated stone into their construction, and one of the last houses built during this phase would appear to be stone-built and rectangular.

The mound was subsequently raised again by at least 1.5m. An entranceway was identified, but no trace of a surrounding fence, bank or wall was detected. Two dry-stone-walled souterrains were constructed into the built-up mound, and, although no other structures survived from this period, it is presumably the case that these souterrains were associated with houses.

The waterlogged conditions of the site meant that quantities of organic material survived, including shoe leather, animal and human hair, and wicker walls. These conditions were also conducive to the survival of insect material, including animal and human lice; as well as plant material, including fragments of woad pods, and flax fibres.

A large number of glass objects were found on site including 85 glass beads, two fragments of glass bracelets, three amber beads, and an inlaid glass stud. A glass-topped iron pin was also found on site. Crucible and tuyère fragments suggest that glass-working may have been undertaken on site. There was evidence for iron working and iron tools were identified (knives, billhooks and shears). Other finds included three amber beads; a bronze brooch; a millstone and two wooden paddles; fragments of wooden vessels, and quantities of souterrain ware.

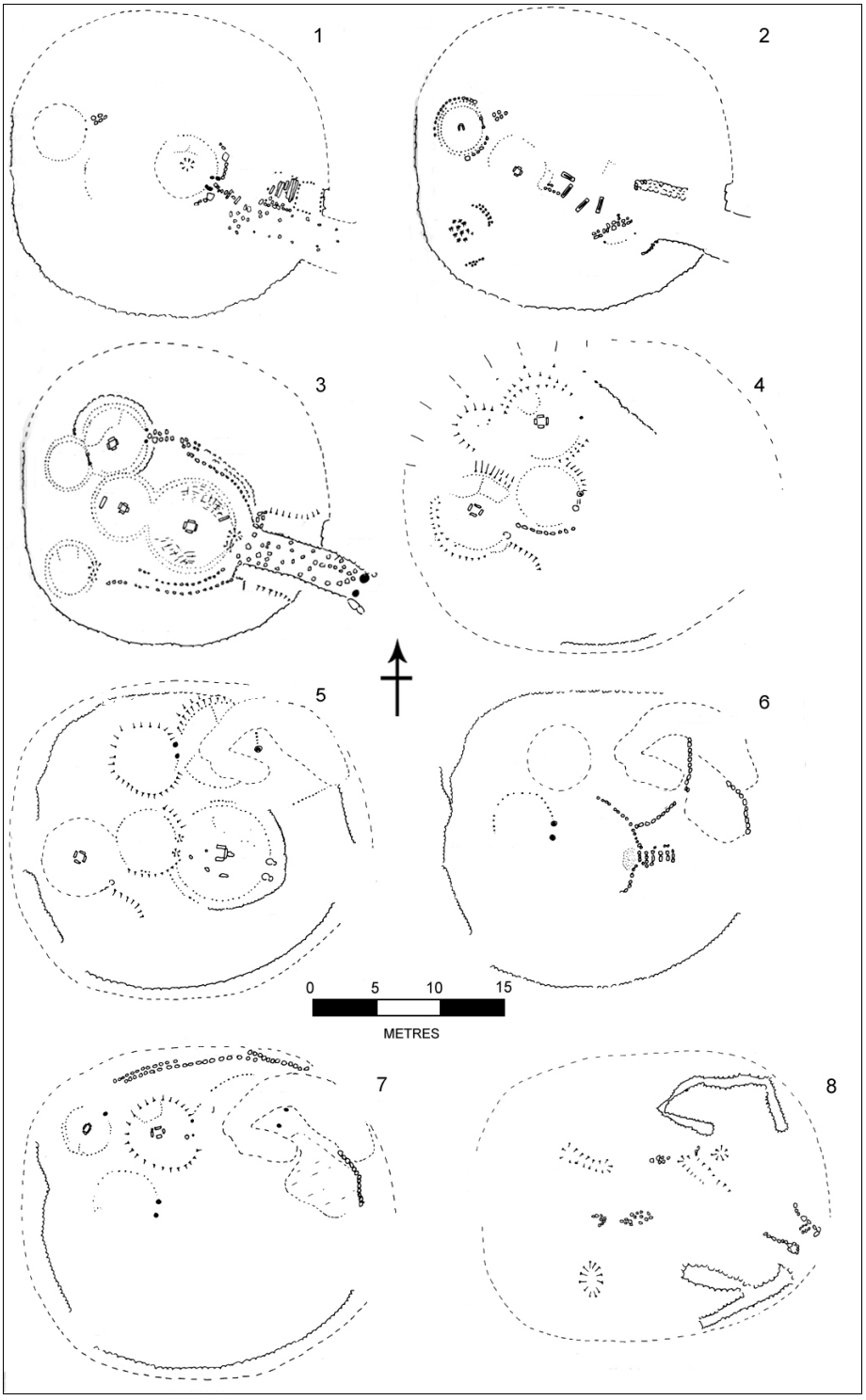


Fig. 22: Plans of phases from Deer Park Farms, Co. Antrim. 1-3 from univallate phase; 4-7 from raised phase; 8 is associated with the souterrain construction (after McDowell 2004, [1] 38; [2] 41; [3] 43; [4] 50; [5] 50; [6] 53; [7] 57; [8] 60).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-3064	Wall stakes of house Iota	1295±16 BP	**A.D. 666-723**; **A.D. 739-770**.
UB-3065	Soil & Charcoal	1229±14 BP	**A.D. 709-746**; **A.D. 766-875**.
UB-3066	Sample 749	1302±15 BP	**A.D. 664-718**; **A.D. 742-769**.
UB-3081	Wicker from wall of Theta	1311±18 BP	**A.D. 659-716**; **A.D. 744-768**.
UB-3082	Wicker from wall of Eta	1291±17 BP	**A.D. 668-725**; **A.D. 738-771**.
UB-3083	Wicker from wall of Zeta	1280±17 BP	**A.D. 675-730**; **A.D. 735-772**.
UB-3084	Wicker from wall of Kappa	1312±20 BP	**A.D. 658-718**; **A.D. 742-769**.
UB-3093	Wooden threshold of 02	1269±16 BP	**A.D. 683-774**.
UB-3199	Withies from structure H	1181±14 BP	A.D. 779-794; **A.D. 800-891**.
UB-3200	Wicker from wall of D	1258±14 BP	**A.D. 687-776**.
UB-3201	Wicker from wall of Z	1171±14 BP	A.D. 779-793; **A.D. 801-895**; A.D. 925-937.
UB-3217	Cut-off river channel	1408±43 BP	**A.D. 563-676**.
UB-4192	Ring ditch	1258±22 BP	**A.D. 673-782**; A.D. 789-811; A.D. 848-852.
UB-4193	Charred twigs- context 685	1142±34 BP	A.D. 780-791; **A.D. 805-982**.
UB-4194	Charred twigs- context 7936	1313±38 BP	**A.D. 652-774**.
UB-4195	Charcoal- context 5d	1219±25 BP	A.D. 695-699; **A.D. 708-747**; **A.D. 765-886**.
UB-4196	Charred twigs- context 182	1189±31 BP	A.D. 719-742; **A.D. 769-898**; A.D. 920-947.
UB-4197	Charred twigs- context 9	1273±24 BP	**A.D. 670-777**.
UB-4953	Outer rings of oak	925±39 BP	**A.D. 1024-1188**; A.D. 1198-1206.

References:

Kenward, H. K. & Allison, E. P. 1994. A preliminary view of the insect assemblages from the early Christian rath site at Deer Park Farms, Northern Ireland, in J. Rackham (ed.) *Environment and Economy in Anglo-Saxon England: Proceedings of a conference held at the Museum of London, 9-10 April, 1990*. London: Council for British Archaeology Bowes Morrell House, 111 Walmgate, York.

Lynn, C. J. 1988. Ulster's oldest wooden houses: Deer Park Farms, Co. Antrim, in A. Hamlin & C. Lynn (eds.) *Pieces of the Past: Archaeological Excavations by the Department of the Environment for Northern Ireland 1970-1986*. Belfast, H.M.S.O., 44-7.

Lynn, C. J. & McDowell, J. A. forthcoming. *Excavations at an early Christian settlement at Deer Park Farms, Glenarm, Co. Antrim*.

McDowell, J. A. 2004. *Excavation, Recording and the use of Space at the Early Medieval Site of Deer Park Farms, Co. Antrim*. Unpub'd MPhil, Queen's University, Belfast.

'Doonmore' (Cross td.), Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **D17244263 (31724/44263)**
SMR No: **ANT 005:007**
Excavation Licence: **N/A**
Excavation Duration/Year: **1938?**
Site Director: **V.G. Childe (for the Prehistoric Research Council for Northern Ireland)**.

The site is set on top of a rocky peak rising almost vertically 12m from the surrounding farmland. It was excavated under a grant by the Prehistoric Research Council for Northern Ireland.

Excavation on the summit revealed areas of paving, a rectangular structure and two hearths. Possible post sockets were also discovered around the edges of the summit, indicating the likely presence of a light palisade (Fig. 23).

The nature of the site and the presence of sherds of green-glazed pottery suggest that the site was used during the Anglo-Norman period. There is also substantial artefactual evidence that the site was occupied during the early medieval period – there were large numbers of souterrain ware pottery sherds (as well as some unidentified wheel-thrown pottery); shale bracelets; iron bloom; and fragments of three rotary quernstones (one of which had a cross carved in low relief).

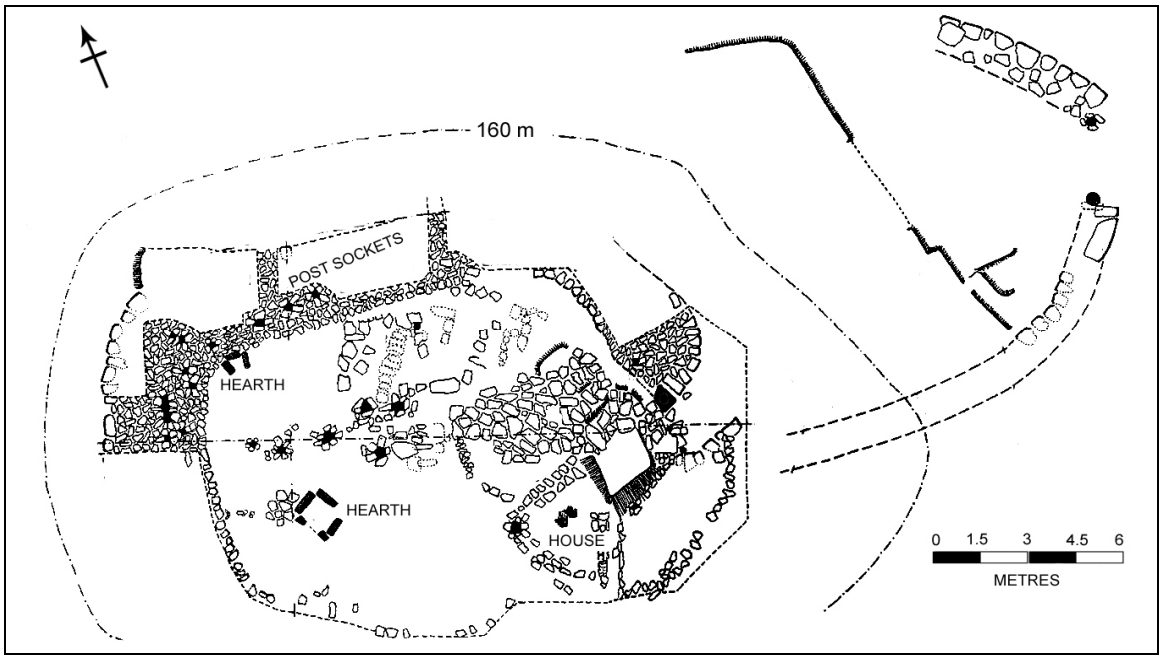


Fig. 23: Plan of excavation at Doonmore, Co. Antrim (after Childe 1938).

Reference:

Childe, V. G. 1938. Doonmore, a castle mound near Fair Head, Co. Antrim. Ulster Journal of Archaeology (Third Series), 1, 122–35.

Dromore, Co. Antrim
Early Medieval Raised Enclosure.
Grid Ref: **D04751354 (30475/41354)**
SMR No. **ANT 027:006**
Excavation Licence: **N/A**
Excavation Duration/Year: **1964**.
Site Director: **A. E. P. Collins (Ancient Monuments Branch, Ministry of Finance)**.

The site was a raised enclosure, set on a mound approximately 3m high. The site was destroyed subsequent to excavation as part of a farm improvement scheme. Excavation showed that a natural hillock had been deliberately scarped to create the enclosure mound. The top of the mound contained evidence for occupation. Postholes, pits and shallow gullies provided structural evidence, and three separate houses could be identified.

House I was partially defined by a sub-circular drainage gully which enclosed ten postholes and one small pit (Fig. 24). Small sherds of souterrain ware were recovered from the fill of the pit.

House II was also partially defined by a sub-circular drainage gully which enclosed six postholes and a shallow basin. A few sherds of souterrain ware were found in the fill of the basin.

House III was a stone-built structure, of rectangular form with rounded corners (Fig. 25). The walls survive in places to a height of three courses. Much of the interior was paved with flat basalt slabs. A couple of sherds of souterrain ware were the only artefacts found in association with this structure.

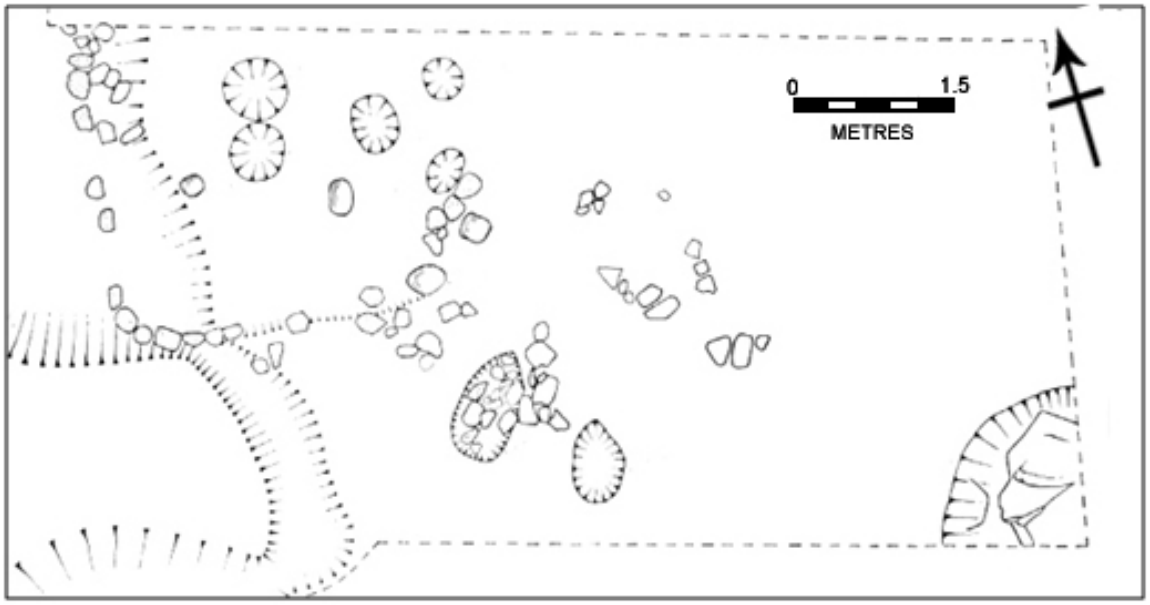


Fig. 24: Hearths to the east of House I at Dromore, Co. Antrim (after Collins 1968, 63).

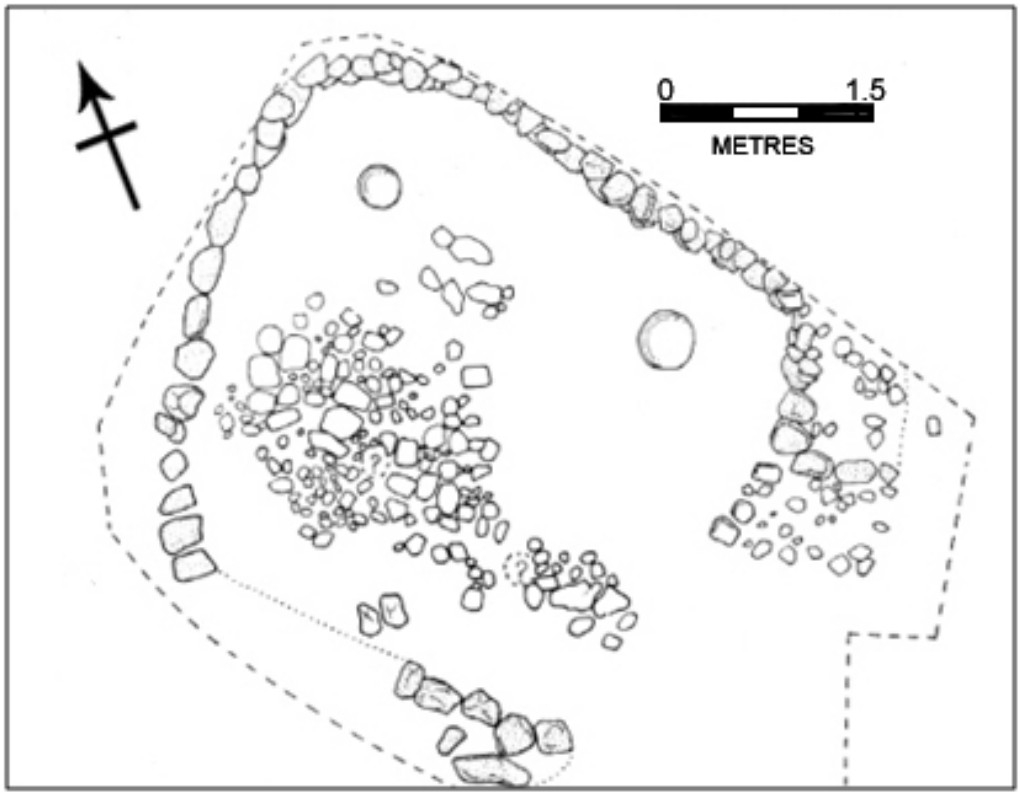


Fig. 25: Plan of House III at Dromore, Co. Antrim (after Collins 1968, 63).

Reference:

Collins, A. E. P. 1968. Excavations at Dromore ringwork, Co. Antrim, *Ulster Journal of Archaeology* (Third Series), 31, 59–66.

Drumadoon, Co. Antrim
Early Medieval Raised Enclosure.
Grid Ref: **D16744046 (31467 44046)**
SMR No: **ANT 009:042**
Excavation Licence: **AE/03/105**
Excavation Duration/Year: **May – August 2003**.
Site Director: **C. McSparron (Centre for Archaeological Fieldwork, QUB) & B. B. Williams (Northern Ireland, Environment & Heritage Service: Built Heritage)**.

The site consists of a mound, approximately 5m high, set at the end of a ridge. Small-scale gravel quarrying by the landowner had exposed the side of a souterrain, and had potentially compromised the integrity of the archaeological site.

Excavation of the site revealed that a bank had originally enclosed an area 14m by 5m on top of a natural mound, approximately 3.5m in height. This bank had a stone-faced external façade, and there was evidence for a cobbled entranceway and metalled interior surface. The construction of the souterrain appears to have occurred during this phase of occupation. Human habitation is indicated by the presence of a hearth, and a circular hut which was associated with deposits of burnt wattle-and daub (Fig. 26). Souterrain ware (242 sherds) were found in this occupation layer; as well as two iron nails, and iron spearhead, and a copper alloy clasp. A large number of oat grains (10,000 +) were recovered from in and around the hut, accounting for 74% of the total cereal grains from this occupation phase.

The bank slump was later levelled and in-filled to create an artificial platform upon which a second hearth and paved area were constructed (Fig. 27). Souterrain ware (54 sherds) was also found in this occupation layer.

The interior of the site was levelled again, and the external bank was strengthened by the addition of an internal stone revetment. A sub-circular hut was identified in this occupation phase, which appears to relate to the conversion of the early medieval site into an Anglo-Norman motte (Fig. 28). A copper-alloy bell-shrine of possible twelfth-century date was discovered in a void within the souterrain fill. A figure of Christ, which was manufactured at Limoges in the thirteenth century, had been attached to the bell-shrine. A silver half-penny of Henry III (dating to 1247-1272) was also found in this phase. Over two hundred pottery sherds were recovered – the majority (134) were identified as souterrain ware; a large number (85) were identified as possible souterrain ware; and fourteen were identified as thirteenth/fourteenth-century Medieval Ulster Coarse Pottery.

Analysis of the mammalian animal bones shows that the numbers of identified specimens (NISP) from the Early Medieval occupation phases are: Cattle (185); Sheep (160); Pig (43); Horse (7); Dog (10); Cat (14); Fox (31); and Hare (3). A number of fish bones (67) were also recovered, and were identified to salmon, saithe, red seabream, and cod (in the earliest occupation layer); and cod and red seabream (in the later layer).

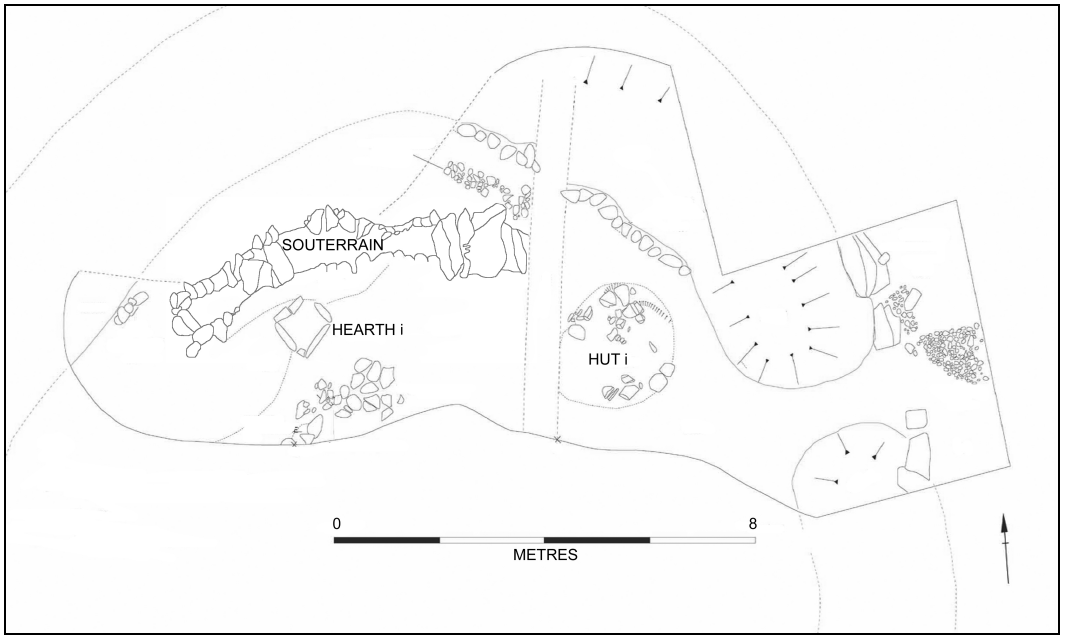


Fig. 26: Phase I occupation at Drumadoon, Co. Antrim (after McSparron & Williams 2009, 121).

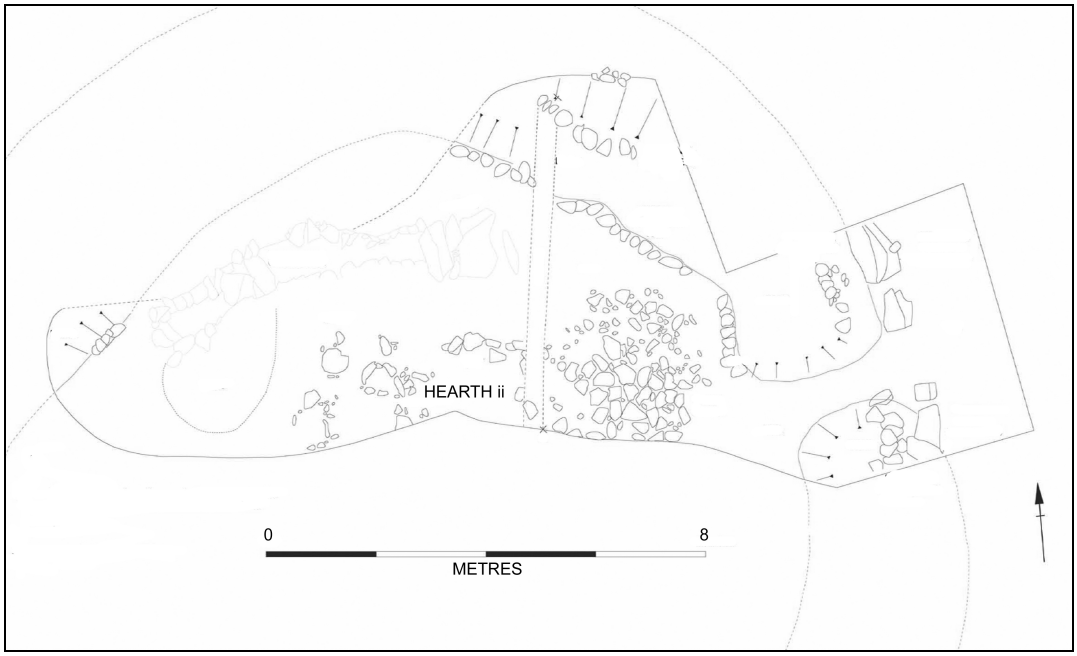


Fig. 27: Phase II occupation at Drumadoon, Co. Antrim (after McSparron & Williams 2009, 125).

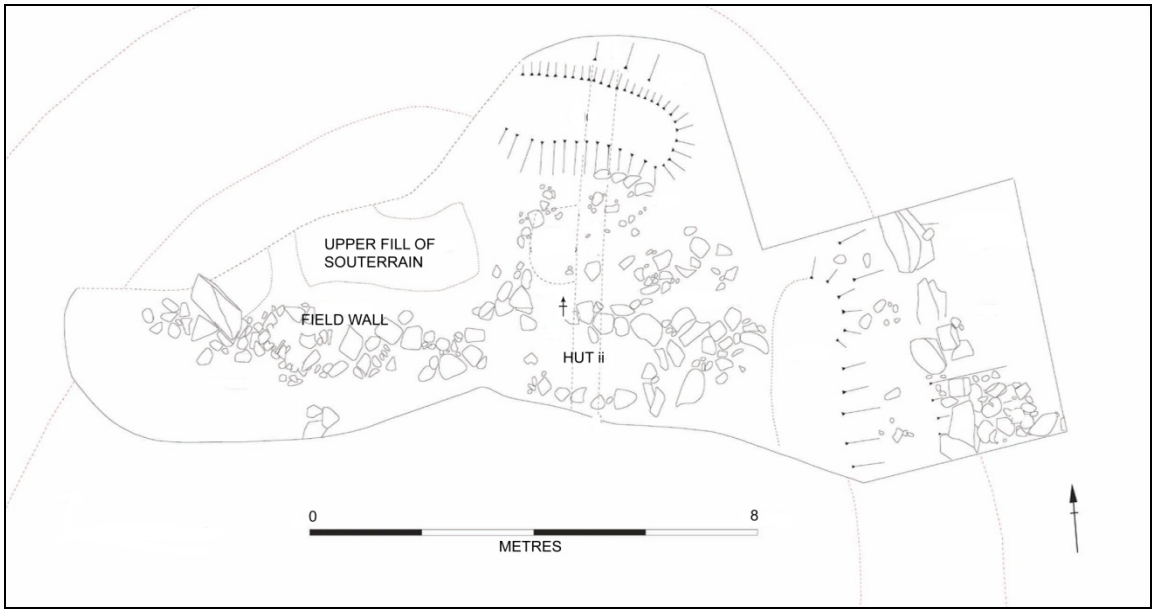


Fig. 28: Phase III occupation at Drumadoon, Co. Antrim (after McSparron & Williams 2009, 127).

Radiocarbon Dates

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-6414	Charred cereal grains from Hearth II	1185±30	A.D. 724-739; **A.D. 771-899**; A.D. 919-949
UB-6416	Charred cereal grains from basal fill of souterrain	1152±30	A.D. 779-792; **A.D. 803-972**
UB-6417	Charred cereal grains from Hearth I	1186±30	A.D. 723-740; **A.D. 770-899**; A.D. 919-948
UB-6418	Charred cereal grains from Hut I	1199±30	A.D. 713-745; **A.D. 767-895**; A.D. 925-937
UB-6993	Human femur in gravel capping souterrain	1260±29	**A.D. 670-783**; A.D. 787-823; A.D. 841-861

Reference:

McSparron, C. & Williams, B. B. 2009. The excavation of an early Christian rath with later medieval occupation at Drumadoon, Co. Antrim. *Proceedings of the Royal Irish Academy* Section C, 109C, 105–64.

Dunsilly, Co. Antrim
Early Medieval Raised Enclosure
Grid Ref: **J14088890 (31408/38890)**
SMR No. **ANT 050:003**
Excavation Licence: **N/A**
Excavation Duration/Year: **Summer 1974; Summer 1975**.
Site Director: **T. E. McNeill (Queen's University, Belfast)**.

Excavation was undertaken on a motte prior to its destruction and revealed a number of phases of occupation. The earliest phases of the site are represented by ephemeral remains of circular structures, and a stone-built hearth (Fig. 29). This phase of (possibly) unenclosed dwellings is succeeded by the construction of an enclosure bank with an internal revetment or stone kerb. In a later phase of construction, a rectangular house was constructed (Fig. 30), using the interior bank as a supporting wall. The site then appears to have been abandoned for a time, before being modified into an Anglo-Norman motte.

Finds from the site were dominated by souterrain ware (420 sherds), as well as a few objects of glass and lignite.

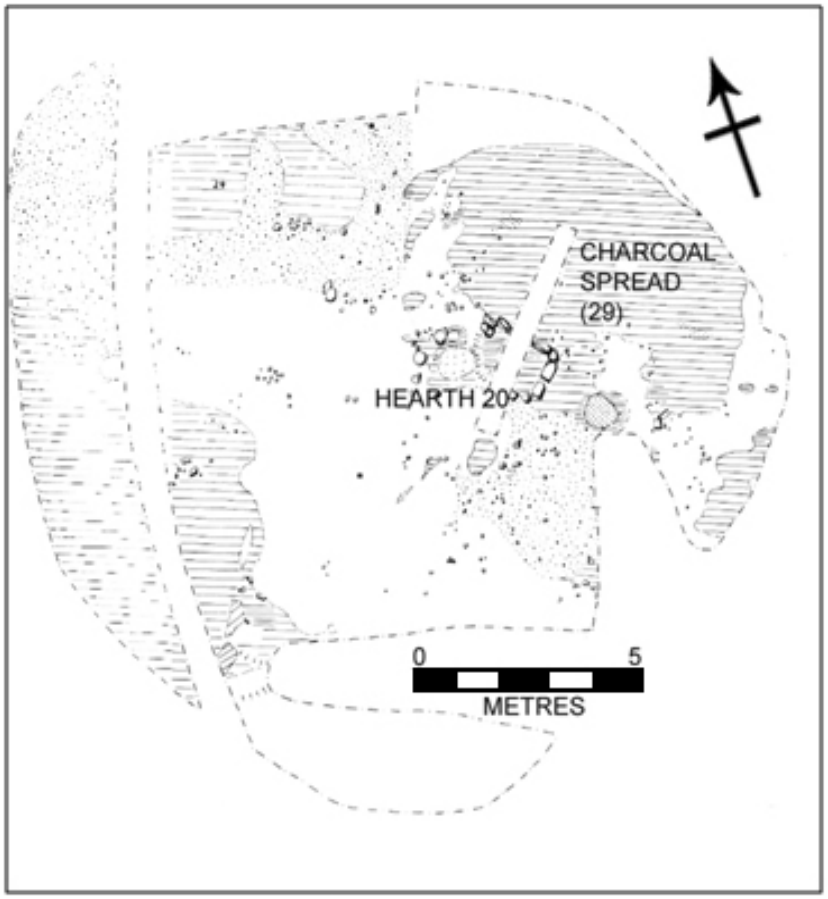


Fig. 29: Plan of pre-enclosure B Phase at Dunsilly, Co. Antrim (after McNeill 1991-2, 83).

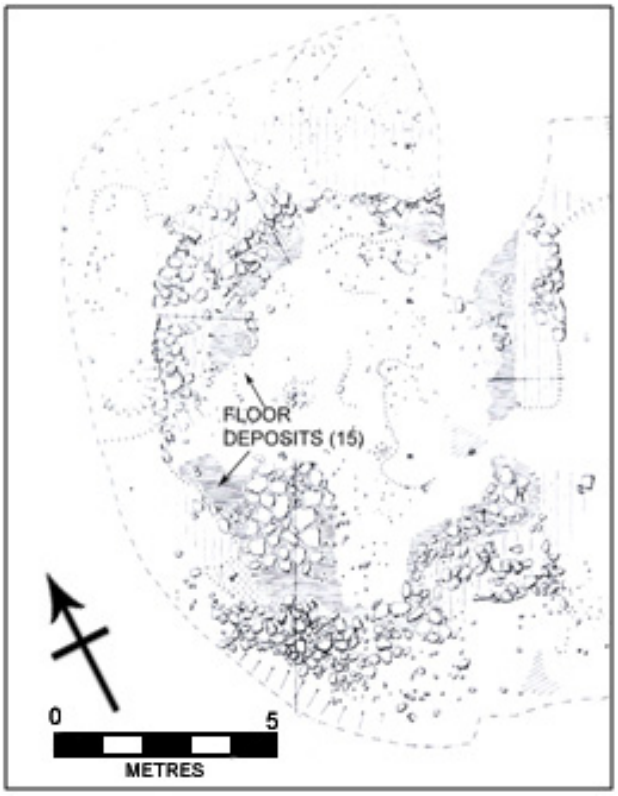


Fig. 30: Plan of Enclosure 3 house at Dunsilly, Co. Antrim (after McNeill 1991-2, 92).

Radiocarbon Dates

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-967	Charcoal spread in 'pre-enclosure B' (29)	1905±75	87 B.C. – A.D. 78; **55 B.C. – A.D. 259** A.D. 284-323
UB-968	Charcoal spread from floor of house (15)	890±40	**A.D. 1035-1219**
UB-2001	Charcoal from 'pre-enclosure C' hearth (32)	1565±105	**A.D. 255-656**
UB-2002	Charcoal from 'pre-enclosure B' hearth (F20)	1380±65	**A.D. 544-776**

Reference:

McNeill, T. E. 1991-2. Excavation at Dunsilly, County Antrim, *Ulster Journal of Archaeology* (Third Series), 54-5, 78–112.

Killealy, Co. Antrim
Early Medieval Raised Enclosure
Grid Ref: **J16338065 (31633/38065)**
SMR No. **ANT 055:074**
Excavation Licence: **N/A**
Excavation Duration/Year: **1970**.
Site Director: **A.E.T. Harper (Historic Monuments Branch, Department of Environment)**.

This site was an enclosure with a raised interior, surrounded by two ditches and two banks. It was subsequently destroyed by work at Aldergrove airport. A number of occupation phases were identified on the site.

Phase 1: Occupation was first established on a raised peat platform - whether or not this peat was natural, or deliberately placed in position is not yet clear: there is no peat on the immediately surrounding land and none was located either under the banks or in the bottoms of the ditches. The remains of wooden houses, and hearths were found. This occupation layer yielded no pottery but produced a single-sided bone comb, and a dumb-bell bead. [UB-536; UB-537; UB-538; UB-539; UB-541; UB-545]

Phase 2: A layer of peat 0.10m thick separated this phase from the earliest one. From this later occupation which was marked by at least four hearths, and a possible house site, sherds of souterrain ware were recovered, as well as two bronze pins, a loom weight and several bones. [UB-540; UB-542]

Phase 3: The final occupation layer. A third bronze pin was the major find in this phase. [UB-544].

(No plans were available for this site)

Radiocarbon Dates

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-536	SE corner of trench	1635±65	**A.D. 255-559**
UB-537	Phase 1 occupation surface	1470±45	A.D. 441-455; A.D. 460-484; **A.D. 533-656**
UB-538	Wood- Phase 1	1600±65	A.D. 261-280; **A.D. 325-601**
UB-539	Charcoal- base of hearth	1540±65	**A.D. 401-643**
UB-540	Phase 2 hearth	1385±65	**A.D. 544-774**
UB-541	Hearth & Surround- Phase 1	1560±35	**A.D. 419-574**
UB-542	Hearth A	1345±65	**A.D. 617-772**
UB-544	P4 Layer 3- Hearth	1230±50	**A.D. 669-894;** A.D. 928-933
UB-545	Oak Doorpost	1395±40	**A.D. 574-683**

References:

Harper, A. E. T. 1970:03, Tully, *Excavations* (1), 2–3.

Lynn, C. J. 1981-2; The excavation of Rathmullan, a raised enclosure and motte in County Down, *Ulster Journal of Archaeology* (Third Series), 44–5, 168.

Smith, A. G., Pearson, G.W., & Pilcher, J.R. 1973, Dates from Belfast, *Radiocarbon* (15.1), 212–228.

'Langford Lodge' (Gartree td.), Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **J09617507 (30961/37507)**
SMR No**. ANT 058:017**
Excavation Licence: **N/A**
Excavation Duration/Year: **September - October 1960**.
Site Director: **D. M. Waterman (Historic Monuments Branch, Ministry of Finance)**.

The site existed as a circular platform (24m by 25.5m in diameter, and 0.9m to 1.5m high). An ice house associated with the ruined manor house had been cut into the site in the nineteenth century.

Excavation showed that the site have a multi-phase history, beginning with a Neolithic phase of occupation. The early medieval occupation occurred in two phases. In Phase I, an area approximately 22m in diameter was enclosed by a ditch (1.5m to 1.8m wide and 0.6m deep). A small – approximately 7.5m wide – square timber-posted house was discovered in the centre of this enclosure, with an associated central hearth (Fig. 31). This structure was surrounded by a shallow drainage gully. The area around the house appears to have had a cobbled surface, but elsewhere the site was un-metalled. This occupation soil contained sherds of souterrain ware, and its nature led the excavator to interpret this as representing an animal stockyard, rather than human habitation.

In Phase II the ditch was moved outwards to its present position and the interior was raised into a low platform. The enclosure appears to have formed part of the manorial gardens, and cultivation has severely truncated archaeological features from this phase. A pair of stone-lined post-sockets were uncovered which presumably relate to a structure from this phase. A few sherds of souterrain ware were found in these post-sockets.

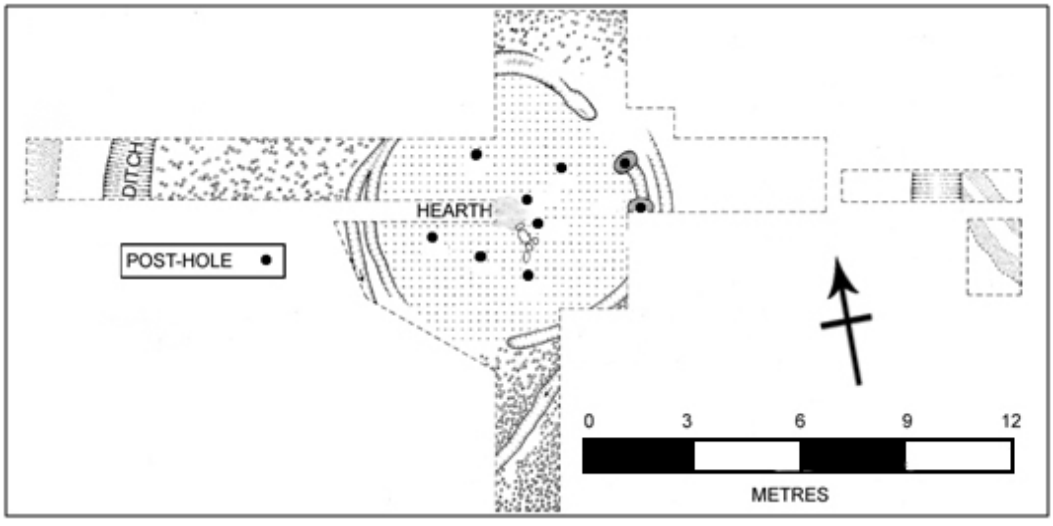


Fig. 31: Plan of Phase I house at Langford Lodge, Gartree, Co. Antrim (after Waterman 1963, 47).

Reference:

Waterman, D. M. 1963. A Neolithic and Dark Age site at Langford Lodge, Co. Antrim, *Ulster Journal of Archaeology* (Third Series), 26, 43–54.

'Larrybane' (Knocksoghey td.), Co. Antrim
Early Medieval Promontory Fort.
Grid Ref: **D04824512 (30482/44512)**
SMR No. **ANT 004:005**
Excavation Licence: **N/A**
Excavation Duration/Year: **1935; April 1954**
Site Director: **V. G. Childe (Edinburgh University); V. B. Proudfoot & B. C. S. Wilson (Historic Monuments Branch, Ministry of Finance)**.

The site is a promontory fort which was partially excavated by V.G. Childe in 1935. It was later threatened by quarrying, and was further excavated in 1954 (Fig. 32).

The 1954 excavation was largely focused on the interior of the site. No structural remains of house walls were discovered. However, some roughly cobbled floors were found which suggest that the houses may have been rectangular.

An iron ring, nail and sickle were found on site, and the presence of slag suggests that ironworking was undertaken on site. The exotic material found on site – a fragment of bronze, a glass bangle, and an amber bead – are possible indicators of external trade. Around 1500 sherds of souterrain ware are recorded for the site.

Faunal remains from this excavation show a higher percentage of sheep bone than normally found on other early medieval sites - (Cattle (44.7%); Sheep (43.3%); Pig (6.8%); Red Deer (3.0%); Horse (1.5%). One bone was found of dog, cat and hare; and there were also a number of bird bones (domesticates and sea birds), as well as some fish bones (mostly cod).

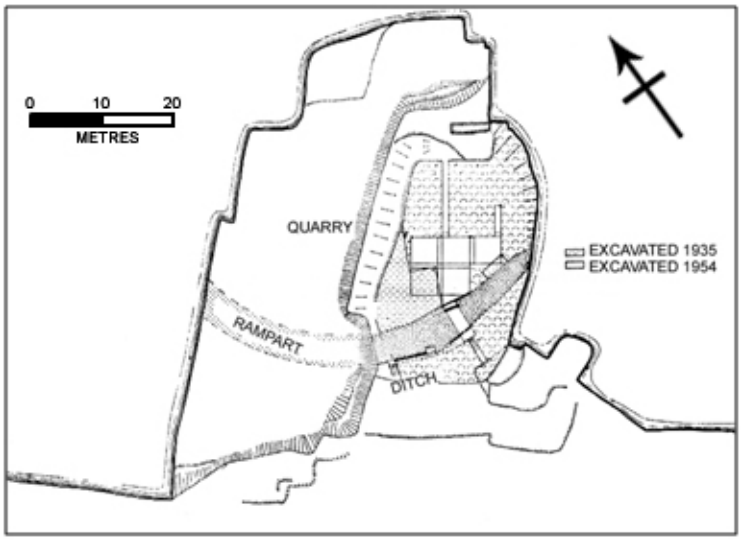


Fig. 32: Plan of Excavations at Larrybane, Knocksoghey, Co. Antrim (after Proudfoot & Wilson 1961-2, 92).

References:

Childe, V. G. 1936. A Promontory fort on the Antrim Coast. *Antiquities Journal*, 16, 179–98.

Proudfoot, V. B & Wilson, B. C. S. 1961-62. Further excavations at Larrybane promontory fort, Co. Antrim, *Ulster Journal of Archaeology* (Third Series), 24–5, 91–115.

Lissue, Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **J22786325 (32278/36325)**
SMR No. **ANT 067:013**
Excavation Licence: **N/A**
Excavation Duration/Year: **June – August 1946**.
Site Director: **G. Bersu (Royal Irish Academy)**.

The site consists of a univallate enclosure, approximately 60m in diameter, built on the southern slope of a drumlin. A research excavation was undertaken combining the Royal Irish Academy; Queen's University, Belfast; the Belfast Municipal Museum; and the Inspectorate of Ancient Monuments.

Excavation revealed the presence of an earlier, smaller enclosure ditch (Fig. 33). Finds from the fill of this earlier ditch included animal bones and pieces of worked wood, along with sherds of souterrain ware, which suggest that this ditch was deliberately back-filled during the early medieval period, when the enclosure expanded to its present size.

A large number of postholes were uncovered in the interior of the enclosure. These were interpreted by the excavator as forming concentric circles, and, based on previous excavations in the Isle of Man, the excavator suggested that these represented a circular structure, approximately 40m in diameter, which would have covered the entire interior of the enclosure. No other such structure has been identified in an Irish context, and it is possible that such an interpretation is erroneous.

Finds from the site included a slate 'trial-piece' which has examples of interlaced design; a bronze ring-pin; and two glass beads. There were also vast amounts of souterrain ware – the sherds from the earlier ditch tended to be undecorated, whereas those from the later enclosure had 'cable-ornamentation', presumably formed by pinching the clay between finger and thumb. The water-logged conditions in the ditch of the later enclosure preserved wooden artefacts (including most of an oaken churn, and a couple of lathe-turned vessels – all of which were typologically dated to around the start of the ninth century), and the fragments of two (or three) leather shoes.

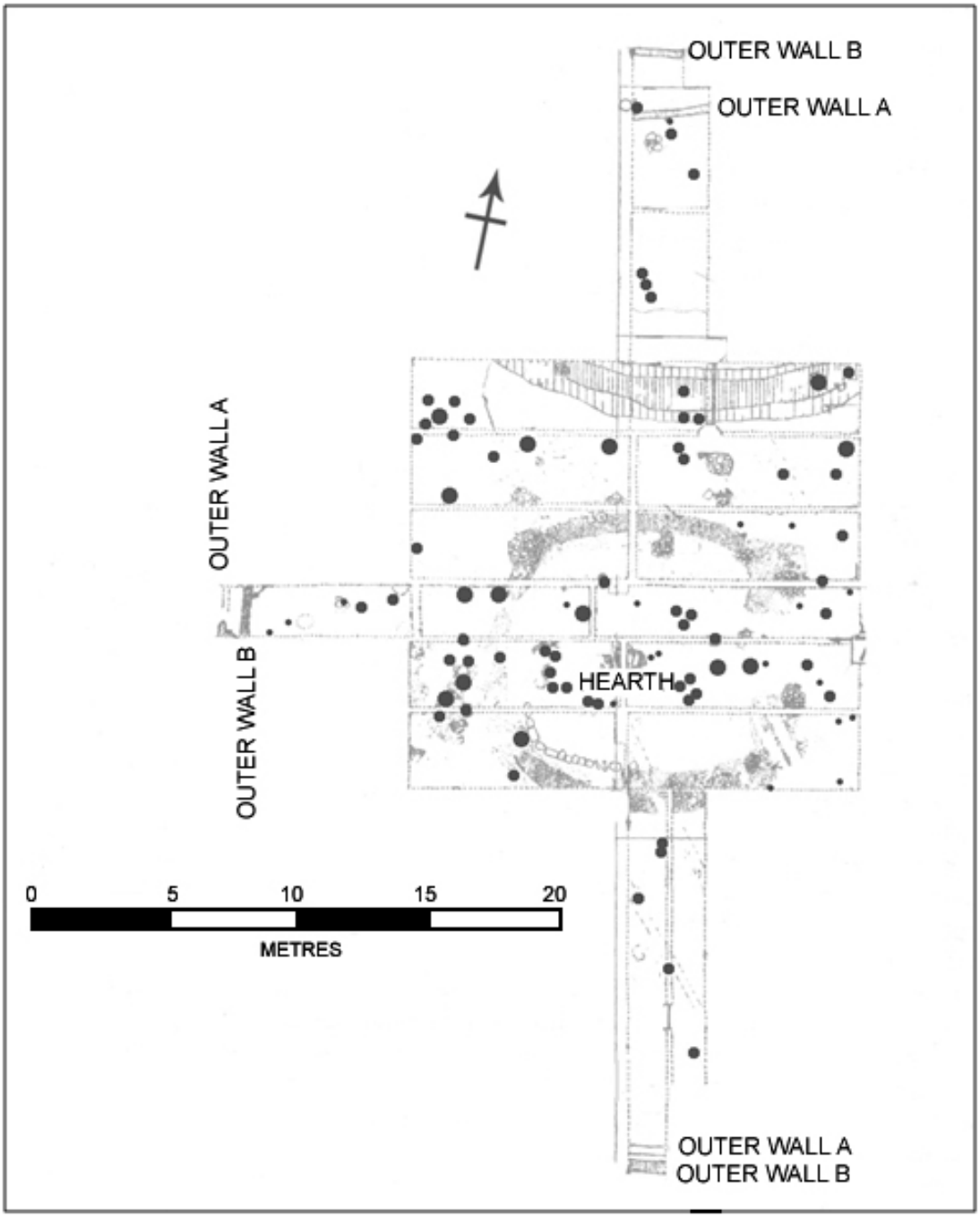


Fig. 33: Plan of excavated area at Lissue, Co. Antrim (after Bersu 1947, 34).

References:

Bersu, G. 1947. The rath in Lissue townland, Co. Antrim: report on excavation in 1946. *Ulster Journal of Archaeology* (Third Series), 10, 30–59.

Bersu, G. 1948. Preliminary report on the excavations at Lissue, 1947. *Ulster Journal of Archaeology* (Third Series), 11, 131–3.

'Meadowbank' (Jordanstown td.), Co. Antrim
Early Medieval Raised Enclosure.
Grid Ref: **J36198506 (33619/38506)**
SMR No: **ANT 052:047**
Excavation Licence: **N/A**
Excavation Duration/Year: **June – August 1995**.
Site Director: **N. Crothers (Archaeological Development Services)**.

The site was a mound (40m in diameter), raised 4m above the surrounding landscape. The site was located on a gentle south-east facing slope, and was excavated prior to a housing development.

Excavation revealed four identifiable phases of occupation (Fig. 34). The first phase consisted of the construction of a univallate enclosure surrounded by a large ditch (up to 7.5m wide and 2.5m deep) and a wide bank (up to 5m wide). The entranceway to this site appears to have been flanked by a sequence of large postholes and two stone-lined palisade slots. Several hazel wands recovered from the silted-up ditch of this early phase of occupation have been tentatively interpreted as the collapsed remains of a bank-top palisade. A post-built circular structure and associated ironworking pit, along with other truncated postholes and pits, appear to have been constructed at this time (Fig. 35). A second occupation layer succeeded these features, but left little structural remains.

The site was then deliberately raised and a souterrain was built into this mound. Finally the souterrain was deliberately destroyed, but occupation still carried on and is evidenced by structural traces and cobbled surfaces.

Finds from the site were dominated by souterrain ware (1240 sherds), but two lignite bracelets; one perforated whetstone fragment; iron working slag; tuyère fragments; bone pins; bronze dress pin fragments; iron dress pins; and an iron spearhead were also recovered.

[No plan exists for this site]

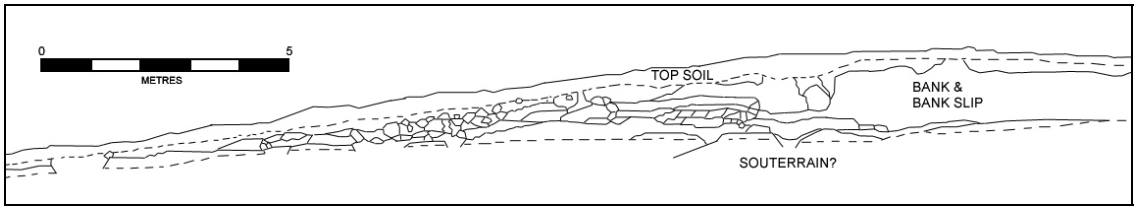


Fig. 34: Section through site at Jordanstown, Co. Antrim (from NIEA).



Fig. 35: Phase 1 roundhouse at Jordanstown, Co. Antrim (per N. Crothers).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-4232	Charcoal- context 60	1255±44 BP	**A.D. 670-875**.
UB-4233	Charcoal- context 102	1352±49 BP	**A.D. 605-773**.
UB-4234	Charcoal- fill 198	1511±44 BP	**A.D. 433-496**; **A.D. 503-636**.
UB-4232	Charcoal- context 60	1255±44 BP	**A.D. 670-875**.

References:

Crothers, N. 1995. The excavation of a rath at Jordanstown, Co Antrim: Preliminary report. Archaeological Development Services.

Crothers, N. Undated. Excavation of a rath at Jordanstown, Co. Antrim. Archaeological Development Services.

Rathbeg, Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **J18288805 (31828/38805)**
SMR No. **ANT 050:018**
Excavation Licence: **N/A**
Excavation Duration/Year: **March – May 1967**.
Site Director: **C.Warhurst (Ancient Monuments Branch, Ministry of Finance)**.

The site was a univallate enclosure which was levelled during motorway construction. It had been identified with Rathbeg of Moy-Linne in Dal nAraidi, a site mentioned in various early annals.

The V-shaped ditch was found to be approximately 5.7m wide and 2.7m deep. Two turf layers in the ditch indicated occupation phases of the enclosure. The only finds from the ditch were fragments of one cordoned souterrain ware pot and preserved plant macrofossils (mainly hazel).

A circular timber-posted building was excavated near the centre of the enclosure, but produced no associated finds. To the east of the interior three aligned post-holes were interpreted as the supports for a later lean-to structure which utilised the inner face of the bank (Fig. 36). A bowl-shaped kiln was also built into the inner face of the bank in the south of the interior.

A rectangular stone-walled building and a rectilinear clay-walled building were located in the west of the interior. Both appear to have been contemporary with a primary occupation phase.

A large number of souterrain ware sherds were uncovered on site, as well as fragments of three iron knives, and a solitary blue glass bead.

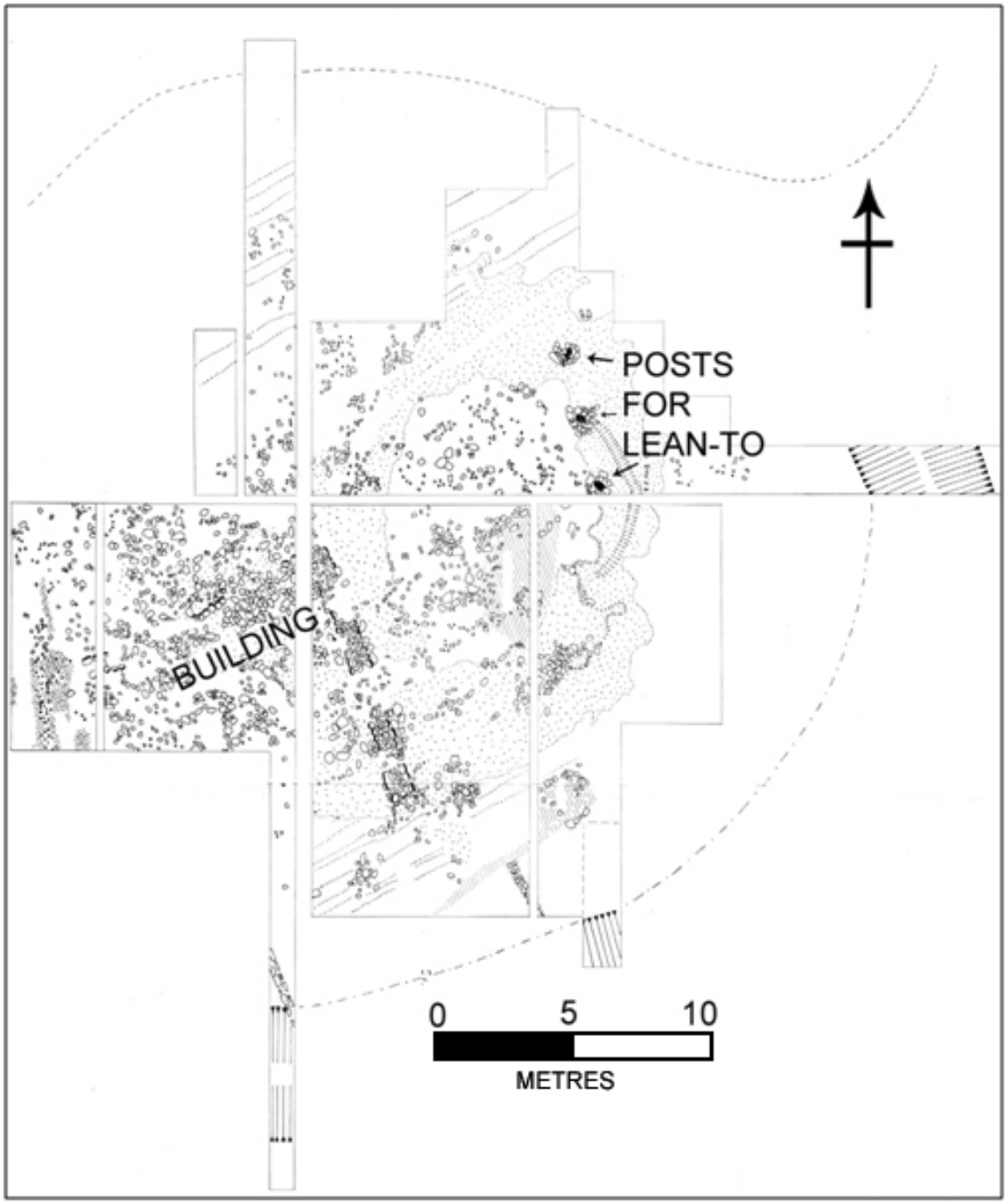


Fig. 36: Plan of interior of Rathbeg, Co. Antrim (after Warhurst 1969, 95).

Reference:

Warhurst, C. 1969. Excavations at Rathbeg, Co. Antrim, *Ulster Journal of Archaeology* (Third Series), 32, 93–100.

Seacash, Co. Antrim
Early Medieval Settlement Enclosure
Grid Ref: **J15397978 (31539/37978)**
SMR No. **ANT 055:077**
Excavation Licence: **N/A**
Excavation Duration/Year: **July – August 1971**.
Site Director: **C. J. Lynn (Historic Monuments Branch, Department of Environment)**.

The enclosure had been levelled during World War II to construct temporary airforce huts and was completely destroyed in 1971 prior to construction of an army barracks. The site had been seriously damaged by bull-dozing and all features in the northwest area were truncated to some extent. A flimsy, possibly wicker walled, structure was discovered in the southeast quadrant.

Access to the enclosure had been gained across an hourglass-shaped causeway (Fig. 37). The causeway was broken by an ancient, stone-packed drain, evidently designed to permit water to escape to the northwest. It is possible that the drain was a secondary feature of the causeway. An attempt had been made to widen the causeway at some time late in the enclosure's occupation, or perhaps after its abandonment. A row of eight oak posts ('A' on plan) had been driven in 1.5m from the edge of the causeway and parallel to it. The original entrance was blocked by a gate as two large postholes ('B'), 2m apart and 0.35m deep, were found 2m inside the causeway.

A circular structure was identified to the east of the modern pipe trench; and a rectangular lean-to structure, which may have utilised the exterior bank face as an interior wall, was identified to the east of this. The circular structure was interpreted as a dwelling, while the lean-to may have been an outhouse.

The water-logged conditions immediately to the southeast of the causeway preserved some organic objects – mainly wooden stave-built vessels; and a scrap of possible shoe leather. Analysis of the animal bone suggests that the minimum numbers were as follows: Cattle – 8; Pig – 5; Sheep – 4; Horse – 2; Cat – 1.

Almost 3,000 sherds of souterrain ware were found on site, some of which was decorated with cordons or oval impressions. Three glass beads; three bronze pins and an iron spiral ringed pin were also found. Agricultural activity was indicated by the discovery of an iron sickle point and part of a rotary quern-stone; and other industrial activity may have been hinted at by the discovery of pieces of whetstones and hone-stones, as well as stone spindle whorls.

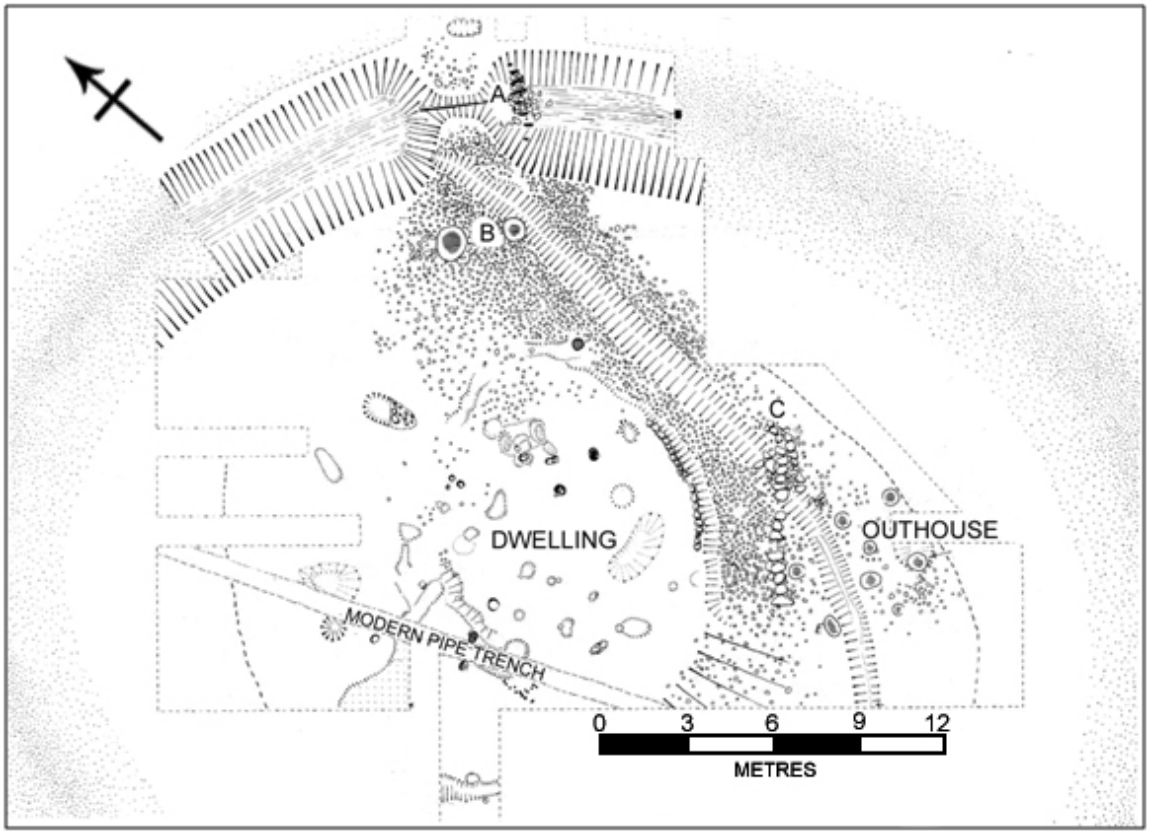


Fig. 37: Plan of Seacash, Co. Antrim (after Lynn 1978, 57).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-671	Gate Post ('B')	1430±70 BP	A.D. 433-494; **A.D. 505-695**; A.D. 698-708; A.D. 747-765.
UB-672	Charcoal occupation F16 ('C')	1175±65 BP	A.D. 688-753; **A.D. 759-988**
UB-673	Causeway Revetment Post ('A')	790±40 BP	**A.D. 1174-1281**
UB-845 (1973)	71-73 cm above ditch bottom	995±65 BP	A.D. 896-924; **A.D. 938-1186**; A.D. 1200-1206
UB-845 (1975)	69-75 cm above ditch bottom	1080±75 BP	**A.D. 773-1053**; A.D. 1079-1153
UB-846	19-23 cm above ditch bottom	1140±110 BP	**A.D. 661-1049**; A.D. 1085-1123; A.D. 1137-1151
UB-847	0-6 cm above ditch bottom	695±90 BP	**A.D. 1162-1424**
UB-847F	Retest of 847	1135±100 BP	**A.D. 667-1045**; A.D. 1094-1120; A.D. 1141-1147

Reference:

Lynn, C. J. 1978. An enclosure in Seacash Townland, County Antrim, *Ulster Journal of Archaeology* (Third Series), 41, 55–74.

Shane's Castle Park, Co. Antrim
Early Medieval Settlement Enclosure.
Grid Ref: **J10398781 (31039/38781)**
SMR No. **ANT 049:031**
Excavation Licence: **N/A**
Excavation Duration/Year: **May – October 1967**.
Site Director: **C.Warhurst (Ancient Monuments Branch, Ministry of Finance)**.

A trench was opened through the ditch and entrance into the centre of the enclosure. This showed that a cobbled causeway, approximately 3m wide, had been left across the ditch. Excavation of the ditch uncovered two stout oaken stakes set in postholes against the outer edge of the bank. These were interpreted as having formed part of a revetment to prevent slippage of the bank into the ditch. A few sherds of souterrain ware were also found in the ditch.

Fragmentary remains of at least six structures were identified within the enclosure (Fig. 38). One of these consisted of two longitudinal trench slots, presumably to hold the sill of a wooden structure, and has been identified by the excavator as being contemporary with the primary occupation of the enclosure. Along with sherds of souterrain ware, three small pieces of cinder slag, and a blue glass bead were also recovered from the site.

A souterrain, built into the north bank of the enclosure, was also excavated. The entrance of this was located outside the enclosure, and two body sherds of souterrain ware were recovered from the floor of the souterrain.

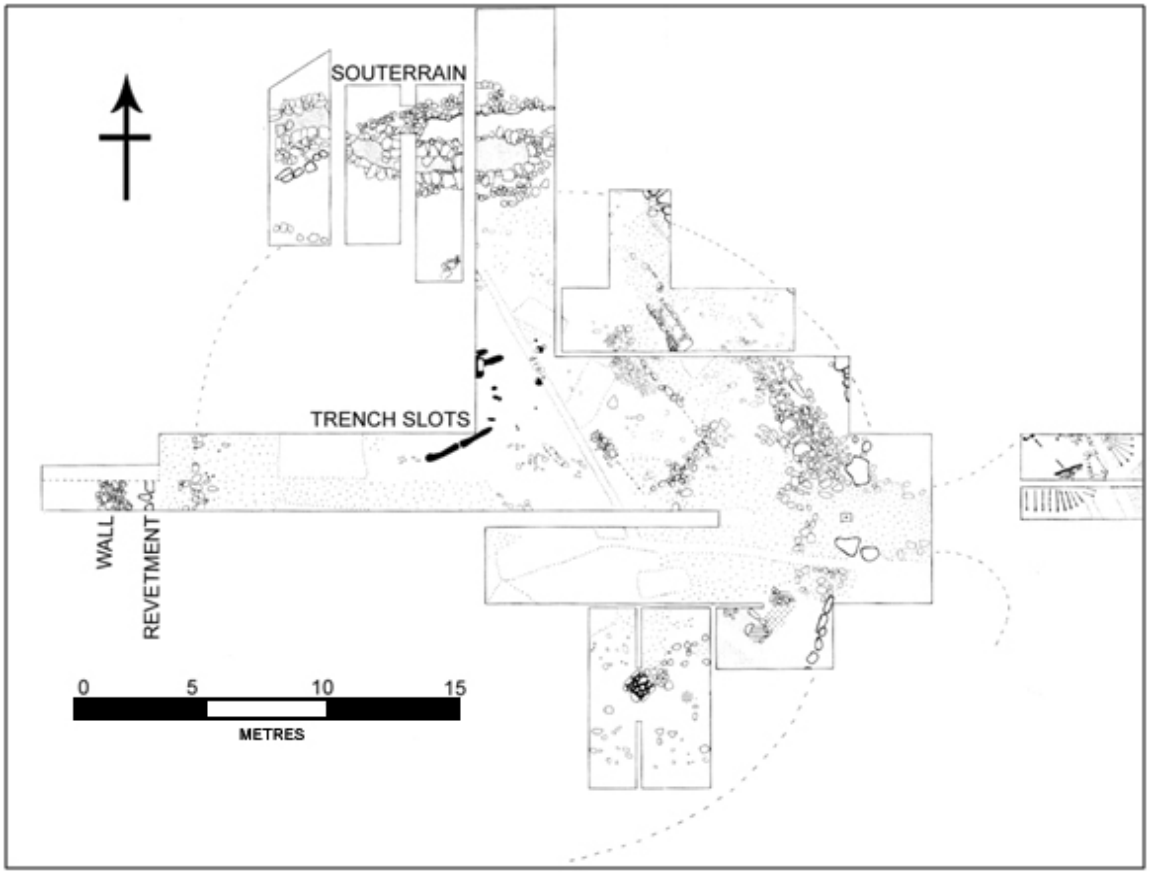


Fig. 38: Plan of interior of enclosure at Shane's Castle Park, Co. Antrim (after Warhurst 1971, 60).

Reference:

Warhurst, C. 1971. Excavation of an enclosure at Shane's Castle, Co. Antrim, *Ulster Journal of Archaeology* (Third Series), 34, 58–64.

County Armagh

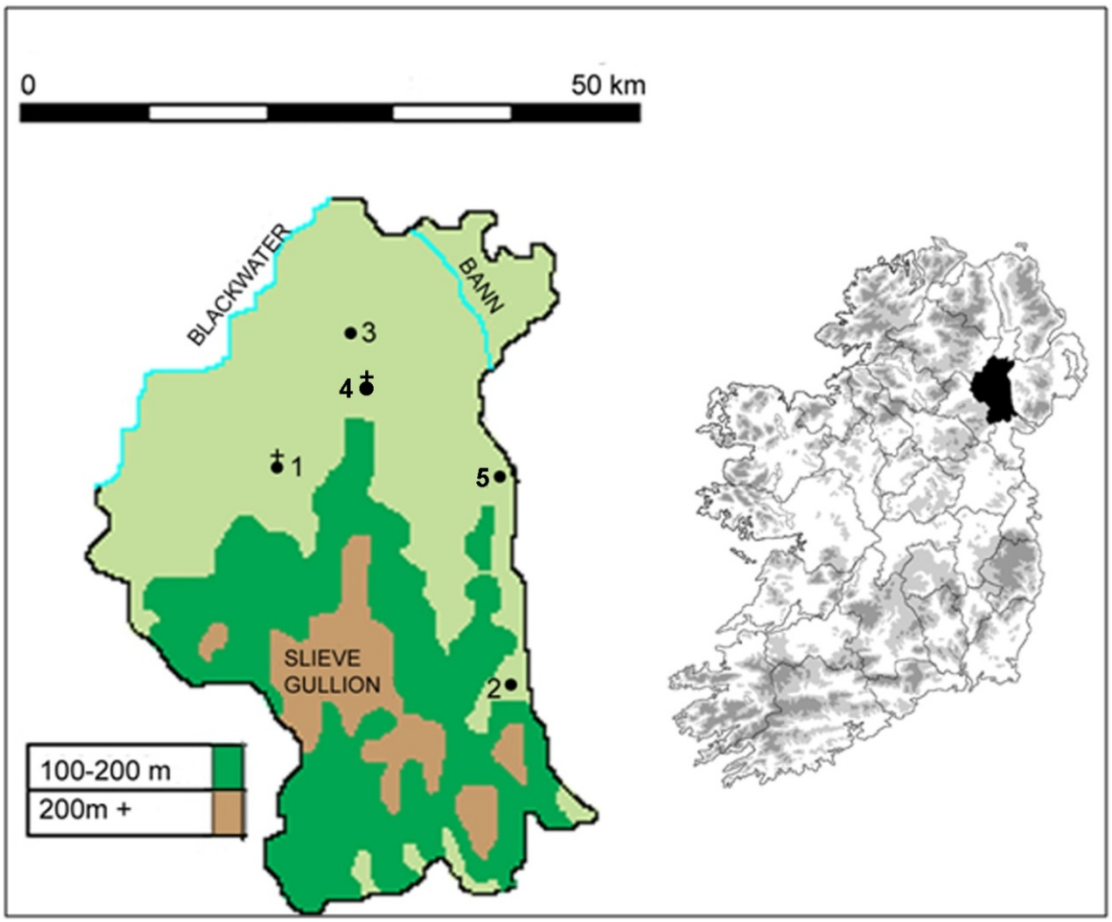


Fig. 39: Significant early medieval excavations in Co. Armagh.

1	Armagh	**4**	Kilmore
2	Derry More	**5**	Terryhoogan
3	Dressogagh		

Armagh (Armagh City td.), Co. Armagh
Early Medieval Ecclesiastical Settlement.
Grid Ref: **H87444511 (28744/34511)**
SMR No: **ARM 012:066**
Excavation Licence: **N/A**
Excavation Duration/Year: **June – September 1968; December 1979 – January 1980; September – December 1990 & March – April 1991; February – April 1992.**
Site Directors: **C. Gaskell-Brown & A. E. T. Harper (Historic Monuments Branch, Ministry of Finance); C. J. Lynn (Historic Monuments Branch, Department of the Environment (NI)); N. Crothers (Archaeological Development Services Ltd.); D. P. Hurl (Environment & Heritage Service, Department of the Environment (NI))**

The streets around the cathedral of St Patrick's in Armagh have been the subject of a number of excavations which uncovered evidence for early medieval settlement within the early ecclesiastical enclosure (Fig. 40).

Excavations at Castle Street in 1968 revealed a substantial V-shaped ditch which had been modified at least twice (Fig. 41). The earliest phase ended when material from an outer bank was used to partially in-fill the ditch – the remains of two human burials were included in this fill; and evidence for bronze working (metal fragments, crucibles and ingot moulds) were found in the layers above and below the human remains. By the end of the early medieval period the ditch appears to have been used as a rubbish dump for industrial activity ongoing on site – crucibles, clay moulds, trial pieces and enamel were all found in this area. A stone causeway was built next to the ditch at this time, and three post-holes associated with this have been interpreted as a possible fence.

A number of pits uncovered within the enclosure near this causeway appear to have industrial (or possible domestic) function. Finds from one pit (F) included a bronze pin engraved with birds, a jet bracelet and souterrain ware. A possible workshop (G) was uncovered, and it produced industrial finds, such as enamel stick and iron shears, and imported material (E-ware sherds and part of a Teutonic glass cone-beaker). The remains of a wattle-and-daub structure were also excavated (D), which may have acted as a wind-break for the workshop area.

Excavations throughout the 1970s and 1980s in the Scotch Street area revealed evidence for a large early medieval cemetery, as well as industrial debris (lignite, glass and amber working), and some settlement evidence (souterrain ware and some possible structural features). Excavations at Upper English Street uncovered the terminals of a ditch, sealed by a layer which contained sherds of souterrain ware, and cut into by a second ditch (which contained sherds of everted-rim ware). Industrial activity was identified in the form of metalworking (slag, crucibles and furnace bottoms), and a series of post-holes, stake-holes and hollows may be representative of structures. A ring-ditch which contained slag and charcoal was excavated at Abbey Street (Fig. 42). This was radiocarbon dated to the eighth- to tenth-century. Over 2000 sherds of pottery were recovered from this excavation, of which 68 were identified as souterrain ware or everted-rim ware.

Although substantial evidence for industrial activity (iron-working, bronze-working, lignite-working, glass-working, enamel-working, and amber-working) has been uncovered in these excavations, there is very little archaeological evidence for early medieval settlement. Continuous occupation on the hill in Armagh appears to have significantly truncated and destroyed the remains of earlier settlement.

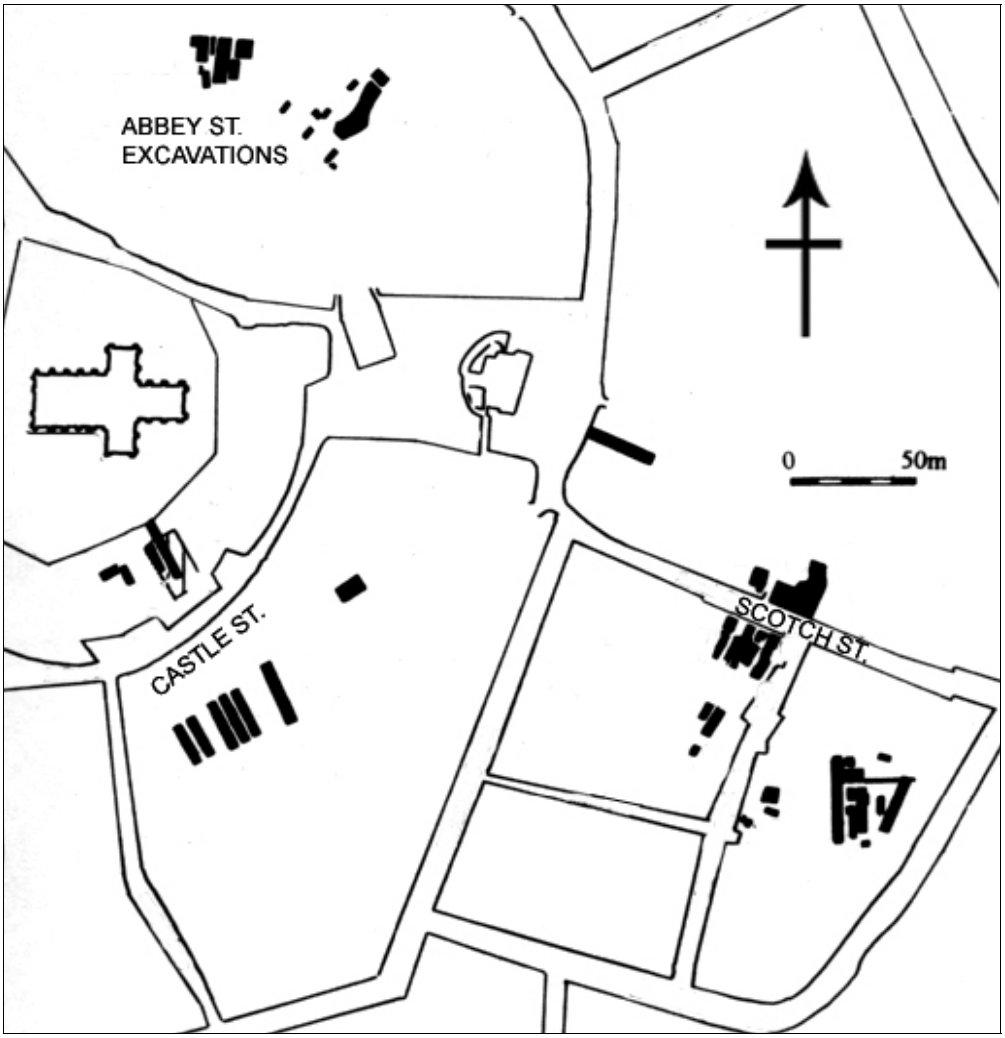


Fig. 40: Early Medieval excavations in centre of Armagh City (after Matthews 2000, 220).

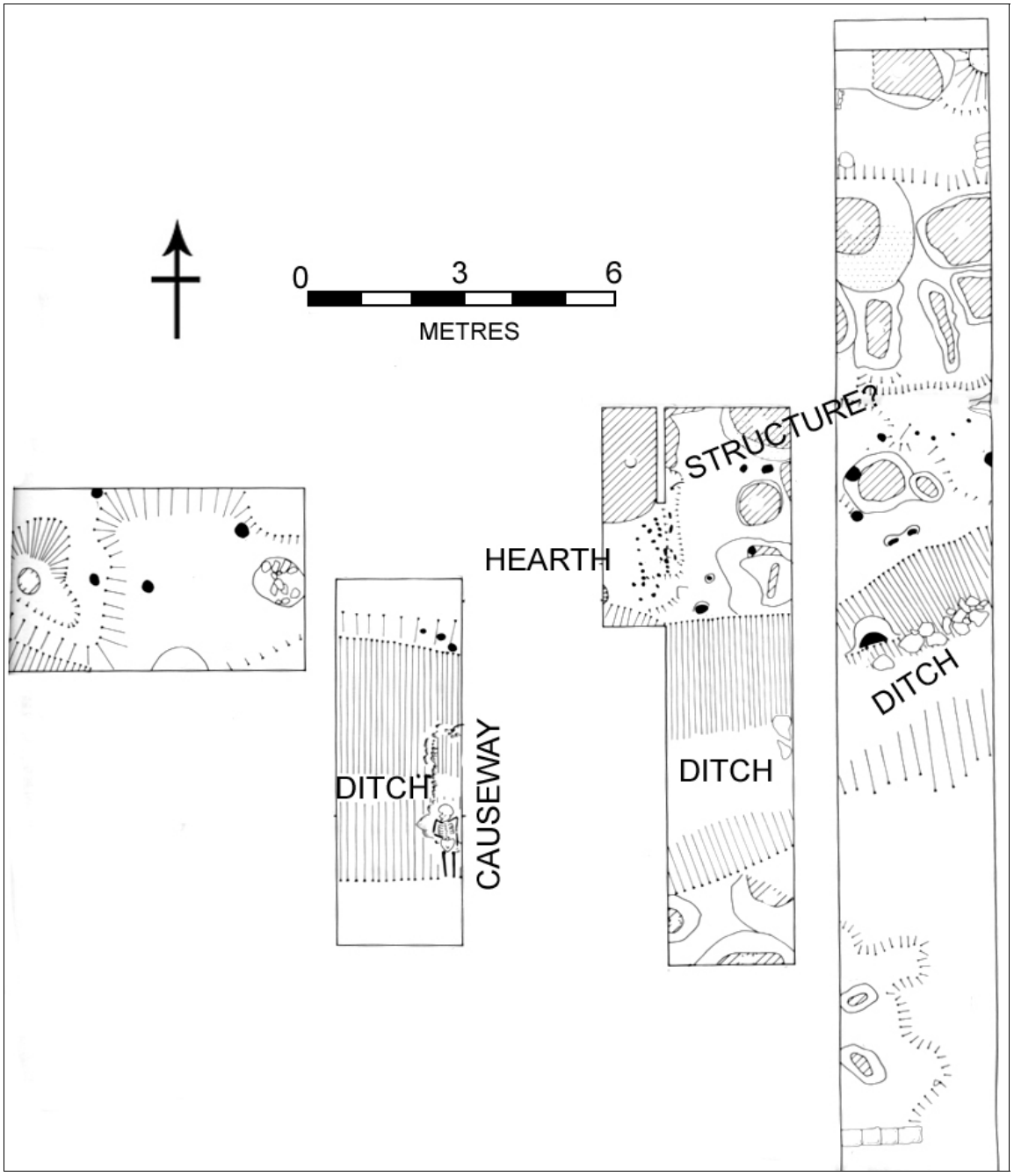


Fig. 41: Excavations at Castle Street, Armagh 1968 (after Gaskell-Brown & Harper 1984, facing 118).

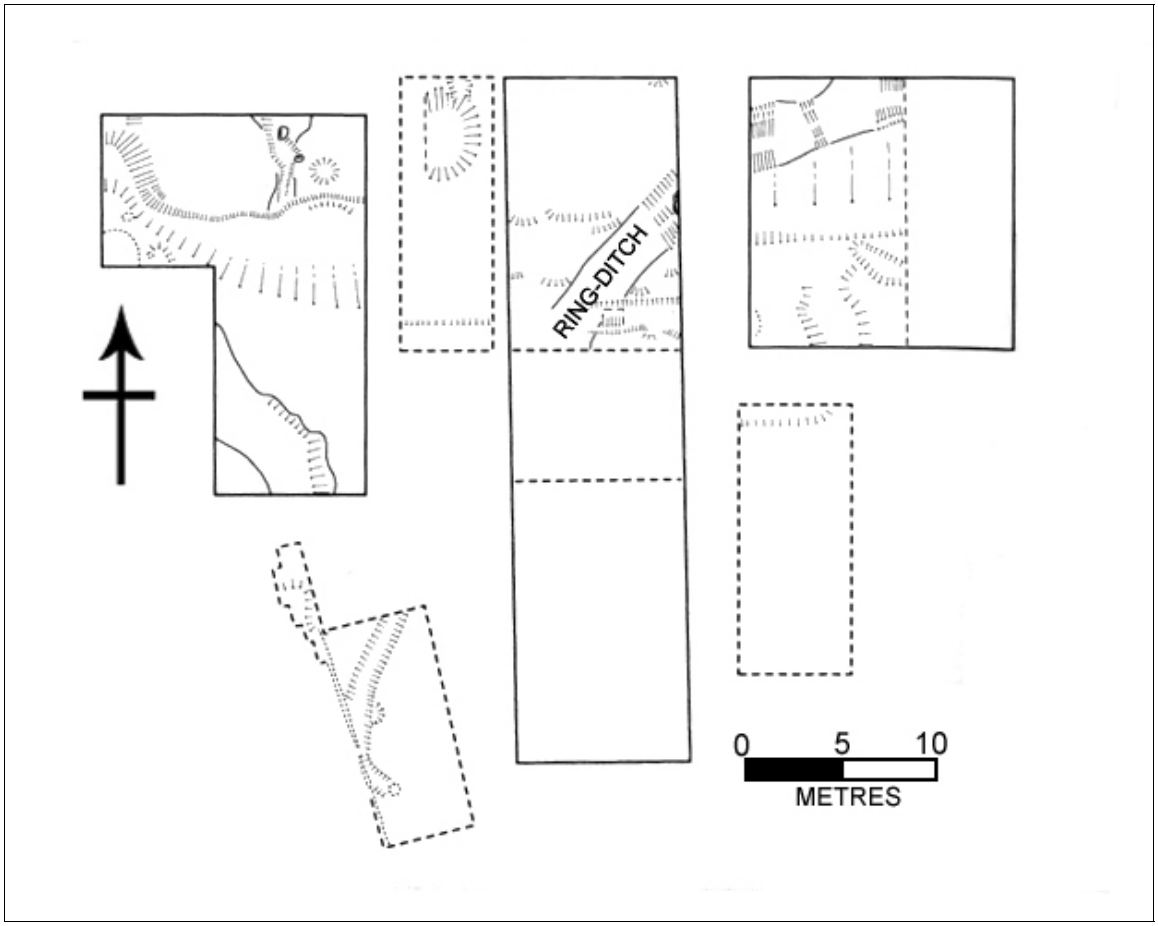


Fig. 42: Excavations at Abbey Street, Armagh 1992 (after Hurl 2003, 100).

Radiocarbon Dates: Castle Street

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-283	Twigs from bottom of primary ditch cut	1660±80 BP	A.D. 176-190; **A.D. 212-577**
UB-284	Charcoal overlying human remains in ditch fill	1845±85 BP	20 B.C. – 12 B.C.; **1 B.C. – A.D. 388**
UB-285	Carbonized twigs from pit dug into upper ditch fill	1430±85 BP	**A.D. 427-725**; A.D. 738-772.

Radiocarbon Dates: Scotch Street

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-2437	Wood from grave G	1510±50 BP	**A.D. 432-638**
UB-2438	Wood from grave G	1400±40 BP	**A.D. 572-678**
UB-2439	Charcoal from fire pit (F11)	1685±30 BP	A.D. 258-299; A.D. 318-422

Radiocarbon Dates: Abbey Street

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-3769	Charcoal from ring-ditch	1219±68 BP	**A.D. 667-968**

References:

Crothers, N. 1999. Excavations at Upper English Street, Armagh. *Ulster Journal of Archaeology* (Third Series), 58, 55–80.

Gaskell-Brown, C. & Harper, A. E. T. 1984. Excavations on Cathedral Hill, Armagh, 1968. *Ulster Journal of Archaeology* (Third Series), 47, 109–61.

Hurl, D. 2003. Excavations in Abbey St. Armagh. *Ulster Journal of Archaeology* (Third Series), 62, 97–116.

Lynn, C. J. 1988. Excavations at 46-48 Scotch Street, Armagh, 1979-80. *Ulster Journal of Archaeology* (Third Series), 51, 69–84.

Lynn, C. J & McDowell, J. A. 1988. The Oldest City in Ireland: Armagh, in A. Hamlin & C. J. Lynn (eds.) *Pieces of the Past: Archaeological excavations by the Department of the Environment for Northern Ireland, 1970-1986*. Belfast: HMSO, 57–61.

Matthews, G. R. 2000. *The Early History and Archaeology of Armagh City*. Unpublished PhD Thesis (Queen's University Belfast).

Derry More, Co. Armagh
Early Medieval Settlement Enclosure.
Grid Ref: **J0496028040 (304960/328040)**
SMR No: **ARM 026:008**
Excavation Licence: **AE/00/22; AE/01/38; AE/01/42; AE/01/69**
Excavation Duration/Year: **May 2000 – June 2000; 2001**.
Site Directors: **E. Halpin (Archaeological Development Services); C. Long (Archaeological Development Services)**

A hachured enclosure was shown on early editions of the Ordnance Survey maps, but at the time of excavation this was only marked on the ground by a fraction of the surviving bank. Excavation was required prior to the construction of a number of houses on the site.

Four trenches were excavated through the site (Fig. 43), and the original enclosure ditch was discovered in all of these. The only other features located during the excavation were the curving gullies of a (possible) roundhouse, and the linear gullies of a possible rectangular house. A number of sherds of souterrain ware were found in the linear gullys, suggesting that the associated structure was built during the early medieval period. The lack of occupation debris, habitation layers, and charcoal spreads has led the excavator to suggest that this site may have been occupied for only a short period, or, indeed, may have been abandoned before being fully completed.

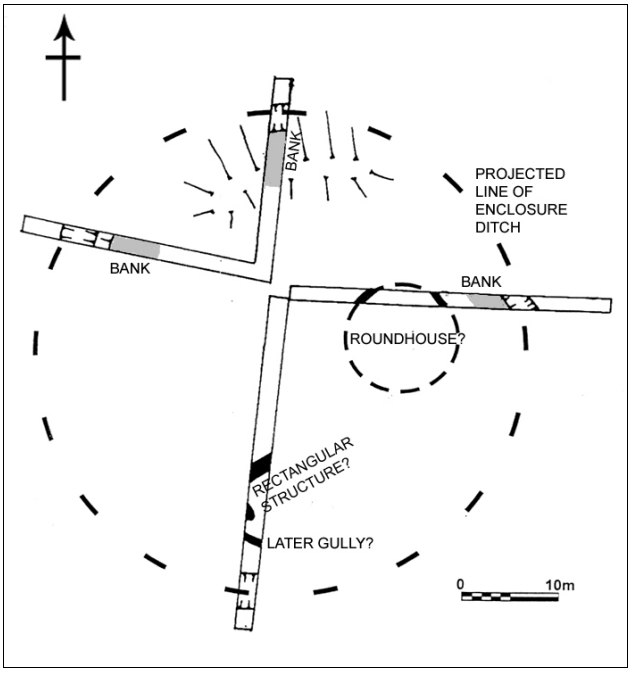


Fig. 43: Plan of excavations at Derry More in 2000, showing location of features (after Halpin 2000).

References:

Halpin, E. 2000. Assessment Excavations at Green Road, Bessbrook, Co. Armagh. Archaeological Development Services Ltd.

C. Long. 2001:022. Derrymore Fort, Bessbrook. http://www.excavations.ie.

Dressogagh, Co. Armagh
Early Medieval Settlement Enclosure.
Grid Ref: **H93075543 (29307/35543)**
SMR No: **ARM 009:001**
Excavation Licence: **N/A**
Excavation Duration/Year: **Spring 1964**.
Site Directors: **A.E.P. Collins (Archaeological Survey of Northern Ireland)**

The site consisted of an irregular, 'pear-shaped' enclosure (Fig. 44) (29m by 34m internally) set on the northern slope of a drumlin. Farm improvement threatened the enclosure, leading to the excavation of the site.

Excavation through the inner bank and ditch revealed an earlier, pre-bank occupation layer. This was indicated by the presence of an iron-smelting hearth (and associated iron slag) located beneath the present inner bank. It was, however, suggested by the excavator that the smelting hearth and inner ditch may have been contemporary features, suggesting perhaps that the present bank may not have matched the proportions of the contemporaneous bank. Indeed it would appear that scarping of the outer face of the bank, and re-cutting of the ditch, were undertaken in recent years to assist in drainage.

The major feature on the site consisted of a 'figure-of-eight' house (Fig. 45). Both parts of the house respected each other, and were held to be contemporary, rather than a succession of roundhouses; and both 'rooms' were found to contain a central hearth. Both of the hearths were flanked by small post-holes, which have been interpreted as supports for a cooking crane. Small circles of charcoal found in the centre of the slot trenches would appear to represent the remains of the vertical wands used in wickerwork, implying that the structure had wicker, or wattle-and-daub, walls.

Two sherds of soutterain ware were found in the old turf-line under the main bank. These finds, along with the presence of the smelting-hearth, suggests that the site was occupied prior to the construction of the main bank and ditch. Over 50 sherds of soutterain ware were recovered from the house, as well as fragments of a fine bronze chain.

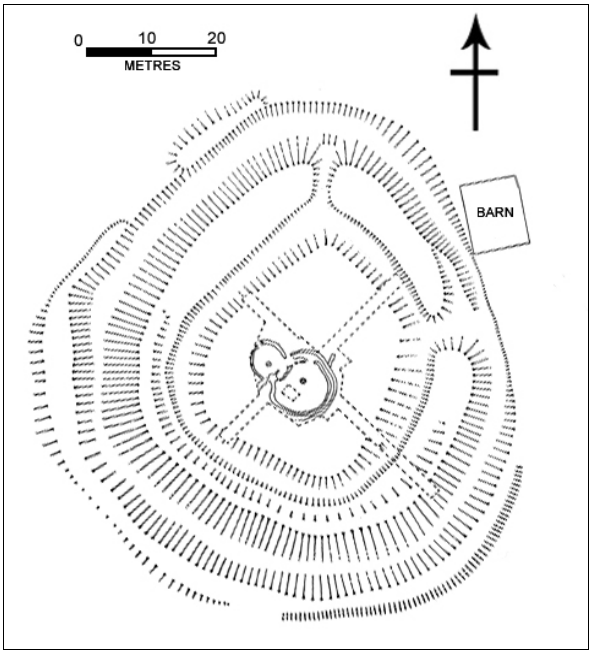


Fig. 44: Plan of Dressogagh, Co. Armagh (after Collins 1966, 118).

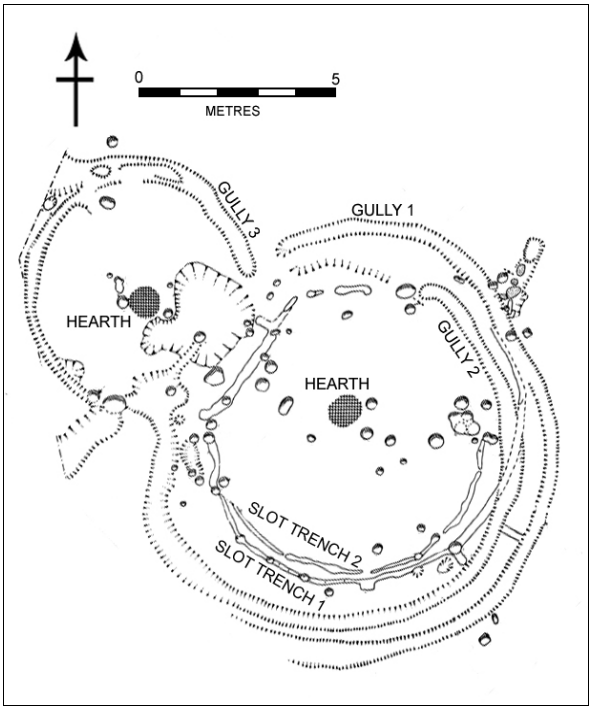


Fig. 45: 'Figure-of-eight' house at Dressogagh, Co. Armagh (after Collins 1966, 120).

Reference:

Collins, A. E. P. 1966. Excavations at Dressogagh Rath, Co. Antrim. *Ulster Journal of Archaeology* (Third Series), 29, 117–129.

Kilmore, Co. Armagh
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **H94325116**
SMR No: **9:18**
Excavation Licence: **AE/02/19**
Excavation Duration/Year: **4th-17th March 2002**
Site Director: **Norman Crothers (ADS)**

Kilmore (*Cill Mhór*) is the site of a small village, 2.5m miles north of Richhill and within the Armagh city and District Council area. An early monastery is said to have been founded at Kilmore in the fifth century by St. Mochto. A round tower is enclosed within the square tower of the current church at Kilmore dedicated to St. Aidan and represents the only surviving vestige of the early monastery. An excavation in advance of an extension to the rear or north side of the church hall at Kilmore uncovered several major features including portions of at least three ditches, a large well, several large pits, post-holes, pits and gullies. The excavated area measured 24m north–south by 19m and was bounded on the east by the perimeter wall of the church and graveyard of St Aidan, on the west by the fence-line of the newer cemetery and on the north by an area of rough grazing.

The innermost and largest ditch measured 2m wide x 1.5m deep and ran north–south along the line of the church boundary. It cut a large pit that ran below the perimeter wall and into the church graveyard. A second north-south aligned ditch was uncovered 10m west of the inner ditch. It was 1.2m wide and a maximum of 0.9m deep and cut a large circular well. The outermost ditch was situated 2m west of the middle ditch and was 1.2m wide and a maximum of 0.8m deep. Unlike the other two ditches, the fill was relatively clean, and it was probably infilled shortly after it was dug.

A large circular well was uncovered on the northern edge of the excavation, and the site was extended 5m north to reveal its maximum extent. It measured 4m in diameter, and was excavated to a depth of 2m. A line of six wooden stakes driven into the lower fills was uncovered near the southern edge of the well, running east–west, along with some worked timbers. The upper fills of the well were cut by the middle of the three ditches. The extension of the excavated area also revealed a fourth ditch, aligned east–west, which was not excavated as it lay outside the limits of excavation.

Numerous archaeological features including several post-holes of varying sizes and depth were uncovered in the area between the inner and middle ditches. Three east-west running gullies were also excavated for 6m before being cut by the middle ditch. The eastern extent of these gullies is unknown, as they had been badly truncated by a modern pipe-trench. Other features included a small pit with burnt stones, and a rectangular, straight-edged pit, possibly originally wood lined, with a stake-hole in each corner.

A considerable quantity of finds were recovered from the site, including over 1000 sherds of pottery, mostly belonging to early medieval souterrain ware and medieval everted-rim ware. Among the artefacts were several tanged iron knifes, a small domed bone comb, part of a polished stone axe, some iron pin fragments and part of a lignite bracelet. Some scraps of preserved leather were also recovered from the well.

References

Crothers, N. 2002:0034, Kilmore, early Christian church site, Co. Armagh. www.excavations.ie.

Terryhoogan, Co. Armagh
Early Medieval Unenclosed House.
Grid Ref: **J05404430 (30540/34430)**
SMR No: **N/A**
Excavation Licence: **AE/04/62**
Excavation Duration: **April – May 2004**.
Site Directors: **J. C. McSparron (Centre for Archaeological Fieldwork, Queen's University Belfast)**

An unenclosed early medieval house was uncovered on the west slope of a drumlin during the construction of a private dwelling. The structure was identified by the presence of a circular gully which may have acted as a drip-trench for a roundhouse (Fig. 46). The gully contained quantities of souterrain ware, suggesting a *terminus post quem* occupation date from the eighth century. No structural remains for the roundhouse were discovered due to truncation of the upper soil layers, but the gully enclosed an area 8m in diameter, implying that the roundhouse was slightly smaller than this.

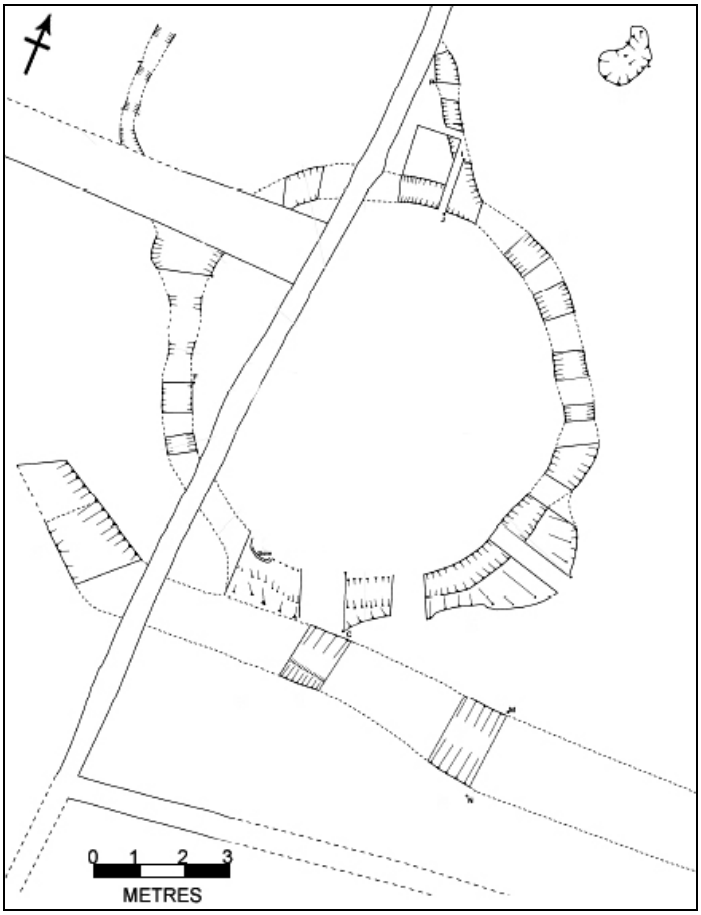


Fig. 46: Circular gully at Terryhoogan, Co. Armagh (after McSparron 2004, 18).

References:

McSparron, C. 2004. Terryhoogan, Scarva, Co. Armagh. Centre for Archaeological Fieldwork Data Structure Report 028.

County Clare

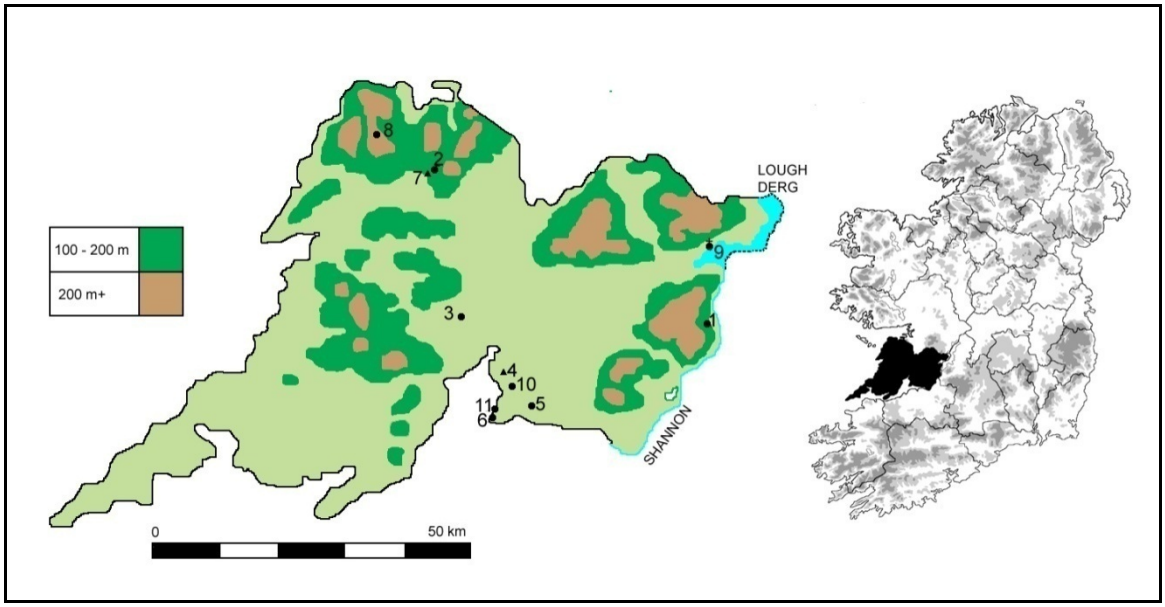


Fig. 47: Significant early medieval excavations in Co. Clare.

1	Beal Boru	**7**	Glencurran
2	Cahercommaun	**8**	Gragan West
3	Cahircalla More	**9**	Inishcealtra
4	Carrigoran	**10**	Killula
5	Clonmoney West	**11**	Thady's Fort
6	Garrynamona		

'Beal Boru' (Ballyvally td.), Co. Clare
Early Medieval Settlement Enclosure
Grid Ref: **R69607427 (169605/174270)**
SMR No: **CL 045-031**
Excavation Licence: **N/A**
Excavation Duration/Year: **1961**
Site Director: **M.J. O'Kelly (University College Cork)**

Beal Boru is an impressive univallate early medieval enclosure subsequently remodelled during the Anglo-Norman period into an apparently (unfinished) motte. The site is situated on the apex of a steep-sided spur of gravel overlooking the River Shannon and the town of Killaloe. This position on the nose of a spur overlooking the channel afforded the inhabitants the ability to control an important crossing point as well as the river traffic itself. The site was excavated as part of a research dig by M.J. O'Kelly of University College Cork. Approximately one quarter of the site was investigated over a period of ten weeks in 1961.

The recovery of two Hiberno-Scandinavian coins in sealed contexts suggest that the site was occupied during the eleventh century. The site may have continued to be occupied into the early-twelfth century if an entry for A.D. 1116 in the *Annals of the Four Masters* reporting the destruction of the Boromha by Toirdealbhach Ua Conchobhair can be taken as applying to this particular site. It then was abandoned for a period before the present enormous bank and ditch was thrown up completely masking the remains of the original enclosure bank and ditch. The overall diameter of this visible structure varies from between 70m-75m though the actual internal space is no more than 20m in diameter as the banks are as much as 17m thick at their base. The height of these banks varies from between 4m-6m above old ground level while the ditch has an approximate width of 10m and depth of 1-2m.

Cuttings through the secondary Anglo-Norman period bank revealed the profiles of the primary early medieval enclosure bank and ditch as well as a possible earlier silted up ditch and shallow trench. This silted-up ditch which had a width of 1.6m at its top and depth of 1.4m from present field-level was not pursued and yielded no archaeological finds. The shallow trench within the primary enclosure (width 1.5m and depth 0.35m) was also not pursued and yielded no finds though had already silted up before the primary enclosure deposit was laid down. One sherd of possible prehistoric coarse-textured pottery was found below the habitation refuse of the primary enclosure, as well as a chert scraper found in gravel forming the bottom of the secondary ditch. These artefacts suggest an earlier period of activity on site.

The bank of the primary enclosure had an internal stone-wall revetment, and had a wooden palisade performing the same function on the outer face. The enclosure was evidently a well built structure with a maximum height of 2m in its western section and having a thickness of 4.8m and 5.7m along its northern and western faces respectively. Though cuttings of the secondary ditch had removed much of the primary ditch, a short section of the original feature was observed outside the secondary entrance and it was estimated that its width was 4.5m wide and depth 2.5m above the original ground level.

The interior of the enclosure revealed a large number of postholes, but most of these were not able to be interpreted into any structural plan. In a number of instances, groups of stakeholes occurred near or on both sides of burnt areas and were interpreted as supports for the suspensions of cooking vessels over fires. Only one structure was able to be identified, a rectangular house towards the western side of the enclosure (Fig. 48). It measured approximately 4m by 2.5m and was defined by posts with diameters of 0.20-0.40m and depths of 0.20-0.35m. The doorway was situated in the south-west corner and was defined by a possible protecting porch in the form of two post holes and a well-laid paved surface. The depth of habitation refuse stretching from the central hearth through the entrance and connecting with an extensive rubbish dump directly outside the door was suggestive of a relatively long period of occupation. An Hiberno-Scandinavian coin (*c.* A.D. 1070) was found

beside the central hearth and a slate trial-piece was found in the habitation deposit covering the entrance passage of the building. A large burnt area marked by a thick layer of charcoal-flecked soil was identified outside the northeast corner of the building and seems to have been contemporary with it.

A period of abandonment between the end of the primary period of activity and the beginning of the construction of the secondary feature was suggested by the presence of a turf layer that had formed over the whole surface of the original fort. The enormous secondary bank and ditch was next erected and involved the dumping of material inside and on the inner slopes of the primary bank to raise the width and height of the bank to its present form. The excavator suggested that the intention of the builders was not to create a larger enclosure but to build a motte-like structure or flat-topped mound which would have been the result had they continued to deposit gravel from the ditch outside and tip it all around the inner bank slopes in the interior. The lack of any archaeological evidence associated with this secondary structure also supports the hypothesis that this feature was never completed.

There were few finds from the site belonging to the original enclosure; a fact partly explained by the inability of the excavators to investigate close to the inner faces of the bank on the sheltered west and south-west sides as well as the enormous size of the secondary structure engulfing it. The few finds consisted of a stone trial piece, five bronze pins, a tanged stud, two hone-stones, some corroded iron objects and nails, two sherds of brownish-grey pottery and two Hiberno-Scandinavian silver coins dated to A.D. 1035 and 1070 respectively. Although no actual furnace was identified, evidence for small-scale ironworking on the site took the form of six small hemispherical lumps of slag.

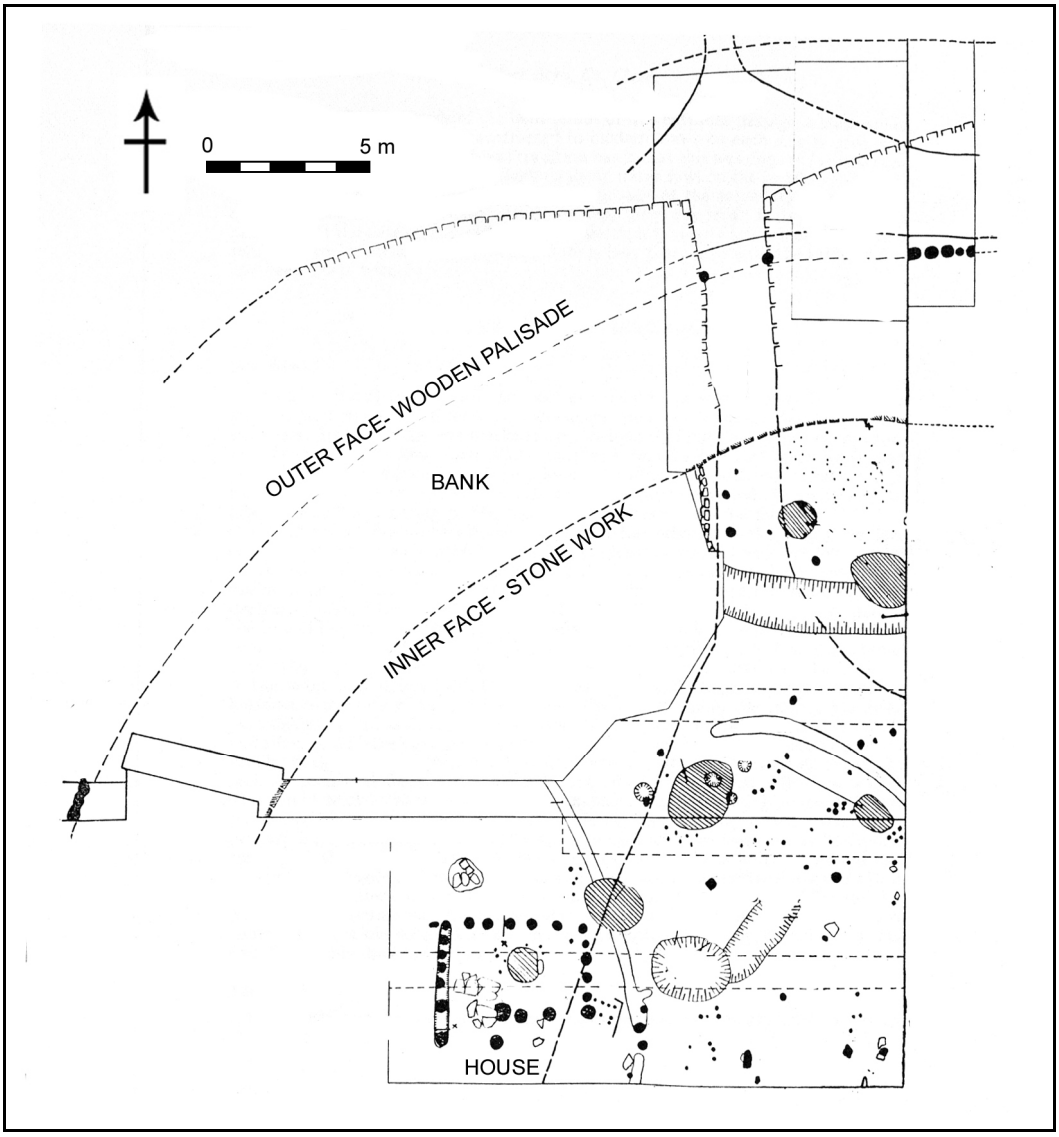


Fig. 48: Plan of excavated areas at Béal Ború, Co. Clare (after O'Kelly 1962, fig. 4).

Reference:

O'Kelly, M. J. 1962. Béal Ború. *Journal of the Cork Historical and Archaeological Society*, 67, 1–27.

'Cahercommaun Fort', (Tullycommon td.), Co. Clare
Early Medieval Settlement Enclosure
Grid Ref: **R28199649 (128190/196496)**
SMR No: **N/A**
Excavation Licence: **N/A**; **03E0397**
Excavation Duration/Year: **July - August 1934; April 2003**
Site Director: **H.O'N. Hencken (Third Harvard Archaeological Expedition); B. Quinn (Moore Archaeological and Environmental Services)**

Cahercommaun is an inland cliff-top fort situated in the townland of Tullycommon. It comprises a roughly circular enclosure with two concentric stone walls, set on a cliff edge (Fig. 49). Remains of a well-defined passageway giving access through the outer enclosure to the centre enclosure on the eastern side of the fort as well as traces of radial walls and other structures and features can be seen within and between the enclosing walls and in the surrounding fields. The site was excavated on two occasions - in 1934, and latterly in 2003.

The fort consists of three limestone walls with rubble cores. The two outer enclosing walls of the fort had diameters of 116m and 73.5m at their greatest points. The area between the first and third walls yielded no significant archaeological deposits and it was suggested that this area was intended primarily for agricultural use. The imposing inner wall surrounding the living quarters was higher and more massive than the two others with a maximum thickness of 8.5m and height of 4.5m. Excavations in the interior uncovered a guard room, several irregular stone structures and hearths as well as two souterrains beneath a general deposit consisting of stones and black earth mixed with bits of charcoal and animal bone.

Hencken (1938; 1950) suggested that the primary phase of occupation was between the seventh and ninth centuries A.D The excavation identified no evidence for the building of new structures or the abandonment of older ones in a secondary phase, suggesting that the primary phase of occupation of the fort may have not been for much more than a few generations. Two broadly contemporary phases of occupation were originally suggested by the presence of two extensive layers of ash near one of the structures.

Ó Floinn (1999, 80-82) has recently re-evaluated the metalwork evidence from the site and suggested the material-culture can be broadly divided into four early medieval phases between the fifth/sixth and later ninth/tenth centuries. The first phase was dated to the fifth/sixth century and included stratified deposits containing imported pottery (Late Roman Amphora (B ware)) and an iron penannular brooch. The second phase dated to the later sixth/seventh century (e.g. imported E ware pottery and a copper-alloy penannular brooch) and the third to the later seventh-eighth century (e.g. an enamelled ring brooch and bowl-shaped spindle-whorls). The final phase was dated to the ninth and tenth centuries and contained artefacts of early Viking age including a silver brooch.

Cotter, through a reassessment of Hencken's excavations and Ó Floinn's artefact analysis has iidentified three early medieval phases. The first consisted of a pre-Souterrain fifth/sixth-eighth century phase (Ó Floinn's Phase 1, 2 and 3). The main occupation phase was dated to the ninth century (Ó Floinn Phase 4) and consisted of the stone structures and both souterrains. The final phase (later ninth/tenth century) involved the re-flooring of the southern area of the cashel and the construction of another structure.

Though a large collection of artefacts were recovered during the excavation, very few were actually stratified because of the extensive infilling of the site. A large iron hook, socketed iron knife and a decorated silver brooch were found beside a human skull inside one of the souterrains. Objects belonging to a later period included a single-edged sword, pronged and socketed tool, bone button and pieces of rotary and saddle querns. Tanged iron knives and pieces of rotary querns were found in both earlier and later deposits.

The Harvard excavators identified that the distribution of the stratified finds inside the inner enclosure revealed a number of patterns. The northeast quadrant produced the largest collection of finds, and was identified as the main occupation area. The northwest quadrant was second in importance, yielding vast quantities animal bone, lignite rings, bronze studs, bone pins, tools, weapons and miscellaneous household objects. The southwest quadrant was identified as the kitchen and servants quarters since it produced very few finds except for three types of artefacts; querns, bone points and stone axes; and the southeast quadrant of the enclosure was the poorest area, only yielding worked fragments of bone and antler as well as possible evidence for ironworking in one of the hearths.

A vast quantity of animal bone (4183 kg) was recovered inside the inner enclosure of the fort. Cattle were clearly an integral part of the economy at Cahercommaun with their bones accounting for 97% of the total. Sheep and goat accounted for 1%, pig at slightly less than 1% with the bones of horses and Red Deer making up the bulk of the remainder. Cereal processing also appears to have been practiced and was evident in the form of a large collection of saddle and rotary quern stones, bill hooks and iron shears. From the excavated stratigraphical evidence, it was suggested that both quern types ‘existed side by side, possibly for different kinds of milling’.

A modest quantity of iron slag was also recovered scattered throughout the fort, mostly in un-stratified contexts though small cakes were identified in layers of ashes inside one of the souterrains and in a number of hearths inside the inner circular stone enclosure. Evidence for textile production can also be posited due to the relatively large collection of spindle whorls recovered. No pottery was identified though wooden vessels were at least present on the site as attested by the recovery of iron bucket-handles and two iron clamps of wooden bucket hoops like those recovered on Ballinderry Crannog, No. 1.

Chief amongst the large collection of iron, antler, bone and stone tools included a significant quantity of knives, iron axes, hooks, bill hooks, awls, shears, bone points, spears, needles, bone, antler and stone spindle whorls, hammer-stones, whetstones as well as three polished stone axes indicative of prehistoric activity. Personal ornamented objects included a decorated silver brooch, a fragment of a small bronze penannular brooch with zoomorphic terminals, various bronze, iron and bone ringed and un-ringed pins, glass, amber, shale, lignite, bone and antler beads, glass bracelets, lignite rings and bone combs. Other important miscellaneous items recovered included an iron bell, iron barrel padlock, door-hinge, iron bucket-handle, belt-buckles and a single edged iron sword.

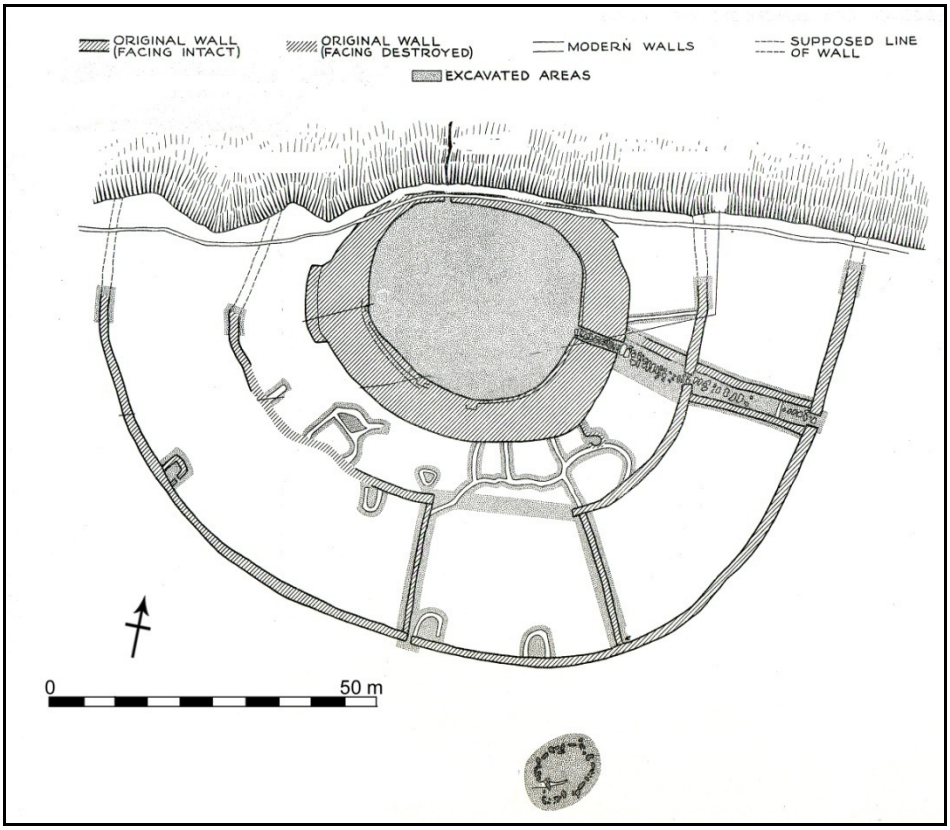


Fig. 49: Plan of Cahercommaun, Co. Clare (after Hencken 1938, 4).

References:

Cotter, C. 1999. Western Stone Forts Project: Cahercommaun Fort, Co. Clare - a reassessment of its cultural context, in *Discovery Programme Reports 5*. Dublin: Royal Irish Academy.

Hencken, H. O'N. 1938. *Cahercommaun: a stone fort in County Clare* Dublin: The Royal society of antiquaries of Ireland.

Hencken, H. O'N. 1938. Cahercommaun, a stone fort in County Clare. *Journal of the Royal Society of Antiquarians of Ireland*, 68, 1-82.

Hencken, H. O. N. 1950–1951. Lagore Crannog: An Irish Royal Residence from the Seventh to Tenth Centuries (Contributions by Liam Price and Laura E. Start). *Proceedings of the Royal Irish Academy Section C*, 53C, 1–247.

Ó Floinn, R. 1999. The date of some metalwork from Cahercommaun reassessed, in C. Cotter (ed.) Western Stone Forts Project: Cahercommaun Fort, Co. Clare - a reassessment of its cultural context, in *Discovery Programme Reports 5.* Dublin: Royal Irish Academy.

Ó Donnabháin, B. 1980. The stone fort at Cahercommaun. *The Other Clare*, 4, 6–7.

Cahircalla More, Co. Clare
Early Medieval Settlement Enclosure
Grid Ref: **R32517553 (132511/175537)**
SMR No: **N/A**
Excavation Licence: **04E0029**
Excavation Duration/Year: **January - March 2004**
Site Director: **K. Taylor (TVAS Ireland)**

An enclosure (internal diameter of 38m by 37m) was identified at Cahircalla More during topsoil stripping in advance of road works in 2003, and was completely excavated in the following year. The site was located on a south-east-facing slope (33m OD), upslope from a wide expanse of bog.

Prehistoric activity on site consisted of a single oval pit with cremated bone and several finds in secondary contexts- worked quartz fragments, struck chert and a small amount of possibly Late Bronze Age pottery from the plough soil as well as struck chert and a small amount of cremated bone from the early medieval field ditches. This latter evidence suggests that at least one prehistoric cremation burial on the site was disturbed by the subsequent early medieval activity.

The enclosure ditch was 0.75-1.53m wide and between 0.2m and 0.8m deep; post-medieval ploughing appears to have removed the enclosing banks (Fig. 50). Various artefacts- a piece of the upper stone of a rotary quern, iron tool, possibly a chisel, fragments of iron slag, four smithing hearth bottoms, animal bone and a number of cereal grains- were recovered from the ditch fill. Radiocarbon dating of a cattle limb bone from the ditch fill suggested that it had been in-filled during the sixth or seventh century (see below).

The remains of a small oval structure (internal dimensions of 6.3m by 4.4m) defined by three short lengths of curvilinear gully were excavated at the southern end of the enclosure. The gully segments were typically 0.65m wide and 0.40m deep and contained fills with large quantities of charcoal and iron slag as well as animal bone. A radiocarbon date obtained from a grain of cereal from the foundation slots produced a similar date to that produced for the ditch in-fill (see below).

Two pits- 1.41m by 0.5m and 0.15m deep; and 1.19m by 0.75m and 0.3m deep- were excavated within this building. The fills of both pits were similar to those of the gully segments producing large quantities of iron slag and charcoal as well as burnt mammal bone fragments and cereal grains. Another two early medieval pits were excavated within the enclosure. The pits - 0.50m by 0.70m and 0.43m deep; and 0.23m by 0.40m and 0.20m deep – also produced iron fragments, iron slag, burnt animal bone and cereal grains. Both pits were irregular-shaped and were interpreted as possible stone sockets in which domestic refuse collected. A bowl-shaped pit excavated outside the south-western side of the enclosure appears to have been dug to contain a broken saddle quern and its fill contained a small quantity of cereal grains.

The ditched enclosure was an integral part of a large pattern of rectangular fields defined by five broadly linear ditches to the north and west. Trenches were excavated across the five ditches which measured between 0.5-1.2m wide and 0.25-0.65m deep and contained generally steep sides and slightly concave bases.

Finds from the ditch fills included a copper-alloy ring pin, whetstones, including a pin-sharpening stone, a small quantity of iron slag, animal bone fragments, a mini-anvil stone, oyster shell, and the above mentioned prehistoric struck chert, worked quartz and cremated human bone. Cereal grain samples from the fill of two of the ditches produced radiocarbon dates ranging from the seventh century to the twelfth century, indicating that these ditches may have been backfilled at different times (see below). A pit (1.20 by 0.88m and 0.65m deep) excavated along the alignment of one of these early medieval field ditches contained a

large assemblage of charred cereal grains and its primary fill was almost pure charcoal with evidence for in situ burning at its base. It was suggested that this pit was likely contemporary with the early medieval enclosure.

Smithing was the principle early medieval ironworking. Analysis of the slag from the oval building indicates that smithing was being undertaken inside this structure. Smithing hearth bottoms- four from the enclosing ditch and two from the ploughsoil- and a mini anvil from a field ditch were associated with this activity. A possible iron ore fragment was also recovered from the enclosure ditch and suggests that limited smelting may have also been undertaken on the site.

Cereal cultivation was also indicated by the two quernstones, field patterns and large quantity of grains, particularly from oats and barley as well as rye, wheat and quantities of weed seeds.

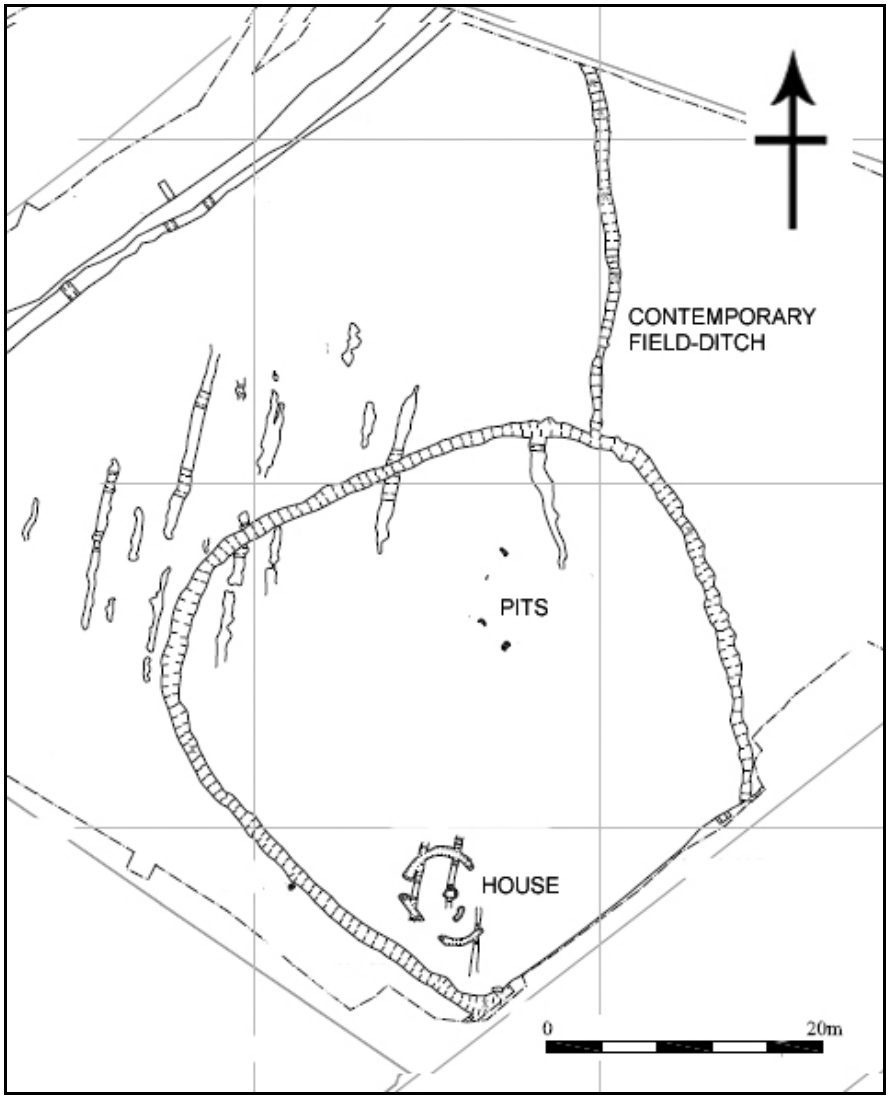


Fig. 50: Plan of enclosure, house and field boundaries at Cahircalla More, Co. Clare (after Taylor 2006).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-207730	Charred cereal seeds from fill of field ditch	1000±40 BP	**A.D. 975-1155**
Beta-211571	Cattle limb bone from fill of enclosure ditch	1470±40 BP	A.D. 467-481 **A.D. 534-655**
Beta-211572	Charred cereal seeds from foundation slot of oval structure	1430±40 BP	**A.D. 559-662**
Beta-211573	Charred cereal seeds from fill of field ditch	1250±40 BP	**A.D. 674-874**

References:

Hull, G. 2003. 03E1291, N18 Ennis Bypass Archaeological Test Excavations, Contract 4, Central Linear Trench with Offsets (Southern and Western Sections), Final Archaeological Assessment Report, TVAS Ireland report J03/12b.

Hull, G, & Taylor, K. 2005. Archaeology on the route of the Ennis Bypass, *The Other Clare*, 29, 35-41, Shannon Archaeological and Historical Society

Hull, G and Taylor, K. 2007. N18 Ennis Bypass and N85 Western Relief Road: Summary of the final archaeological results, *The Other Clare*, 31, 23—9.

Taylor, K. 2004. Site AR128, 04E0029, Cahircalla More, Co. Clare, N18 Ennis Bypass, unpublished Preliminary Archaeological report, TVAS Ireland report 04/02i

Taylor, K. 2006. Site AR128, 04E0029, Cahircalla More, Co. Clare, N18 Ennis Bypass, Unpublished excavation report (available http://www.tvasireland.ie/Reports/n18ar128.pdf)

Carrigoran, Co. Clare
Early Medieval Settlement landscape
Grid Ref: **R38946719 (138944/167192)**
SMR No: **CL051:171**
Excavation Licence: **98E0426; 98E0338 & Ext.**
Excavation Duration/year: **August 1998; February 1999-April 2000**
Site Director: **F. O'Reilly (Valerie J. Keeley Ltd.)**

Excavations in Carrigoran townland in advance of road works revealed evidence for six main phases of activity on an area of gentle south-easterly sloping land, with marshland to the south and east. Two of these phase (1 and 3) would appear to belong to the early medieval period, with a phase of abandonment (Phase 2) separating them.

The main finds from Phase 1 were comprised of the remains of three structures (A – C) and a series of pits containing charred remains. Structure A had an internal width of 4.2m and was at least 5.2m long. It was post-built and contained a central line of double stakes possibly representing an internal divide. The presence of a number of external postholes outside its south-western and southern walls suggests that these may have supported roof or wall bracing timbers. A shallow pit was located in the interior of this structure, the primary fill of which contained burnt soil, stone, bone, charcoal and charred seed remains. The charred seed remains of hulled barley, possible barley, indeterminate cereal and grass seeds, and weeds such as dock, cleaver and plantain were recovered from its secondary fill. This pit appears to have been used primarily for storage or to contain waste products from crop processing. The absence of oats from the pit fill suggests a prehistoric date.

Structure B was oval in plan (4.8m by 2.9m). It was post-built, with the roof supported by a central post. As with Structure A, there was also had no evidence for any internal hearth. Another possible structure (Structure C) was identified between Structures A and B as a curvilinear drainage gully. There was no evidence for a hearth and three internal postholes may have a structural function.

Eights pits were discovered to the south of the structures. Charred seed remains (dominated by hulled barley, indeterminate cereals, oats) were recovered from a number of these pits which appear to have been originally used for grain storage. A rim of a rotary quern and a Class B comb fragment were recovered from the fill of the pits, and rotary quern fragments was also found in a disturbed context. Although a complete chert end-scraper was also found in one of these pits, the presence of oats indicates that the final use of the pits may have been in the medieval periods.

Several small curvilinear stone-walled and ditched fields belong to Phase 3. There was also evidence for iron smelting/smithing in the form of furnace pits and a large quantity of slag from this phase. The end-plate of a Class E bone comb (pre-ninth/tenth-century) was found in the fill of one of the field ditches. This was in a good condition and appears to have been lost/discarded in the ditch during manufacture, implying that the ditch silted up in the early medieval period.

(**No plan was available for this site**)

References:

Reilly, F. 1999:047. Carrigoran, Co. Clare. www.excavations.ie

Reilly, F. 2000:055. Carrigoran, Co. Clare. www.excavations.ie

Clonmoney West, Co. Clare
Early Medieval Settlement Enclosure
Grid Ref: **R43106231 (143104/162317)**
SMR No: **N/A**
Excavation Licence: **01E0242**
Excavation Duration/Year: **March-April 2001**
Site Director: **D. Murphy (ACS Limited)**

Topsoil stripping on a promontory overlooking the River Shannon in the townland of Clonmoney West in advance of road works revealed evidence for a fourth- to seventh-century deposit, an early/late medieval stone wall, two post-medieval field walls and undated burnt spreads.

The stone wall stretched along the northern side of the site for a length of 30m and had an average width of 2.2m. The wall overlay a silty-clay deposit containing charcoal, animal bone and cremated bone. An eighth/ninth-century copper-alloy ring-pin and a polished stone axe flake were recovered from the deposit, and radiocarbon dates from charcoal from this deposit fell to the fourth and fifth century (see below). It could not be clearly established if the stone wall was contemporary with this deposit. An incised rotary quernstone fragment, a roof tile, an Anglo-Norman 'Edward III' coin and a whetstone were recovered from the wall. Some of these finds are medieval in date and indicate that the wall could have been possibly constructed or repaired in this period.

Linear features in the adjacent field may represent part of a settlement enclosure. The character of the finds from the stone wall and the underlying deposit suggests that these features may have had a domestic function. A number of hearths, pits, drainage ditches, spreads, post- and stakeholes were also excavated close by in the same townland and produced thirteenth to sixteenth century radiocarbon dates confirming late medieval activity in this area.

Two spreads containing oxidized clay, small stones and charcoal were uncovered to the south of the post-medieval walls, overlying the natural boulder clay. The spreads do not appear to have been related to the post-medieval walls and may represent areas of burning.

A small quantity of animal bone fragments were recovered from the early medieval deposit and overlying stone wall and comprised bone from cattle, sheep/goat, pig and horse with some limited evidence for butchery marks.

(**No plan was available for this site**).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-161999	Charcoal from silty brown deposit underlying stone wall	1590±60 BP	**A.D. 337-602**

Reference:

Murphy, D. & O'Neill, T. 2001. N18/N19 Ballycasey to Dromoland Road Improvement Scheme Contract No. 2. Final Report on Archaeological Excavation of AR42A (Clonmoney West townland). Unpublished report submitted to DoEHLG.

Garrynamona, Co. Clare
Early Medieval Settlement Enclosure
Grid Ref: **R36516095 (136518/160952)**
SMR No: **CL061-004**
Excavation Licence: **N/A**
Excavation Duration/year: **Spring 1959**
Site Director: **E. Rynne (National Museum of Ireland)**

An enclosure in Garrynamona townland, excavated in advance of the construction of a new runway and landing strip at Shannon airport, revealed evidence for a possible early medieval enclosed settlement preceded by a series of trenches and pit features (Fig. 51). The excavations were conducted on behalf of the National Museum of Ireland over the course of eleven days in the spring of 1959. The site was situated on a small rock-outcrop on low-lying ground, surrounded on the north, east and south by marshy land and on the west by gently rising rocky ground.

Two main periods of inhabitation was uncovered. The first phase was associated with a series of pre-enclosure shallow trenches and pits in the eastern and south-western area of the site. The shallow pits or trenches, averaged about 0.20-0.30m in depth, and were filled with a dark material containing small flecks of charcoal and some animal bone. An east-west trench in the south-western part of the site ran across the area of the subsequent enclosure entrance and was filled with dark-blackish stony deposits containing charcoal lumps. One long, narrow trench (1m wide) ran in a north-south direction and extended under the north-eastern enclosure bank. A single course of setting stones (approximately 0.25m high) ran along its western edge. Near a stone scatter, another north-south orientated trench approximately 2.80m in width and 0.30m deep ran under the eastern enclosure bank and contained a fill mixed with charcoal flecks and a fragment of a polished bone point.

A pit in the south-eastern quadrant contained a black charcoal-rich fill and revealed a decorated double-sided bone comb at its base. This feature was uncovered at the north-western end of a pile of loose stones, which could have formed some part of a surface.

A fire-pit excavated to the east of the centre of the site revealed two large flat-headed iron nails and a portion of a bronze binding strip within its reddish burnt charcoal fill. Nearby was another small pit filled with charcoal-rich material. A possible posthole was suggested for this pit though the presence of different varieties of wood in the charcoal argues against this interpretation.

The second phase of habitation was associated with the construction of the enclosure banks and the stone-revetted south-western entrance-way. The enclosure had a diameter of 32m externally and 24m externally, and enclosed a habitation deposit containing flecks of charcoal and a few bone fragments. There appears to have been no evidence of structures or other features associated with this occupation phase.

The excavator suggested that the main period of inhabitation associated with the enclosure was between the fourteenth and seventeenth centuries A.D. He cited the late appearance of some of the iron finds as well as the occurrence of seventeenth century pottery sherds and clay pipes in contexts associated with this phase. It could be suggested however that the enclosure is early medieval and that these artefacts were removed from their original contexts due to subsequent site disturbance. Various other finds and artefacts including fragments of quernstones and a piece of slag recovered in the ‘old ground level’ might originally be early in date.

A late phase of occupation at the site was associated with a number of spreads of mussel shells in the southern interior and a small internal enclosure (3m by 4m internally) immediately inside and to the east of the south-western enclosure entrance. These features

were associated with glass fragments, pottery sherds and coins dating to the eighteenth and nineteenth centuries.

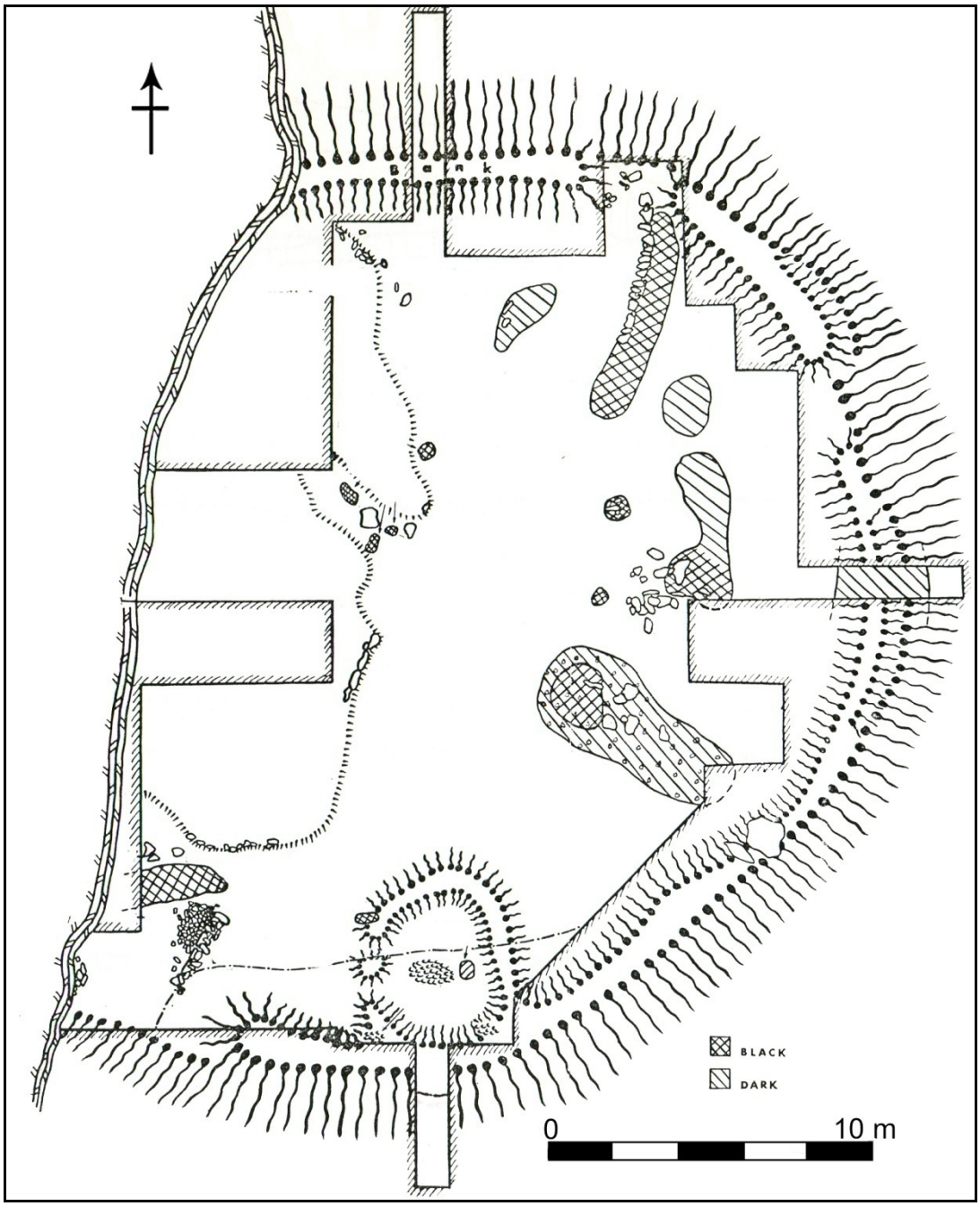


Fig. 51: Plan of Garrynamona, Co. Clare (after Rynne 1962-4, plate XLVII).

Reference:

Rynne, E. 1962-4. Some destroyed sites at Shannon Airport, County Clare. *Proceedings of the Royal Irish Academy Section C*, 63, 245–77.

'Glencurran Cave' (Tullycommon td.), Co. Clare
Grid Ref: **R27409631 (12740/19631)**
SMR No: **CL010-054**
Excavation Licence: **04E0432; 05E0379; 08E0265**
Excavation Duration/year: **12 weeks over 2004, 2005, 2008, 2009**
Site Director: **M. Dowd (Institute of Technology Sligo)**

Glencurran Cave is situated on the southeastern side of Glencurran valley (110m 0D) in the western part of the Burren National Park, close to the villages of Kilnaboy and Carron. Excavations between 2004 and 2009 revealed evidence for Late Bronze Age votive deposition and early medieval occupation. The early medieval evidence was uncovered primarily from outside the cave entrance where some modification of the natural bedrock had taken place to create a D-shaped platform (Fig. 52). Here, a hearth and a collection of early medieval domestic artefacts were recovered. A Viking necklace was recovered deeper in the cave, approximately 50m from the entrance).

The cave is over 750m in length, although only the outermost 65m is of archaeological interest. Inside the entrance is a level area named the 'Entrance Chamber', connected by a low narrow passage, less that 13m in length to the main cave passage.

A Neolithic and early Bronze Age lithic assemblage- cores, blades, flakes, scrapers and retouched artefacts- were recovered from the entrance area as well as from deeper in the cave system. middle Bronze Age ritual activity was concentrated around a dry-stone-built cairn. Fragments of scallop shells, a shale axe, a rubbing stone, a copper-alloy object, a net-sinker, bone beads, perforated cowrie shells, perforated an un-perforated periwinkle shells, amber beads and bead fragments, charcoal, animal bone and over 20 human bones were recovered from disturbed deposits on the cave floor directly beneath the cairn. A middle Bronze Age radiocarbon date was obtained from an adult human fibula (see below).

Evidence for late Bronze Age votive deposition was also discovered in the cave, approximately 45m from the entrance. An assemblage of disarticulated un-burnt human bones derived from at least seven individuals – adults and young children - was recovered. These appeared to have formed token deposits together with a large quantity of cowrie shell beads, periwinkle shell beads, amber beads and the remains of three Late Bronze Age pottery vessels. Further evidence for deliberate deposition of disarticulated human bones was found at the cave entrance where a human bone produced a late Bronze Age/early Iron Age date (see below).

Evidence for early medieval occupation was identified primarily in the entrance chamber and outside the cave entrance. The D-shaped platform outside the entrance appears to have been deliberately modified to produce a level surface for domestic activity. Several prehistoric lithics overlay the early medieval finds on the platform, suggesting that material was dug up from inside the cave and dumped outside to create this platform.

The remains of a small crude stone-lined hearth were found immediately outside the entrance and contained a charcoal-rich deposit with burnt and un-burnt animal bones. Charcoal from the hearth came from a collection of twigs or small branches rather than mature wood. Along with the size of the hearth and the relatively low quantity of charcoal, this indicates a small low-intensity fire.

A series of limestone blocks were fitted across the cave entrance and may have functioned as a plinth for a wooden door; a suggestion supported by the recovery of an iron barrel padlock key inside the cave. Another crude arrangement of stone was identified in the southern part of the entrance chamber and may mark an attempt at demarcating the living space between the chamber and the passage during this period.

The main and only major occupation layer from the D-shaped platform included a socketed iron sickle, a tanged iron knife, a stone spindle-whorl, a perforated iron strap, possibly from a wooden bucket, as well as Bronze Age lithics and a prehistoric perforated dog whelk. An early medieval ringed-pin was recovered inside the cave entrance where it seems to have been deliberately and carefully placed under a flat stone.

A relatively large quantity of animal bone was recovered from the entrance chamber and platform and appears to represent butchery and consumption. Bones of cattle, sheep and pig outside the cave entrance were associated with primary butchering waste. Consumption appears to have taken place inside the cave where most of the faunal remains represented meat-bearing elements of cattle, sheep and pig. Domestic fowl, mallard, goose bones, cat and dog were also recovered.

A Viking necklace of 71 glass beads was found in the area where much of the Late Bronze Age activity was identified. A number of the beads were segmented and foil-covered and are similar to examples recovered from Kilmainham, Islandbridge as well as from the trading site at Birka, Sweden. The necklace may have been stolen and hidden in the cave.

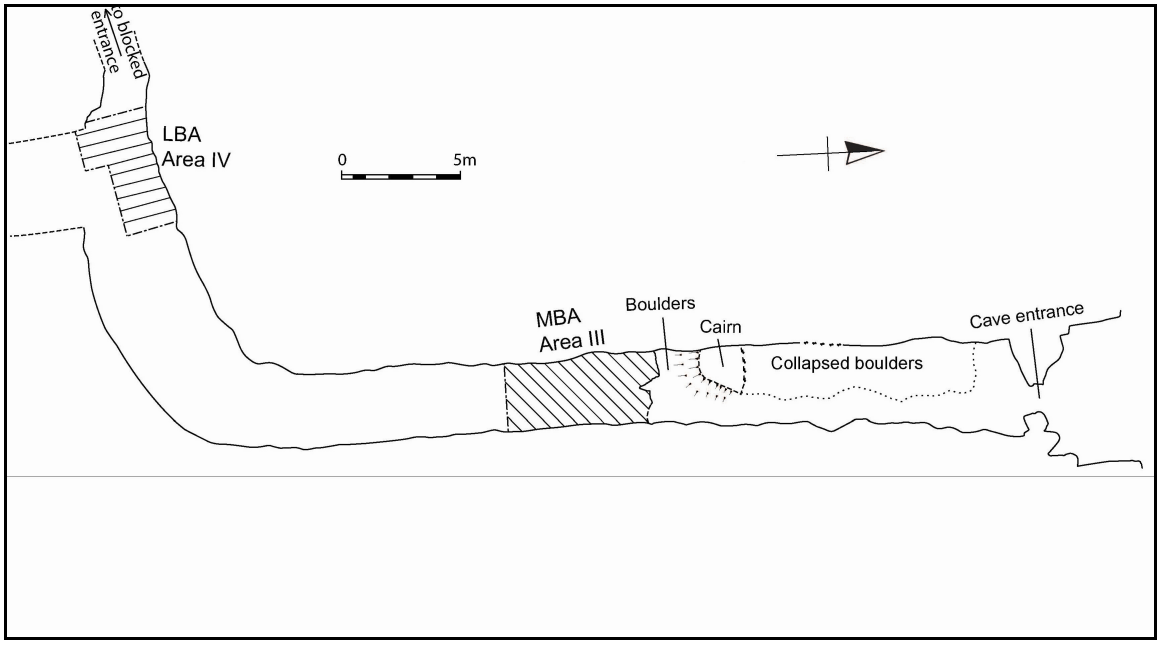


Fig. 52: Areas of archaeological activity at Glencurran cave, Co. Clare (after Dowd 2009a).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-6660	Adult left fibula from cave floor beneath stone cairn (Area III)	3035±36 BP	**B.C. 1408-1194** B.C. 1141-1134
UB-6661	Child (2-4 yrs) left ilium from cave floor in Area IV	2536±31 BP	**B.C. 797-731** **B.C. 692-660** **B.C. 651-544**
UB-6922	Left adult ulna from Area II	2426±32 BP	**B.C. 749-687** B.C. 666-642 B.C. 592-576 **B.C. 571-402**

References:

Dowd, M. 2004. Preliminary Excavation Report 2004: Glencurran Cave, Tullycommon Td., Co. Clare, Unpublished Report for DoEHLG.

Dowd, M. 2006 Final excavation report for 2004 & 2005 seasons. Unpublished report for DoEHLG.

Dowd, M. 2006 The Glencurran burials. *Descent* 191, 27-8.

Dowd, M. 2007 Living and dying in Glencurran Cave, Co. Clare. *Archaeology Ireland* 21 (1), 13-17.

Dowd, M. 2009a. Middle and Late Bronze Age funerary and ritual activity at Glencurran Cave, Co. Clare, in Finlay, N., McCartan, S. & Wickham Jones, C. (eds.) *Bann flakes to Bushmills: papers in honour of Peter C. Woodman*, 86-96. Oxbow, Oxford.

Dowd, M. 2009b. Excavation of Glencurran Cave. *Burren Insight*, 9.

Dowd, M. and Bunce, C. 2009. Glencurran Cave – gating and archaeology. *Underground* 75, 9-11.

Gragan West, Co. Clare
Early Medieval Settlement Enclosure
Grid Ref: **M200018 (120000/201800)**
SMR No: **N/A**
Excavation Licence: **E000458**
Excavation Duration/Year: **October-November 1988**
Site Director: **C. Cotter (National Museum of Ireland)**

A robbed out cashel was excavated at Gragan West because of severe farm disturbance on the site in the 1980s. A number of Bronze Age finds were recovered, as well as a possible hearth, dry-stone wall, other structures and finds associated with an early medieval settlement. Previous finds from the site (e.g. a palstave axe-mould, part of a stone mortar, tracked stone, spindle whorl, iron pick, and iron slag) were brought to the attention of the National Museum, initiating a rescue excavation in winter of 1988. The site is situated on a level platform (210m OD) on the eastern slopes of the limestone Burren ridge of Poulacapple, commanding extensive views to the east, north and south.

The site consists of a robbed out cashel. It survived as an extensively disturbed roughly circular mound 22.5m in diameter and 1.35m in maximum height in the centre, tailing off steeply downslope to the east and more gently to the north and south. The western half was almost completely levelled and a number of features (an outbuilding in the southwest sector, a north-south farm-track bisecting the centre of the mound and a modern dry-stone wall cutting its southern portion) had caused severe disturbance to the site.

There was limited stratigraphy (four layers) and where it survived this was extensively disturbed. Two cuttings were excavated at right angles to each other near the midpoint of the mound, and a third trench was excavated in a small pocket of archaeology, 35m to the north of the mound.

Evidence for Bronze Age activity was identified in disturbed contexts from within the mound and in an isolated pocket of archaeological material, 35m to the north of the mound. Finds from the mound comprised a decorated rim sherd of an early Bronze Age food vessel pot in the western disturbed half of the site and the previously recorded palstave axe-mould. An area of prehistoric activity to the north of the mound comprised a variety of finds (e.g. animal bone, fragments of chert, a stone knife and a possible dagger with a raised midrib). Iron slag from these deposits also indicates later activity in this area.

The site itself appears to represent the disturbed remains of an early medieval enclosure. A number of large stones were scattered across the western half of the mound. They may represent the demolished remains of a dry-stone wall or could have been laid deliberately to provide a well-drained, level surface- similar to that which occurred in many of the structures in the interior of Cahercommaun. A stone-lined hearth (1.5m by 0.7m) set into the mound just west of the mound's midpoint was also similar in style to hearths excavated at Cahercommaun. A small hole was drilled into the bedrock in this area and may have been used to support a post for some form of structure.

Two sawn horn tips were recovered from in the disturbed material in the west side and just east of the centre and indicate that bone-working was being carried out on the site. A fragment of a worked bone rib from the western side of the mound and may have been used for scraping and softening animal hides. The loom weight and spindle-whorls indicate textile production. Iron slag from the sod of the mound, the centre of the mound and the area to the north may have been associated with ironworking activity. The hone-stones and rotary grinding stone were used for smoothing and sharpening tools and weapons. A relatively large quantity of animal bone as well as occasional oyster, scallop and barnacle shells were also discovered on the site.

The focus of the early medieval settlement was in the disturbed western half of the site and it was from this area that the bulk of the finds were recovered (e.g. stone spindle-whorls, a loom weight, hones, hammer-stone, rotary grinding stone, strike-a-light, an amber bead, dumb-bell rock-crystal bead, quartz toggle, fragment of iron knife and a key for a barrel-padlock). The other early medieval finds (e.g. a bone toggle, cylindrical bone/horn object, yellow herringbone glass bead, stone gaming pieces, small bronze ring, socketed iron spearhead, iron gouge, iron needle, iron ring and miscellaneous iron artefacts) were found across the site.

(No plans available for this site).

References:

Cotter, C. 1988:04 ‘Gragan West’ www.excavations.ie

Cotter, C. 1990. Gragan West- E458. Unpublished excavation reports submitted to the National Monuments Service, DoEHLG.

Inishcealtra, Co. Clare
Ecclesiastical Settlement
Grid Ref: **R69895023 (169896/185023)**
SMR No: **CL029-009---**
Excavation Licence: **E180**
Excavation Duration/year: **1970-77; 1979-80**
Site Director: **L. de Paor (Office of Public Works)**

A long-term research and conservation project was undertaken at an ecclesiastical site on the small island of Inishcealtra (Holy Island) between 1970 and 1980 and revealed considerable evidence for ritual, settlement, burial and industrial activity associated with the monastery (principally tenth to thirteenth centuries) as well as subsequent post-medieval pilgrimage and burial activity (Fig. 53).

The ecclesiastical remains are situated in the eastern and south-eastern part of the island and consist of a round tower, two churches, two oratories and other buildings, a large collection of crosses and cross-slabs and an extensive system of enclosures and paths defined by earthworks and dry-stone walls. The island is little under than 45 acres in extent and is situated in the mouth of Scarrif bay in Lough Derg in the lower Shannon, 300m from the western shore.

Excavations were undertaken in five general areas and comprised the Lady Well (I); two-roomed modern cottage (II); St. Brigid's (Baptism) church (III); the D-shaped enclosure (St. Michael's or *Garraidh Mhichíl*) at the summit of the island (IV); St. Caimin's Church, Teampal na bhfear nGonta, the Saint's Graveyard, the 'confessional' and the Round Tower (V). Finds and features from the Lady's Well (I) and the two roomed cottage (II) were chiefly modern. The site of St. Michael's (*Garraidh Mhichíl*) in Area IV yielded only post-medieval pilgrimage and burial activity.

Early Medieval Monastic Phase
The excavated archaeology from the monastic phase dates primarily from the tenth to the thirteenth centuries. A small collection of finds (e.g. polished stone axes, chert and flint flakes and scrapers and a flint arrowhead), however indicate prehistoric activity on the island. Subsequent to this prehistoric activity, a series of radial bank-and-ditches crossed the monastic quadrant of the island, but were not closely dated.

A small quadrangular enclosure defined on its west side by an early radial bank-and-ditch and on the others by the partial remains of low secondary banks and external ditches was discovered around St. Bridget's church. A bronze openwork brooch (dated *c.* A.D. 800) found in the primary silt of the northern enclosure ditch indicates that this feature was constructed in the ninth century. This early phase of the monastery is largely defined by a limited number of early artefacts, mostly recovered from secondary contexts. These include a small enamelled object, (possibly from a seventh/eighth-century reliquary), a sandstone grave-slab with an incised Chi-Rho cross, and as well as a few fragmentary sherds of E ware and a sherd of Late Roman Amphora 1 (B*ii*)).

The earliest ecclesiastical features in the monastery appear to be a possible timber 'shrine' to the west of the 'Confessional' cell, some burials near the shrine, an earthen oratory to the west of the round tower and a small number of burials to the west of St. Caimin's church.

A sequence of roughly east-west rectangular earthen oratories, predating a large late-twelfth century circular house, were excavated to the immediate west of the round tower. The earliest structure (5.5 by 4.1m) contained mud-built walls reinforced by close-set wattles and was orientated on the same axis as the single-celled stone church at St. Brigid's. The re-buildings of this structure were more aligned with that of St. Caimin's church to the east.

The earthen oratory(s) were roughly contemporary with a small north-south rectangular timber structure aligned within the partial remains of a rectangular enclosure. This structure, rebuilt on a number of occasions, had traces of a pillared portico on its southern gable end, and was interpreted as a possible shrine.

At least sixteen poorly preserved east-west burials were identified within the rectangular enclosure and in the vicinity of the 'Confessional' Cell. Twelve burials were aligned with the rectangular enclosure and with the sequence of small wooden structures in its interior.

The southern part of the rectangular enclosure containing the possible shrine was overlain by the Saint's graveyard and its surviving northern medieval stone wall. This graveyard appears to have been formally laid out and walled in the twelfth century or shortly before it and the recumbent graveslabs *in situ* within it are of roughly the same date.

The rectangular timber structure(s) appear to have been replaced as a shrine by a small roughly mortared stone structure covering a shallow cist burial on the site of the present early modern 'Confessional' cell to the east. It is suggested that this early stone structure on the site of the 'Confessional' cell dates to the tenth/eleventh century. Further Romanesque additions were made to St. Camin's, 'Teampal na bhFear nGonta and St. Bridget's and St. Mary's church appears to have been built in the early thirteenth century.

This early stone structure, interpreted as a possible shrine inaugurated a concentrated phase of stone building involving the construction of the original stone church of St. Caimin's (A.D. 1000) and St. Bridget's as well as a round tower dated to about the same time.

The base of the round tower had shallow foundations and was built upon a large flat carefully prepared platform or 'raft' of puddle clay studded with small boulders and stones and ringed by small drain-trenches. A narrow continuous trench or slot skirted the 'raft' of the round tower and separated it from the area to the southwest and northwest. The trench possibly supported a fence of some kind and was related to the phase of activity associated with the round tower.

There is significant evidence for eleventh-twelfth century habitation and industrial activity. A possible rectangular structure and traces of flimsy circular wooden structures- similar in form to examples defined by gullies and post-holes to the west of St. Brigid's enclosure- were excavated within a lightly fenced early eleventh-thirteenth century ovoid enclosure (23m max diameter) to the north of the 'Confessional' cell and the rectangular wooden enclosure.

Eleventh century bronze-working evidence- stone motif pieces, bronze waste and bronze scraps with late 11/early 12th century 'Ringerike' ornament- were associated with a number of these huts within the enclosure. Tillage activity marked by furrows was roughly contemporary with this eleventh century activity and with some burials inside the rectangular enclosure to the south.

Numerous traces of circular wooden and earthen structures were identified in the vicinity of the Round Tower and St. Caimin's church and some of these were stratigraphically earlier than the round tower. Two large circular houses (I & II), roughly 10m in diameter were clearly identified to the southwest of the Round Tower. One of these buildings (I) contained a projecting porch and a hearth which concealed a hoard of 21 early Norman coins from the reign of Stephen (1135-1154) and Henry II (1154-1189).

The area to the west and southwest of the round tower revealed numerous pits and working hollows with evidence for ironworking (mainly slag and bloom), principally dating to the twelfth and thirteenth centuries. Two bullaun stones were excavated to the west of House I and finds from this area produced numerous whetstones, iron bolts, knife blades, nails, burnt bone, mortar, slag, chert chippings and a possible stone pestle belonging to the bullauns.

Medieval Activity

Significant evidence for medieval burial, industrial activity, surfaces and pathways were uncovered across the site. Twenty thirteenth century burials were excavated in the interior of St. Bridget's church with further medieval burial revealed in the vicinity of the round tower and St. Caimin's church. St. Brigid's enclosure and surrounding area was also used for industrial activities- stoneworking, metalworking, ironworking and boneworking- in the medieval period.

Quern-stones appear to have been manufactured to the north of the St. Brigid's enclosure as two possibly thirteenth century decorated querns and fragments of other quern-stones were recovered from a series of pits in the area. Boneworking evidence was also confined mainly to the north of St. Brigid's church and comprised fragments of red deer antler, complete and incomplete bone and antler combs and needles, points and shroud pin. Associated finds of bronze stick-pins, coins and other objects suggest that this activity was mainly thirteenth century.

The ironworking evidence was uncovered mainly within St. Brigid's enclosure to the immediate north of the church and included fragments of furnace-bottoms as well as quantities of clinker and bloom from a number of pits. A clay dome in an irregular flat-bottomed straight-sided pit to the immediate west of the church was interpreted as a bronze-working furnace. Finds from the furnace included slag, charcoal, scraps of burnt bone and tiny fragments of green copper oxide.

Post-medieval Pilgrimage and burial

The ecclesiastical complex was remodeled in the seventeenth and eighteenth centuries with the construction of a number of drystone pilgrim 'station' enclosures surrounding the 'Confessional' Cell and the churches of St. Michael and St. Brigid. Areas of paving circumnavigated the inner face of the enclosures and allowed the pilgrims perform a 'round' or circuit of these monuments.

A small post-medieval mortared stone structure and an infant cemetery (*Cillín*) were excavated within the 'station' enclosure at St. Michael's. Similarly, the 'Confessional' Cell in its present form was dated to c. A.D. 1700 from the recovery of part of a late seventeenth century clay pipe from a context under its foundations. A broad paved roadway connecting the church sites of St. Caimin's and St. Mary's was also built in this period.

General Finds

Finds from the sites included iron nails, knives, hooks, bolts, staples arrowheads, medieval chainmail, 13th century metal scabbard tip, bronze buckles, pins, needles, mounts, rings, bone combs, pins, needles, gaming pieces, motif-pieces, stone moulds, trial-pieces, Romanesque voussoirs and fragments, whetstones, quern-stones, jet bracelet fragments, a Hiberno-Norse coin quarter, a 12th century early Norman coin hoard a sherds of Bii ware and a few sherds of E-ware.

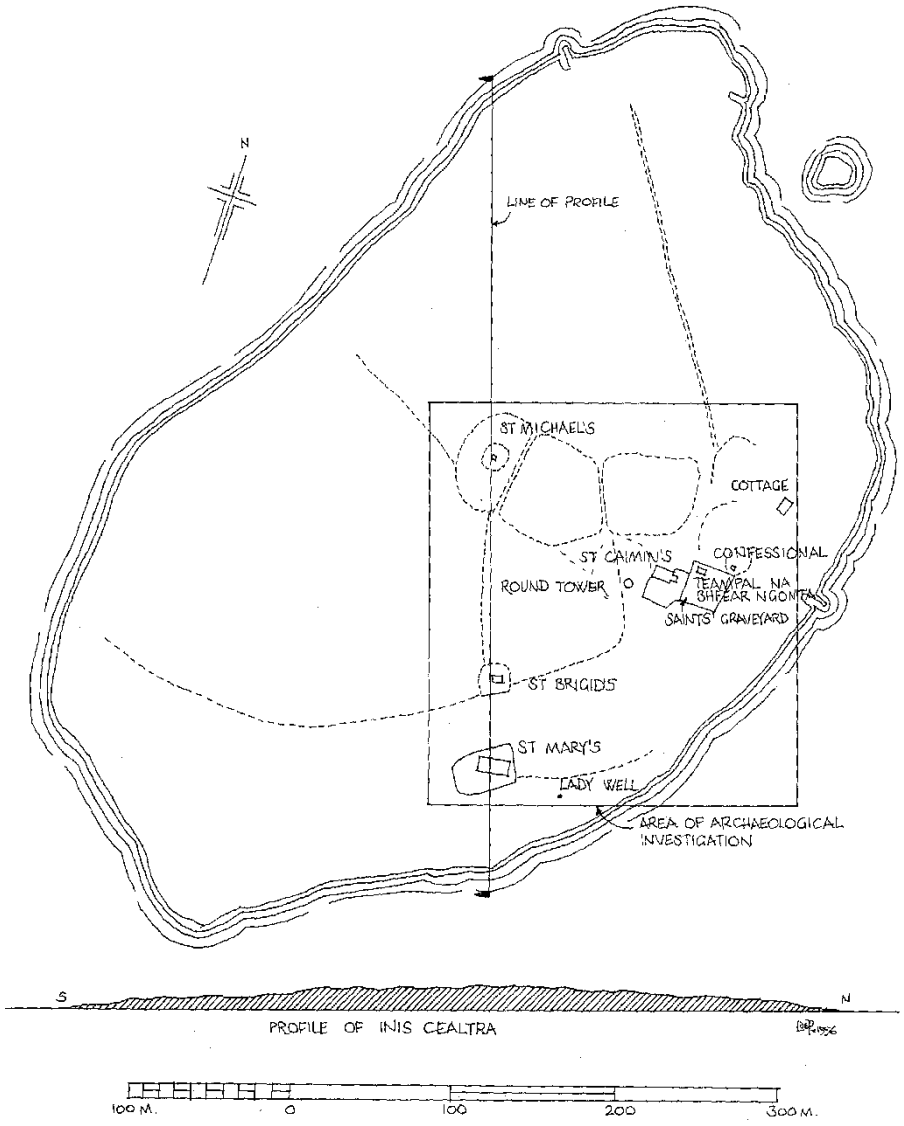


Fig. 53: Plan of Inishcealtra, Co. Clare (after De Paor 1997).

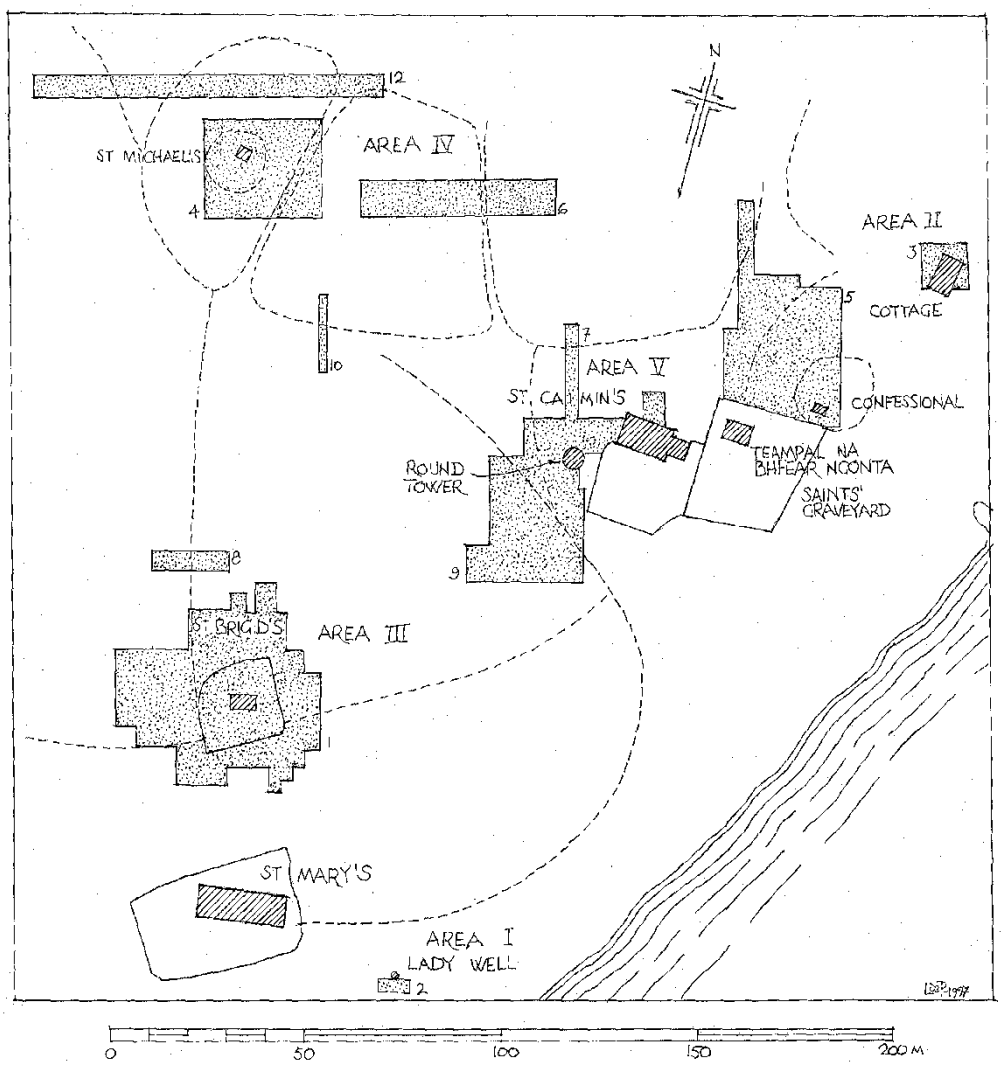


Fig. 54: Excavated areas of Inischcealtra (after de Paor 1997).

References:

De Paor, L., & Glenn, D. 1995. St. Caimin's, Iniscealtra: Reconstruction of the doorway. *North Munster Antiquarian Journal* 36, 87–103.

De Paor, L. 1997. Inis Cealtra: report on archaeological and other investigations of the monuments on the island. Unpublished Report.

Killulla, Co. Clare
Early Medieval Settlement Enclosure
Grid Ref: **R40056504 (140054/165049)**
SMR No: **N/A**
Excavation Licence: **01E0022**
Excavation Duration/Year: **May - June 2000; March 2001**
Site Director: **D. Murphy (ACS Ltd.)**

Topsoil stripping at Killulla in advance of road improvement revealed a multi-phase archaeological landscape comprising a late Bronze Age building, hearth and *fulachta fiadh*, an early medieval ditched enclosure and a small post-medieval metalworking complex. The excavated area was located in low-lying flat marginal ground in Killulla townland, south of the town of Newmarket on Fergus.

Charcoal from the gully fill and posthole fill of a circular post-built hut and external hearth produced Late Bronze Age/Early Iron Age dates (see below). This structure was later truncated by the early medieval ditched enclosure. A *fulachta fiadh* on the eastern side of the site was radiocarbon dated to a similar period (see below).

A ditched enclosure was discovered along the western side of the site and extended out beyond the limit of excavation (Fig. 55). It was only partially excavated and had a diameter of 38m internally and 42m externally. An entrance was identified along the south-eastern perimeter and a posthole 0.3m west of the southern terminus may have supported some form of gate. Another posthole of similar size and construction was excavated 2m to the west and may have also been related to it.

The cut of the enclosing ditch had a profile varying from a U- to an almost V-shape and was 1.3m-2.8m wide with an average depth of 1.25m. The ditch appears to have been refilled with the same material that had been originally dug from it. The excavated material from the ditch may have then been deposited within the enclosure to form a bank. The lack of silting with the base of the ditch indicates that this material from the bank was re-deposited back into the ditch shortly after this event, with a dumping of stones being concentrated within the vicinity of its terminals.

Finds from the enclosing ditch included a fragment of a rotary quern, a possible socketed spearhead and fragments of two human skulls as well as a large quantity of animal bone. The faunal remains were dominated by the bones of cattle, sheep/goat, horse, pig as well as dog and deer and displayed evidence for butchery marks. A dated charcoal sample from the secondary fill of the ditch indicated that the ditch was backfilled in the eleventh/twelfth century (see below).

The interior of the enclosure was only partially investigated and the few features from this area mostly comprised post-medieval drainage ditches, furrows and pits of unknown date. Other than two other internal postholes, no other features could be possibly associated with the occupation phase of the ditched enclosure though many may survive outside the limit of the excavation area.

A post-medieval rectangular metalworking stone structure (7m X 3.5m) trunctuated the north-western section of the ditched enclosure. Associated with it were two internal hearths, a small external keyhole shaped furnace and a network of drains situated mainly to the west. Finds from the features includes post-medieval pottery, a coin dated to 1689, fragments of iron artifacts, clay pipes and glass as well as charcoal, bone and slag.

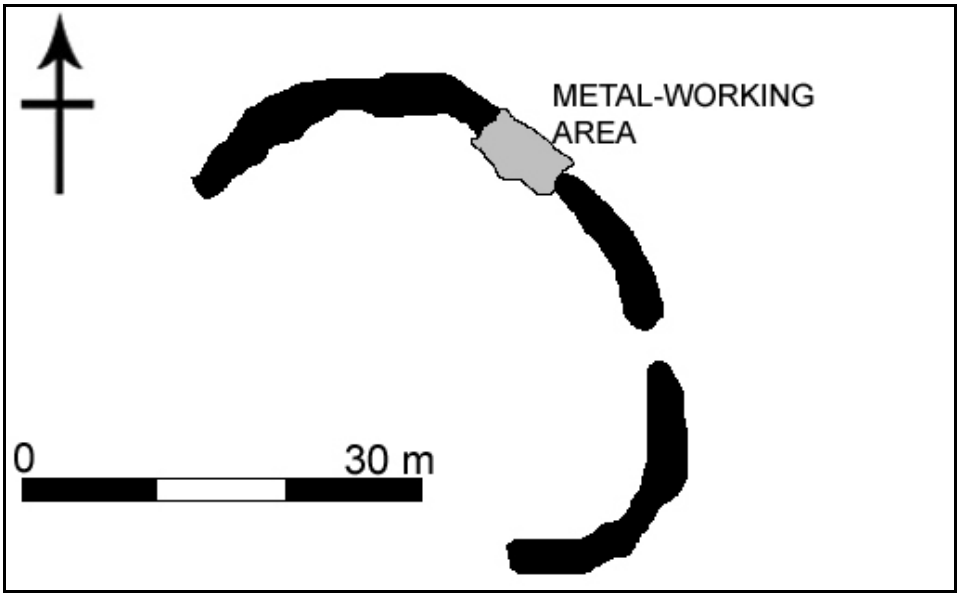


Fig. 55: Plan showing enclosure and metal-working area at Killula, Co. Clare (after Murphy & Danaher 2001).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
Beta-159622	Charcoal from secondary fill of ditched enclosure	950±40 BP	**A.D. 1016-1179**
Beta-159623	Charcoal from fill of hearth associated with *fulachta fiadh*	2510±60 BP	**B.C. 796-485** B.C. 464-416
Beta-159624	Charcoal from fill of posthole associated with hearth, west of circular structure	2540±40 BP	**B.C. 801-705** **B.C. 695-539**
Beta-159626	Charcoal from fill of trough of *fulachta fiadh*	2650±70 BP	**B.C. 978-740** B.C. 689-663 B.C. 648-548
Beta-159629	Charcoal from fill of foundation cut of circular structure	2490±40 BP	**B.C. 780-486** B.C. 463-448 B.C. 442-416

References:

Murphy, D & Danaher, E. 2001. N18/N19 Ballycasey-Dromoland Road Improvement Scheme, Contract 2: Interim Report on Archaeological Excavation of Site AR27 (Killulla townland). Unpublished Report for DoEHLG.

'Thady's Fort' (Ballycally td.), Co. Clare
Early Medieval Settlement Enclosure
Grid Ref: **R36546164 (136546/161642)**
SMR No: **CL061-005**
Excavation Licence: **N/A**
Excavation Duration/year: **Spring 1959**
Site Director: **E. Rynne (National Museum of Ireland)**

Thady's Fort is a double banked enclosure with evidence for an internal wooden palisade, a rectangular building, areas of paving as well as fire-pits and postholes. The site was situated near the summit of Thady's Hill, and was excavated by staff from the National Museum over the course of eight days in the spring of 1959 in advance of the construction of a new runway and landing strip at Shannon airport.

The site contained two encircling banks with a wide ditch between them and a south facing entrance (Fig. 56). The enclosures were 57m by 61m externally (and approximately 30m internally). The southern entrance was splayed, and measured about 2m on the inside and 3m on the outside.

The inner face of the inner bank was strengthened with a stone revetment wall generally two courses high for most of the perimeter. Where this stone revetment was missing along the northern side, a trench (3.7m long, 0.6m wide and 0.3m deep) containing a linear spread of charcoal was uncovered. This was interpreted as a timber revetment or palisade, subsequently destroyed by fire.

A shallow fire-pit (0.2m deep) was the only feature of interest in the limited excavations in the site's eastern half. It abutted the revetment wall along the eastern perimeter of the enclosure. Two further fire-pits and a possible posthole were excavated near the centre of the site. One fire-pit and the possible posthole cut into the 'old ground level' though underlay a stony deposit.

A rectangular stone-house (13.4m by 6.2m externally) was evident prior to excavation in the south-west quadrant. The walls survived to a height of 0.6m high and were 0.75m thick. They were built of large generally rectangular dressed stones on the outer faces, with an inner core of small irregular stones. A continuous band of mortar was found on the interior walls suggests that it had been plastered. A shallow fire-pit full of burnt material and the remains of a possible chimney were excavated inside the structure. Two possible postholes were excavated inside the house with a further one identified outside; and an area of paving was also discovered outside the entrance.

The foundation-walls of the house had much in common with that of medieval houses excavated at Caherguillamore, Co. Limerick. This, along with the recovery of a number of late medieval finds and pottery sherds suggest a late medieval date for the house. This dating is supported by the recovery of a number of stratified clay pipe bowls underneath the paving outside the entrance and among the fallen wall-stones.

It cannot be established if this house post-dates, or is contemporary with, the enclosures. The excavator suggested that both the house and enclosure bank may have been contemporary for two reasons; the slip from the inner bank was against the outer face of the south-western wall of the house and not underneath it and because the western corner of the house was built upon the lowest levels of bank and not on top of slip from the wall. A number of finds from the enclosure, however, are associated with the early medieval period, e.g. a piece of sheet-bronze, four quern stone fragments, a whetstone and an iron knife with bone handle. A number of later finds (e.g. seven sherds of medieval pottery), some iron objects (e.g. a jaw's harp) and three clay pipe-bowls, were also intermixed with these artefacts in contexts associated with the house and enclosure and suggest later disturbance on the site of an early medieval enclosure.

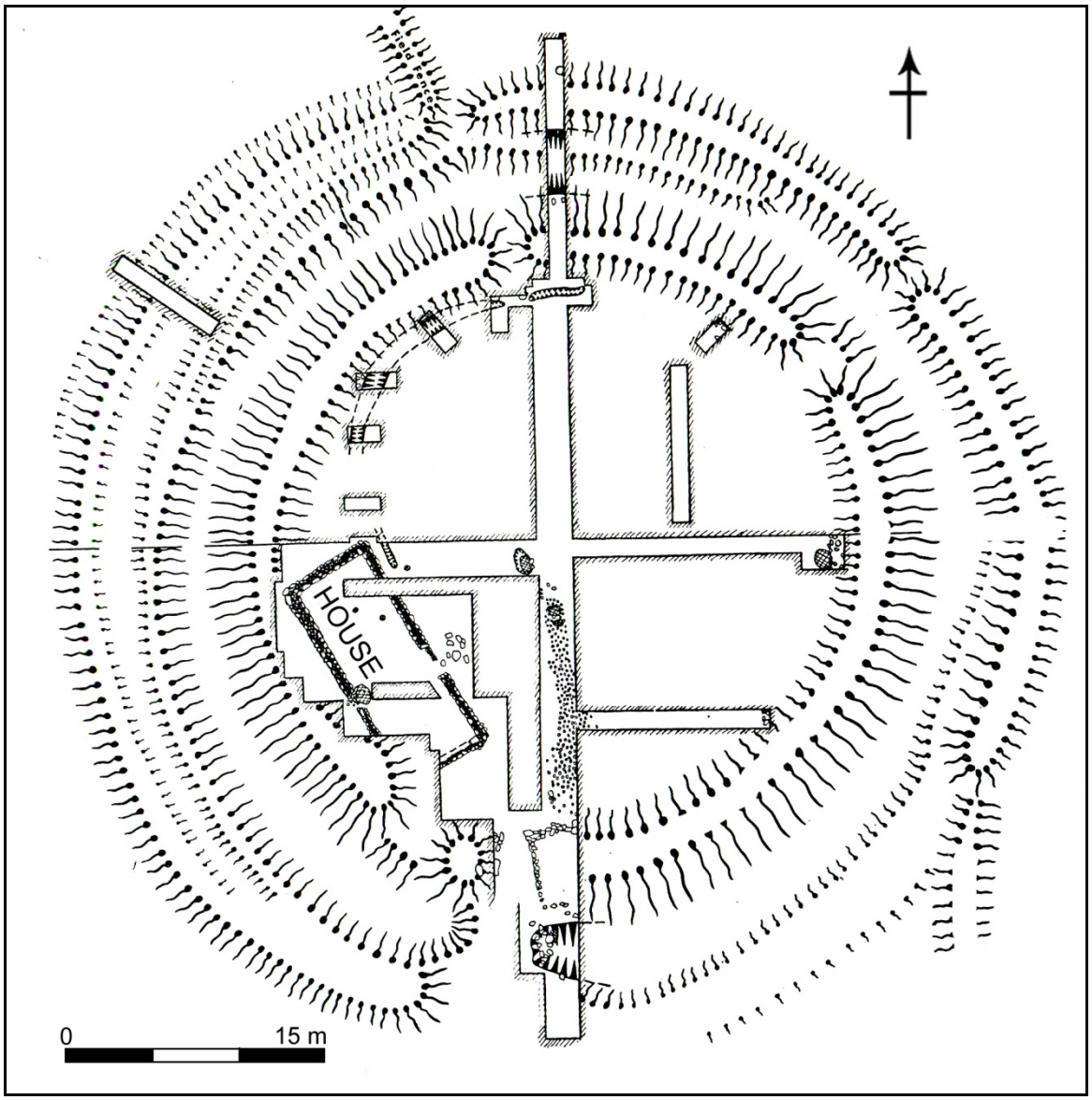


Fig. 56: Plan of Thady's Fort, Co. Clare (after Rynne 1962-4, plate XLV).

Reference:

Rynne, E. 1962—4. Some destroyed sites at Shannon Airport, County Clare. *Proceedings of the Royal Irish Academy Section C*, 63C, 245–77.

County Cork

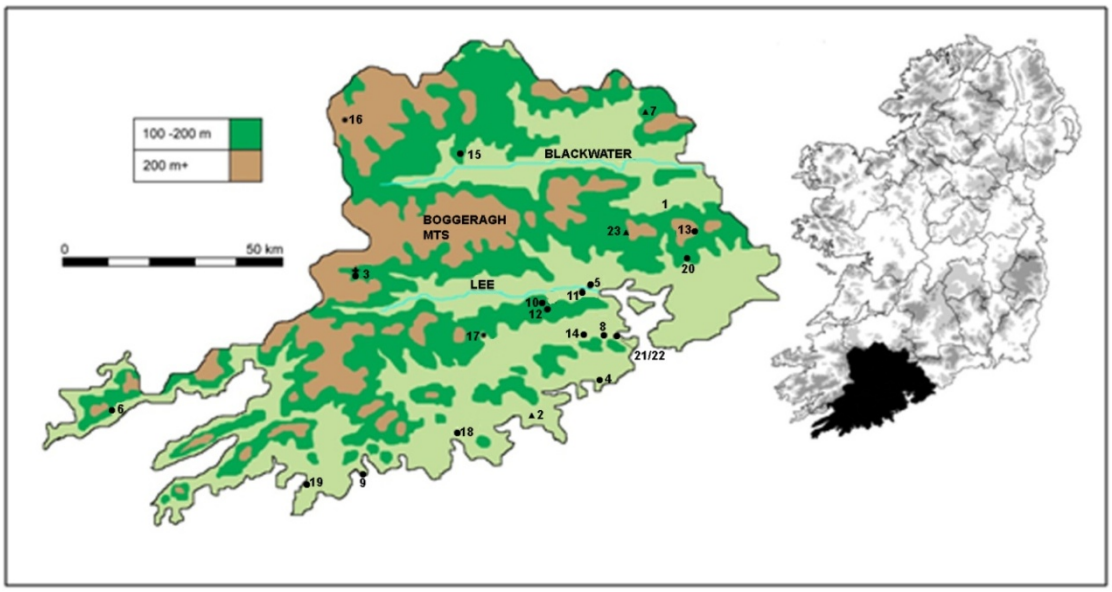


Fig. 57: Significant early medieval excavations in Co. Cork.

1	Ballyara	**13**	Garryduff
2	Ballycatteen	**14**	Killanully
3	St. Gobnetts	**15**	Lisduggan
4	Ballynacarriga	**16**	Lisleagh
5	Banduff	**17**	Lisnacaheragh Fort (Garranes)
6	Barrees	**18**	Lisnagun
7	Brigown	**19**	Oldcourt
8	Carrigaline	**20**	Park North
9	Carrigillihy	**21**	Raheens 1
10	Carrigrohane	**22**	Raheens 2
11	Cork	**23**	Skahanagh North
12	Curraheen		

Ballyarra, Co. Cork
Unenclosed Souterrain
Grid Ref: **W85029166 (185021/091665)**
SMR No: **CO045-055**
Excavation Licence: **N/A**
Excavation Duration/Year: **1953**
Site Director: **E.M. Fahy (University College Cork)**

A souterrain, apparently unroofed and uncompleted, was discovered in an extensive gravel deposit, 30m from the bank of the River Bride, by workmen quarrying gravel (Fig. 58). There was no surface indication of any associated enclosure or related structures, but the souterrain appears to have been deliberately in-filled with habitation refuse.

The souterrain was single chambered, with poorly built walls. Its entrance was originally gained through an oval pit (1.8m by 2.1m and 2.2m deep), not protected with either a stone or wooden revetment. The entrance pit was relatively undisturbed except for some collapse on its southern side. It had evidence for three layers of habitation refuse alternating with spreads of gravel which had apparently collapsed from the sides of the pit. There was no evidence for a deep layer of collapse on the floor of the pit from the un-revetted gravel sides of the structure suggesting that there had not been a lengthy period of disuse before the habitation refuse was dumped inside the structure. It was suggested that the spreads of gravel in the habitation refuse indicated short pauses in the dumping process. Two pieces of worked antler and animal bone were recovered in these habitation fills in the entrance pit.

The oval pit entrance led into a collapsed chamber whose approximate internal dimensions were 2.5m in length, 1m in width and 1.95m in depth. Habitation refuse was discovered on the floor of the chamber and had a maximum depth of 70cm at the northern wall. Some animal bone was uncovered within it and had been 'obviously split to facilitate extraction at the marrow'. A bronze ring pin, iron pin, a sandstone hone, three waste flint flakes and three pieces of worked Deer antler as well as a small quantity of iron slag and one furnace bottom were recovered within the habitation refuse. Fragmentary remains of two young human infants were also recovered within the habitation refuse of the souterrain.

The souterrain appears to have been deliberately filled with refuse suggesting either that its roof had been removed to facilitate this activity or that the roof of the structure had never been put in place. There was no evidence that the roof of the souterrain had collapsed into the chamber at any stage or had been removed by work associated with the quarrying. The absence of any form of lining around the deep entrance pit of the may suggest that the souterrain was never completed as without such supports and steps it would have been very difficult for one to access and exit the structure.

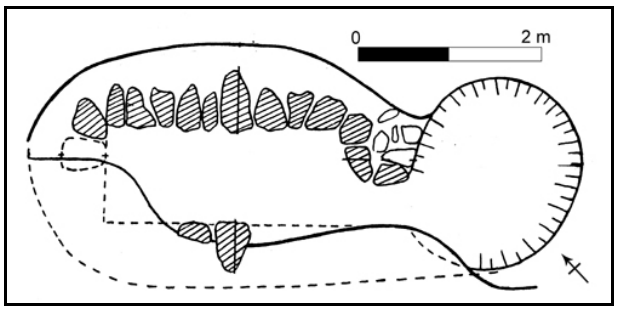


Fig. 58: Plan of souterrain at Ballyara, Co. Cork (after Fahy 1953, 56).

Reference:

Fahy, E. M. 1953. A souterrain at Ballyarra, Co. Cork *Journal of the Cork Historical and Archaeological Society*, 58 55-9.

Ballycatteen Fort, Co. Cork
Early Medieval Settlement Enclosure & Souterrains
Grid Ref: **W58194591 (158198/045919)**
SMR No: **CO124-034**
Excavation Licence: **N/A**
Excavation Duration/Year: **1940 - Easter 1942**
Site Director: **S.P. Ó Ríordáin & P.J. Hartnett (University College Cork)**

A trivallate (or possibly quadrivallate) enclosure at Ballycatteen was excavated between 1940 and Easter 1942 by means of a Special Employment Scheme administered through the Commissioners of Public Works. The excavation uncovered three souterrains, a stone built kiln and occupation surfaces defended by a complex of multiple gates and palisades at its southern entrance (Fig. 59). The enclosure is located along the south-eastern end of a narrow ridge of land (61m O.D.), commanding considerable views across the surrounding countryside.

The site has a total overall diameter of 119m and contains three concentric banks and ditches enclosing a circular space 61m in diameter. A low counterscarp bank (0.60m maximum height) survives along the southern and western perimeter and may represent a fourth outer ditch. A section of the inner ditch was excavated and revealed that it was rock-cut and had a fill depth of about 1.4m. The total height of the present summits of the inner and middle banks over the bottom of the inner ditch was 4m and 3.35m respectively. The section did not uncover evidence for the remains of a wall-face on the banks though the presence of a number of large stones inside the ditch fills suggest that the bank may have been originally partially revetted with stone.

The southern entrance to the site was substantially excavated and showed evidence for multiple gates and palisades. The outer enclosure entrance was destroyed by modern disturbance and only one definite rock-cut posthole was uncovered in this area. Two rock-cut pot-holes appear to have supported a gate 3.5m wide at the entrance of the middle enclosure. The innermost enclosure entrance was the most elaborate and consisted of two gates and the inner palisade. The outermost gate was 2.3m wide and was supported by two postholes each. A palisade trench was revealed 1.8m inside the crest of the inner bank and encircled the site. The trench fill indicated that it held wooden posts. The inner gate was defined by two postholes formed by deepening the palisade trench from its usual depth. It closed the 3.05m gap in the palisade wall and formed the final defence of the site. A palisade of uprights along the eastern side of the entrance was interpreted as the wall of a shelter which served as a guardhouse.

A thick black organic deposit - approximately 0.3m deep - was uncovered immediately inside the wooden palisade in the southwest quadrant of the site. It was the earliest and evidently most important habitation deposit. Nine out of the twelve bronze finds from this site- including a pennanular brooch and a collection of pins and rings as well as a fragment of pale blue glass from a glass vessel, an amber bead, an iron ring and sixty sherds of imported pottery (largely E ware) were recovered from beneath or inside this deposit. A glass rod fragment of blue glass, as well as small Bronze semi-spherical object (possibly part of a horse trapping), was recovered at the edge of the black deposit. A large bead of dark blue glass was found above the black deposit while a jet bracelet was recovered further north in the original ground surface just outside the black deposit. A few groups of stakeholes as well as two hearth-sites on the outskirts of the deposit in the southwest quadrant were identified through none formed any structural plan.

A stone-built kiln with twin compartments, or flues (2.75m by 1.07m), was located at the edge of this occupation layer. The flues had been sealed by laying slates horizontally over them and then sealing them with a layer of clay to make an air-tight covering. Comparisons were made between this structure and flax-drying kilns in Ulster. A number of postholes and twelve hearths were excavated in the centre and northern part of the site, but structural

shape was not able to be inferred from these. In a few cases the amount of charcoal in the posthole and the blackening of the stones around it suggest that the building may have been destroyed by fire. A rock hollow was utilized as the base of one hearth (V). Its fill consisted of powdered charcoal, bone fragments and some fragments of iron and slag. Though there was little depth of habitation material in this area, the scattered distribution of these features and the superimposition of hearths and postholes over each other were suggestive of various short successive habitation phases. A number of early artefacts including fragments of two bronze pins, a glass bead and an iron chain were recovered in this area in the centre of the site.

Three dry-stone built souterrains were excavated in the interior of the site. It was suggested that the souterrains were roofed with timber supporting a covering of stone roofing tiles as no evidence for stone lintels were uncovered and evidence for a series of rock-cut postholes and recesses for wooden uprights was identified in Souterrain B. A large quantity of charcoal as well as fragments of thin shale was found in the fills of Souterrain A and B. It was suggested that the chambers in Souterrain C may not have been roofed and a large dump of limpet shells in one of its chamber fills hints at its use as a refuse pit. A medieval iron axe-head, three small fragments of a bronze plate and a large quantity of animal bone were also recovered within this structure. Though early medieval finds were recovered in the habitation evidence at the centre of the site and inside the souterrains, the absence of E ware pottery in both these contexts suggests that these structures were later in date than the black habitation deposit found immediately inside the palisade in the southwest quadrant.

Nine crucible fragments and a large quantity of iron slag (13.6 kg), half from the early black organic deposit, were recovered from the site. Two large heavy pieces, one from beneath the black deposit and the other in the vicinity of a hearth in the centre of the site, were interpreted as furnace-bottoms and attest to the practice of iron smelting. Two quern fragments, a single spindle whorl, thirty pieces of flint and twenty whetstones were other finds recovered. A small quantity of un-burnt animal bone belonging to cattle and sheep (or goat) was recovered from the bottom of the palisade trench and in the lower layers of the souterrain fills.

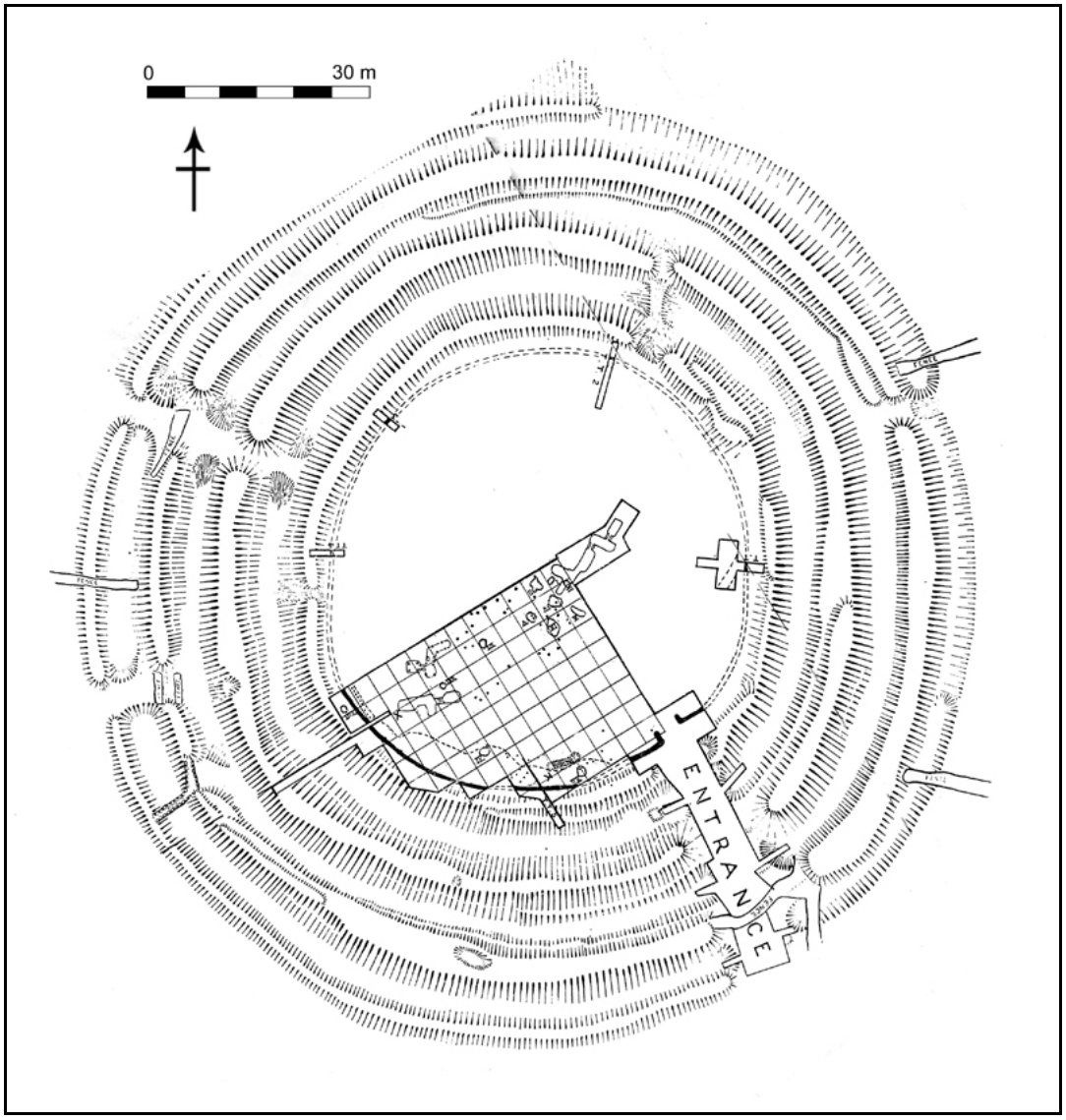


Fig. 59: Plan of Ballycatteen, Co. Cork (after Ó Ríordáin, S. P. & P. J. Hartnett 1943-4, plate 1).

References:

Ó Ríordáin, S. P., & Hartnett, P. J. 1943-4. The excavation of Ballycatteen Fort, Co. Cork. *Proceedings of the Royal Irish Academy Section C*, 49C, 1-43.

Power, D. 1989. Cork. *Archaeology Ireland*, 3(1), 46–50.

Ballynacarriga, Co. Cork
Early Medieval Settlement Enclosure
Grid reference: **208273 79034**
SMR: **N/A**
Excavation Licence No: **01E0567**
Excavation duration/year: **2001**
Site director: **D. Noonan (Archaeological Consultancy Services Ltd.)**

Excavations at Ballynacarriga – in advance of a road development – revealed an early medieval square-shaped settlement enclosure with an upper appended L-shaped enclosure (Fig. 60). Both enclosed a number of features related to settlement, including structures, possible structures, pits and hearths, and agriculture, including cereal-drying kilns and outbuildings. Radiocarbon dates suggest a potential date-range for the site between the early fifth and early eleventh centuries although there is also evidence for late Bronze Age activity. The settlement was situated on the south-facing slope and floor of a small valley.

The square-shaped settlement enclosure measured 35m by 40m and had a possible entrance to the southwest. The presence of a bank was suggested by a lack of archaeological features within 1.5m of the ditch. The ditch was V-shaped at the north and was up to 2.5m deep. The remainder of the ditch was U-shaped and was approximately 1.7m in depth. It varied in width between 2m and 4m. Charcoal from the lower fill of the ditch's south-eastern section was radiocarbon dated to A.D. 416-652. Finds were few and included three pieces of flint debitage and a possible flint core. Poor soil preservation meant that animal bone was not recovered in large quantities.

The majority of features within the settlement were identified in the south-western part of the enclosure. These included a series of successive structures, a souterrain, a small pen or barn, large pits and an open hearth. Structure I was a central circular house. It was defined by stake-holes and measured 8.6m in diameter. A number of deep postholes within the house may have held roof supports. An entrance may have been located to the southeast where double postholes were identified. This was the most substantial dwelling within the enclosure and appears to have been the earliest building.

The round house was cut by a possible rectangular structure of which the north-western section survived (Structure II). It was defined by a number of postholes and shallow features. Only a tiny portion of the building survived and it was not possible to reconstruct its original size.

An arc of postholes and stake-holes were identified within the northern half of Structure I and they respected a large pit that was situated within the circular house. They continued outside the structure which suggests that this was a separate building (Structure IV). It is unclear if the postholes and stake-holes formed a complete circular building or if they acted as a barrier to the pit which may have functioned as a well. Also, its chronological relationship with the round house is unclear.

A large pit, open hearth and small pits were located to the immediate south of the round house. Charcoal from a stony fill within the large pit returned a late Bronze Age date which indicates earlier activity on the site. Finds within the pit included a flint scraper, a possible anvil stone and a whetstone. The hearth was situated above the southern edge of the back-filled pit and this in turn was succeeded by a number of smaller cooking pits which contained charcoal and burnt animal bone. One of the pits also produced a dark blue glass dumbbell bead which potentially dates between the eighth and twelfth centuries. An unstratified fragment of a white opaque glass bead was also found in this area.

Structure III was a small building to the south of the above features. It was rectangular in plan and was formed by three slot trenches with its open side to the north. No finds were retrieved from its slot trenches and the building may have functioned as a small barn or perhaps a chicken coop. It appears too small to have held animals.

A souterrain was located to the northwest of the main area of activity. It was U-shaped and consisted of four main chambers. It may have been stone- or timber-lined and it is possible the stones were robbed-out at some point. No finds were recovered from the souterrain fills. Two large pits were located directly to the east of the souterrain but their function is unclear due to an absence of finds or inclusions within their fills. Their chronological relationship to other features on site is similalrly unknown.

The north-western part of the enclosure included a number of pits, a cluster of stake-holes, isolated postholes and a hearth. These were all located on sloping ground and therefore probably represent the remains of features related to temporary and peripheral activity. A black glass bead, with white and red speckles, was found in the vicinity of the stake-hole cluster.

A similar range of features, on sloping ground, were found in the north-eastern part of the settlement enclosure including pits, stake-holes, postholes, a hearth and a sunken oven. These also appear to represent peripheral activity a short distance from the main settlement focus. One of the pits, possibly a refuse pit, contained two fragments of iron slag and pieces of flint debitage.

The south-eastern area of the enclosure, similalrly to the area directly beside it to the west, was rich in settlement features including another souterrain, a possible associated structure (Structure VI), another circular building (Structure V), and a number of pits. A cereal-drying kiln was also identified in this area and all these features were situated on flat ground.

The souterrain was J-shaped and consisted of two passages connected by a narrow crawl space. Fills within it contained hazelnut shell fragments and occasional burnt animal bone fragments. Frequent charcoal fragments along the western and southern edges of the cut suggest the souterrain may have been timber-lined or that it utilised wooden structural supports before it was burnt.

A narrow linear trench that was 5.7m long and 0.2m wide (Structure VI) was located immediately to the north of the souterrain. It contained a posthole at each end. A second slot trench was situated immediately to its south. The larger trench may have formed one side of a rectangular structure related to the souterrain. Postholes and pits to the east may have formed another component of the structure. Pits, postholes and stake-holes were also evident in the vicinity of the souterrain. No structural plans could be reconstructed but they pointed to intense activity within this part of the enclosure.

Structure V measured approximately 3.6m by 5m and was defined by ten postholes and two large internal postholes which possibly held roof supports. The postholes were evenly spaced on average 1.4m apart and were similar in size and depth.

Finally, a cereal-drying kiln was located within the south-eastern area. The kiln truncated the circular building (Structure V) and was therefore a later feature on site. This makes sense because it would have been dangerous to locate a cereal-drying kiln so close to dwellings due to fire risks. The kiln was probably used after the settlement features in this part of the enclosure were abandoned. Charcoal from the kiln's primary deposit was dated to A.D. 775-1022.

The L-shaped enclosure – a later extension to the main settlement – ran north from the square enclosure for 50m before it turned west for 30m. The ditch had a maximum width of 3.3m and was approximately 2.5m deep. No artefacts were retrieved from the ditch but

charcoal from its primary fill returned a radiocarbon date of A.D. 582-694 which indicates it was a later addition to the main settlement enclosure. The ditch and internal features were concealed by a substantial spread of redeposited natural material which may have once formed the bank.

This area enclosed three circular structures, three cereal-drying kilns, a cooking pit and a possible souterrain. Two isolated linear features pre-dated the ditch while a small pit in proximity could not be dated or stratigraphically related. Three phases of activity were observed in the upper L-shaped enclosure.

The most northern structure (Structure VII), located in the north-eastern corner of the upper enclosure, was sub-circular and of slot-trench construction. It measured 4.6m north-south by 5.6m east-west. The slot trench contained four postholes while three postholes, three stake-holes and a possible stoned-lined pit were located within the structure. The building's function is unclear. A lack of artefacts and hearth do not support its use as a dwelling. However, it may have been the home of a base client or low-status individual who performed labour for the occupants of the main settlement. Alternatively, it may have been an agricultural building, perhaps used for storage.

Structure VIII was a circular building of shallow slot trench construction that was located approximately 4.5m south of Structure VII. It measured 5.1m in diameter. Two internal and six external postholes were recorded. The internal postholes were situated towards the front of the structure and may have held roof supports. Most of the external postholes were located immediately outside the slot trench and may have held wall supports. It was similar in construction to Structure VII and there was likewise no evidence for a hearth or any finds suggestive of habitation. Any of the interpretations put forward for Structure VII could be equally valid here.

The last structure in the upper enclosure consisted of two separate circular slot trenches around a cereal-drying kiln (Structure IX). The northern slot trench was similarly sized to the southern trench and the diameter of structure was 6.6.m. Fourteen postholes were associated with the slot trenches and may have held wall supports. This structure may have acted as a windbreak for the enclosed cereal-drying kiln. The kiln was partially truncated by a later stone-lined cereal-drying kiln. Another kiln was situated in close proximity to the north. No finds were found in association with any of the kilns.

A potential souterrain extended from the northern ditch of the main square-shaped settlement enclosure into the upper enclosed area. It was 6.1m long and 0.9m wide. A thin spread of charcoal suggests the souterrain may have been timber-lined. Some fragments of burnt animal bone were the only finds retrieved from the souterrain fills.

The final feature within the upper enclosure was a large circular pit which was located 7.5m to the southwest of Structure IX. There was evidence for *in-situ* burning and its upper fills included fragments of heat-fractured stones and burnt bone. Charred oat grains were recovered from the pit's lower fill and it appears this it functioned as an open-air cooking pit.

A small number of unstratified finds were recovered mainly from the topsoil on the. These included fragments of quern stones and an iron knife.

Excavations at Ballynacarriga revealed a multi-phased early medieval square-shaped settlement enclosure with a slightly later appended northern enclosure. There was extensive evidence for internal structures within the main enclosure including a round house, a barn or coup, pits, an open hearth, a number of potential buildings, two souterrains and a cereal-drying kiln. Although the stratigraphic relationship of some features was uncertain, we know that the circular house was relaced by a later possible rectangular building and it is likely – as represented by numerous stake-holes and postholes – that dwellings and related structures were replaced and modified across generations. The settlement evidence was mainly confined

to the southern flat area of the enclosure and it was here that witnessed the most intensive activity.

At a later stage, the occupants at Ballnacarriga constructed an additional enclosure to the north of their settlement. This area enclosed further structures and cereal-drying kilns. Two of the circular structures were very similar in form and were probably contemporary. These may represent the dwelling places of base clients or servants who lived beside their lords and who were responsible for the upkeep and labour of the settlement and farm.

The family at Ballynacarriga practised a mixed agricultural economy. Animal bone was largely absent from the site but this was due to poor preservation conditions and there can be little doubt that the occupants had access to a relatively large supply of animals. Cereal processing was also evident as indicated by the cereal-drying kilns and quern stones. Although the kiln within the main enclosure probably post-dated the initial settlement activity on the site, those within the upper enclosure may have been contemporary with this first phase as they were situated a safe distance from the dwellings and farm buildings. Small-scale tool repair is suggested by some iron slag within one of the pits although no smithing hearths were identified. Although other finds were scarce, notably dress items, it appears that this family, across a number of generations, lived a comfortable life until the settlement was abandoned, possibly during the ninth or tenth centuries. It appears that both the main and upper enclosure ditches were backfilled at the same time and therefore both areas of the site were potentially abandoned simultaneously.

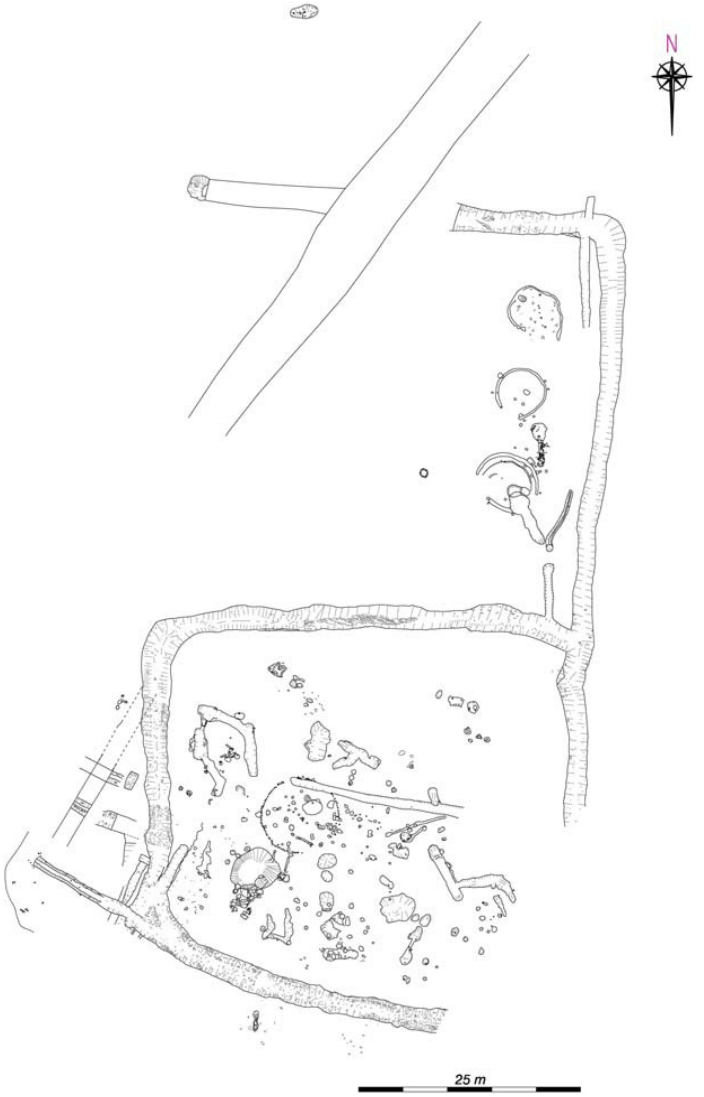


Fig. 60: Ballynacarriga (After Noonan et. al 2004)

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-165324	Charcoal from primary fill of square enclosure ditch	1510±70 BP	**A.D. 416-652**
Beta-165321	Charcoal from stony fill within pit immediately south of round house	2530±50 BP	**803-508 B.C.;** 458-454 B.C.; 439-419 B.C.
Beta-165322	Charcoal from fill of drying chamber within cereal-drying kiln. Located in upper	1120±60 BP	**A.D. 775-1022**

	L-shaped enclosure		
Beta-165323	Charcoal from primary fill of upper L-shaped enclosure ditch	1380±40 BP	**A.D. 582-694**; A.D. 704-705; A.D. 748-765

References

Noonan, D., Conway, C., O'Hara, R. and O'Meadhra, J. 2004. Ballynacarriga: early Christian settlement. Unpublished report prepared for Archaeological Consultancy Services Ltd.

Kinsella, J. 2010. A new Irish early medieval site type? Exploring the 'recent' archaeological evidence for non-circular enclosed settlement and burial sites. *Proceedings of the Royal Irish Academy* 110 (C), 89–132.

Ballyvourney, 'St. Gobnet's House' (Glebe td.), Co. Cork
Early Medieval Ecclesiastical Settlement
Grid Ref: **W19757684 (119751/076844)**
SMR No: **CO058-034001**
Excavation Licence: **N/A**
Excavation Duration/Year: **June - August 1951**
Site Director: **M.J. O'Kelly (University College Cork)**

St. Gobnet's House, a circular stone structure to the west of a medieval church site situated on a level area on a hillside, was excavated over the course of eight weeks between June and August 1951. The excavation was financed by means of a Special Employment Scheme and administered through the Commissioners of Public Works and the Royal Irish Academy.

The excavation revealed two phases of occupation with little or no interval between them (Fig. 61). The earlier phase is associated with a wooden rectangular house (or houses) defined by several large postholes. A number of pits containing lumps of slag and furnace bottoms were found inside the floor plan of this structure; a hollow, filled with habitation refuse and clusters of large stone, also belonged to this phase. An elaborate system of stone-lined drains and trenches were also constructed to trap and draw off surface water coming down from a hill rising to the north and north-west of the site.

The wooden structure was subsequently removed and replaced by the round stone building after the level of the ground was first raised by the laying down of a charcoal-rich soil deposit (0.15m thick). One pit found inside the south wall of the stone round house belonged to the early phase of occupation. This appeared to have been in use during the laying down of the levelling-deposit, suggesting that there was little or no interval between the abandonment of the primary structure and the construction of the secondary stone building.

The round stone building had a floor diameter of 6.1m. Its walls averaged 1.5m thick at the base and contained an inner and outer face with a rubble core. A central post in the centre of the structure supported the roof while two smaller posts set at the inner edges of the entrance jamb slabs evidently formed part of a frame for a wooden door. A well was excavated 1.8m outside the roundhouse door and consisted of a circular hole, 0.45m in diameter and dug to a depth of 0.75m in the soil.

The second phase was particularly associated with iron and metalworking. A hearth and several pits rich in charcoal, lumps of slag and potential furnace bottoms were excavated in the interior of the round house and were used also probably in connection with iron smelting. Numerous postholes of various sizes were excavated between and around the pits and may have held short stakes to support some form of structures associated with the iron smelting process. Two crucible fragments containing traces of bronze indicate that a small amount of bronze-working was also undertaken on site.

A blue glass bead and possibly an iron spearhead, and an iron brad belong to the primary period of occupation. The finds from the round house stratum consisted of two crucibles, two short lengths of bronze wire, three fragments of a jet bracelet, five iron knives, two ferrules, several corroded iron nails, a brad, a spindle whorl, four shale discs, seventeen whetstones, two spherical stones and flint and chert cores. The site also produced a large quantity of iron slag, 57 furnace bottoms and fragments of 80 others, clay furnace covers and a small fragment of a possible tuyère, although these may belong to the primary phase. Animal bone was poorly preserved due to the acidic nature of the soil but the meagre evidence appeared to belong to sheep and cattle.

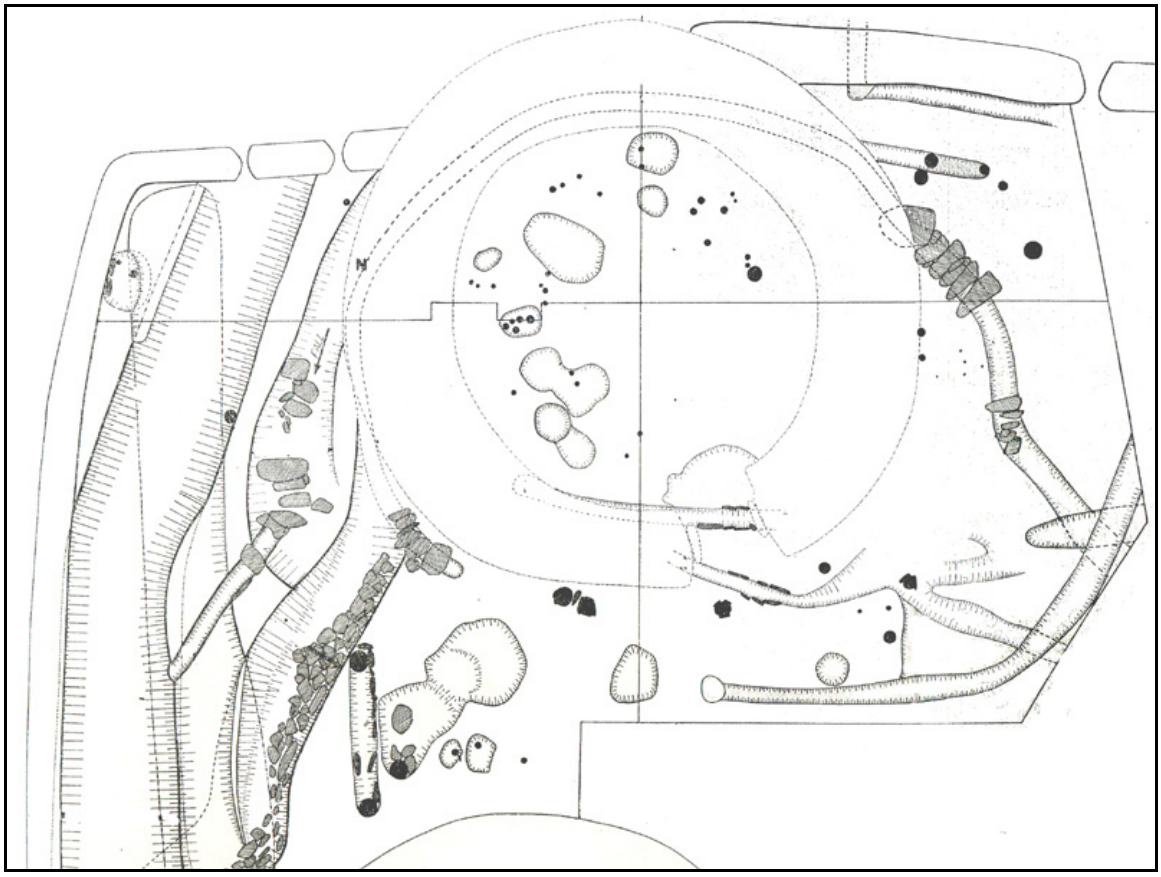


Fig. 61: Plan of St. Gobnet's, Co. Cork (after O'Kelly 1951-2, fig. 4).

Reference:

O'Kelly, M. J. 1951-2. St. Gobnet's House, Ballyvourney, Co. Cork. *Journal of the Cork Historical and Archaeological Society,* 56–57, 18–40.

Banduff, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W70427417 (17042/07417)**
SMR No: **CO074:20**
Excavation Licence: **99E0113**
Excavation Duration/Year: **March & May 1999**
Site Director: **S. Lane (Sheila Lane Ltd.)**

Initial testing at a levelled enclosure at Banduff revealed evidence for an eighth/ninth-century enclosure ditch, a stone revetted internal bank and associated trenches, deposits and surfaces. The site was located in the suburbs of Cork on the side of a fairly steep, south-facing slope.

Five trenches were excavated across the arc of the enclosing ditch (Fig. 62). The top of the ditch was widest at the north (5m) and narrowest at the northwest side (3m). The ditch originally had a shallow (0.45m deep) U-shaped profile, which was re-cut in places to form a steep-sided U-shaped profile (1.30m deep). The re-cut ditch was significantly narrower than the earlier ditch, with a maximum width of 2.40m.

The sequence of in-filling of the ditches was broadly similar. The primary fill of the re-cut ditch contained medium-sized stones which may represent the collapse of stone facing from the associated enclosing bank (the upper levels of which revealed an eighth/ninth-century bronze plain-ringed loop-headed pin). More recent fills of the re-cut ditch contained decomposed organic matter and field clearance stones.

The enclosing bank was levelled in the 1970s, although its base could be determined as a convex curve (5.35m wide) along the inside of the ditch. A stone feature (1.96m by 0.60m) set into the boulder clay on the outer line of the bank appears to have formed the footing for a stone facing for the outer face of the bank. Another stone spread (1.20m by 1.0m) on the boulder clay inside and to the south of the base of the bank and appears to have originally formed part of a stone facing for the inner face of the bank. There was nothing to indicate that the bank had been backfilled into the ditch.

The other possible archaeological features on the site included a pathway, a charcoal spread, and a couple of trenches. A spread of hard-packed small stones (1.60m by 0.40m, and 0.16m thick) lay on the shallow curve of the ditch on top of the boulder clay. The stones appear to have been deliberately packed tightly together to form a path outside the bank which may have been contemporary with the enclosure. Alternatively, they could form part of a lane which is depicted skirting the site on its north-eastern side on both the 1842 and 1950 Ordnance Survey maps.

A small irregularly-shaped charcoal spread (1.70m by 0.16m, and between 0.04m-0.11m thick) was exposed on the eastern side inside the northern arc of the ditch. A layer of re-deposited clay (0.15-0.25m thick) overlay the spread at its northern end. A shallow trench (2.25m by 030m and 0.12m deep) contained brown slightly burnt soil, possibly washed out from the charcoal spread. Another trench (2.40m x 0.30m and 0.08m deep) contained some medium-sized stones, two bone fragments and a narrow lens of charcoal (0.15m diameter by 0.04m thick).

The recovery of the loop-headed ringed pin from the upper levels of the primary fill of the re-cut ditch indicates that the enclosure was occupied and altered during or before the eighth/ninth century. Associated with it may have been a stone revetted bank, material of which subsequently collapsed into the re-cut ditch at a certain point. A series of undated spreads and trenches were uncovered in the enclosure's interior and a path lay immediately outside the enclosing bank.

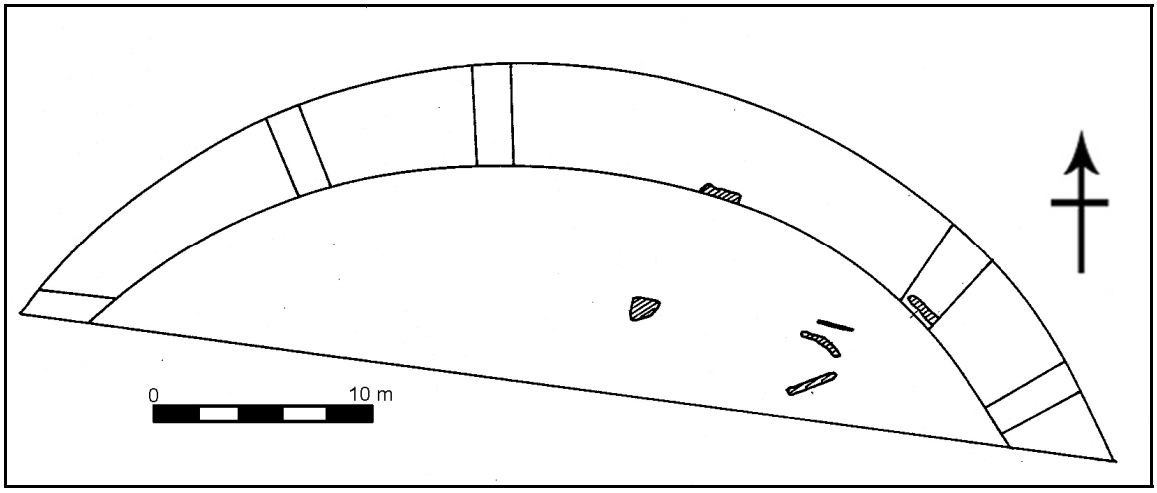


Fig. 62: Plan of enclosure and features at Banduff, Co. Cork (after Lane 1999b).

Reference:

Lane, S 1999a Proposed Development at Banduff, Co. Cork. Unpublished report submitted to DoEHLG

Lane, S 1999b Archaeological Excavation, Banduff, Co. Cork. Unpublished report submitted to DoEHLG

Barrees Valley, Co. Cork
Early Medieval Unenclosed Settlement
Grid Ref: **V68004700 (06800/04700)**
SMR No: **N/A**
Excavation Licence: **02E0914**
Excavation Duration/Year: **2002; 2003**
Site Director: **W. O'Brien (University College Galway)**

A research programme was conducted by UCG in the Barrees valley, north of Castletownbere in the Beara Peninsula of County Cork in 2002 which sought to examine the use of upland environments in late prehistoric Ireland. The excavated sites consisted of two *fulachta fiadh* , two adjacent standing stones and a hut; all dating to the Bronze Age, an early medieval enclosure and two hut sites and a late medieval charcoal or roasting kiln/pit.

The earliest excavated features consisted of two Bronze Age *fulachta fiadh* which produced radiocarbon dates of 3280±30 BP and 2820±35 BP. Two closely set monoliths were excavated at Site H. Both were originally set upright in shallow subsoil pits and held in position with large packing stones. Quartz boulder, pebbles and deposits of cremated bone and charcoal were found in association with the two monoliths. Charcoal, indicating fires adjacent to the western stone, was radiocarbon dated to 2830±30 BP indicating a late Bronze Age date (GrN-28306).

Hut site (D) was in a collapsed state and was situated on level ground adjacent to a small stream. It proved to be a significant dwelling, rectangular in outline with rounded corners and measuring 6.7m (east-west) by 5.2m externally. The 1.2-1.9m-wide earthen wall survives to a height of 0.35-0.65m. The exterior of the wall was faced with rough horizontal coursing of field stones. A horse shoe shaped annexe was attached to the building and contained a hearth. Charcoal from the hearth was dated to 2465±20 BP, indicating a Bronze Age date for the house.

A circular stone enclosure (A) measuring 17m in diameter was the initial focus of excavation. It was defined by a stone wall, 1.2-1.5m wide and contained a single orthostatic entrance. A series of stony sediment spreads dating to both the construction and the use of this monument was uncovered beneath the peat in the interior of the enclosure. No post-holes or other features were uncovered in its interior. A small number of finds were recovered from the site including early medieval dumb-bell glass beads, stone discs and an iron point. A radiocarbon dates of peat growth (800± 30 BP indicates that the enclosure was abandoned by c. AD 1200.

Excavation on Site E revealed a circular hut foundation defined by a 0.8-1.4m-wide collapsed wall of rough field stones with a 0.7m-wide entrance opening on the northern side. No interior features were found and the only find consisted of early medieval multi-coloured bead. Two small charcoal deposits were found underneath the wall stones and were radiocarbon-dated to 1380±40 BP (GrN-28303), consistent with a sixth to eighth-century A.D. date range for the bead.

Excavations were also undertaken on Site F. It was a 'D'-shaped stone wall enclosure built against the inner face of a large field wall. It measured 4.8m by 2.7m internally and was defined by a single narrow wall of rough field stones, which was originally up to 0.6m high. Two low transverse slabs on the south-east side mark the position of a 1.2m-wide entrance. No interior features were found, with the exception of a spread of charcoal over the floor. This was radiocarbon dated to 895±20 BP (GrN-28304), pointing to the use of this hut shelter in the eleventh or twelfth centuries A.D. No finds were recovered.

Site G consisted of an oval depression, measuring 4.4m by 3.3m by 0.3 deep, adjacent to a small stream. It was revealed as a steep-sided pit with a central depth of 0.55m which contained a waterlogged peaty fill with preserved branches and twigs, overlying a compact

layer of charcoal. The layer of charcoal produced a radiocarbon date of 585±20 BP (GrN-28305), indicating a later medieval context. It was identified as a possible charcoal kiln or a large roasting pit. No artefacts were recovered.

The large enclosure and two hut sites then attest to early medieval settlement within the Barrees valley.

(**No plans were available for this site**).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
GrN-28301	From peat growth indicating abandonment of enclosure (Site A)	800±30 BP	**A.D. 1185-1275**.
GrN-28302	Charcoal from hearth inside rectangular Hut (Site D)	2465±20 BP	**765-684 B.C.**; **669-642 B.C.**; 494-486 B.C.; 463-448 B.C.; 443-416 B.C.
GrN-28303	Charcoal from underneath wall stone of circular hut (Site E)	1380±40 BP	**A.D. 582-694**; A.D. 704-705; A.D. 748-765.
GrN-28304	Charcoal spread over floor surface of a D-shaped stone wall enclosure/structure (Site F)	895±20 BP	**A.D. 1044-1100; A.D. 1119-1142; A.D. 1147-1212.**

Reference:

O'Brien, W 2002:0238 Barrees, Co. Cork. www.excavations.ie

O'Brien, W 2003:0174 Barrees,CO. Cork. www.excavations.ie

Brigown, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **R82301190 (18230/11190)**
SMR No: **N/A**
Excavation Licence: **03E1153**
Excavation Duration/Year: **November - December 2003**
Site Director: **M. Carroll (John Purcell Archaeological Consultancy)**

An excavation at Brigown in advance of a residential development partially revealed the western outer limits of a possible enclosure with extensive evidence for metalworking waste at its north-western end. Several other pits and linear features were also excavated in its interior and exterior though most could not be stratigraphically linked to each other or to the larger enclosing ditches. The site is bordered on its south-eastern side by a tributary of the Gradoge River and an early monastery ('Brigown') with a church, holy well. A round tower is located 400m to the north-west, and St. Finnchu's stone, a large millstone (probably a horizontal mill runner stone), is located within the tributary of the Gradoge River close to the southern corner of the site. The Book of Lismore records the place-name 'Bri-gobh-unn' translated by Joyce (1870, 34) as the '*bree*' or hill of the smith ('*gobha*'). Power (1980, 13) attributes this name to St. Finnchu and states that it was named in honour of the seven master smiths who worked there. Interestingly, the excavation uncovered large quantities of metal slag.

Two large curving ditches, bisected by a large linear ditch, appear to have formed part of an enclosure. The curvature of the two ditches suggests that the dimensions of the original enclosure were quite substantial, possibly measuring 40-50m in diameter (Fig. 63). No evidence for an associated bank was uncovered though a curving field boundary was depicted in the First Edition O.S. map in the general area of the excavated ditch and may represent a portion of the bank.

The main enclosure ditch (maximum dimensions of 17.8m in length, 2.3m in width and 1.5m in depth) included fills of charcoal and slag-rich deposits. This was bisected by a linear ditch (maximum dimensions of 3.5m wide and 1.33m deep), which was in turn cut by a shallow ditch. No finds or animal bone were recovered from any of these ditches.

A curving linear trench was excavated in the southern half of the site inside and parallel to the enclosing ditch. It was interpreted as a palisade trench, although no stakeholes and only one posthole was recovered from its base. The northern end of the feature was cut by a ditch and there was no evidence for a continuation of the trench in the northern half of the site.

A possible entrance feature was located at the south end of the site and was defined by the terminus of the southern ditch and a large shallow pit, 0.8m further east. The possible palisade trench terminated 1.2m south of the ditch terminal and may have formed part of a defended entrance feature.

Several pits and linear features were located outside the enclosure ditches. Those pits and linear features to the west of the northern section of the enclosing ditch contained large quantities of charcoal and slag and may have been utilized for the dumping of waste or by-products associated with metalworking. Charcoal and slag was relatively absent from those features to the west of the southern enclosing section. Several pits, linear features and a possible posthole were excavated in the interior of the possible enclosure. There was no direct evidence for the process of metalworking inside the enclosure though two small pits displayed evidence for *in situ* burning. One small bowl-shaped pit with evidence for *in situ* burning was interpreted as a possible pit-furnace used for iron smelting.

The substantial quantity of slag and charcoal at the north-western end of the site indicates that metalworking was undertaken on or in the vicinity of the enclosure however no

diagnostic furnace bottoms, or tuyères fragments were recovered from any of the excavated features within or outside the possible enclosure.

There was no direct evidence for the occupation of the enclosure in the form of houses, structural features or hearths though such evidence might be located further east in the monuments interior. No artefactual dating evidence was recovered and the excavated features were devoid of finds or faunal remains. The charcoal from the excavated features was too highly contaminated to provide a radiocarbon date though an early medieval date was suggested for the site.

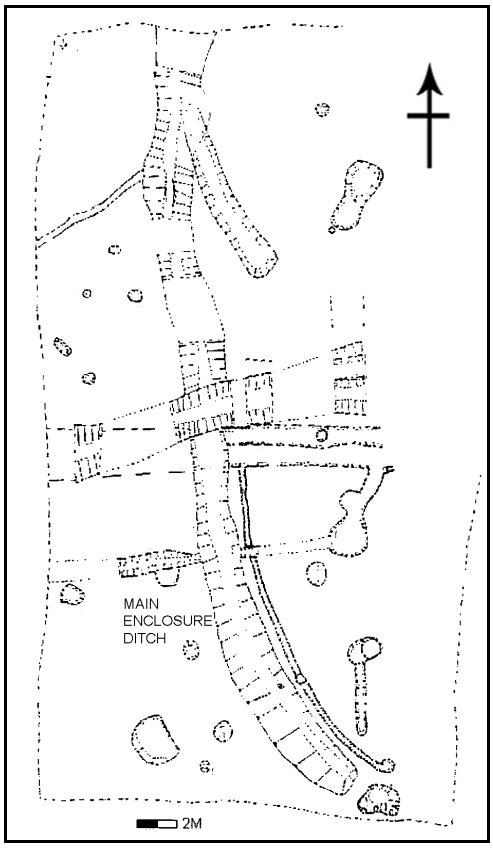


Fig. 63: Plan of excavation at Brigown, Co. Cork (after Carroll 2005).

References:

Carroll, M. 2003:0178. Brigown, Co. Cork. www. excavations.ie

Carroll, M. 2005. Archaeological Excavation at Brigown, Mitchelstown, Co. Cork (03E1153). Unpublished report for John Purcell Archaeological Consultancy.

O'Callaghan, N. 2003a. Test Excavation and Monitoring Report, Brigown, Mitchelstown, Co. Cork (03E0972). Unpublished Report for Eachtra.

O'Callaghan, N. 2003b. Archaeological Excavation Report, Brigown, Mitchelstown, Co. Cork (03E1153). Unpublished Report for Eachtra.

Carrigaline Middle, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W73296371 (17329/06371)**
SMR No: **CO087-030; CO087-031**
Excavation Licence: **01E1148**
Excavation Duration/year: **2001; 2002**
Site Director: **R. Sherlock**

Two enclosures and a souterrain were partially investigated in 2001 and 2002 in advance of a housing development. Initial testing and geopgysical survey at the site of an enclosure and souterrain suggested strong archaeological anomalies. Eleven 2m-wide trenches were excavated and the features uncovered included a number of pits, a hearth, a number of possible cremation burials, a portion of the enclosure ditch which extended beyond the limits of the area of open space, and a portion of an earlier ditch which was apparently truncated by the ditch of the enclosure.

The two enclosures werer investigated in 2002. The western enclosure (CO087-030) was excavated, revealing the presence of an earlier oval-shaped enclosure (37.5m by 31m). This was defined by a ditch (1.60m wide and 0.9m deep) which was truncated by the larger later ditch (5.9m wide and 2m deep). Postholes, pits, cremation burials and possible funerary pyres lay to the north and northwest of these ditches and indicate early medieval and prehistoric activity.

The second levelled enclosure (CO087-031) was also investigated. Excavations revealed the enclosure ditch and a number of features. The ditch, where excavated at the southern side of the enclosure, was found to be 3.6-4m wide at ground level, 1.4-2m wide at the base and 2-2.3m deep. An entrance way was located and a gatehouse, defined by a pair of substantial postholes, was also discovered.

References:

Sherlock, R. 2001:0130. Carrigaline Middle, Co. Cork. www.excavations.ie

Sherlock, R. 2002:0246. Carrigaline Middle, Co. Cork. www.excavations.ie

Carrigillihy, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W22363255 (122363/032559)**
SMR No: **CO142-091001**
Excavation Licence: **N/A**
Excavation Duration/Year: **1951**
Site Director: **M.J. O'Kelly (University College Cork)**

Excavation was undertaken in the early-1950s by M. J. O'Kelly of University College Cork and financed by means of a Special Employment Scheme. The site was located just above the 15m contour mark on gently west-east sloping ground, 45m to the west of a series of indented cliffs along the western side of Glandore harbour.

Excavation revealed a possible early medieval square house superimposed upon the ruins of an earlier possible Bronze Age oval house associated with a stone enclosure (Fig. 64). The primary phase of occupation consisted of an oval house within a low oval stone-built bank. The stone bank (24m by 21m) was 1.2m high and 2.75m thick at its best preserved points and contained a core of loose stones and occasional orthostats faced with small flanking slabs at various places. The eastern entrance contained a roughly cobbled area and a gate identified as two stone-packed postholes, set 1.06m apart between the stone bank terminals. The interior contained a stone-built oval-shaped house (internal dimensions 10.05m by 6.70m) with an eastern doorway directly opposite the enclosure entrance.

A spread of unbroken habitation refuse extended out from the floor of the house and across the open space to abut against the lower courses of the inner face of the enclosure, suggesting the house and enclosure were contemporary. The finds (pottery sherds, a bronze awl, a stone disc, two hone stones, perforated slabs and flint pieces) from the habitation refuse and occupation deposits and pits inside the house suggest the primary phase of occupation was during the Bronze Age. A sterile grey-white leached deposit sealed all these occupation deposits.

The secondary phase of occupation was marked by a stone-built house, square externally (8.5m x 8.5m) with rounded corners. The dry-stone walls were on average 1.4m thick, and survived to a maximum height of 0.60m. The building contained two opposing doorways which were defined by one posthole each. Large internal postholes suggest that posts at the corners and centre of the house supported a wooden or thatched roof. A layer of habitation refuse, flecked with charcoal, was recovered across the whole floor of the house.

The stone-built enclosing bank appears to have ceased to function as a protective barrier during the secondary occupation phase. The southeast-facing door of the secondary house was roughly opposite the eastern enclosure entrance though there appears to have been no attempt to repair or rebuild the gateway at this point; the opposite doorway, however, had no corresponding entrance through the enclosure.

The enclosure bank was much collapsed (less than 0.6m) and its inner facing removed at this point, suggesting that the inhabitants of this secondary house simply passed in and over this particular stretch of bank. The abundance of stone from the collapsed walls of the enclosure and primary house may have attracted the secondary occupants to this site.

The finds from the secondary phase were all recovered outside the secondary house and suggest an early medieval date. A fragment of a shale bracelet was recovered immediately to the south-west of the secondary house in the same habitation refuse deposit associated within this building. Fragments of two rotary querns were found near the inner face of the south bank above the grey-white leached deposit.

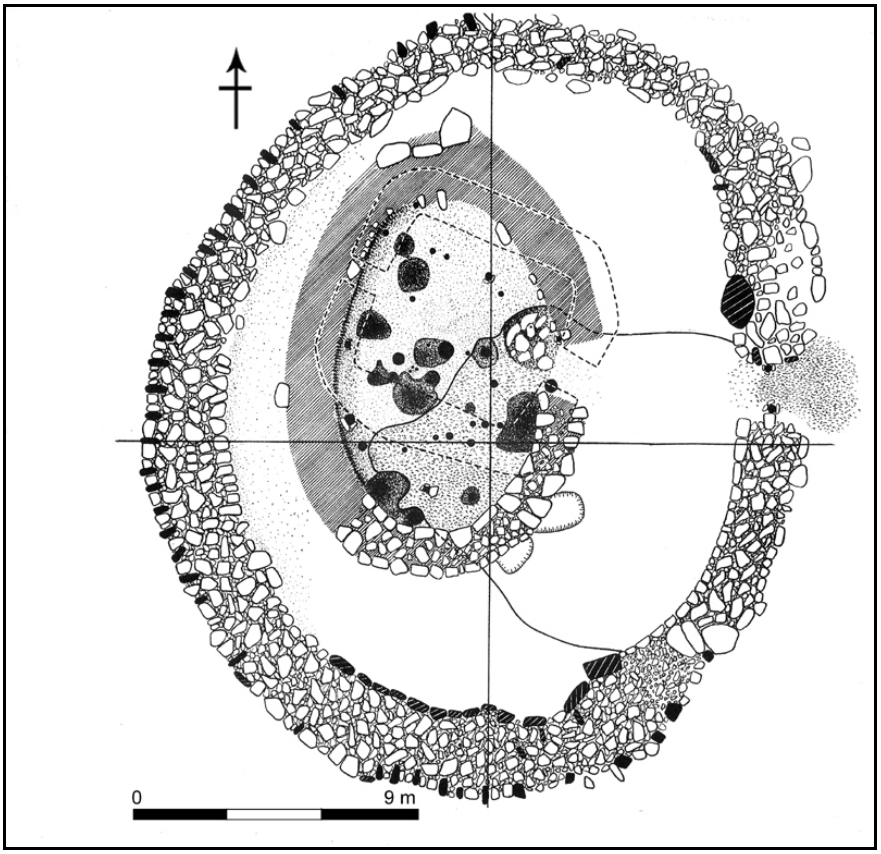


Fig. 64: Plan of primary phase at Carrigillihy, Co. Cork (later phase dashed) (after O'Kelly 1951-2, Fig. 2).

References:

O'Kelly, M. J. 1951. Forts, Carrigillihy townland, near Union Hall, Co. Cork. *Journal of the Royal Society of Antiquaries of Ireland,* 81, 71–2.

O'Kelly, M. J. 1951-2. An Early Bronze Age Ring-fort at Carrigillihy, Co. Cork *Journal of the Cork Historical and Archaeological Society,* 56–57, 69–86.

Carrigrohane, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W6015/7076 (16015/07076)**
SMR No: **CO073-082**
Excavation Licence: **03E0967**
Excavation Duration/year: **2003**
Site Director: **C. Moloney (Headland Archaeology)**

A levelled bivallate enclosure was excavated prior to residential development. It revealed evidence for internal and external enclosing ditches as well as a possible internal souterrain and the truncated remains of drains, pits and other features; however the site interior had been damaged by both agricultural activity and recent developments in the area.

The site was recorded as a crop-mark on an aerial photograph consisting of two concentric rings with a maximum external diameter of 60m and an enclosed space of 40m-45m. The truncated remains of the inner and outer ditches were 1m apart and corresponded well with the area enclosed by the inner crop-mark on the aerial photograph (Fig. 65).

The heavily truncated remains of a possible outer ditch were identified as a narrow parallel linear feature, and the inner ditch (maximum width of 3.3m) was broadly aligned with the inner crop-mark on the aerial photograph. Both these ditches contained silty-clay fills with charcoal inclusions, and a sherd of souterrain ware and one piece of animal bone was found in the inner ditch.

Another internal ditch or possible destroyed souterrain, 3.0m in width, was uncovered. It contained a similar mid-brown silty-clay fill deposit with occasional charcoal to the excavated ditches though did not align with either of the crop-marks evident on the aerial photograph. A substantial sandy-clay deposit in the three trenches in the centre of the enclosure may represent material deposited after the removal of the possible souterrain. The extent of this deposit implies that the possible souterrain may have been a substantial structure extending over 8m.

A series of anomalous deposits possibly consisting of the truncated remains of drains, pits and structures were uncovered in the interior of the enclosure. A series of small pits and deposits in the southeast of the interior may possibly be related to some form of structure in this area, and a possible field drain with occasional large sub-angular stones was located to the northwest of the internal ditch/possible souterrain.

A large diagonal cut in the eastern end of Trench 2 in the enclosure's interior revealed one fragment of post-medieval pottery (brown-ware). A series of four cultivation furrows (013-016) - 2.3m apart and 1m in width- were excavated to the south-west of the enclosure and may represent the remains of lazy-beds associated with post-medieval cultivation.

The souterrain ware pottery from the fill of the enclosing ditch indicates that this site was an early medieval enclosure which contained a possible north-western entrance, a possible internal souterrain and a series of features possibly relating to a structure in the southeast of the internal space.

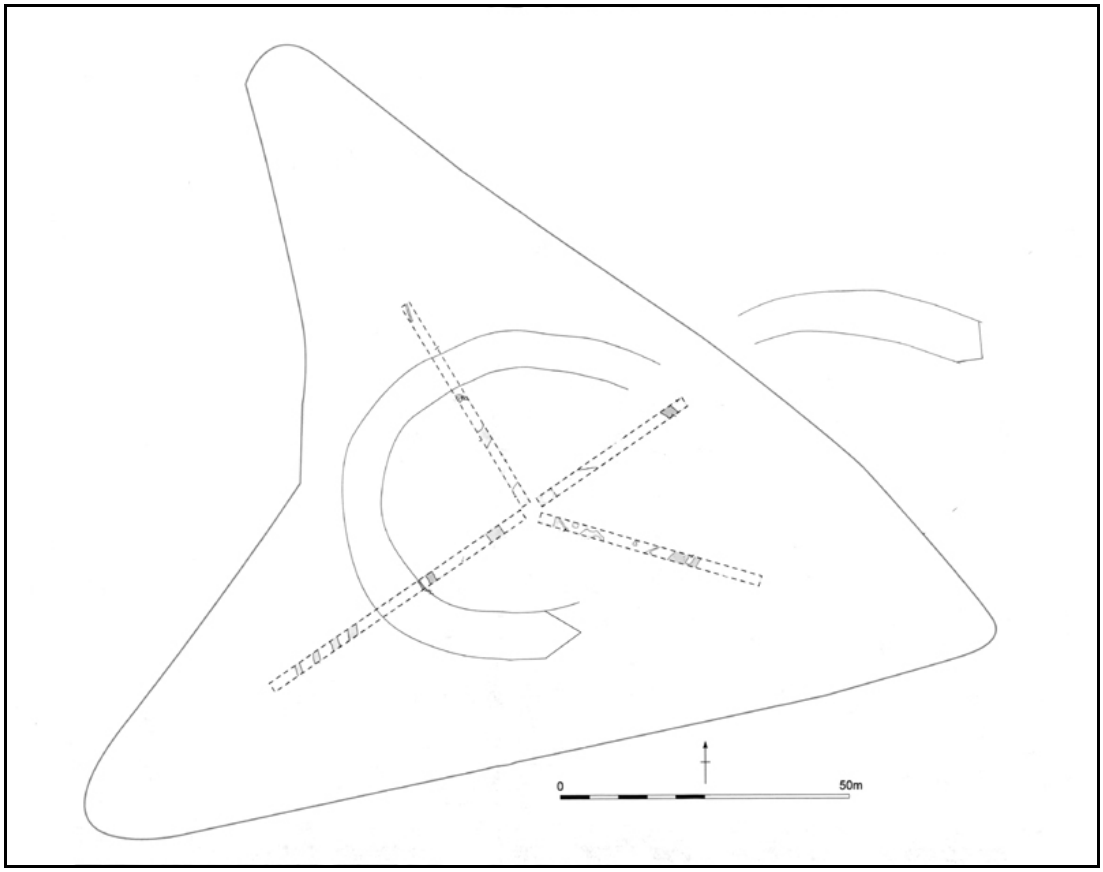


Fig. 65: Plan of excavations at Carrigrohane, Co. Cork (after Moloney et al. 2003).

References:

Moloney, C. 2003:0188. Carrigrohane, Co. Cork. www.excavations.ie.

Moloney, C., Gleeson, C., & Breen, G. 2003. Archaeological testing of a proposed development at Carrigrohane, Ballincollig, Co. Cork. Unpublished Report for Headland Archaeology Ltd.

Hiberno-Scandinavian Cork

Hanover Street/South Main Street, South Island
Scandinavian Urban Settlement
Grid Ref: **W671715 (16710/07150)**
SMR No: **N/A**
Excavation Licence: **96E0128**
Excavation Duration: **May-June 1996**
Site Director: **R. Cleary (Archaeological Services Unit, UCC)**

40-48 South Main Street, South Island
Urban Scandinavian Settlement
Grid Ref:
SMR No:
Excavation Licence: **03E1170**
Excavation Duration: **Aug. 2003- May 2004**
Site Director: **M. Ní Loingsigh (Sheila Lane)**

No. 15 South Main Street, South Island
Scandinavian Urban Settlement
Grid Ref: **W670720 (16700/07200)**
SMR No:
Excavation Licence: **00E0124**
Excavation Duration: **May-Nov. 2000**
Site Director: **M. Hurley & J. Trehy**

Tuckey Street, South Island
Urban Scandinavian Settlement
Grid Ref: **W67507180 (16750/07180)**
SMR No:
Excavation Licence: **97E0040**
Excavation Duration: **March-May 1997**
Site Director: **M. O'Donnell (Archaeological Services Unit, UCC)**

Tuckey Street, South Island
Urban Scandinavian Settlement
Grid Ref:
SMR No:
Excavation Licence: **96E0157**
Excavation Duration: **1996**
Site Director: **C. Power (Cork County Archaeologist)**

Tuckey Street/South Main Street, South Island
Scandinavian Urban Settlement
Grid Ref:
SMR No:
Excavation Licence: **E146**
Excavation Duration: **1975-77**
Site Director: **D.C. Twohig (University College Cork)**

11-13 Washington Street, South Island
Urban Scandinavian Settlement
Grid Ref:
SMR No:
Excavation Licence: **E625**
Excavation Duration: **August-September 1991**
Site Director: **S.W.J. McCutcheon**

Washington Street/South Main Street, South Island
Scandinavian Urban Settlement
Grid Ref: **W67167177 (16716/07177)**
SMR No:
Excavation Licence: **02E0034**
Excavation Duration: **2002**
Site Director: **H. Kelleher**

3 & 5 Barrack Street, South Bank
Urban Scandinavian Settlement
Grid Ref: **W67167177 (16716/07177)**
SMR No:
Excavation Licence: **99E0650 & EXT.**
Excavation Duration: **1999; 2000**
Site Director: **S. Lane & D. Sutton (Sheila Lane Ltd.)**

Citi Carpark, Grand Parade, South Island
Urban Scandinavian Settlement
Grid Ref: **W67277156 (16727/07156)**
SMR No:
Excavation Licence: **04E0132**
Excavation Duration: **2004**
Site Director: **D. Sutton (Sheila Lane Ltd.)**

The following is based on general and thematic papers on Scandinavian Cork and a range of excavation publications related to the town (e.g. Bradley & Halpin 1993; Cleary, Hurley & Shee Twohig 1997; Hurley 1998; Cleary & Hurley 2003). It will focus on various aspects of the town's layout including its location, defenses, streets and pathways, plots and fences, structures and evidence for craft and industry.

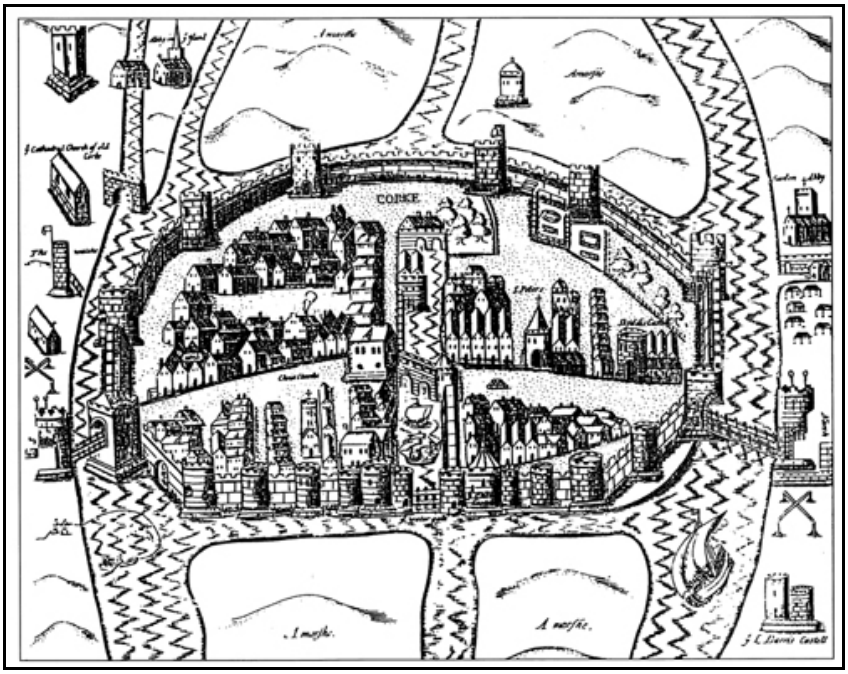


Fig. 66: Map of Cork city in Pacata Hibernia (after Hurley 2003a, 152).

LOCATION

Cork or *Corcaigh* meaning 'Marsh' is situated in a broad swampy tidal estuary of the River Lee (Fig. 66). The settlement was built on estuarine islands (South Island and North Island) in the marshy valley of the Lee which gradually climbed up the steep hills rising to the north and south. Today the river in Cork city flows through two main channels (the South Channel and the North Channel) on either side of the South and North Islands. The south bank of the south channel and the South Island contained the nucleus of the early monastic and Hiberno-Scandinavian settlement at Cork.

The earliest settlement at Cork was a monastery dedicated to St. Finbarr or Bairre on the south bank of the south island. The monastery was probably founded sometime in the sixth or early seventh centuries and was evidently in existence in A.D. 682 when the obit of a certain Suibne, abbot of Cork is recorded in the annals. The monastery was under the control of the local Ua Selbaig family and the Dál Cais in the eleventh century with command of the settlement and monastery at Cork passing to the Meic Charthaig Kings of Desmond in the early twelfth century.

Very little is known about the physical appearance of the early monastery at Cork but at least its position- on a prominent ridge on the south bank of the south channel overlooking the marshy estuary of the River Lee- can be established. The present cathedral dates to the nineteenth century though Romanesque fragments in the chapter house indicate the presence of a pre-Norman church on the site. A description in A.D. 1644 also records the presence of a possible round tower a short distance east of the cathedral. Based on a series of plot boundaries, it has been suggested (Bradley and Halpin 1993, 17-18) that the early monastery was located within a D-shaped enclosure with its northern side formed by the cliff dropping to the River Lee below.

Cork

The presence of an early monastery and a sheltered harbour in a tidal river estuary undoubtedly attracted the attention of the Scandinavians to Cork. The annals record Scandinavian raids at Cork in A.D. 821, 839, 915, 962, 978, 1013, 1089 and 1098 and indicate that some form of settlement had been established by A.D. 848 when Ólchobar Mac Cináeda, King of Cashel attacked *Dún Corcaighe* (Jefferies 1985, 15). Another ninth-century reference record the Scandinavian *caisteol* (castle) which was possible destroyed in A.D. 865 (Jefferies 1985, 15). The raid at Cork in A.D. 915 may have been a prelude to a renewed occupation of the site in the early tenth century and was possibly associated with the arrival of a fleet to Waterford in A.D. 914 and the re-foundation of Dublin in A.D. 917 (Bradley & Halpin 1993, 19).

Based on topographical information from a charters dating to the initial years of Anglo-Norman activity (1177-82), it has been suggested that the South Island was the nucleus of the Scandinavian town (Fig. 67) with an accompanying area of settlement on the south Bank to the south of South Gate Bridge (Candon 1985, 93-5). Within the South bank was the parish church of Holy Trinity (Christchurch) - a dedication common to the Scandinavian towns of Dublin and Waterford. Other early foundations include St. Nessan's church on the north bank of the Lee, St. Peter's on the North Island and the church of St. Sepulchre, St. Michael, St. Mary del Nard, St. Bridget and an Augustinian Priory (Gill Abbey); all on the south bank of the south channel.

There is no known ninth- or tenth-century Scandinavian archaeological horizon at Cork with the earliest evidence from various sites in the South Island and Barrack Street on the South Bank dating from the late eleventh century. Though the pre-Norman archaeological evidence is concentrated on the South Island, it is quite possible that further excavations may confirm that the area of the South Gate Bridge- spanning the south channel of the River Lee- was the physical centre of the earliest Scandinavian settlement (Cleary & Hurley 2003, 156). The archaeological evidence confirms that the settlement on the marshy South Island developed northwards.

Originally, the early twelfth-century settlement in South Main Street consisted of a series of artificially raised clay platforms surrounded by wooden fences or revetments. The settlement platforms may initially have been connected with each other by wooden boardwalks but were gradually linked together as the channels were in-filled and the South island was created. The South Island appears to have been one single unit by the late twelfth century containing one main central north-south street- modern South Main Street- on the highest and driest part of the island. The South Island was enclosed by a stone wall by the early thirteenth century (Hurley & Power 1981; Hurley 1985; Cleary & Hurley 2003).

St. Peter's church was situated on the North Island and may also have an early origin (Candon 1985, 91-103). A stratigraphically early ditch was excavated at Grattan Street and a seventh-eighth century baluster head pin from the site may indicate an early settlement, possibly monastic, in the area of St. Peter's church (Lennon 2003, 63). The marshy ground of the North Island was known as the suburb of Dungarvan in medieval texts. The island was not extensively inhabited until the latter thirteenth century when a long spinal main street developed. Both islands were connected with each other by a bridge located roughly at the junction of Liberty Street and North and South Main Street and were completely walled by the early fourteenth century (Hurley 1995, 63-79; Hurley 1996; Hurley 2003b, 173-81). The fully developed fortified core of medieval Cork was confined to the two marshy islands linked together by a long spinal main street terminating in gate towers and bridges.

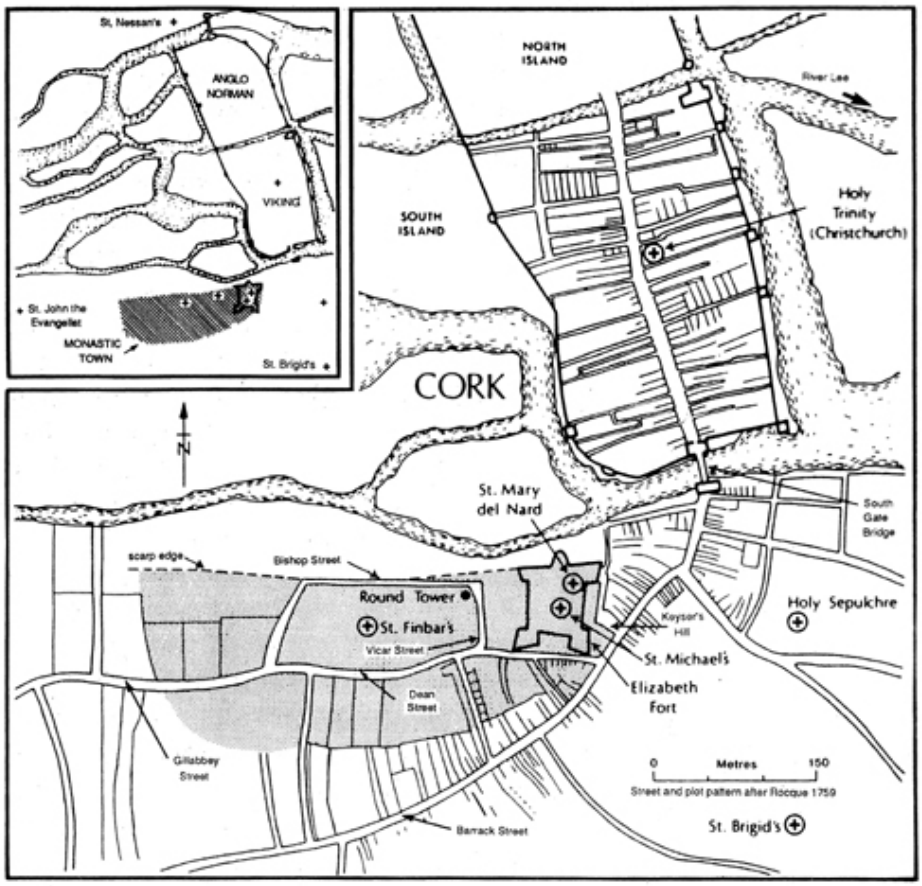


Fig. 67: Plan of Scandinavian and medieval Cork (after Bradley & Halpin 1993, 18).

There have been a significant number of excavations in the area of Scandinavian Cork (Fig. 68) since the 1970's described particularly within a number of edited publications (e.g. Cleary & Hurley 2003; Cleary, Hurley & Shee Twohig 1997) and in the annual excavation bulletin reports.

DEFENCES AND LAND RECLAMATION REVETMENTS

Historical Evidence

There is no historical or archaeological evidence for the exact location of the original ninth century Scandinavian *Dún* or *caisteol* mentioned in the annals though the probable location is on the South Island. Hurley (2003b, 171-72) have suggested that parallels for the low-lying marshy island siting of the Cork settlement should be sought with a number of possible *longphort* sites at Athlunkard, Co. Clare, Dunrally, Co. Laois and Anagassan, Co. Louth. There are scant other descriptions of a Scandinavian settlement at Cork between the later ninth and early twelfth century when (Jefferies 1985, 15-17).

The late twelfth century charters linguistically distinguish between the South Island (*civitas*) and the settlement on the South Bank (*Vill*) which could imply that these two areas were visibly distinct from each other at the cusp of the Anglo-Norman invasion, perhaps by the existence of enclosing defences around the former (Bradley & Halpin 1993, 20). The properties at the South Bank are described as being bounded by the 'curtilage of the burgesses' which would indicate an unenclosed settlement (Jefferies 1985).

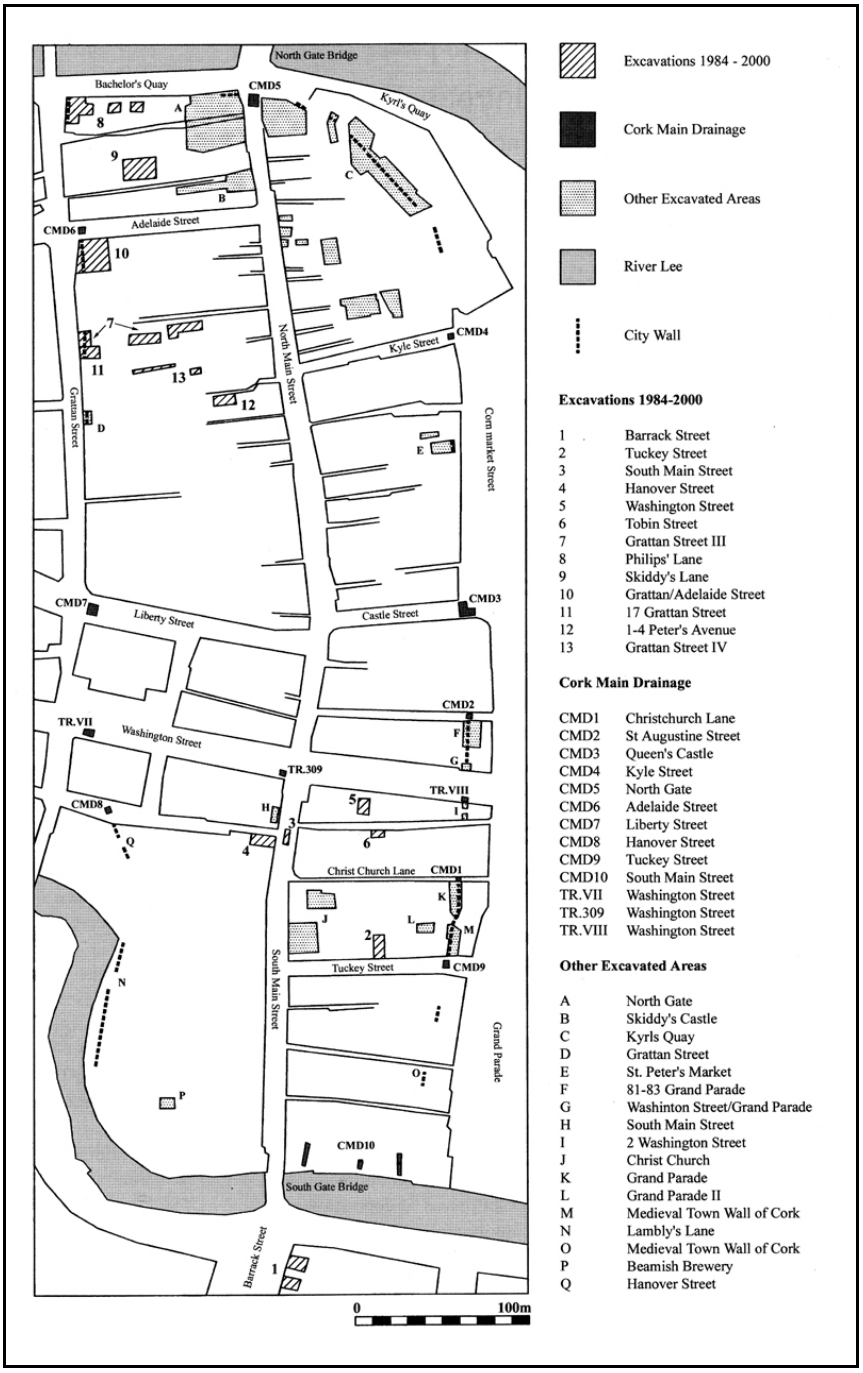


Fig. 68: Excavated areas on the South and North Islands (after Cleary & Hurley 2003, 2).

Though the *civitas* on the South Island may have relied on the natural protection offered by its island position, it is more probable that it contained defences of some form- wooden palisade, clay bank or stone wall- mentioned in early Anglo-Norman sources. That Robert FitzStephen and Milo de Cogan are said to have *besieged* Cork in A.D. 1177 might indicate that the city had fortifications (Bradley & Halpin 1993, 20). The early Anglo-Norman charters mention the 'gate of Cork' and burgages both within and without the walls (Bradley & Halpin 1993, 20) which also imply that an area in Cork- the South Island? – had defences in the mid/late twelfth century.

The excavations at Scandinavian Dublin and Waterford have produced considerable archaeological evidence for defensive enclosures and waterfront revetments. In contrast, the

low-lying marshy location of Scandinavian Cork has produced significant waterfront revetments but evidence for enclosing banks or walls is more limited.

Archaeological Evidence

The South Island- the main area of Scandinavian settlement- appears to have originally been a marshy intermittent land bank in the tidal estuary of the river. Between the late eleventh and late twelfth century, the Scandinavian community initiated an active phase of land reclamation at the island by constructing timber revetments and introducing estuarine clays into the settlement area. The reclaimed clays not only raised the ground level above the high tide but also created a solid foundation of material upon which to build property divisions and buildings.

Described below are excavations on the South Island which have produced evidence for the deliberate introduction of estuarine clays and the construction of timber revetments.

The Christchurch excavations (1975-77) to the east of South Main Street revealed that the estuarine clays were 'thicker towards the east' (Cleary 1997, 29) and were interspersed with planks and timber track-ways to create firm footings (Hurley 2003c, 183). The majority of the excavated sites which revealed thick deposits of estuarine clay were located some distance from the main street or crest of the South Island, suggesting that these deposits were introduced in an attempt to level up the sloping ground to the rear of the properties (Hurley 2003c, 183).

The Christchurch excavations also confirmed that the ground towards the centre of the excavated site was higher than either the northern or southern sections. This would also indicate that the initial early twelfth century settlement on the South Island was on low mounds or platforms protected from tidal flooding by timber revetments (Hurley 2003c, 183).

Prior to the erection of an early twelfth-century timber fence/revetment at Tuckey Street, a layer of over 1.2m of fluvial-derived silty clay was deposited on the site (O'Donnell 2003, 13-14). It may have been deliberately introduced by channelling or allowing floodwater to settle on the site (Hurley 2003c, 182-83). A series of silty clays up to 1.5m in thickness with intermediary occupation deposits and timbers platforms were subsequently deliberately introduced onto the site in an attempt to raise the ground level above that of the high tide. The activity began after the erection of the timber fence c. A.D. 1115-1122 and continued till sometime after A.D. 1145.

At least one metre of fluvial-derived silty clay underlay the first occupation phase at the site at the junction of Hanover street/South Main Street (Cleary 2003, 31-34; Hurley 2003c, 183) and may have also been introduced by channelling or allowing floodwater to settle on the site. The deposit was augured to determine its depth and a timber beam was recorded at the base at a depth of 1.10m. It was suggested that it may represent a platform like those recorded at Tuckey Street which provided a solid footing in the soft clays during the deposition process.

Prior to the erection of a twelfth-century east-west stave-built boundary plot, a layer of fluvial-derived silty clay (0.60m thick) was uncovered at the lowest levels reached at 11-13 Washington Street (McCutcheon 2003, 45-47). The deposit was sterile and was interpreted as being introduced to the site in order to raise ground levels. A possible drainage ditch belonging to a subsequent twelfth/mid thirteenth century phase was also uncovered at the southern end of the site and was defined at its north end by one of two parallel east-west stave-built fences.

An excavation at the junction of Washington Street and South Main Street at the northern end of the South Island uncovered two large oak revetments aligned north-south and set 2m

apart at one of the lowest levels excavated to date in Cork city. The revetment of vertically set round-wood and roughly split logs was dated by dendrochronology to A.D. 1104±9 and retained a clay platform 1.3m in height upon which a subsequent Hiberno-Scandinavian Type 1 house (1124±9) was built (Kelleher 2002 & forthcoming; Hurley 2003a, 157-58).

An excavation on the east side of South Main Street (35-39) uncovered two parallel east-west aligned timber revetments at the lowest levels (Kelleher 2004). The base of these revetments were driven into the natural clay and the ground behind was then artificially raised to a height of 1.5m by the introduction of locally derived clay. Dates were pending for the structure though it was expected to be late eleventh/early twelfth century. At least one of the revetments subsequently marked the line of a later plot division.

An excavation was undertaken adjacent to the South Gate Bridge at the angle of the modern quay wall and South Main Street (Ní Loingsigh 2003). The natural bank of the River Lee sloped down to the South and was evident as a clay silt layer below the habitation evidence. The earliest feature consisted of massive oak 'planks' (0.4m by 0.15m by 1.4m minimum), set on edge and held in place by upright posts (0.34m by 0.16m by 1.4m minimum). The structure stood to a height of 0.6m with both the upright and horizontal timbers extending down into the silty clay.

The ground behind the revetment (i.e. to the north of) was consolidated by the introduction of approximately 1.56m of silt, clay and organic material. Finds from the clay behind the revetment included a barrel padlock key, a stick pin and sherds of Ham Green cooking ware. The uppermost part of the revetment was possibly braced by three horizontal north-south oak beams held in place by timber uprights situated on top of the introduced clays. The timber base-pads of four upright posts, which may have supported a quayside structure or may be the foundations of a sill beam house, were also recorded. The early thirteenth-century medieval city wall was exposed traversing the site on an east-west axis, 2m south of the timber revetment.

A further area at 40-48 South Main Street uncovered at its lowest levels an east–west boundary fence of upright timbers (felling date A.D. 1097/98) driven into the natural reed marsh. Local muds and clays were deposited on both sides of the fence to a height of 1.2m to create a dry platform upon which a series of Scandinavian post-and-wattle and timber framed houses were built (Ní Loingsigh 2005).

A series of waterfront revetments were uncovered at an adjacent site between Grand Parade and South Main Street on the southern limits of the South Island (Sutton 2004). The reclamation activity began in the late eleventh century at the western end of the site and extended eastwards over a 40 year period culminating in the enclosure of the southern perimeter of the island by timber revetments. Locally derived estuarine clays were dumped on either side of an un-braced east-west fence of cleft oak timbers and upright post- 1.5m average height- dated to AD 1100. The base of the fence timbers doubled as a property boundary and was driven into the natural muds. Similarly constructed north-south fences dated to *c*. A.D. 1123/1124 and retained a second phase of reclamation clays which raised ground levels to the west of the fences and were also deposited to the east as reclamation advanced eastwards (Sutton 2004). The original boundary was extended further eastwards in A.D. 1134/35 when an east-west fence of pointed and un-braced cleft timbers was built.

A low stone bank defined the southern perimeter of the island. Associated with it was a crude timber revetment built to the south of the stone bank and dated *c*. A.D. 1143. Two subsequent parallel timber revetments were constructed further to the south and retained introduced muds. The most southerly revetment comprised up to two horizontal runs of edge-laid planks, braced to the south by upright posts pegged into mortised base plates. It appears to have replaced the abutting revetment to the north in mid-twelfth century (A.D. 1152 ± 9; A.D. 1166 ± 9). A timber jetty (10.2m long and surviving to a height of 1.8m)

replaced part of the waterfront revetments *c*. AD 1160. The jetty was constructed using similar carpentry techniques employed in the construction of similar structures in London and Dublin from the late-twelfth century. It was evidently in use for a long period of time and was repaired *c*. 1197 (Sutton 2004).

Overview

A number of sites (e.g. Tuckey Street, Hanover street/South Main Street and 11-13 Washington Street) revealed deep fluvial-derived silty clay deposits underlying the earliest habitation evidence, revetments or structures. These deposits may have also been deliberately introduced by human agency by channelling or allowing floodwater to settle on the sites.

The early twelfth century settlement on the South Island consisted of a series of artificially raised clay platforms surrounded by wooden fences or revetments. One clay platform at the junction of Washington Street and South Main Street was 1.3m in height and retained by a timber revetment (A.D. 1104±9). The artificially raised platforms were linked together as the channels as the South island as a single unit was created by reclamation activity between the late eleventh and late twelfth centuries. Twelfth century Scandinavian type houses were built upon the artificially raised platforms with the timber revetments (e.g. 35-39 South Main Street and Grand Parade) sometimes forming the boundaries of twelfth century property plots.

The excavations have established that the marshy edges of the South Island, particularly along its eastern and southern sides were reclaimed by successive parallel timber revetments from the late eleventh century (e.g. Ní Loingsigh 2003 & 2005; Kelleher 2004; Sutton 2004). The excavations between South Main Street and Grand Parade at the Southern limits of the island have significantly uncovered a twelfth century jetty, a low stone bank and successive waterfront revetments. It was suggested that the jetty and revetments may have enclosed the medieval town prior to the construction of the early thirteenth-century stone city wall (Sutton 2004.

Excavations at points along the medieval city wall at the South Island have established that it was built upon river gravels at extremities of the island (Hurley 2003b, 174). Excavations adjacent to the South Gate Bridge (Ní Loingsigh 2003) revealed that the Scandinavian timber revetment was 2m to the north of the early thirteenth-century city wall. The Scandinavian settlement on the South Island was therefore situated within a more confined area which did not extend to the limits of the medieval walled city till the later twelfth century.

The Scandinavian timber revetments and defences were uncovered deep in the estuarine deposits well below the contemporary street levels. Many are therefore probably still relatively intact on the South Island but remain largely unexcavated (Cleary & Hurley 2003, 173).

STREETS AND PATHWAYS

The Scandinavian and medieval settlement at Cork developed on two low-lying islands adjacent to the lowest fording point of the river Lee and was therefore situated along an important route-way connecting the lands to the north and south. The Scandinavian settlement was centred along a main spinal north/south street (South Main Street) on the highest and driest point of the South Island with some possible adjacent settlement on the South Bank. These areas may have been possibly connected with each other by a bridge in the twelfth century as the *Annals of the Four Masters* report that in A.D. 1163 Muircheartach Ua Maelsechlainn, son of the King of Mide fell of the bridge at Cork and was drowned in the river (Hurley 2003c, 184-85).

The Scandinavian main street on the South Island lies beneath the modern South Main Street. The excavated buildings on the South Island- Washington Street (Kelleher in prep; Kelleher 2002; Hurley 2003a, 157-58), Hanover Street/South Main Street (Cleary 2003, 31-44; Hurley 2003a, 158), 40-48 South Main Street/Old Post Office Lane (Ní Loingsigh 2003 & 2005), 35-39 South Main Street (Kelleher 2004), 15 South Main Street (Hurley & Trehy 2003, 29-30)- were aligned with or fronted onto the main medieval street. The Cork Main Drainage Scheme excavations at 15 South Main Street and Washington Street involved trenches along the South Main Street, confirming the medieval street was narrower than the modern street and that many of the houses fronting onto the street are under the present street. The excavated houses to the west of No. 15 South Main Street were 4.82m to the west of the present street-fronting building.

Evidence for a track-way on the South Bank was uncovered which may have led down to the river crossing and Scandinavian settlement on the South Island. The excavations at No. 3 Barrack Street (Fig. 69) directly to the South of the South Gate Bridge uncovered a timber track- dated to A.D. 1085±5 - defined on its eastern side by a post and wattle fence and horizontally laid timbers (Lane & Sutton 2003, 5-9). The track lay to the east of the modern street and roughly follows the line of the (south-north) street down to the South Gate Bridge. Only a small portion of the track-2.78m north-south by 1.52m east-west- was excavated and failed to identify its western edge. It contained a number of layers of round wood branches on the estuarine clay beneath a superstructure of timber planks and large roughly hewn tree trunks. A single sherd of eleventh-century Normandy pottery was found inside the timbers of the track.



Fig. 69: Plan of track-way at 3 Barrack Street, Cork (after Lane & Sutton 2003, 6).

There is limited but growing evidence for pathways leading from streets directly into property plots, houses and outbuildings. Paths were uncovered leading between several Scandinavian Type 1 and Type 2 buildings at the junction of South Main Street (40-48) and Old Post Office Lane (Ní Loingsigh 2003 & 2005). A number of pathways and track-ways were also associated with a series of Hiberno-Scandinavian-type houses at 35-39 South Main Street (Kelleher 2004).

PLOTS AND FENCES

There is growing evidence for the layout of property boundaries along the main street (South Main Street) of the twelfth century Scandinavian settlement on the South Island. These

property boundaries were aligned east-west to the main north-south medieval street and were built using a variety of methods using post-and stake-holes and stave-built fences set in base plates.

An early twelfth century stave-built fence was excavated immediately north of Tuckey Street- a laneway situated just off the eastern side of South Main Street (O'Donnell 2003, 13-16). The fence was probably part of an original property division as it was aligned east-west and ran roughly along the same line as late medieval property boundaries at Christchurch (Cleary 1997, 26-100). The stave-built fence consisted of twenty vertical timber planks set in an oak base plate. Timbers from the fence were felled sometime between A.D. 1115 and 1122.

Two possible fence/property divisions or house walls were uncovered in a small excavation at No. 5 Barrack Street on the South Bank (Lane & Sutton 2003, 9-12). The structures were associated with layers of compacted organic material containing late eleventh/early twelfth-century pottery. Two timbers from the second fence/wall produced felling dates of A.D. 1014±9 and 1061±9.

An excavation was undertaken at 11-13 Washington Street in the backyard of houses fronting onto South Main Street (McCutcheon 2003, 45-54). The lowest twelfth-century deposits contained an east-west earth-fast post and stave fence which may have functioned as a boundary plot fronting onto South Main Street. Six east-west aligned stake-holes roughly parallel to the fence were also uncovered and may represent an earlier boundary or internal backyard division.

The Phase 2 twelfth/mid thirteenth-century deposits revealed an east-west ditch- 5m wide at ground level, 1.2m wide at the base and 1.03m deep- containing organic inclusions, a stick pin, iron needle, bone and shell. Two parallel east-west rows of oak staves and posts- one row driven through the fills at the ditch edge- were also uncovered. The ditch possibly drained the site while the two fence lines may have served as boundary divisions fronting onto South Main Street (Fig. 70).

An excavation at the junction of South Main Street (40-48) and Old Post Office Lane adjacent to the South Gate Bridge revealed a series of east-west Type 1 and 2 structures and possible property divisions (Ní Loingsigh 2003 & 2005). The houses were built three deep to the east of the main medieval street (South Main Street) and the publication of this site may shed important light on the organization of property boundaries in Scandinavian Cork.

Another recently excavated site at 35-39 South Main Street (Kelleher 2004) uncovered pathways, track-ways and boundary fences associated with several phases of Hiberno-Scandinavian buildings which fronted onto the main medieval thoroughfare. One of the plot divisions was located along the line of an earlier late eleventh/early twelfth-century timber revetment (Kelleher 2004).

Hurley (2003c, 153) has suggested that the late medieval property boundaries in Cork may have consisted of rows of buildings with different specific functions- residential/trade street-fronting house, sleeping chamber middle house and a hall for dining and residential use at the rear. Evidence for a ranking of buildings was uncovered in eleventh/twelfth-century Waterford where Type 1 houses fronted the street with Type 2 to the rear. A similar pattern of Type 1 and 2 houses fronting the main medieval street has been revealed at Hanover Street/South Main Street, Cork (Cleary 2003, 31-44; Hurley 2003a, 158) and could indicate the presence of a burgage plot.

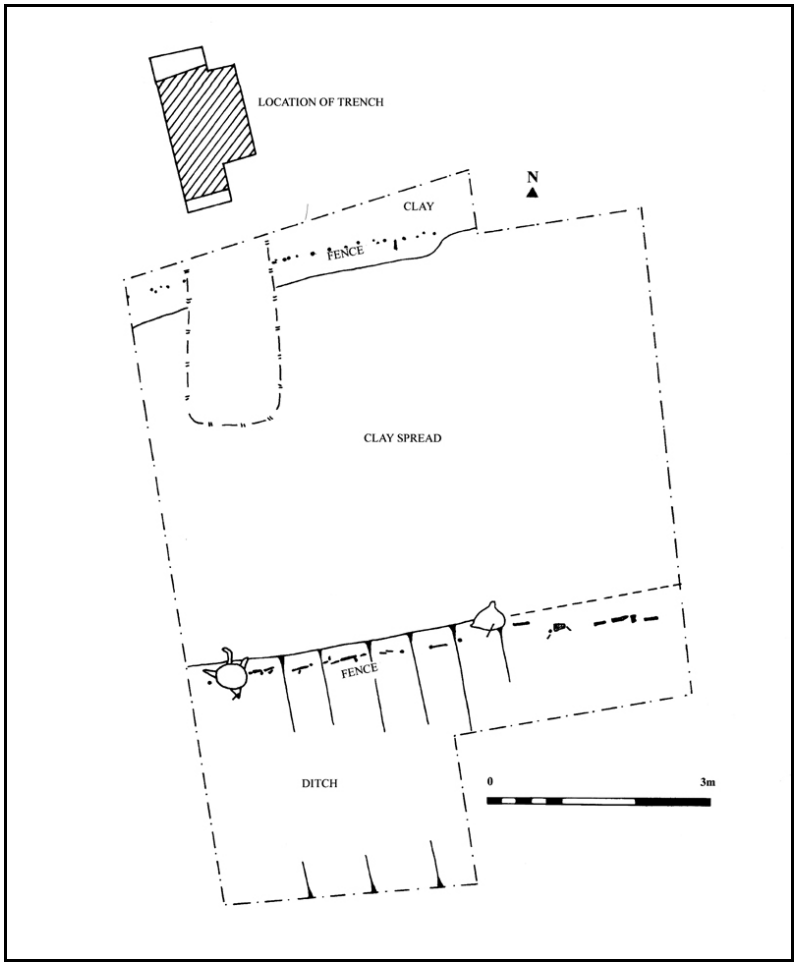


Fig. 70: 11-13 Washington Street, Cork, Phase 2 - twelfth/mid-thirteenth century (after McCutcheon 2003, 48).

STRUCTURES

Types

This section will identify the different types of structures that were present in Scandinavian Cork and follows with descriptions of some of these buildings from a variety of excavation reports. Wallace (1992 & 2001) has identified seven main types of buildings recovered within the Irish Scandinavian towns. Types 1, 2 and 6 have been identified at the Scandinavian settlement at Cork between 1996 and 2004 (Cleary 2003, 31-44; Hurley 2003a, 157-60; Hurley & Trehy 2003, 29-30; Ní Loingsigh 2003 & 2005; Kelleher 2002; 2004 & forthcoming).

Type 1 buildings comprise the vast majority of excavated examples and have been found from the mid ninth to twelfth century levels. Type 1 structures were long, rectangular buildings with rounded corners. They had low post-and-wattle walls and a rood that was supported by two pairs of large posts that were set in from the side and end walls. A stone-lined hearth was centrally placed and doors were usually located at each end of the building. The buildings were divided by aisles and the long central floor was flanked on both sides by built-up bedding which ran parallel to the side walls. The average floor area was 40m^2 (Wallace 1992, 9–14). The Type 2 buildings were sub-rectangular in plan, with pronounced rounded corners, and were smaller than Type 1 structures with an average area of 15m^2. They were not aisled and rarely had formal fireplaces. The door was usually in the sidewall and the walls were generally formed with a double line of post-and-wattle. Type 3 (1992, 16–7) are typically slimmer and shorter versions of Type 1 structures that were built in narrow

and smaller plots. Type 4 buildings are sunken structures in which the floor is situated below ground level. Type 5 structures describe small huts without roof supports which probably functioned as animal pens or were utilised for other outdoor activities (Wallace 1992a, 17–8; Fig. 11). Type 6 buildings refer to Sill-Beam structures with load-bearing walls which appear to have been constructed from the early-twelfth century onwards in Waterford and Cork. Type 7 refers to rectangular stone buildings found within Hiberno-Norse towns. They have also only been found at Waterford and date to the mid twelfth century.

Early- Mid Twelfth Century Type 1 and Type 2 Post and Wattle Buildings

Excavations at Washington Street near the north end of the South Island revealed a succession of post-and-wattle walled houses (Kelleher in prep.; Kelleher 2002; Hurley 2003a, 157-58). The north-eastern quadrant of the earliest structure, dated by dendrochronology to A.D. 1124±9, was uncovered upon a clay platform 1.3m high, and retained in place by a timber revetment. The building was a typical Type 1 house with evidence for a wattle wall with a fragmentary outer curved wall at the north-eastern corner extending to a door jamb and threshold. Finds associated with the building included a metal stick-pin, animal bone and several bone cylinders (Kelleher 2002. The wattle walled house was replaced by another wattle-walled structure represented by a single row of charred posts and in turn by the remains of another mid-twelfth century Type 1 wattle-walled house (Hurley 2003a, 158). The houses faced onto the main Street (South Main Street) and were associated with a range of finds including medieval pottery, bronze stick-pins, a gaming-piece and whalebone, most probably used as a chopping board (Kelleher 2002).

The remains of two post-and-wattle houses- stratigraphically pre-dating a mid-twelfth century sill-beam structure were excavated at the junction of Hanover Street and South Main Street on the South Island (Cleary 2003, 31-44; Hurley 2003a, 158) (Fig. 71). The charred remains of two rows of stake-holes and a 3.34m length of wattle and a clay floor represented the evidence for the north and east corner of the first wattle-walled house. The building was situated to the southeast of a second wattle-walled house represented by 25 stakes which roughly corresponded to the location of the overlying sill-beam house. The 25 stakes occurred in two rows and a discrete group and was associated with an occupation floor covered by charcoal enriched sod-like patches. The structures were identified as the remains of *circa* early twelfth-century Type 2 ancillary building associated with a Type 1 house underlying the sill-beam structure.

A series of east-west aligned Hiberno-Scandinavian houses (Types 1, 2 and 6) built on plots on a clay platform were excavated at the junction of South Main Street (40-48) and Old Post Office Lane, adjacent to the South Gate Bridge in the south-eastern quadrant of the South Island (Ní Loingsigh 2003 & 2005). The Type 1 and Type 2 buildings dated from between A.D. 1100-1140 and pre-dated four mid twelfth-century timber-framed sill-beam houses. The Type 1 and Type 2 structures comprised nineteen houses with four distinct phases of activity. The buildings were built three deep to the east of the north-south main medieval street lying beneath the modern South Main Street.

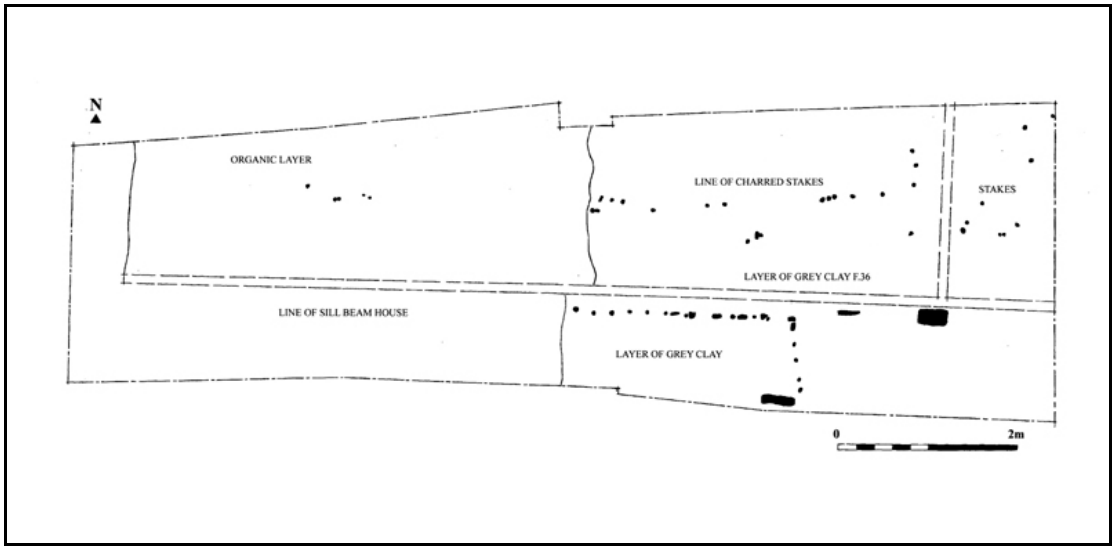


Fig. 71: Hanover Street/South Main Street, Cork, Level 1 (after Cleary 2003, 33).

The remains of at least seven Type 1 houses and one definite Type 2 were identified. They were typically rectangular with rounded corners in shape and contained central hearths and internal divisions and doorways in the shorter end walls, with one exception. Finds associated with the buildings included bone combs, carved and lathe turned wooden artefacts, stick pins, a scale balance and pans, a barrel padlock and keys, crucible fragments, a net sinker, fishing line weights, leather shoes, hone-stones and a late eleventh/twelfth century pottery assemblage.

A series of east-west aligned Hiberno-Scandinavian type houses were excavated on reclaimed ground on the east side (35-39) of South Main Street (Kelleher 2004). The buildings belonged to Wallace's Type 1 structures and contained post-and-wattle walls with rounded corners with doorways all in the shorter side walls. Two Type 1 houses were also excavated towards the medieval street front along the modern South Main Street. The buildings were associated with pathways, track-ways and boundary fences.

Early- Mid Eleventh Century Stave-Built Buildings

The remains of two rectangular stave-built structures were uncovered towards the eastern side (15) of South Main Street and represented either two successive houses or two phases of a house built on the same plot (Hurley & Trehy 2003, 29-30). The latest house fronted onto the medieval street and consisted of a north-south row of seven vertically set earth-fast staves supported at the base by a row of stones. A vertically-set earth-fast post defined the southern limit of the stave wall and was identified as a possible door jamb. The northern limit of the wall was represented by a single vertical post and two east-west aligned staves which formed part of the return wall of the building. The overall width of the structure was estimated to be 6.32m which would place the structure in the larger range of excavated twelfth-century buildings in Cork and Waterford. Dendrochronological dates from the timbers of the building centred on A.D. 1131-32. The structure appears to have replaced an earlier building of similar construction and of roughly the same size represented by six poorly preserved staves and two rectangular posts. The two vertical posts were recorded at the north and south ends of the stave-built wall and corresponded to the location of the door jamb and north corner post of the Phase 2 house.

Mid-Eleventh Century Type 6 Sill-Beam Buildings

The remains of a Type 6 sill-beam structure, dated by dendrochronology to the mid-twelfth century, were uncovered overlying two post-and-wattle building at the junction of Hanover Street and South Main Street on the South Island (Cleary 2003, 31-44; Hurley 2003a, 158). Only the foundation sill-beams and the bases of the earth-fast structural uprights survived *in situ*. The remains consisted of a four roomed building set axially to the South Main Street which had a maximum length of 11.50m-12.50m (east-west) and was 5m-6m in width (north-south). The house was internally partitioned with post and stakes and substantial timbers replaced the vertical timbers of the south wall. These timbers produced a dendrochronological date of A.D. 1171±9, indicating a time-span of *c*. 20 years between the initial construction and the later modifications.

Four timber-framed sill-beam houses were excavated at the angle of South Main Street (40-48) and Old Post Office Lane, adjacent to the South Gate Bridge in the south-eastern quadrant of the South Island (Ní Loingsigh 2003 & 2005). The timber-framed houses superseded the series of east-west aligned Type 1 and Type 2 buildings which fronted onto the north-south main medieval street lying beneath the modern South Main Street. Only the composite base-pads and some large upright posts survived in *situ*. The upright timbers had a date range of AD 1145–1156.

Late Eleventh/Twelfth century Possible Buildings

A small area of excavation at No. 5 Barrack Street on the South Bank revealed the remains of two fence/property divisions or possible house walls (Lane & Sutton 2003, 9-12). Two timber staves were driven into the estuarine clays at the lowest levels and were associated with layers of compacted organic material containing late eleventh/early twelfth century pottery. The presence of wattle in the upper organic layer may indicate collapsed wattle walls though no direct evidence for post-and-wattle walls were revealed. Three large vertical timbers were exposed within the upper organic levels and may have formed part of a second fence line or structure. Two of the timbers produced felling dates of A.D. 1014±9 and A.D. 1061±9. Above these levels were layers of hearth material and shell deposits associated with late eleventh/fourteenth-century pottery.

Overview

The Type 1 and Type 2 post-and-wattle Hiberno-Scandinavian buildings at Cork principally date from A.D. 1100-1150 though the tradition of post-and-wattle in buildings did continue to be employed at Christchurch on the east side of South Main Street between the late twelfth-fourteenth century (Hurley 1997, 100-103). In contrast, the post-and-wattle tradition at Waterford was largely replaced by sill-beam buildings with earth-fast roof supports by the mid-to late twelfth century at Peter Street in Waterford (Cleary, Hurley & Shee Twohig 1997, 103). In recent years, a similar sequence of buildings has also been identified at Cork at Hanover Street (Cleary 2003, 31-44) and at the junction of Old Post Office Lane and (40-48) South Main Street (Ní Loingsigh 2003 & 2005).

CRAFT

A considerable number of artefacts associated with a range of craft and industrial activities have been uncovered in Cork city though the vast majority of these finds dates from after the late twelfth century. In contrast to Waterford and Dublin city, the evidence for Scandinavian craft-working and industry is more limited.

The advances and changes in carpentry techniques at Cork are testified in the evolution of the buildings and timber revetments. Wooden vessel staves and discs were recorded at Hanover Street (Cleary & Hurley 2003, 354) and lathe-turned artefacts from Hanover Street (Cleary & Hurley 2003, 354) and 40-48 South Main Street (Ní Loingsigh 2005) testify to the presence of specialized coopers at Cork in the later twelfth century.

Twelfth century bone-working is indicated by a range of artefacts including cut bone hollow cylinders from Hanover Street (Cleary 2003, 38) and Washington Street (Kelleher 2002 & forthcoming) and bone combs from 11-13 Washington Street (Cleary & Hurley 2003, 335) and 40-48 South Main Street/Old Post Office Lane (Ní Loingsigh 2003). A fragment of modified antler tine was also recovered from a later twelfth century layer inside the sill-beam house at Hanover Street (Cleary & Hurley 2003, 344).

Leather shoe fragments from Hanover Street (Cleary & Hurley 2003, 365) and 40-48 South Main Street (Ní Loingsigh 2005) confirm twelfth century leather-working at Cork.

INDUSTRY

A complete copper-alloy balance arm and a pair of scale pans were found close together in a later twelfth century layer of brushwood inside the sill-beam house at Hanover Street (Cleary 2003, 38) and could indicate that it was the home of a merchant. A scale balance and pans were also recovered at 40-48 South Main Street (Ní Loingsigh 2005). Whetstones from Hanover Street (Cleary 2003, 38) and 40-48 South Main Street (Ní Loingsigh 2005) indicate the sharpening of metal artefacts in twelfth century Cork. The iron and metal-working evidence from Cork dates from the late twelfth century though crucible fragments were recovered from twelfth century house levels at 40-48 South Main Street (Ní Loingsigh 2005).

Hazelnut shells were recovered from deposits at Barrack Street, 11-13 Washington Street and Hanover Street and indicate that they were being gathered for consumption inside the town. A variety of fruits- blackberry, bramble, elder, raspberry, crab-apple were also recorded in deposits at Hanover Street and 11-13 Washington Street (Cleary & Hurley 2004, 393). Oat, wheat and barley grains were also identified within the fill of the ditch at Washington Street.

Fishing is indicated by a fish hook from a later twelfth century brushwood and straw level at Hanover Street as well as a net sinker and a fishing line weight from 40-48 South Main Street (Ní Loingsigh 2003). A whalebone was discovered at a site at the junction of Washington and South Main Street (Kelleher 2002) and was interpreted as a possible chopping board.

Twelfth century animal and fish bone are represented at a number of sites including Barrack Street, Tuckey Street, Hanover Street (Cleary & Hurley 2003, 375), Washington street/South Main Street (Kelleher 2002 & forthcoming) and 40-48 South Main Street (Ní Loingsigh 2003 & 2005). The animal bone from 40-48 South Main Street was more diverse from contemporary faunal assemblages from Ireland and contained venison, veal and lamb, as well as a range of fish and bird species e.g. a sturgeon scale and some white-tailed eagle bones.

Various recreational and personal artefacts have been recovered such as bronze metal stick pins and a gaming piece from Washington/South Main Street (Kelleher 2002), seventh/eighth century baluster headed pin from Grattan Street (Lennon 2003, 63), metal stick-pins from Washington street/South Main Street (Kelleher 2002 & forthcoming), barrel padlock key from the junction of South Main Street and the modern quay wall (Ní Loingsigh 2003) and barrel padlock and keys and stick-pins from 40-48 South Main Street (Ní Loingsigh 2003).

References:

Bradley, J., & Halpin, A. 1993. The topographical development of Scandinavian and Anglo-Norman Cork, in P. O'Flanagan & C. G. Buttimer (eds.) *Cork History and Society*. Dublin: Geography Publications, 15–44.

Bradley, J., Halpin, A. & King, H.A. 1985. Urban Archaeological Survey: Part 14: Cork City. Office of Public Works. Unpublished.

Carberry, E. 1943. The development of Cork City. *Journal of the Cork Historical and Archaeological Society,* 48, 63–6.

Candon, A. 1985. The Cork suburb of Dungarvan. *Journal of the Cork Historical and Archaeological Society,* 90, 91–103.

Cleary, R.M. 1996a. Report on archaeological excavations at 2 Washington St, Cork. Unpublished report lodged with the City Archaeologist's Office, Cork City Council, and Dúchas: The Heritage Service.

Cleary, R. M. 1996b. Medieval Graveyard and boundary wall at Cove Street, Cork. *Journal of the Cork Historical and Archaeological Society,* 101, 94–111.

Cleary, R.M. 1996:043. Hanover Street/South Main Street, Cork. www.excavations.ie.

Cleary, R. M. 1997. Christ Church site excavation in R. M. Cleary, M. F. Hurley & E. S. Twohig (eds.) *Skiddy's Castle and Christ Church, Cork : excavations 1974-77 by D.C. Twohig Cork: Cork Corporation*. Cork: Cork Corporation, 26–100.

Cleary, R. M. 2003. Hanover Street (96E128), in R. M. Cleary & M. F. Hurley (eds.) *Excavations in Cork City 1984-2000*. Cork: Cork County Council, 31–44.

Cleary, R. M., Hurley, M. F., & Shee Twohig, E. (eds.) 1997. *Skiddy's Castle and Christ Church, Cork: excavations 1974-77 by D.C. Twohig* Cork: Cork Corporation.

Cleary, R. M. & Hurley, M. F. (eds.) 2003. *Excavations in Cork City 1984-2000* Cork: Cork City Council.

Cronin, M. 1995. From the 'flat o' the City' to the top of the hill: Cork since 1700, in H. Clarke (ed.) *Irish Cities*. Cork: Mercier 55–68.

Editor 2001. Cork Vikings. *Archaeology Ireland,* 16(4), 5.

Holland, M. 1917. Survey of the town walls of Cork in 1733. *Journal of the Cork Historical and Archaeological Society,* 24, 199–205.

Hurley, M. F. 1985. Excavations of part of medieval City Wall at Grand Parade, Cork. *Journal of the Cork Historical and Archaeological Society,* 90, 65–90.

Hurley, M. F. 1986. Excavations in medieval Cork: St. Peter's Market. *Journal of the Cork Historical and Archaeological Society,* 91, 1–25.

Hurley, M. F. 1989. Excavations at Grand Parade, Cork II. *Journal of the Cork Historical and Archaeological Society,* 94, 27–45.

Hurley, M. F. 1990. Excavations at Grand Parade, Cork, II (Part 2). *Journal of the Cork Historical and Archaeological Society,* 95, 64–87.

Hurley, M. F. 1995. Excavations in Cork City: Kyrl's Quay/North Main Street and at Grand Parade (Part 1). *Journal of the Cork Historical and Archaeological Society,* 100, 47–90.

Hurley, M. F. 1996. Excavations in Cork City: Kyrl's Quay/North Main Street and at Grand Parade (Part 2). *Journal of the Cork Historical and Archaeological Society,* 101, 26–63.

Hurley, M. F. 1997. Medieval settlement and architecture: discussion, in R. M. Cleary, M. F. Hurley & E. S. Twohig (eds.) *Skiddy's Castle and Christ Church, Cork : excavations 1974-77 by D.C. Twohig*. Cork: Cork Corporation, 101–07.

Hurley, M. F. 1998. Viking age towns: archaeological evidence from Waterford and Cork, in M. A. Monk & J. Sheehan (eds.) *Early Medieval Munster: archaeology, history and society*. Cork: Cork University Press, 164–77.

Hurley, M. F. 2001. Domestic architecture in medieval Cork and Waterford (11-17th century), in M. Glaser (ed.) *Lubecker Kolloquium zur Stadlarchaologie im Hanseraum II: Der Hausbeau*. Lubeck, 15–34.

Hurley, M. F. 2003a. A review of domestic architecture in Cork, in R. M. Cleary & M. F. Hurley (eds.) *Excavations in Cork City 1984-2000*. Cork: Cork County Council, 151–70.

Hurley, M. F. 2003b. The defences, in R. M. Cleary & M. F. Hurley (eds.) *Excavations in Cork City 1984-2000*. Cork: Cork County Council, 171–81.

Hurley, M. F. 2003c. The infrastructure of medieval and post-medieval Cork, in R. M. Cleary & M. F. Hurley (eds.) *Excavations in Cork City 1984-2000*. Cork: Cork County Council, 182–9.

Hurley, M. F. & Power, D. 1981. The medieval town wall of Cork. *Journal of the Cork Historical and Archaeological Society,* 86, 1–20.

Hurley, M. F. & Sheehan, C. M. 1997. Features west of North Main Street (Area 2), in M. F. Hurley (ed.) *Excavations at the North Gate, Cork 1994*. Cork: Cork Corporation, 39–72.

Hurley, M.F., Trehy, J., & Price, V. 2000:0132. South Main Street/Hanover Place/Liberty Street/Cross Street, Cork. www.excavations.ie.

Hurley, M. F. & Trehy, J. 2003. South Main Street (00E0124), in R. M. Cleary & M. F. Hurley (eds.) *Excavations in Cork City 1984-2000*. Cork: Cork County Council, 29–30.

Jefferies, H. 1985. The history and topography of Viking Cork. *Journal of the Cork Historical and Archaeological Society,* 88, 81–99.

Kelleher, H. 2002:0291. Washington Street, Cork. www.excavations.ie.

Kelleher, H. 2004:0244. 35-39 Main Street South, Cork. www.excavations.ie.

Kelleher, H. Forthcoming. *Excavations for the main Drainage Scheme,* Cork.

Lane, S. 1999:087. 3 Barrack Street. www.excavations.ie.

Lane, S. 2000:0122. 5 Barrack Street, Cork. www.excavations.ie.

Lane, S. & Sutton, D. 2003. 3 and 5 Barrack Street (99E650), in R. M. Cleary & M. F. Hurley (eds.) *Excavation in Cork City 1984-2000*. Cork: Cork County Council, 5–12.

Lennon, A. M. 2003. Grattan Street (E568), in R. M. Cleary & M. F. Hurley (eds.) *Excavations in Cork City 1984-2000*. Cork Cork County Council, 61–77.

McCutcheon, S. W. J. 2003. 11-13 Washington Street (E625), in R. M. Cleary & M. F. Hurley (eds.) *Excavations in Cork City 1984-2000*. Cork: Cork County Council, 45–54.

Ní Loingsigh, M. 2003:0225. Main Street South, Cork. www.excavations.ie.

Ní Loingsigh, M. 2005:0226. 40-48 Main Street South, Cork. www.excavations.ie.

O'Donnell, M.G. 1997:041. Tuckey Street, Cork. www.excavations.ie.

O'Donnell, M. G. 2003. Tuckey Street (97E0040), in R. M. Cleary & M. F. Hurley (eds.) *Excavations in Cork City 1984-2000*. Cork: Cork County Council, 13–28.

Power, C. 1999:092. Christhchurch Lane/Hanover Street/Kilft's Lane/Little Cross Street/St. Augustine Street/St. Patrick's Street/Emmet Place/Tuckey Street. Cork. www.excavations.ie.

Rynne, C. 1993. *The archaeology of Cork city and harbour: from the earliest times to industrialisation,* Cork: Collins Press.

Shee Twohig, E. 1997. Skiddy's Castle site excavation, in R. M. Cleary, M. F. Hurley & E. Shee Twohig (eds.) *Skiddy's Castle and Christ Church, Cork: excavations 1974-77 by D.C. Twohig*. Cork: Cork Corporation, 1–25.

Sutton, D. 2004:0236. Citi Carpark, Grand Parade, Cork. www.excavations.ie.

Twohig, D.C. 1975:010. Cork City, South Main Street. www.excavations.ie.

Twohig, D.C. 1976:011. Cork city (South Main St.). www.excavations.ie.

Twohig, D. C. 1980. Medieval Cork, in *Cork our City.* Cork: Musaem Chorcai.

Wren, J. 1995. The city wall at 81-83 Grand Parade, Cork. *Journal of the Cork Historical and Archaeological Society,* 100, 88–90.

Wallace, P. F. 1992. *The Viking age buildings of Dublin* Dublin: Royal Irish Academy for the National Museum of Ireland and the Royal Irish Academy.

Wallace, P. F. 2001. Ireland's Viking Towns, in A. Larsen (ed.) *The Vikings in Ireland*. Roskilde: The Viking Ship Museum, 37–50.

Curraheen, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W60726922 (160722/069228)**
SMR No: **N/A**
Excavation Licence: **01E1209**
Excavation Duration/year: **2002**
Site Director: **E. Danaher (ACS Ltd.)**

The site was discovered during archaeological testing in advance of road construction on a slightly elevated area of ground (20m OD), surrounded by flat marshy landscape on three sides and better agricultural land to the east and northeast.

The earliest activity on site dated to the Neolithic and was comprised of a number of chipped stone artefacts- including two concave scrapers and an end-scraper- in secondary contexts and two sherds of carinated bowls from a posthole/pit. A possible late Neolithic/Early Bronze Age 'Beaker' settlement was also identified by pits and postholes, as well as a substantial collection of Beaker pottery (*c.* 2300–2200 B.C.), flint debitage and a thumbnail scraper. Subsequent prehistoric activity comprised a Bronze Age pit/posthole and two Iron Age pits, one of which may have functioned as a bowl-furnace or hearth (see below).

The early medieval settlement comprised a conjoined enclosure (62m by 44m), consisting of a large eastern enclosure with an attached smaller western annex (16m in diameter). Part of the site had been destroyed by modern agricultural disturbance, quarrying, and the construction of a (now) disused railway track (Fig. 72). Both enclosures were defined by shallow ditches backfilled with re-deposited material from related earthen banks. The ditches of the enclosures respected each other, supporting the radiocarbon results (see below) that both were contemporary with each other.

The ditch of the small enclosure was V-shaped with an average width of 1m and depth of 0.85m. No artefacts, except for a possible hone-stone, were recovered from its fills, although an iron axe-head was recovered in topsoil overlying the upper fill of the ditch. Charcoal from the fills of the small enclosure ditch has produced calibrated dates in the seventh/ninth century (see below). This enclosure appears to have had a south-eastern entranceway (defined by two postholes), with the north-western quadrant of the larger ditch acting as its eastern boundary. There were no occupational layers within the interior of the small enclosure apart from two pieces of flint debitage and three large postholes, interpreted as possible tethering posts for animals. Charcoal from one posthole produced a radiocarbon date falling in the sixth/seventh century (see below).

The ditch of the large enclosure was 1.65m wide across the top and was 0.8m deep. Only the southern extent of this ditch survived with the northern part destroyed by modern disturbance. Two iron fragments were recovered in the fill of the large enclosure ditch. The ditch was possibly re-cut along its north-western section where it bounded the eastern side of the western annex. Along this section, the ditch was narrower and deeper than the other excavated parts of the large enclosure ditch, although similar in profile to that of the ditch of the western annex. It was suggested that this section of the large enclosure ditch was dug in such a way as to prevent animals from the western annex crossing into the main enclosure.

An oval arrangement of ten postholes and an internal hearth associated with stakeholes were interpreted as the remains of a post-and-wattle oval building (8m by 6m) in the northeast quadrant of the large enclosure. Charred cereal remains of oats, barley and wheat as well as charcoal and a glass bead were recovered from deposits overlying the hearth.

A cluster of post- and stakeholes were excavated 7m to the southwest of the oval building and defined the ground plan of a small square structure (4m by 4m). The small size of the structure suggests it may have functioned as an outhouse or storage unit. A number of post- and stakeholes were revealed to the south and west of the oval structure. Iron objects, slag,

the point of a copper-alloy stick-pin, hazelnut shells and charred seeds were among the finds retrieved from these features.

A number of pits were excavated to the south of the oval structure inside the enclosure. A large shallow oval pit (3m long and 0.32m deep) was found to contain cremated bone. This pit was separated from a smaller pit that contained two charcoal-stained fills with inclusions of slag, iron shavings, oxidized clay and cremated animal and human bone by a linear arrangement of stakeholes. Two rectilinear dug features were excavated in the interior of the enclosure. The first, 6.32m in length and 0.25–0.38m deep, contained four fills with inclusions of slag, charcoal, stone (including two possible hone-stones) and cremated animal and human bone. The second, 5m long, 1.2m wide and 0.6m deep, contained charcoal flecks and stone.

Evidence for late medieval activity was limited and comprised an oval pit and three associated stakeholes located towards the southern edge of the excavation. Charcoal from one of its fill produced a date in the thirteenth to fifteenth century (see below).

Only a few fragments of cremated bone survived on the site due to the acidic nature of the soils. The cremated bone represented those belonging to humans and medium- sized mammals such as sheep/pig. Oat seeds were the most prevalent form of cereal grain with less frequent amounts of barley and wheat and traces of charred ‘weed’ seeds. A small quantity of metal slag was also excavated and might suggest limited metalworking on-site.

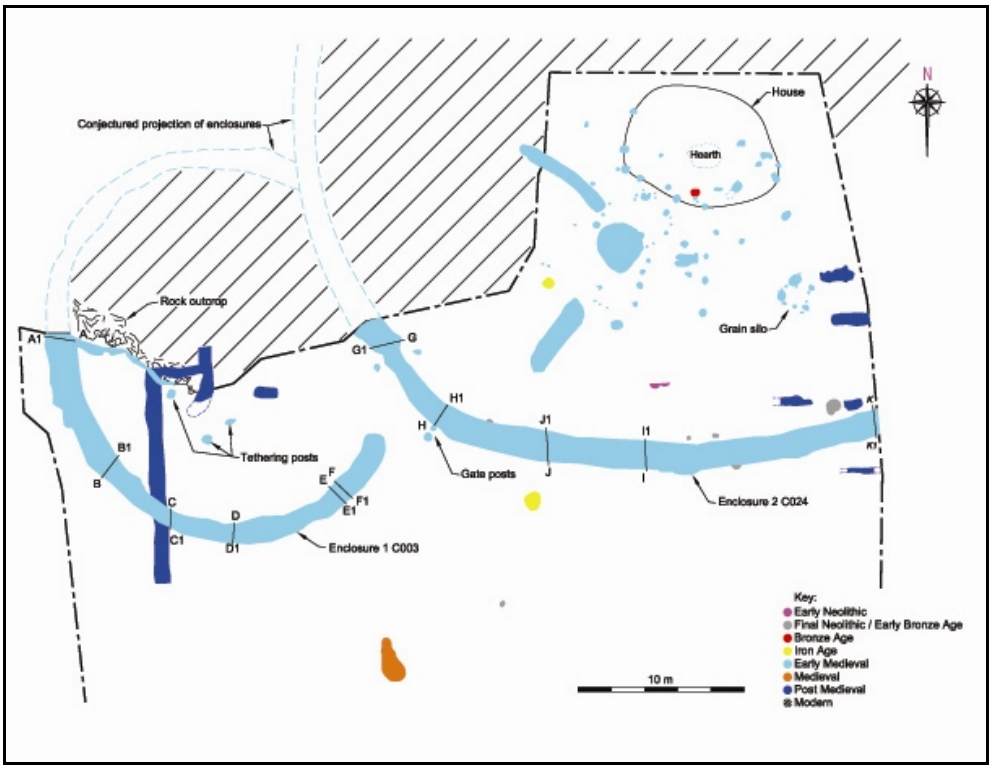


Fig. 72: Plan of Curaheen, Co. Cork (after Danaher & Cagney 2004).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta -171416	Charcoal from fill of posthole inside western enclosure annex	1420±40 BP	**A.D. 564-666**
Beta -171417	Charcoal	1390±70 BP	A.D. 444-447 A.D. 464-482 **A.D. 533-779** A.D. 794-801
Beta -171418	Charcoal from fill of possible bowl-furnace or hearth	2210±60 BP	**B.C. 396-149** B.C. 140-112
Beta -171419	Charcoal from the upper fill of the enclosing ditch of the western annex	1220±60 BP	**A.D. 669-899** A.D. 918-954 A.D. 957-961
Beta -171420	Charcoal	1300±40 BP	**A.D. 649-781** A.D. 791-807
Beta -171421	Charcoal from fill of pit located towards southern limit of excavation	630± 70 BP	**A.D. 1268-1425**
Beta -171422	Charcoal from pit containing Beaker pottery, flint debitage and charred seeds	3920±70 BP	**B.C. 2579-2200** B.C. 2158-2155
Beta -171423	Charcoal	1300±60 BP	**A.D. 644-876**
Beta -178191	Charcoal from circular pit	2330±60 BP	B.C. 745-689 B.C. 664-647 **B.C. 551-341** **B.C. 326-204**
Beta -178192	Charcoal (Oak sample)	1490±60 BP	**A.D. 432-498** **A.D. 501-651**
Beta -178193	Charcoal from fill of small circular pit/posthole located close to postholes of early medieval oval building	2920±40 BP	**B.C. 1261-1006**

References:

Danaher, E. 2002:0296. Curraheen 1, Co. Cork. www.excavations.ie.

Danaher, E., & Cagney, L. 2004. Excavation report on N22 Ballincollig Bypass. Unpub'd.

Garryduff I & II, Garryduff, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W92518633 (192515/086332)**
SMR No: **CO055-001; CO055-002**
Excavation Licence: **N/A**
Excavation Duration/Year: **Summer 1945; Summer 1947**
Site Director: **M.J. O'Kelly (University College Cork)**

Garryduff I and Garryduff II were two univallate enclosures excavated by staff from University College Cork during the summers of 1945 and 1947. Garryduff I (maximum diameter of 20m) was situated at the highest point of the eastern end of a prominent hill side knoll (162m OD), 165m upslope from Garryduff I (142m OD) and commanding considerable views to the north over the valleys of the River Blackwater and Bride. It was a significant enclosed settlement with two phases of early medieval occupation. In contrast, Garryduff II revealed no settlement evidence and no finds, except for a few charcoal spreads. It was interpreted as a possible cattle enclosure associated with Garryduff I.

The enclosure banks of Garryduff I consisted of an outer and inner stone facing with a rubble core built upon an annular platform of broken rock quarried from the external ditch. These banks survived to a maximum of 6.5m thick and 1.37m high, and appear to have been constructed and repaired in two separate phases associated with the two periods of occupation (Fig. 73).

The eastern entrance of Garryduff I consisted of a stone-lined entrance passage and an external uncut causeway of rock (3.35m-4.90m wide). A series of postholes and trenches within the entrance passage were interpreted as forming the remains of a wooden palisade and a possible gate-tower. The only feature of note at Garryduff II consisted of an unusual entranceway, with postholes suggesting a gated palisade filling the gap between the ends of its stone-built banks.

The external rock-cut ditch of Garryduff I was wide (5.3m) but rather shallow (0.45-1.8m deep). It appears to have operated more as a quarry ditch to provide material for the core of the bank than a specific addition to the enclosures defences. A low counterscarp bank was identified running around the southern perimeter of the enclosure outside the rock-cut ditch.

Two periods of occupation, very closely associated together and of insignificant time difference, were identified within the interior of Garryduff I. The primary phase began shortly after the bank was built and was marked by two houses. House I occupied the west central area and was a post-built structure of indeterminate plan. It was associated with an internal hearth and rubbish pit from which a few fragments of E ware pottery were recovered. House II, a post-built structure, was identified to the east of House I. It was rectangular in form (6.40m x 3.05m) and had an internal hearth and areas of paving. A gravelled entrance passage stretching from the eastern side of House II through the entrance passage also belonged to this phase and provided a dry surface into the centre of the enclosure. The principal find from this phase consisted of a bird ornament decorated with gold filigree recovered near the centre of the enclosure and dating to just before, or at the beginning of, the occupation of the site.

The secondary phase of occupation followed a partial collapse of the inner face of the enclosure bank and was marked by the decay of the enclosure defences and entrance. Areas of paving in the south and southeast sides of the interior - two associated with hearths - suggest the presence of house sites, as does the presence of a third, isolated hearth to the northwest.

The excavation was find-rich, with the majority of the finds associated with the secondary occupation phase. Finds exclusive to this occupation phase included a bronze finger ring; tweezers; button and sewing needle; two iron chisels; sickles; bill-hooks; a belt-buckle; a

barrel-padlock and an anvil; a bone spindle-whorl; a glass stud and bracelet; a shale bracelet; two stone lamps, and one pair of quernstones. Finds from both the primary and secondary phases included bronze pins; iron knives; iron spear-heads; iron shears; awls; pins; ladles; hooks; rings; nails; eight barrel-padlock keys; iron vessel 'escutcheons'; bone pins; glass beads; glass vessel fragments; stone pendants; stone plaques; stone discs and a large quantity of stone spindle-whorls; whet and hone-stones, and flint artefacts.

Evidence for ironworking was well attested in both the primary and secondary occupation phases and finds recovered included crucible fragments, furnace bottoms, tuyère fragments, ore and a considerable quantity of slag. A bowl-shaped furnace was excavated beyond the north-west corner of House I from Period I while six pit-furnaces belonged to the Period II occupation. A small blob of glass was recovered beside the bowl-shaped furnace from Period I and could 'represent a drop of molten glass from the artificer's tool' suggesting that this structure was also possibly used for glass-working. Another blob of glass was recovered from a secondary occupation context in the centre of the interior and may suggest further evidence for this activity.

Nine stone trial pieces were recovered from the site, all except one, from the secondary occupation phase, and contained a variety of designs including a spiral pattern, geometrical interlacements, animal or bird ornament and an interlaced anthropomorph.

The pottery assemblage recovered in both occupation phases consisted entirely of imported E ware, as well as one sherd of Red Slip Ware (A ware). The recovery of pottery sherd fragments belonging to the same vessel in both Period I and II contexts indicates that there was no significant time differences in both occupation phases.

The finds from Garryduff I, particularly the decorated bird ornament from the primary phase and the E ware assemblage indicate that the enclosure was occupied in two roughly contemporary occupation phases around the late-sixth/seventh century. The site appears to be possibly slightly later than Garranes where E ware was absent, though perhaps contemporary with Ballycatteen fort where Red Slip Ware and Late Roman Amphora were absent, though E ware was also recovered.

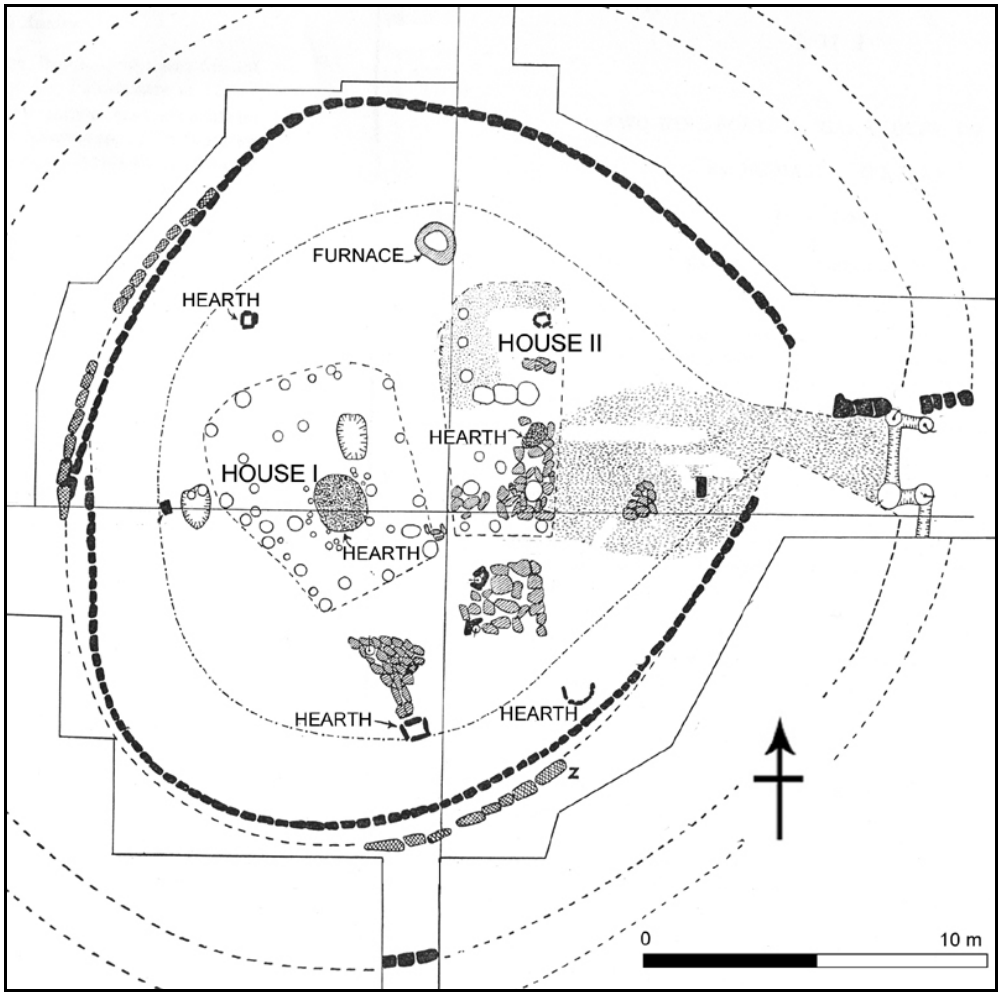


Fig. 73: Plan of excavation at Garryduff I, Co. Cork (after O'Kelly 1962-4, plate III).

References:

O'Kelly, M. J. 1962-4. Two ring-forts at Garryduff, Co. Cork. *Proceedings of the Royal Irish Academy Section C*, 63C, 17–125.

Power, D. 1989. Cork. *Archaeology Ireland,* 3(1), 46–50.

Killanully, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W69246362 (169240/063628)**
SMR No: **CO086-047**
Excavation Licence: **92E0104**
Excavation Duration/year: **July - August 1992**
Site Director: **C. Mount** (**for Archaeological Development Services).**

A univallate early medieval enclosure and souterrain, and a post-medieval rectangular enclosure were excavated in Killanully townland in advance of a limestone quarry extension. The site was located on the crest of an east-west ridge near its north-western end at 41m OD and overlooking the valley of the Owenboy River. The excavation of the whole site revealed that the enclosure and souterrain were primarily occupied between the eighth/tenth centuries A.D and were associated with iron smelting and cereal-cultivation.

The early medieval enclosure was oval in plan (25m by 36m), and was enclosed by a low bank, 1.5m thick and 0.35m high (Fig. 74). The excavated ditch was V-shaped and rock-cut and measured 1.95m wide and 1.05m deep. Two fills were identified within the ditch and contained a quantity of animal bone. The eastern entrance was a simple uncut causeway 3.5m wide between the two ditch terminals and had no indication of any postholes which may have supported a gate. A small quantity of animal bone, a sherd of post-medieval pottery, and a fragment of an iron key shaft were excavated inside the southern ditch terminal.

Evidence for a truncated layer containing occasional flecks of charcoal and fragments of burnt bone were identified beneath the south-west portion of the bank indicated some form of occupation before the enclosure was built. Animal bone and a tuyère fragment within the enclosing bank indicated the presence of a furnace on the site before or during the construction of the enclosing bank.

Intensive modern cultivation and the erosion of soil down the hill slope had destroyed any evidence for houses or hearths inside the enclosure. A stone-lined souterrain was located in the south-western area of the site and consisted of a single curving passage 11.3m long, 0.4-0.9m wide and at most 1.85m below the present ground surface. The structure was unroofed except for one stone lintel and was built using alternating orthostats of upright stone slabs along its southern section and dry-stone walling for the most part in the northern section. A quantity of charcoal in the interstices of the stones along the northern section produced a radiocarbon date from the tenth to the thirteenth century (see below).

The souterrain contained five fills. The original floor of the souterrain was heavily trampled and contained animal bone, molluscs, charcoal, a piece of cinder from a furnace and a bone barrel-bead. An occupation deposit that infiltrated the souterrain through the entrance and was contemporary with the use of the souterrain was discovered overlying the original floor. A quantity of animal bone, single hazelnut shell, charred barley, fat-hen, molluscs and charcoal as well as a whetstone, iron band, iron fragment and 25g of metal ore were recovered from this context. A sample of charcoal from this deposit returned a radiocarbon date in the late-eighth to late-tenth centuries (see below). This occupation deposit lay beneath the primary souterrain backfill or demolition deposit of the souterrain which contained the remains of the dry stone walling and lintel stones as well as animal bone, a stone disc, iron slag and a piece of iron ore.

A corn-drying kiln consisting of a deep circular pit (1.25m by 1.15m, and 0.8m deep) with a flue (0.6m long) was excavated in the western side of the enclosure. The fills of the furnace pit contained a large quantity of iron slag, animal bone, charcoal, two iron nails, charred barley and fat-hen. Charred cereals and weeds were uncovered at the heavily burnt base of the kiln. An irregular slot (1m long by 0.5m wide and 1m-1.15m deep) was excavated 1.5m east of the corn-drying kiln and contained fragments of burnt cattle bone, charcoal, three

charred oat grains and one charred weed. A radiocarbon determination from a large piece of charcoal returned a calibrated two sigma radiocarbon date of A.D. 689-888. A pit (0.85m by 0.3m at the top & 0.3m deep) was situated close to the souterrain and contained animal bone and iron slag.

A horizon layer situated directly beneath the sod but significantly overlying the interior features in the south-western part of the site contained a large quantity of animal bone, iron slag, iron ore and various stone and metal artefacts, displaced from their primary context due to the modern cultivation. Finds from this displaced layer included a knife blade, an iron pin with remains of ringed head, an iron shears, iron nails and spikes and a possible part of a blowpipe, five whetstones, two stone discs and various late finds.

The animal bone was fragmentary and contained an overwhelming number of teeth remains. Sheep, pig, cattle, deer, dog and horse were the domestic animals in descending order of frequency recovered during the excavation. The quantity of iron slag found, and the recovery of tuyère fragments, indicates iron smelting on the site. The corn-drying kiln and the cereal grain (especially barley, as well as oats and fat-hen) indicate a mixed farming economy.

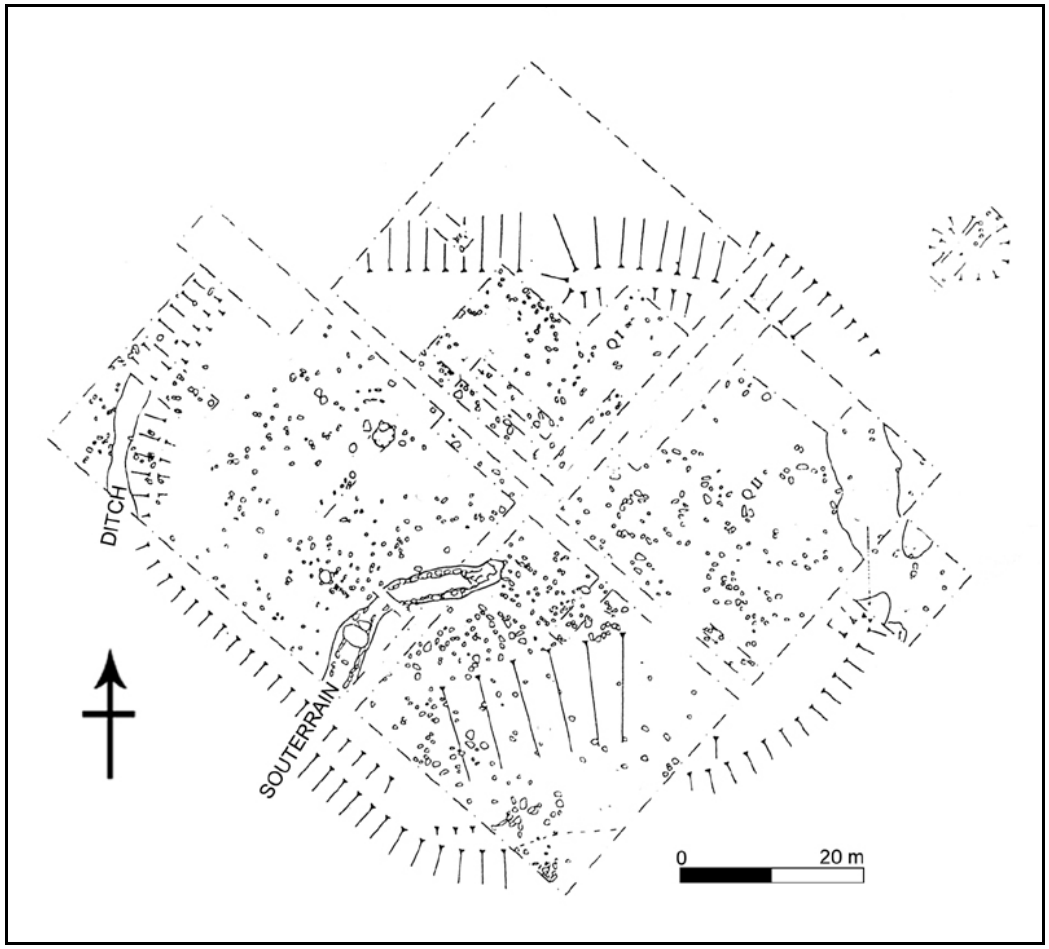


Fig. 74: Plan of Killanully, Co. Cork (after Mount 1995, 124).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-3647	Charcoal from fill of slot, 1.5m east of corn-drying kiln	1222±34 BP	**A.D. 689-752** **A.D. 761-888**
UB-3648	Charcoal from the dry-stone walling of the souterrain	969±97 BP	**A.D. 889-1260**
UB-3649	Charcoal from occupation layer inside souterrain	1155±38 BP	**A.D. 777-975**

References:

Mount, C. 1992. Killanully, Co. Cork. Digging up Cork, Archaeological Excavations in Cork 1992, Cork Public Museum, 14-17.

Mount, C. 1995. Excavations at Killanully, County Cork. *Proceedings of the Royal Irish Academy Section C*, 95C, 119–57.

Lisduggan North 1, 2 & 3, Co. Cork
Early Medieval Settlement Enclosure(s) & Field Systems
Grid Refs: **R42740326 (142746/103269); R43190338 (143195/103381); R43160335 (143163/103353)**
SMR Nos: **CO023-157; CO023-158; CO023-159**
Excavation Licence: **E479; E480**
Excavation Duration/Year: **Summer 1972; Summer 1973**
Site Director: **D. Twohig & M.J. O'Kelly (University College Cork)**

Two levelled univallate enclosures situated close together on a south-facing slope of Knocknanuss Hill in Lisduggan North townland were investigated in advance of quarry developments. The excavations identified evidence for a field pattern of banks and ditches which preceded two enclosures, one of which contained evidence for an outer palisade, three buildings together with habitation debris (Lisduggan 1); and the other interpreted as an associated livestock enclosure (Lisduggan 2) (Fig. 75). A further univallate enclosure (Lisduggan 3) in the same townland was excavated in the summer of 1973. Earlier field patterns, as well as another livestock enclosure, were also identified at this site.

The excavations established that all three univallate enclosures were preceded by a series of trenches which may have supplied material for a number of adjacent field banks. The linear trenches were of variable width and depths, e.g. a 40m stretch of one linear trench was excavated beneath Lisduggan 3 and was roughly 0.9m deep, 0.58m wide at the bottom and 1.3m wide at the top. The excavations established that these linear trenches had not completely silted up when the three enclosures were built, and that they all appeared to belong to a contemporary field network.

No remains of banks adjacent to the linear trenches were identified beneath Lisduggan 1 and Lisduggan 2 though this was explained by disturbances associated with the subsequent ploughing and levelling of the sites. Excavation at Lisduggan 3 identified the remains of a small field bank, surviving to a height of only 0.3m when the enclosure was built. The denuded form of this field bank suggested that it was not longer functional at this time. No artefacts, bone or charcoal were found in the fills of the linear trenches preceding the three enclosures. The pattern of linear trenches was very irregular and is suggestive of more than one small series of fields. The best parallel to this can be found in Co. Limerick at the complexes at Cush (Ó Riordáin 1940) and Lough Gur (Ó Riordáin 1949).

Lisduggan 1 was approximately elliptical in plan (60m by 45m), defined by a U-shaped ditch with a depth of 1.2m. Cuttings through its bank and ditch revealed a palisade trench 0.5m wide and 0.3m deep on the outer face of the enclosure bank. The original entrance was located along its southern perimeter and consisted of an entrance causeway about 3m wide with no evidence for postholes or any structures within its vicinity. Every trench opened within the interior produced charcoal and bone to varying extents. The densest habitation deposits was revealed in the southwest quadrant where three houses, identified as dark bands containing a mixture of soil, charcoal and bone and the charred remains of a few postholes, were revealed. House 1 was more or less circular in plan with an average diameter of 6m. House 2 was roughly circular in plan and was situated to the east of House 1. Little over half of this structure was excavated though what was showed that it had roughly the same diameter of House 1. House 3 overlay House 2 and was rectangular in form (7m by 5.5m). The close setting and small diameters (50-80mm) of the surviving postholes of these three structures indicate that they were probably post-and-wattle built.

An extensive gravel spread was revealed between the doorways of the three houses. A pit (2m by 1.5m and 0.5m deep) was excavated in the centre of the gravel spread and may have been used to collect and retain run-off rainfall from the spread. Three hearths were also excavated in the south-west quadrant of the enclosure and were located in the vicinity of the houses. None were delimited by stones but were identified as intensely burnt soil mixed with charcoal and animal bone. Various objects including fragments of spindle-whorls, crucibles,

flint objects, a rotary quern upper-stone, a blue glass bead, two sherds of E ware, whetstones, a piece of amber, a bronze buckle and iron knives were recovered within the habitation deposits associated with the buildings, hearths and gravel spreads. The very partial remains of two humans as well as a small quantity of fragmentary animal bone were also recovered in these deposits.

Lisduggan 2 was roughly circular in plan and had an average diameter of about 50m. The only feature uncovered in this enclosure was a short length of a cobbled pathway. Except for one single flint piece, no structural, artefactual or faunal evidence was uncovered in any of the trenches. A levelled lime-kiln was built into the banks of its enclosure, probably sometime during the nineteenth century. A large number of modern stone-filled drains were also identified cutting both Lisduggan 1 and Lisduggan 2, and appeared to have been built shortly before the two enclosures and lime-kiln were levelled in the nineteenth century.

Lisduggan 3 was roughly circular and had an average diameter of 45m internally. The enclosing bank survived to a height of 1.3m above the turf level and at its base had an average width of 6m; it appeared to have been constructed in two phases. The excavated ditch was 0.8m below the turf level and had an average width of 3.5m across the top of the ditch. The enclosure had a causewayed entrance 5m wide along its southwest perimeter, and excavations in the vicinity of this exposed a deliberately laid spread of cobbles and gravel which it was suggested was roughly contemporary with the secondary phase of the enclosing bank. Though the interior had been extensively disturbed by subsequent ridge and furrow cultivation, it was possible to identify a rectangular structure (7m by 6m) in the centre of the enclosure. It was defined by lines of postholes, set at 50-150mm intervals, some containing the charred remains of posts. No evidence of postholes was recovered in the interior of this structure and it was considered unlikely that the vertically set posts would have been strong enough to carry a roof without supports. Except for a blue glass bead, a flint perforator/scraper and a whetstone, there was no evidence for any habitation structures, artefacts or debris within or in the vicinity of the rectangular structure strengthening its interpretation as a livestock pen.

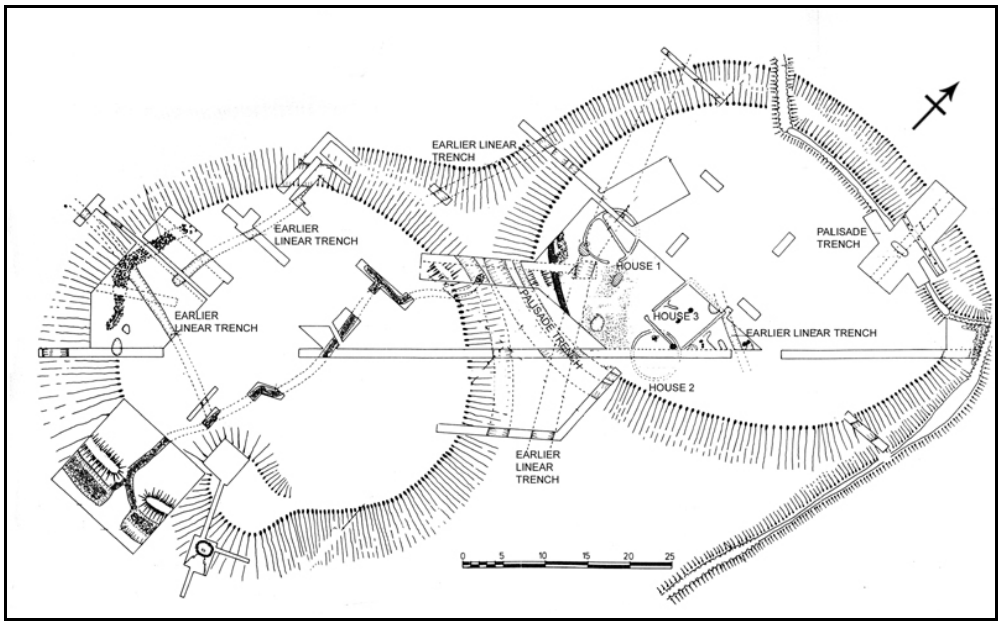


Fig. 75: Plan of Lisduggan 1 and 2, Co. Cork (after Twohig 1990, plan 1).

Reference:

Twohig, D. C. 1990. Excavation of three ring-forts at Lisduggan North, County Cork. *Proceedings of the Royal Irish Academy Section C,* 90C, 1–33.

Lisleagh II, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **R178106 (11780/11060)**
SMR No: **CO027-03001**
Excavation Licence: **E000488**
Excavation Duration/year: **1989-93**
Site Director: **M. Monk (University College Cork)**

Lisleagh II was excavated as part of a University College Cork research dig over a number of seasons. Excavation revealed an early medieval enclosure, and a later ditched enclosure with an external wooden palisade. The site was situated midway along a spur of ground just below 150m OD, which terminates the Kilworth hills and faces south and west over the broad sweep of the Blackwater valley. Despite intensive modern cultivation and truncation, a large number of structural features were identified within the interior of the site.

The site originally consisted of an enclosure (58m by 63m), enclosed by a bank, the basal layers of which survived to a height of 0.75m. The rest of the bank had been subsequently backfilled into the ditch, and this backfill lay beneath a burnt charcoal horizon which had covered the site. Eventually, a steady infill of cultivation had levelled the fills of the ditch up to the ground surface. The entrance of the original enclosure was identified along the western perimeter. At the entrance area, a paved surface was revealed beneath a deep humus rich deposit containing areas of burning. One posthole and a large indented pivot-stone, excavated on the edge of the northern terminus of the bank, indicate the presence of a gate-structure (Fig. 76).

After the original enclosure fell out of use, the central area of the site was encircled by a shallow ditch and an external wooden palisade, interpreted as a cattle enclosure. The ditch was V-shaped and 1.03m wide and 0.77m deep. After a short space of time, it was deliberately backfilled with organic material, animal bone, ironworking debris and charcoal. At least one round house was built upon remains of the backfilled ditch and indicates subsequent occupation on the site.

A narrow trench containing traces of contiguous upright timbers were found immediately outside, and encircling, this ditch and may have been contemporary with this structure. The palisade trench had cut through the remains of the original bank and suggests that the fence changed over time from a log-built palisade to a flimsy stake-fence. The lack of occupation evidence overlying the palisade suggests that this enclosure was used for a longer period than the bank-and-ditched enclosure.

The wall plans of at least four round houses were excavated in the enclosure interior. They were built using a variety of construction techniques from deep stakes to slot trenches supporting large posts and stakeholes. One structure contained a possible porch which cut an earlier round building containing an inner line of conjoined upright planks with a shallow slighter outer wall, possibly of wattle. Several arcs and alignments of stakeholes were also identified through none formed any coherent pattern.

A dry-stone built souterrain was revealed within the north-eastern quadrant. It appears to have been surrounded by burnt wooden posts. It may have had a timber roof as the backfill contained no long lintels though did reveal a layer of burnt material in one of the primary fills which could represent the remains of a wooden roof. The souterrain was backfilled in a series of stages and within its heavily burnt deposits revealed a number of finds including slag, furnace bottom fragments, hone stones, several metal artefacts and an iron knife blade. Though the souterrain had cut the remains of a house, the excavation of several stakeholes in the upper fill of the souterrain suggests continued occupation after the structure fell out of use.

An extensive stony deposit was excavated within the western interior of the enclosure and had been presumably laid to raise and level up this half of the site. Its surface was cut by a number of post pits and stakeholes though these were at a less density than any other part of the site.

Several pits were excavated within the interior, one of which revealed a possible ring-pin. A number of shallow pits in the south-eastern area of the enclosure contained large quantities of slag and appear to have been involved in ironworking. One pit in this area surrounded by a concentration of loose slag as well as a heavily iron stained mixed spread was interpreted as a possible bowl furnace.

Finds from the site were fewer than that recovered on Lisleagh I. Considerable evidence for ironworking and metalworking was identified as was a large quantity of animal bone. The recovery of charred grains of six-row hulled barley, oats, rye and flax seeds as well as quern stones indicate a mixed agricultural economy at the site.

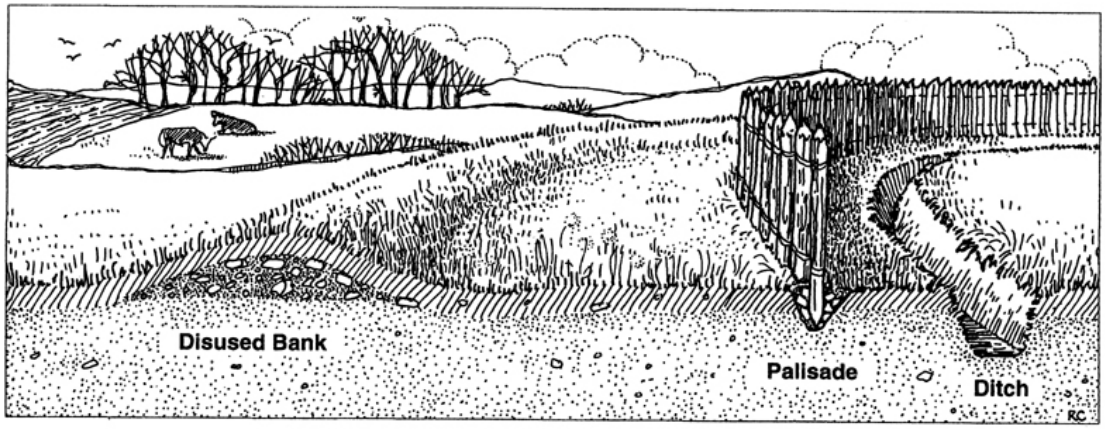


Fig. 76: Artistic reconstruction of Lisleagh II, Co. Cork (after Monk 1998).

References:

Monk, M. A. 1995. A tale of two ringforts: Lisleagh I and II. *Journal of the Cork Historical and Archaeological Society*, 100, 105–16.

Monk, M. A. 1998. Early Medieval Secular and Ecclesiastical Settlement in Munster, in M. A. Monk & J. Sheehan (eds.) *Early medieval Munster: archaeology, history, and society*. Cork: Cork University Press, 33–52.

McLarnen, F., Monk, M. A., & Sexton, R. 2004. 'Burning the biscuit': evidence from the Lisleagh excavations reveals new secrets twenty years on! *Archaeology Ireland*, 18(3), 18–20.

'Lisnacaheragh Fort' (Garranes td.), Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W47336400 (147337/064003)**
SMR No: **CO084-084**
Excavation Licence: **N/A; E629**
Excavation Duration/Year: **1937/8; 1990-91**
Site Director: **S.P. Ó Ríordáin (University College Cork); M. O'Donnell (University College Cork**

Lisnacaheragh is an impressive trivallate enclosure in the townland of Garranes which has revealed an elaborate entrance structure as well as early occupation evidence, extensive craft-working activity and imported late fifth/sixth-century pottery. The site is located on the northern side of an upland area (160m O.D.) that acted as a watershed between the river systems of the Bandon and the Bride.

The site was subject to two excavations; the first was undertaken by S. P. Ó Ríordáin as part of a Special Employment Scheme administered through the Office of Public Works in the late 1930s which investigated a section of the defences, the entrance-way and a select number of areas in the interior; and various trenches in the interior of the enclosure were subsequently investigated in the early 1990s by Mary O'Donnell through a grant from the Office of Public Works.

The site has a total overall diameter of 110m and contains three irregular banks and ditches enclosing an interior space about 67m in diameter (Fig. 77). The eastern entrance was thoroughly excavated and was defended by three irregularly spaced wooden gates between the ends of the outer and inner banks. Two trenches which may have supported a palisade of uprights extended between the ends of the inner bank and the fourth and innermost gate, and served to narrow the entrance towards the interior. The excavation of two postholes as well as traces of a double line of stones under the northern side of the inner bank entrance suggest the plan of a square hut (2.4m by 2.4m) which preceded the construction of the inner enclosing bank.

There were no significant stratigraphical differences to indicate different chronological periods of habitation. The principal phase of habitation was associated with a dark charcoal-rich deposit immediately inside and to the north of the eastern entrance and along the southern sides of the interior. This dark organic deposit immediately inside and to the north of the eastern entrance was investigated by both Ó Ríordáin and O'Donnell. Ó Ríordáin uncovered a large collection of small postholes of no coherent plan in this deposit as well as a range of finds including two glass beads and a pin from a bronze penannular brooch and various domestic objects.

O'Donnell excavations in this area just inside and to the north of the eastern entrance uncovered a sherd of Late Roman Amphora (B ware) and a perforated stone disc within Ó Ríordáin's dark deposit. Her excavation also importantly established that the eastern end of the site had been levelled up and occupied before the enclosing banks were built. O'Donnell also excavated a trench in the western side of the enclosure which produced evidence for part of the burnt walls of a round house. This structure is the only definite building excavated at the site.

The southern side of the enclosure saw intensive occupation. The black charcoal-rich deposit was uncovered beneath a stony deposit in this area and contained a rich artefactual assemblage as well as discarded craft-working products and debris. Iron and bronze manufacturing were a significant activity in this area as evidenced by the principal finds of iron slag, crucibles, clay and stone moulds, iron pincers and awls, a bronze ingot and a bronze casting 'jet' or 'pour'. Fragments of enamel fused to crucibles and an uncut millefiori rod also suggest enamelling and the working of millefiori on site. Other finds included a

bronze button, bronze brooch, bronze pins, possible clay lamp, iron shears, amber beads and fragments of glass beads and vessels.

Post- and stakeholes were also excavated in this deposit in the southern area though none formed any coherent plan. A setting of stones which formed an irregular arc was identified near the northern end of the black deposit and might represent one possible structure. Part of the lower stone of a quern stone was revealed close to this possible structure. A rock-cut rectangular pit (2.75m by 1.8m) was excavated at the eastern end of the black deposit and contained crucible fragments and a fragment of flint at the bottom of its fill.

The black habitation deposit along the southern side of the forts interior lay beneath a stony deposit which had been piled against the inner side of the inner enclosure to strengthen this rampart. This stony deposit had then been retained in place by a stone kerb which ran approximately parallel to the inner bank and about 3.65m from it for 7.6m along the southern side of the enclosure interior. The occupation of this area appears to have been abandoned shortly after the stony deposit slipped over the stone kerb. It was suggested by Ó Ríordáin that the stone kerb may have been utilised as one side of a later structure of the later habitations on the site as possible foundations of walls were identified running out from the kerb.

The pottery assemblage is the strongest indicator that the main phase of occupation at the site was during the later-fifth and sixth century A.D. A large quantity of Late Roman Amphora sherds (250) imported from the eastern Mediterranean during the late-fifth to mid-sixth centuries A.D. was recovered particularly within the dark charcoal rich deposit. The site also revealed one of the very few examples in Ireland of a type of red slipped bowl (Phocaean Red Slip Ware (A ware) (*c*. 500 A.D.)) which often accompanied these amphorae from the eastern Mediterranean. Sherds of a possible red slipped ‘platter’ have also been subsequently identified within the rich pottery assemblage.

A range of domestic objects including iron knives and nails, whetstones, perforated stone discs, struck flint and an unusually small collection of spindle whorls (3) and loom weights (2) were recovered in various contexts across the site. Animal bone was poorly preserved due to the acidic nature of the soil but the meagre evidence appeared to belong to cattle followed by pig.

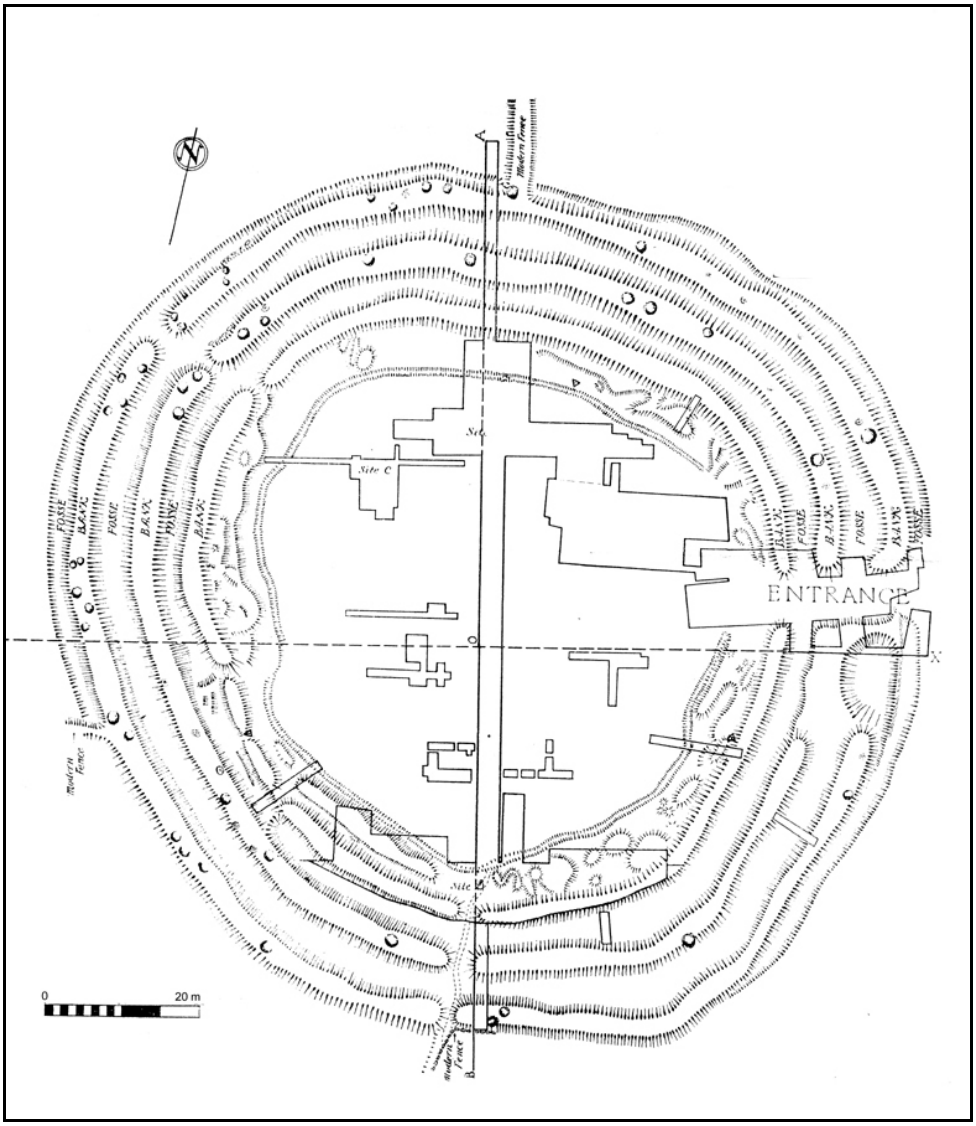


Fig. 77: Plan of Garranes, Co. Cork (after Ó Ríordáin 1941–2).

References:

Doyle, I. W. 1999. A 'Ceramic Platter' of Mediterranean origin from the Ringfort at Garranes, Co. Cork. *Journal of the Cork Historical and Archaeological Society,* 104, 69-76.

O'Donnell, M.G. Lisnacaheragh, Garranes, in I. Bennett *Excavations 1990: Summary accounts of archaeological excavations in Ireland*. (Dublin 1991), 16.

O'Donnell, M.G. Lisnacaheragh, Garranes, in I. Bennett *Excavations 1991: Summary accounts of archaeological excavations in Ireland*. (Dublin 1992), 6.

Ó Ríordáin, S. P. 1941–2. The excavation of a large earthen ring-fort at Garranes, Co. Cork. *Proceedings of the Royal Irish Academy Section C,* 47, 77–150.

Power, D. 1989. Cork. *Archaeology Ireland,* 3(1), 46–50.

'Lisnagun' (Darrary td.), Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W41814211 (141819/042115)**
SMR No: **CO135-031001**
Excavation Licence: **E424**
Excavation Duration/Year: **August 1987; August 1989**
Site Director: **J. O'Sullivan (University College Cork)**

Lisnagun is a univallate enclosure situated on a gentle south-eastern slope at 60m OD, which was excavated as part of a community initiative by the Clonakilty *Macra na Feirme*. Excavation revealed evidence for a central round house, various outbuildings, three souterrains and other structures and features, but the phasing of the site was very difficult to establish as modern ridge and furrow cultivation had truncated almost all the features and stratigraphic evidence.

Possible stakeholes, pits and a shallow interrupted ditch were discovered beneath the enclosure banks. The ditch had steep sides and a U-shaped base and measured 1.3m wide and 0.5m deep. A rock-cut trench also traversed the outer south-eastern entrance area. The evidence was too slight to establish whether these features at Lisnagun represented part of a pre-enclosure field system or the remains of an earlier settlement enclosure.

The surviving enclosure had an external diameter of 53m and an internal diameter of 35m. Where it survived, a low broad counterscarp bank, 0.5m high and 1.4m wide was identified outside the ditch. The main bank survived to a max height of 1.4m over the original ground surface. Its inner face was revetted by a low rubble dry-stone wall (0.65m high), along its eastern and southern sectors. The ditch was V-shaped in profile with a flat base and measured between 3.0m and 5.0m wide and up to 2m deep. Transient hearths, identified by thin spreads of charcoal over scorched soils or settings of stones, were revealed in the base of the ditch.

The entrance was located along the south-eastern sector of the enclosure and had been remodelled at least once. Its terminals were retained by a low dry-stone wall which formed a narrow two meter opening. An area of gravel paving was also associated with this entrance-way. An earlier entrance arrangement which possibly formed an entrance screen and gateway was identified beneath the gravel-paving and took the form of a substantial trench (1.2m wide and 0.9m deep) filled with large packing stones and two adjacent large postholes.

A possible round house, defined by a shallow circular gully or trench (0.15m deep and with an overall diameter of 5.7m), was excavated in the centre of the enclosure. No entrance, structural features or hearths were recovered though its central location does support its interpretation as a round house. A concentration of stakeholes and linear slot-trenches were excavated in the area adjacent to the inner face of the enclosure bank on either side of the primary entrance. These were interpreted as small rectilinear outbuildings with floor plans of between six and eight square metres (Fig. 78).

Three earth-cut souterrains were excavated in the interior of the site and typically comprised a series of low barrel-vaulted chambers connected by narrow creep-ways and ventilated by stone air ducts. Burnt sediments, probably hearth debris, from the backfilled entrance to Souterrain I yielded a radiocarbon date spanning the late-ninth/tenth centuries and was regarded as a *terminus ante quem* date for the construction of the souterrain.

The location of the entrance of two of the souterrains (I and III) within the circumference of the gully of the possible round house, tentatively suggests that at least one may have been entered from this structure. As round houses are less common after the tenth century (Lynn 1978), It is quite possible that the round house and Souterrain I were associated with each other and in use during the ninth century.

It appears that the three souterrains represent a gradual succession of use and replacement than a single activity phase. One of the chambers of Souterrain I was later adapted as a stone-lined pit after the other creep-ways and chambers were backfilled. Finds from the backfill inside the souterrains included burnt sediments from wood charcoal, hazel nut shells, animal bone and shellfish fragments as well as various iron objects, iron slag, a blue glass bead, possible hone and hammer-stones and large perforated stones.

A metalled surface in the eastern area abutted the retaining wall of the inner face of the bank and extended for up to 8m into the interior. It was continuous with the gravel paving in the entrance-way and completely overlay the slot-cuts and stakeholes of the possible outbuildings. The metalled surface contained a considerable amount of burnt occupation debris including small crushed fragments of charcoal, animal bone and shell fish.

A deposit of stony soil (up to 0.8m in depth) sealed the archaeological features in the south-eastern down-sloping quadrant and may have been part of an attempt to raise and dry this area. Finds from this deposit included possible hone and hammer-stones and an iron blade. It could not be established if this stony deposit related to the occupation of the enclosure or was associated with later post-medieval cultivation activity. Further features associated with possible post-medieval cultivation activity included a secondary western entrance and ridge and furrows.

A small quantity of animal bone was recovered from the site. Only 6% of the total animal bones (179) was identifiable and contained the remains of cattle, sheep/goat, pig and red deer. The plant remains from the site represent a typical crop regime from the period with oats and barley dominant and smaller quantities of wheat and rye also present. Two pits pre-dating the enclosure contained a high incidence of wheat and may represent an earlier crop regime. Forty-seven pieces of iron slag was recovered, the majority from disturbed contexts or inside the fills of the souterrains.

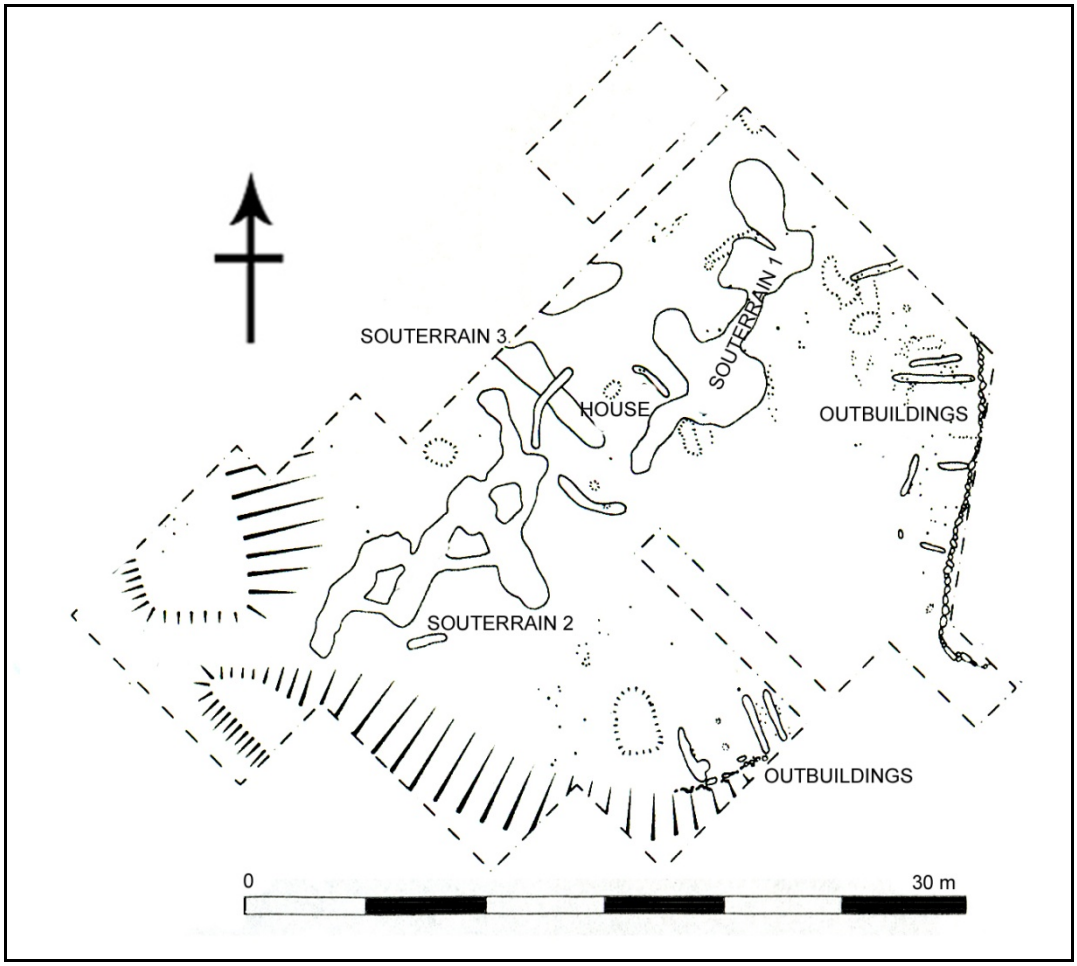


Fig. 78: Plan of interior of Lisnagun, Co. Cork (after O'Sullivan et al. 1998, 38).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-3178	Charcoal from domestic debris in backfilled entrance of Souterrain 1	1110±35	**A.D. 877-1001**

Reference:

O'Sullivan, J., Hannan, M., & Tierney, J. 1998. Excavation of Lisnagun ringfort, Darrava, Co. Cork, 1987–89. *Journal of the Cork Historical and Archaeological Society*, 103, 31–66.

Oldcourt, Co. Cork
Early Medieval Settlement Enclosure & Souterrain
Grid Ref: **W08663148 (108663/031486)**
SMR No: **CO141-118001**
Excavation Licence: **N/A**
Excavation Duration/year: **1959?**
Site Director: **C. O'Cuileanain (Cork Historical and Archaeological Society)**

An excavation of a univallate earthen enclosure at Oldcourt in the late 1950s was financed by a state grant administered through the Royal Irish Academy and the Special Employment Schemes Office, Dublin. The site consisted of a single bank and external ditch enclosing two oval shaped buildings, associated hearths and a souterrain. The enclosure is situated on a slight rise of ground just below the 30.5m contour mark commanding views of a considerable area of the surrounding countryside.

The site consists of a univallate circular enclosure with an internal diameter of 23m (Fig. 79). The bank, built from boulder clay from an exterior ditch, was approximately 3.5m high at its highest point in the south and between 0.9-1.5m high along the north-east quadrant. A revetment comprising a rough facing of loose built stones was identified along the inner face of the bank in the southern and eastern cuttings. A trench-like feature which had been refilled was excavated beneath the bank of the enclosure along its western side and provided evidence for some form of activity before the enclosure was erected.

The exterior ditch had a depth of 1.95m and a maximum width of 4.5m. Spreads of charcoal in various deposits of the fill indicated that fires had been lit inside the ditch on a number of occasions. The entrance was situated on the eastern face of the enclosure and was defined by a short palisade-revetment trench on its south side and a stakehole on the north suggesting the presence of a wooden gate structure. It was surfaced with a rough cobble paving which lead out across a causeway of large boulders and clay which crossed over the exterior ditch obliquely.

The excavation of the interior revealed a number of pits, three hearths, trenches and a large collection of post holes. The considerable accumulation of soil blackened by charcoal and decayed organic matter was suggestive of a relatively long period of occupation. A souterrain was excavated in the southwest quadrant and consisted of a passage linking four chambers. A pit beneath a flag in one of the recesses of a chamber contained a bronze-coated iron bell placed in moss.

Two house plans were identified from the large collection of post holes, hearths and trenches. House A was probably the earliest structure as it is centrally situated with its entrance facing the entrance of the enclosure. It had one internal hearth and an oval floor plan of roughly 10m-12m, defined by post holes, stone settings along its northern side and drainage trenches on its higher eastern face. House B was situated to the south of House A and was also oval in plan with measurements of 10.4m-11.5m along its short and long axes. It may have been erected slightly later than House A since it overlapped this structure to some extent. Two hearths were probably associated with this structure which was defined by post holes and a drainage trench forming a concentric arc around its walls.

The excavation established that soil had been moved from the higher eastern half of the site to the lower opposite area in an attempt to level the interior of the enclosure at a subsequent period. The soil which had been moved belonged to the primary occupation phase of the site making it impossible for the excavators to stratigraphically analysis the finds or to accurately assign post holes and other features to various levels.

The chief iron tools recovered included a ferrule, two tanged knives, a chisel and a number of slotted and pointed objects. Items of personal adornment included three fragments of a jet

bracelet, a segmented bead of blue glass and a bronze ring. A possible iron vessel escutcheon and a bronze-coated iron bell were two other remarkable finds.

Small-scale ironworking was evident by the presence of one almost complete furnace bottom and fragments of eight others, as well as residues of light glassy slag. Some pieces of rock limonite, one of which appeared to have been roasted, were also suggestive of that the local limonite was being used as an ore. No significant quantity of animal bones, or evidence for arable farming (e.g. quernstones), were recovered during the excavation at the site.

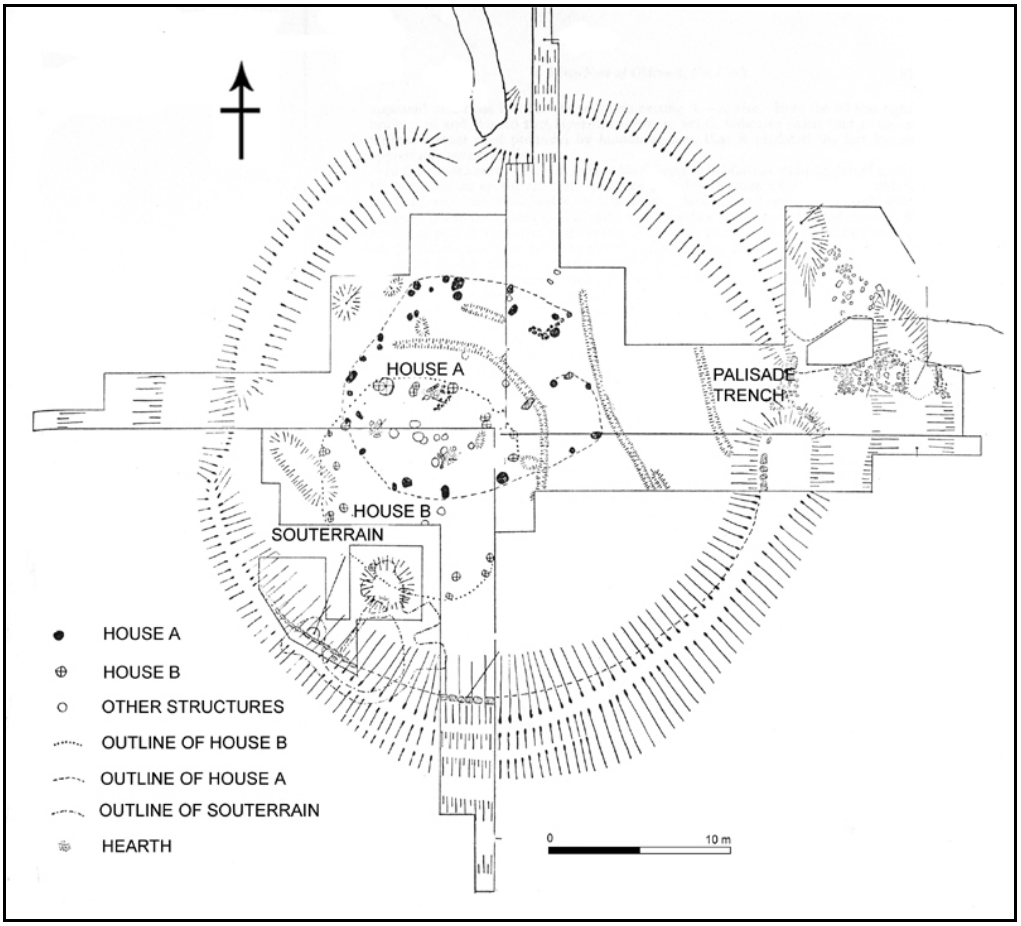


Fig. 79: Plan of Oldcourt, Co. Cork (after Murphy & O'Cuileanain 1961, fig. 2).

References:

Murphy, T. F. & O'Cuileanain, C. 1961. A ringfort at Oldcourt, Co. Cork. *Journal of the Cork Historical and Archaeological Society*, 66, 79–92.

Park North, Midleton, Co. Cork
Cave
Grid Ref: **W91298009 (191291/080093)**
SMR No: **CO076-004**
Excavation Licence: **N/A**
Excavation Duration/Year: **Summer 1942**
Site Director: **J.C. Coleman**

Bones and signs of human habitation were discovered in an undisclosed cave near Midleton in 1865. The cave at Park North, situated at a partly quarried hollow ('Foxes Quarry') and excavated in the summer of 1942, revealed evidence for an eighth/ninth century habitation deposit, and was tentatively identified as the site of this earlier find.

Four caves entrances (A-D) were identified in the quarry face. Cave C was the largest of the group and was selected for excavation after the opening of a test-pit (Fig. 80). It contained an entrance- 6m wide and 3m high which led into an outer chamber (9m by 4.5m). The floor of the outer chamber was covered with loose limestone blocks. A series of low level water-tunnels were identified in the inner tunnels of the cave. The lowest deposit of the outer chamber of Cave C consisted of stiff alluvial clay formed by flood waters entering the cavern. Numerous rock fragments and a quantity of animal bone- cattle (75%) followed by sheep/goat, red deer (antler fragments), pig and dog were embedded within the deposit.

A sandy clay bed, possibly the result of prolonged and deep flooding within the cave, lay above the stiff alluvial clay in the outer chamber of Cave C. Traces of charcoal occurred mostly near the top of the bed but no continuous hearth was observed. The remains of cattle, pig, and red deer (one antler tine) were recovered from this layer.

An extended thick black habitation layer of clay and charcoal (0.15m-0.28m deep) overlay the sandy clay bed in the outer chamber. Numerous bone fragments were scattered through the deposit and were dominated by cattle (50%), sheep or goat (45%), followed by very small quantities of pig, red deer, hare, rabbit, dog, goose, fowl, bird and field mouse. Many of the larger bones belonging to cattle, sheep and pig were broken in marrow extraction. A number of thin clay layers separating the black deposit were identified in places. While this feature was very scanty, it appears to indicate that the occupation of the cave may not have been continuous.

The early medieval finds were all from the black habitation deposit and comprised a bone needle, two bone pins, two portions of a decorated bone comb handle, one stone spindle whorl, two whetstones, hammer-stone, fifteen flint fragments, iron knife point, small tanged iron knife, iron nail or rivet, iron 'holed knife', bronze ring shaped object, three right angled fragments of silvered bronze, some corroded bronze fragments and a decorated bronze bar (possibly from a mounting of an eighth/ninth century shrine).

It was suggested that the black habitation surface dated to the eighth/ninth century A.D. The outer chamber of Cave C was a suitable place for dwelling as it offered advantages of shelter, adequate living space and a convenient water-supply either from the water passages in the low level inner tunnels or from a nearby stream. The cave was subsequently abandoned as a habitation site and the present surface of earth and stones were covered over the black layer.

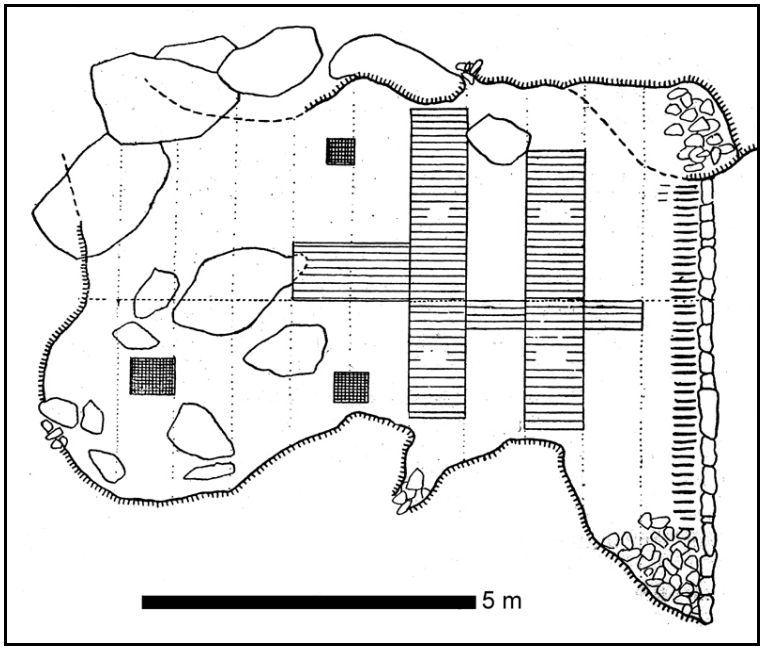


Fig. 80: Excavated areas in Middleton ‘Cave C’, Co. Cork (after Coleman 1941-2, fig. 2).

References:

Coleman, J. C. 1941-2. Cave Excavation at Midleton, Co. Cork. *Journal of the Cork Historical and Archaeological Society,* 47, 63-76.

Raheens I, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W76566358 (176569/063589)**
SMR No: **CO087-047**
Excavation Licence: **N/A**
Excavation Duration/year: **June - November 1989**
Site Director: **A.M. Lennon (University College Cork)**

Two enclosures, 400m apart, were excavated in Raheens townland in advance of an industrial development. Raheens I was recorded on the First Edition of the Ordnance Survey 6" maps, although it appears to have been subsequently levelled in the nineteenth century. The excavation revealed two concentric ditches enclosing two round houses, a scatter of postholes and stakeholes and one large pit as well as some peripheral activity to the west of the site. Phasing of the site was impossible as extensive modern ploughing activity had removed all occupation debris and truncated almost all the features (Fig. 81).

An isolated stone-lined pit and a scatter of post and stakeholes and other pits were excavated to the west of the enclosure. One line of stakeholes appears to have functioned as a small wind-break while a trench containing several stakeholes and two pits had another possible structural purpose. The lack of occupational debris from these features suggests that they were temporary structures and do not represent external habitation sites. The features also had a close stratigraphic relationship to the enclosing ditch suggesting that they may have been associated in some way with the construction of the enclosure ditches.

The site contained two concentric ditches, set 4.0m apart, which had diameters of 34m internally and 45m externally. There was no direct evidence for associated banks. Two sections through the outer ditch revealed that it was U-shaped in profile and measured up to 1.9m deep and 2.20m wide at the surface; and the sections through the inner ditch revealed it was almost bowl-shaped in profile and measured up to 1.6m deep and 3.0m wide at the surface. Both ditches appear to have remained open for a period of time before being finally deliberately in-filled. One fragment of a sheep/goat horn core was found inside a fill in the inner ditch.

A gradually curving U-shaped trench (0.50m deep and 1.80m wide at the surface) was identified immediately inside the inner enclosing ditch along its western side. The trench was excavated extending along the inner perimeter of the ditch for a distance of 18m and was never no more than 1.0m from it. It was tentatively interpreted as a slot beam trench which may have held uprights for a wooden palisade along the western side. A dump of charcoal and heat-shattered stones containing several sherds of an unglazed possible early medieval French ware were recovered in one of the upper fills of the trench and suggest that this 'backfill took place in either the last stages of occupation or after the site was abandoned'.

The large cutting in the interior of the site revealed that the internal features had been heavily truncated due to extensive modern ploughing activity. Several dug features were identified but the lack of occupation deposits made stratigraphic associations impossible. A square shaped pit (2m by 2m, and 0.80m deep) was excavated close to the inner ditch and contained within its fills a considerable amount of charcoal, animal bone fragments, a perforated hone stone and an iron knife blade. Two post-pits were situated in the western corners of the pit and may have provided some form of superstructure for this possible storage pit.

The principal internal features were the two round houses. House 1 and House 2 measured 5m and 6m in diameter respectively and appear to have been principally constructed using slot-trenches and double lines of stakeholes. The entrances to House 1 and House 2 were along the southern and south-eastern sides. No indications of a hearth or internal supports or divisions were uncovered in either structure though these were probably destroyed by recent ploughing activity.

A total of thirteen struck flint including one possible Bronze Age tanged and barbed arrowhead were finally recovered on the site. A small quantity of animal bone fragments was recovered from postholes, pits and ditch fills on the site. Only 11% of the total animal bones (188) was identifiable and was dominated by cattle and sheep/goat to lesser extent.

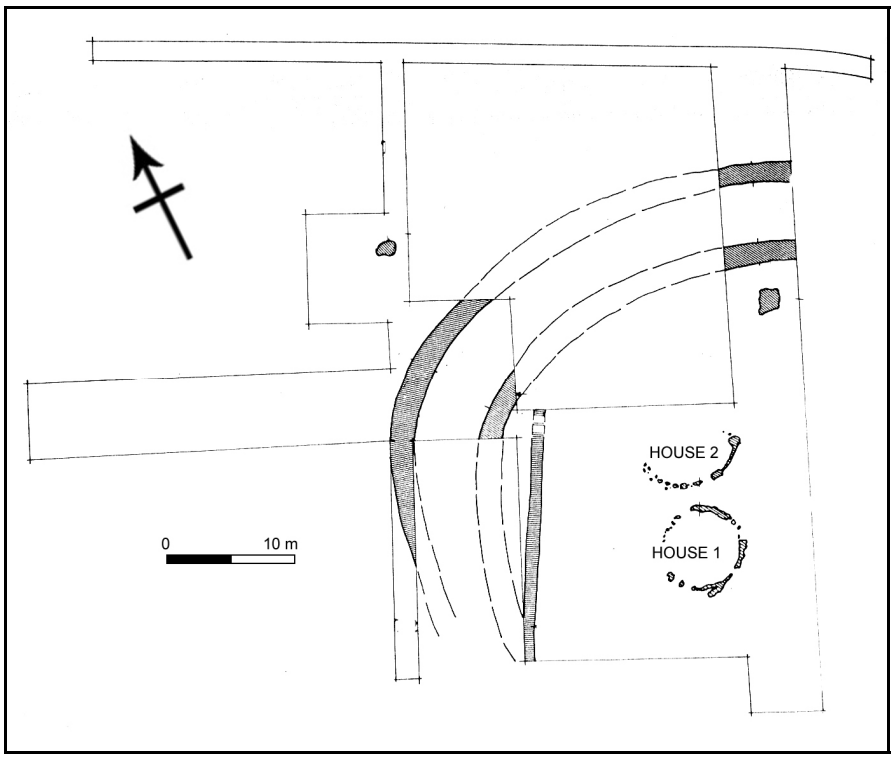


Fig. 81: Plan of excavated area at Raheens I, Co. Cork (after Lennon 1993, 76).

Reference:

Lennon, A. M. 1993. Excavation of a ringfort, Raheens I, near Carrigaline, Co. Cork. *Journal of the Cork Historical and Archaeological Society*, 98, 75–89.

Raheens II, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **W76366348 (176361/063481)**
SMR No: **CO087-046**
Excavation Licence: **N/A**
Excavation Duration/Year: **June-November 1989**
Site Director: **A.M. Lennon (University College Cork)**

Raheens II was situated 400m southwest of Raheens II and was excavated in advance of an industrial development. The excavation revealed a univallate enclosure containing at least eleven structures and three souterrains. The site was visible prior to excavation but appears to have been levelled and extensively ploughed out more recently.

The enclosure had a diameter of 28m and was enclosed by a much denuded bank. This bank averaged less than 0.6m in height and as a result of the levelling of the site did not survive on the northern and western sides of the enclosure. The ditch was U-shaped with a relatively flat base and measured 2.1m deep and 4.3m wide at the surface. The main ditch fill constituted a single phase of backfilling. The entrance was located along the southwest perimeter and was defined by two re-cut post positions, set 1.0m apart which may have functioned as upright supports for a gate. A metalled surface extended northwards from the post positions towards the interior of the site.

A total of eleven structures, some almost complete and others with sections surviving, were uncovered in the interior of the site (Fig. 82). In all cases, a trench (0.2m-0.3m in width, and 0.1m-0.2m in depth) was excavated which would have supported the posts/stakes of the structures walls. Seven of the eleven structures had evidence for post and stakeholes within the trenches though they were for the most part irregularly spaced out and not consistent throughout the entire length of the construction trenches. All the structures were circular except for one sub-rectangular example. The sub-rectangular structure (4.6m by 6.5m), as well as six other circular structures (4.5m-5.6m), was suitably large in diameter to have functioned as domestic dwellings. Four other structures were smaller in diameter (2.4m-3.5m) and may have been used as outhouses or storage buildings.

A burnt layer containing charred hazel twigs, oak charcoal fragments and burnt hazel nut shells as well as several fragments of a shale bracelet partially covered one of the structures and may have resulted from the destruction of its roof or side walls. No evidence of hearths or fire settings was found in association with the structures. The structures were not all contemporary with each other, and appeared to pre-date the souterrains which belonged to the later activity on the site.

Two of these souterrains were excavated and a further one surveyed. Souterrain 1 was situated towards the southern area of the interior and consisted of a single chamber built using vertically and horizontally-laid limestone slabs. A substantial posthole, circular in outline was identified at the base of the souterrain and may have been used as a structural support during the erection of the structure. The roof of the souterrain appears to have been subsequently removed and the structure backfilled with occupation debris containing rubble, animal bone and charcoal.

Souterrain 2 was situated on the northern side of the enclosure and contained a long narrow entrance running from a single chamber into the eastern side of the interior. The possible remains of an uncompleted souterrain (3) were identified in the north-west area of the interior. A large construction trench was excavated but appears to have been subsequently backfilled. There was no evidence to suggest that the souterrain was earth-cut and that the roof had collapsed. The backfill of the feature consisted of occupation debris, animal bone (sheep and cattle), shellfish (oyster, whelk and periwinkle), fish bone and charcoal. A polished stone bead was recovered from the up-cast material of one of the souterrains on site.

A small number of un-stratified finds from the site consisted of two hone stones from the top soil and a perforated stone disc from under the spread of bank material which had been deposited after the site was levelled in modern times. A quantity of animal bone fragments was recovered, the majority belonging to the backfill of the two excavated souterrains. Only 14% of the total animal bones (425) was identifiable and consisted primarily of sheep/goat and then cattle.

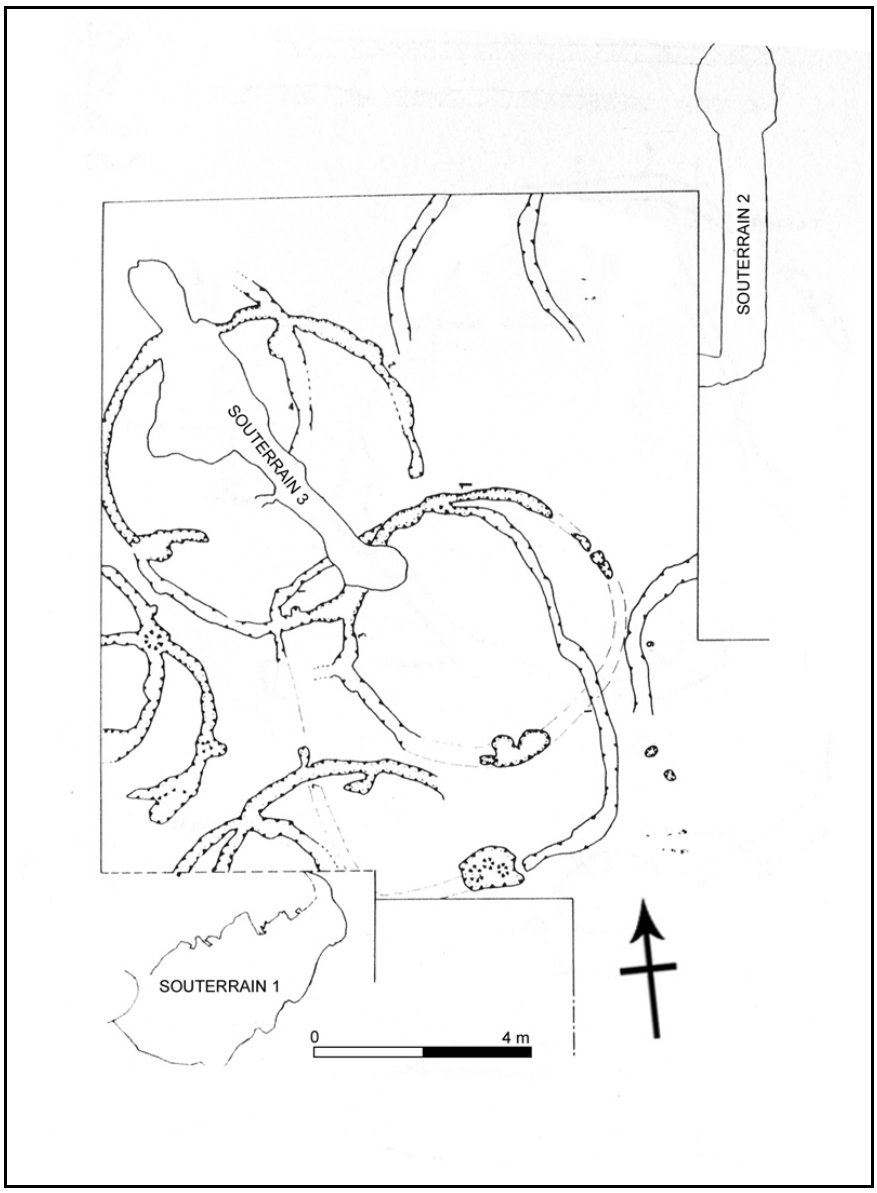


Fig. 82: Plan of some of houses and souterrains at Raheens II, Co. Cork (after Lennon 1994, 52).

Reference:

Lennon, A. M. 1994. Summary report on Excavation of Ringfort, Raheens No. 2 near Carrigaline, Co. Cork. *Journal of the Cork Historical and Archaeological Society*, 99, 47-65.

Skahanagh North, Co. Cork
Early Medieval Settlement Enclosure
Grid Ref: **V77518594 (177510/085940)**
SMR No: **CO 053-10**
Excavation Licence: **03E1132**
Excavation Duration/year: **July - August 2003**
Site Director: **D. Murphy (ACS Ltd.)**

Topsoil stripping in advance of road construction revealed a series of archaeological features including a sixth/seventh century enclosure and a C-shaped structure. The levelled enclosure was most likely of univallate construction and had an approximate internal diameter of 22m. No evidence for an enclosing bank was identified during the excavation, but a curvilinear section of the western portion of the ditch was excavated. This was U-shaped in profile (maximum dimensions of 3.4m wide and 1.2m deep) with sloping sides and a flat base, and had a 4.0m wide entrance at its northwest end.

This ditch contained four main fills. Charcoal from the basal fill produced a radiocarbon date in the seventh century (see below); and a metal object was recovered from its top fill. A stone deposit (2m in diameter and 0.2m in depth) was found within the top fill of the ditch at the northwest end.

A C-shaped structure was situated to the southwest of the enclosure and was contemporary with it. It was roughly contemporary though pre-dated by a number of internal pits, deposits and features. The earliest features comprised two sub-circular charcoal-rich deposits containing oxidized clay and seeds- mainly oats followed by barley. There was no evidence for *in situ* burning and these deposits may represent the dumping of fire debris.

Two gullies, one hearth and a pit represented the next phase of activity pre-dating the C-shaped structure. One curvilinear gully splaying outwards at its southward extent was identified as a flue of a possible kiln. Cereal grains- primarily oats as well as wheat- were found in its basal fill. A pit filled with fire-debris cut this feature and may have destroyed its hearth.

A second gully or flue (0.5m by 2m and 0.2m in depth) truncated the first gully but did not extend beyond it, so it is likely that these features were broadly contemporary and in use together. Both gullies were cut by the C-shaped foundation trench. If indeed these features were the flues of kilns, they were then out of use before the area was enclosed.

A sub-circular pit and a partially stone-lined hearth were roughly contemporary with the gullies. The sub-circular pit (1.5m by 1.12m and 0.3m deep) contained charcoal, oxidized clay and sandstone and was used to depose of fire-debris. The hearth (1.5m by 0.8m and 0.3m deep) was also cut by the C-shaped trench and contained charcoal, burnt bone and cereal grains, mainly oats followed by barley. Charcoal from its fill produced a date in the seventh to ninth century range (see below). The C-shaped trench enclosed a space with a diameter of 7m by 9m internally and 10m by 10m externally. It is unclear if the structure was a roofed dwelling though it instead may have been erected to act as a wind break shielding the internal hearths and pits from the prevailing south-westerly winds. The location of an entrance, 3.7m wide to the north-east facing the enclosure supports this interpretation. Charcoal, burnt bone, carbonized wood and a large quantity of cereal grains (primarily oats, barley and some wild plants) were recovered from its eight deposits were recovered, and a radiocarbon date in the in the seventh to ninth century range (see below) was recorded from the charcoal.

Roughly contemporary with the C-shaped foundation trench were two internal pits and two pits to the southeast. The internal features comprised a pit containing a hearth and a sequence of fire debris which cut the earlier gully and a sub-circular pit. Charcoal, oxidized

clay and a large quantity of cereal grains were recovered from the various deposits within the sequence of fire debris. The pit (3.5m by 1.3m and 0.8m deep) truncated the enclosing C-shaped trench and was the latest feature on the site. The hearth (1.2m by 0.2m and 0.2m deep) was stone-lined and cut into the southeast side of the pit. It had a heavily oxidized base and contained charcoal, burnt bone carbonized wood and a large quantity of seeds, primarily those of oats followed by barley. A second pit (0.8m in diameter and 0.4m deep) was cut into the top fill of this pit. Two burnt fragments of bone and a copper-alloy implement, most likely used as an ear scraper or a type of grooming implement, was recovered from its lower fill. Charcoal from its lower fill produced a radiocarbon date in the sixth/seventh century (see below).

Two sub-oval pits to the southeast were excavated, one of which contained a hearth at its base, from which charcoal, burnt bone and a large quantity of seeds- primarily oats and barley- was recovered. An oak sample from its fill produced a radiocarbon date in the seventh to ninth century range (see below). Two other possible sub-circular hearths were located to the west of the C-shaped structure. The first hearth contained charcoal, burnt bone fragments and oxidized clay within its fills; and the other possible hearth contained charcoal and small stones.

Fire debris, burnt bone and a large quantity of grains (principally oats and to a lesser extent barley, with smaller amounts of rye, wheat and wild plants) indicate that the area to the southwest was used for food preparation and cooking. The possible kiln flues tentatively indicate cereal-drying in this area as well. The small quantity of burnt bone could not be identified to species but contained both large mammal (assumed to be cattle, horse or large deer) and medium-sized mammal (assumed to be sheep/goat, pig or small deer). The few finds from the site consisted of modern ceramic sherds, a metal object and two copper-alloy implements.

(**No plans were available for this site**)

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta - 201060	Charcoal- identified as oak- from fill of C-shaped trench	1240±60 BP	**A.D. 660-896** A.D. 923-940
Beta - 201061	Charcoal- identified as oak- from fill of hearth to the southeast of C-shaped trench	1240±70 BP	**A.D. 657-899** A.D. 918-954 A.D. 956-961
Beta - 201062	Charcoal- identified as ash, hazel and oak- from lower fill of secondary pit cut into top fill of pit	1440±50 BP	A.D. 471-477 **A.D. 535-673**
Beta - 201063	Charcoal- identified as oak- from hearth inside C-shaped structure	1290±60 BP	**A.D. 649-878**
Beta - 201064	Charcoal- identified as ash- from basal fill of enclosing ditch	1380±40 BP	**A.D. 582-694** A.D. 704-705 A.D. 748-765

References:

Murphy, D. 2006. Final Report on Archaeological Excavation of Skahanagh North 3- 03E1132. Unpublished ACS Report

County Donegal

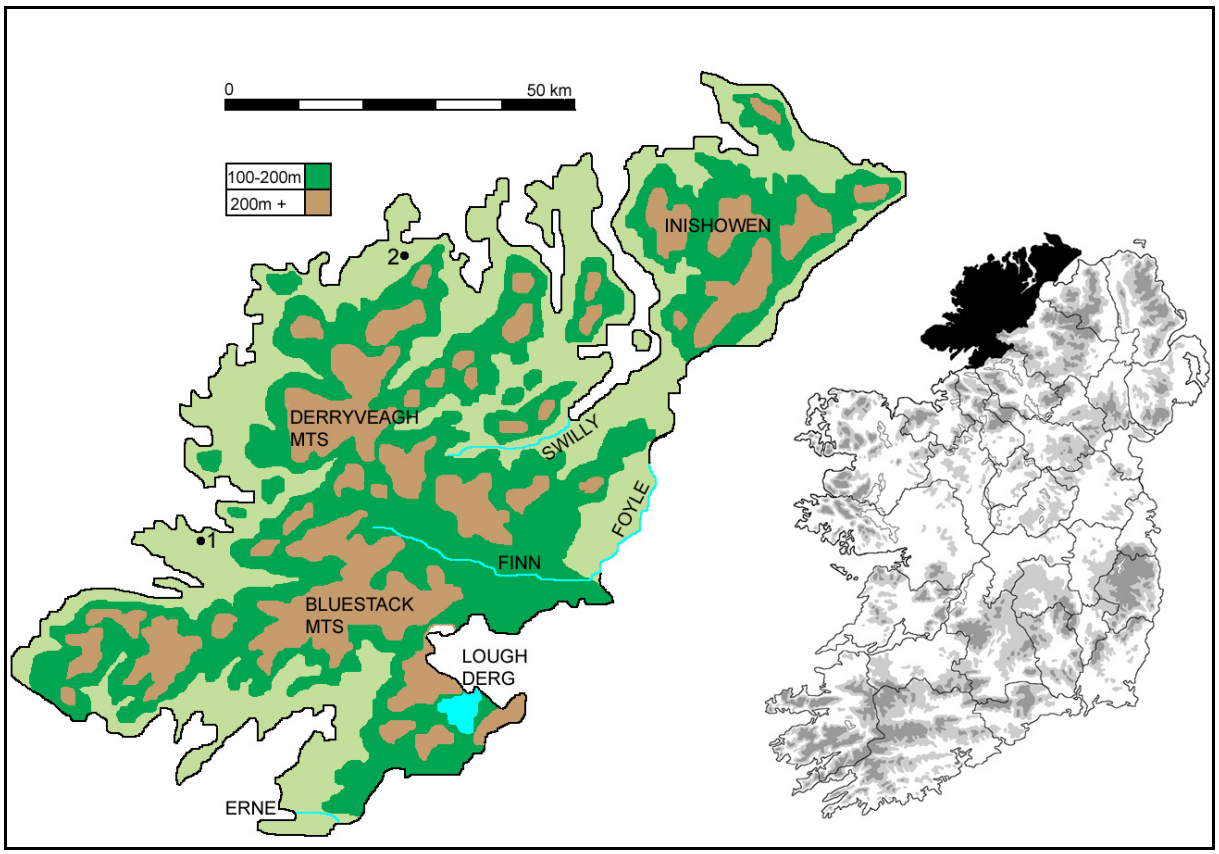


Fig. 83: Significant early medieval excavations in Co. Donegal.

1	Dooey	**2**	Rinnaraw

Dooey, Co. Donegal
Early Medieval Settlement Enclosure.
Grid Ref: **B76000170 (176001/401707)**
SMR No: **DG065-003003**
Excavation Licence: **N/A**
Excavation Duration/Year: **May – September 1959.**
Site Director: **A.B. Ó Ríordáin & E. Rynne (University College, Galway)**.

The site is located on a plain of sandhills that juts out into Trawenagh Bay/Gweebarra Bay. Stone tools, pottery, metal-working and human remains had been found in the area from the late nineteenth century. Larger scale investigation was undertaken in the late-1930s/early-1940s, and this revealed 'dozens' of bronze pins, as well as an iron penannular brooch, iron slag, a 'few' decorated beads, and a 'number' of sherds of decorated pottery. Human skeletal remains were discovered eroding out of a sandhill during this period, and a larger scale excavation was eventually undertaken in 1959 as part of the Special Employment Scheme. This excavation revealed four phases of occupation.

The earliest phase is represented by an unenclosed area (56m x 64m), which contained a number of shallow fire pits. The central part of this earlier occupation area (38m x 40m) was later enclosed by a ditch, which filled in relatively quickly with sand. Habitation appears to have continued on site as refuse is found both inside the area defined by the in-filled ditch and outside it. A number of postholes and a possible stone-built structure constitute the structural remains from this phase of occupation. The site was later used as a Christian cemetery (almost 70 skeletons were excavated in 1959), effectively destroying any structural remains belonging to the main occupation phases.

About 2,000 finds were recovered from the 1959 excavation, but most were not closely stratified. The site appears to have had a predominantly industrial function. Large quantities of *Nucella (Purpura) lapillus* shells (dog-whelk) were found, which have been interpreted as indicating that purple dye may have been extracted on site. Over 120 iron knives – most with bone or antler handles attached – were also recovered; as well as a number of industrial iron tools. Fifty complete, or near complete bronze pins were recorded, as well as several bronze belt buckles and ring-brooches, and fragments of crucibles which showed evidence for bronze-working. Some of these bronze objects were also found to have had amber, enamel, or millefiori settings. A number of glass beads were found, but, unlike the bronzes, there was no evidence for glass-making on site.

[**No plan exists for this site**].

References:

McGill, P. J. 1947. Notes on Shore Dwellers and Sandhill Settlements (Dooey, Lettermacaward, Co. Donegal). *Journal of the County Donegal Historical Society*, VI, 27–31.

Ó Floinn, R. 1995. Sandhills, Silver and Shrines – Fine Metalwork of the Medieval Period from Donegal, in W. Nolan, L. Nonayne & H. Dunlevy (eds.) *Donegal: History and Society*. Dublin, Geography Publications, 85–148.

Ó Ríordáin, A. B., & Rynne, E. 1961. A settlement in the sandhills at Dooey, Co. Donegal. *Journal of the Royal Society of Antiquarians of Ireland* , 91, 58–64.

Rinnaraw, Co. Donegal
Early Medieval Settlement Enclosure.
Grid Ref: **C03803680 (20380/43680)**
SMR No: **DGO 016-016**
Excavation Licence: **N/A**
Excavation Duration/Year: **Summer 1987; Summer 1988; Summer 1989; Summer 1990; Summer 1991; Summer 1992.**
Site Director: **T. Fanning (University College, Galway)**.

The site was described in the *Archaeological Survey of Co. Donegal* as a 'cashel', although all that was visible prior to excavation was a seven metre arc of large stones along the edge of a rock platform (20-25m in diameter) (Fig. 84).

The early excavations were focused on an area of mounds in the centre of the enclosure (Fig. 85). Excavation revealed this as a rectangular stone house (7m by 5m internally). A large internal paved area was discovered, as well as possible internal divisions and post holes which may have held the roof. The hearth was located just north of the centre of the house, and occupation deposits from above the paved floor showed fragments of charcoal and burnt bone, as well as iron slag. A stone-lined drain ran out of the house under the wall beside the entrance. This appears to lead from the paved area, and led the excavator to describe the structure as a 'byre-house' (Figs. 86 & 87), with the paved area acting as an animal pen. Such structures were common in the later medieval period and through into the post-medieval period, although similar 'byre houses' have been excavated at Norse sites in the Western Isles.

A shell midden including shellfish (winkles; cockles; and barnacles), as well as iron slag, two iron objects, a pot sherd, and a fragment of tuyère was found in the area of the north wall of the house. The exact relationship of this midden to the wall is not understood, although it has been stated that it carried into the rubble wall core. A second shell midden was found against the outer face of the wall at the entrance. This included shellfish (winkles and limpets) as well as three pot sherds. The dates from shells from these middens suggest that they are substantially later than the occupation of the house, however charcoal from one of the middens is contemporary with the primary occupation (see below). It seems likely therefore that some form of activity continued on site through the medieval period, and into the post-medieval period.

Little was discovered in the 'yard' of the house. Structural remains in the east of the enclosure revealed possible iron-working activity with considerable amounts of iron slag (30kg were recovered from the site) and fragments of furnace bottoms. The largest number of souterrain ware sherds from the site was also recovered from this area.

Finds from the site included a number of stone artefacts including seven 'burnishers' or polishing stones; five fragments of serpentine rings; a large number of perforated stones (loom weights or net weights); a number of stone discs (interpreted as gaming pieces); and a number of quern fragments. Aside from the iron knife and other object found in the shell midden, a small number of badly corroded iron objects were found – of these, four knife fragments were identified.

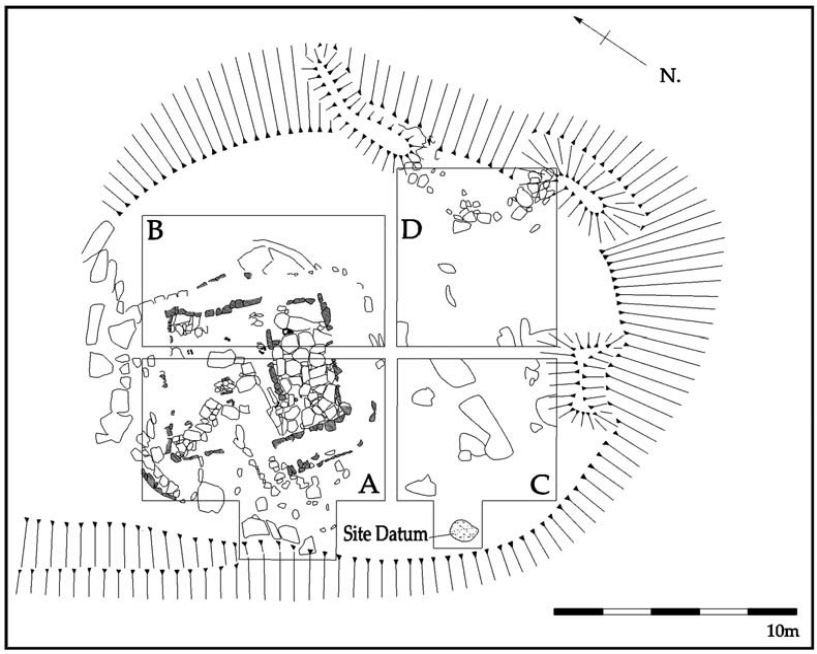


Fig. 84: Plan of Rinnaraw Cashel, Co. Donegal (after Comber 2006, 86).

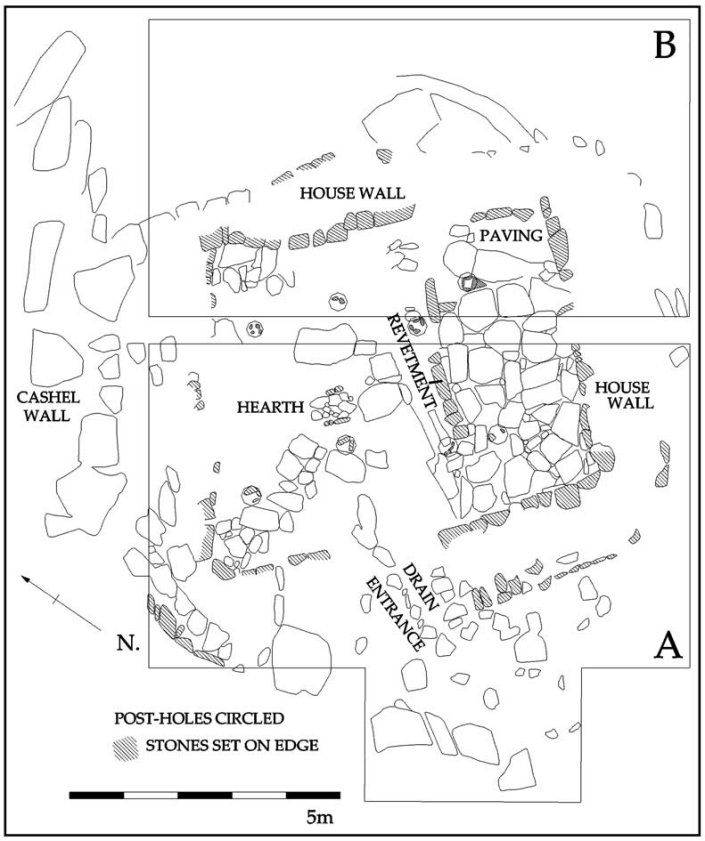


Fig. 85: House at Rinnaraw, Co. Donegal (after Comber 2006, 81).

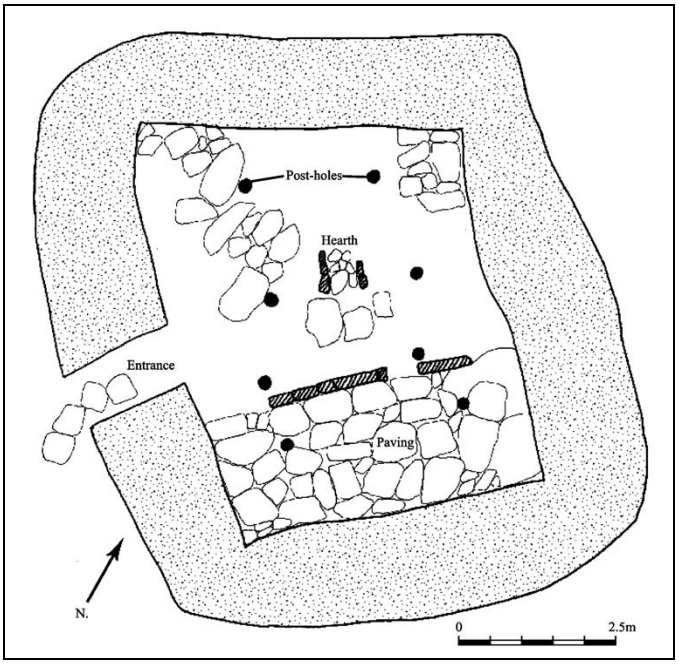


Fig. 86: Plan of ‘byre-house’ at Rinnaraw, Co. Donegal (after Comber 2006, 107).

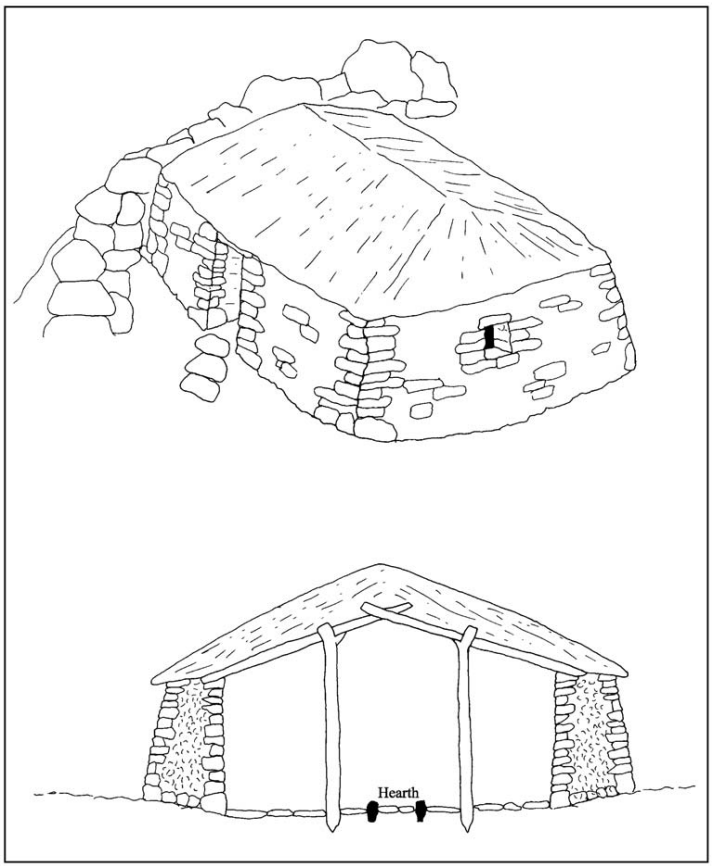


Fig. 87: Artistic reconstruction of ‘byre-house’ at Rinnaraw, Co. Donegal (after Comber 2006, 108).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

(* - calibrated with marine reservoir effect: KA Hughen, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell,
CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, PJ Reimer, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor,
J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1059-1086.)

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
GrN-18078	Shell from midden	910±50 BP	**A.D. 1344-1624***
GrN-18079	Shell from midden	790±50 BP	**A.D. 1454-1689***
GrN-18080	Charcoal from hearth	1330±60 BP	**A.D. 602-784**; A.D. 787-826; A.D. 840-863.
GrN-19755	Charcoal from wall	1085±25 BP	**A.D. 895-927**; **A.D. 935-1015**.
GrN-19756	Charcoal from north midden	1160±35 BP	**A.D. 777-908**; **A.D. 911-971**.
GrN-19757	Charcoal from wall	1070±35 BP	**A.D. 894-928**; **A.D. 934-1021**.
GrN-19758	Charcoal from hearth	1055±35 BP	**A.D. 895-925**; **A.D. 936-1027**.

References:

Comber, M. 2006. Tom Fanning's excavations at Rinnaraw Cashel, Portnablagh, Co. Donegal. *Proceedings of the Royal Irish Academy* (Section C), 106C, 67–124.

Fanning, T. 1987:011. Rinnaraw, Co. Donegal. www.excavations.ie

Fanning, T. 1988:011. Rinnaraw, Co. Donegal. www.excavations.ie

Fanning, T. 1989:019. Rinnaraw, Co. Donegal. www.excavations.ie

Fanning, T. 1990:025. Rinnaraw, Co. Donegal. www.excavations.ie

Fanning, T. 1992:032. Rinnaraw, Co. Donegal. www.excavations.ie

County Down

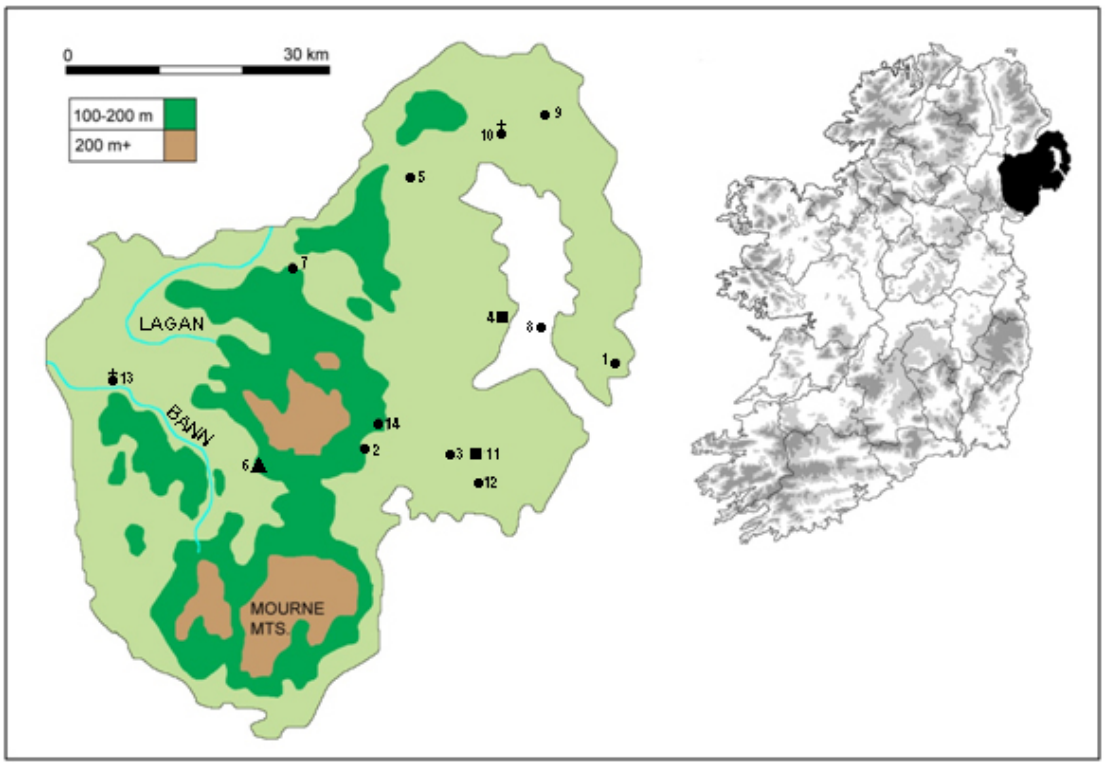


Fig. 88: Significant early medieval excavations in Co. Down.

1	Ballyfounder	**8**	Dunnyneill
2	Ballywillwill	**9**	Gransha
3	Castleskreen	**10**	Movilla
4	Clea Lakes Crannog	**11**	Lough Faughan Crannog
5	Crossnacreevy	**12**	Rathmullan
6	Drumadonell	**13**	Tullylish
7	Duneight	**14**	‘White Fort’, Drumaroad

Ballyfounder, Co. Down
Early Medieval Raised Enclosure.
Grid Ref: **J62074954 (36207/34954)**
SMR No: **DOW 032:014**
Excavation Licence: **N/A**
Excavation Duration/Year: **1950s**
Site Director: **D.M Waterman (for the Archaeological Survey of Northern Ireland)**.

The site, consisting of a 4m high mound with a summit diameter of 23m, was excavated as part of the Archaeological Survey of Northern Ireland. Erosion by cattle prior to excavation revealed that the site had been largely constructed through the accumulation of occupation layers.

A number of postholes in the centre of the enclosure indicate the presence of a timber building, possibly circular in plan, and approximately 5.4m in diameter. A hearth and cooking pit were uncovered within this general area, as were associated finds of souterrain ware and some burnt bone. A second building, also possibly circular in plan, was uncovered to the south of the central structure (Figs. 89 & 90).

Animal bone, mollusc shells, a bronze pin, part of a bone comb and souterrain ware were uncovered from these occupation layers. A fragment of E ware pottery, from a bi-conical pot, was also discovered in the primary occupation layer, as were a fragmentary iron ploughshare, chisel and door-hinge. Four quernstones from the site were subject to thin-sectioning and were identified as coming from the Mourne Mountains.

The site then appears to have been abandoned for a time (indicated by exposed, weathered soils) before being re-used as the base for an Anglo-Norman motte.

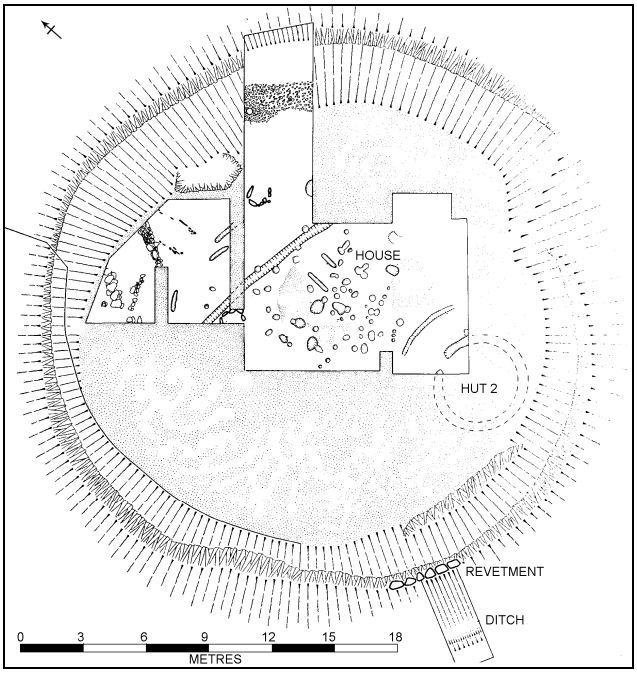


Fig. 89: Excavated areas at Ballyfounder, Co. Down (after Waterman 1958, 40).

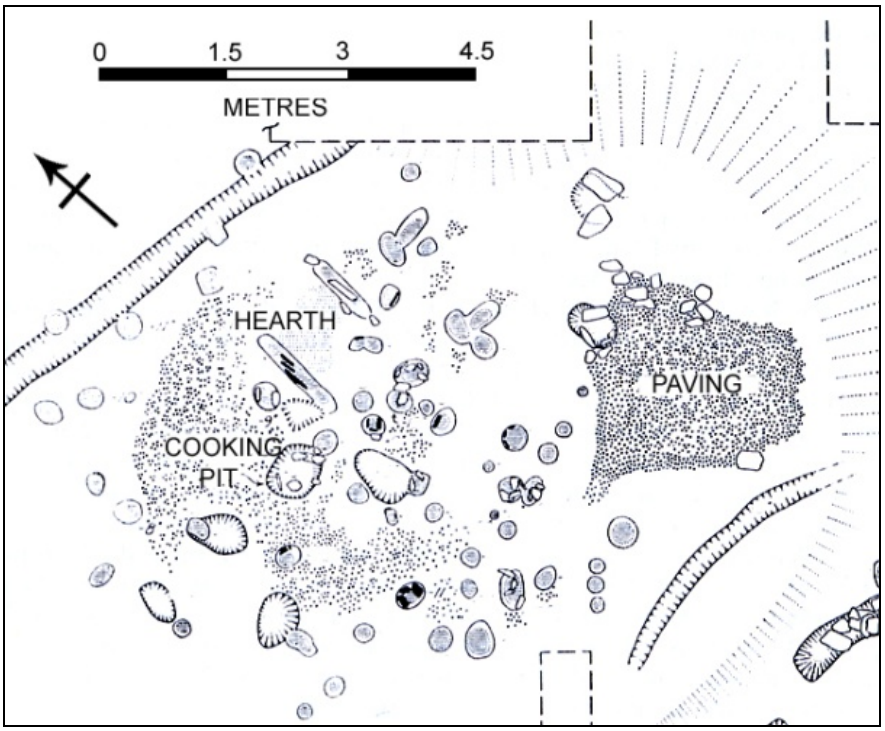


Fig. 90: House at Ballyfounder, Co. Down (after Waterman 1958, 41).

Reference:

Waterman, D. M. 1958. Excavations at Ballyfounder Rath, Co. Down. *Ulster Journal of Archaeology* (Third Series), 21, 39–61.

Ballywillwill, Co. Down
Early Medieval Settlement Enclosures.
Grid Refs: **J35184154 (33518/34154); J35584145 (33558/34145)**
SMR Nos: **DOW 036:025; DOW 036:024**
Excavation Licence: **N/A**
Excavation Duration: **July 1951**
Site Director: **D.M. Waterman & A.E.P. Collins (for the Archaeological Survey of Northern Ireland)**.

The site consists of two counterscarp enclosures (Ballywillwill I (internal dimensions of 30m by 25.5m) and Ballywillwill II (36m)) located within 400m of each other. Both sites were set on the points of promontories of a drumlin ridge; and both were excavated in 1951 as part of the Archaeological Survey of Northern Ireland.

The internal and external banks at Ballywillwill I both had stone revetments, and incorporated a well-defined gateway. Excavation revealed the presence of two shallow postholes which would have held the gate posts (Fig. 91).

Excavation of the interior of Ballywillwill I revealed a complex of dry-stone-walled features, including a possible hut site, a souterrain, and an enigmatic passageway.

A substantial amount of souterrain ware was found on site, as well as two fragments of corroded bronze and a stone spindle whorl.

Excavation of Ballywillwill II revealed that the site had been severely truncated by lazy-bed cultivation and no structural features were apparent. A number of sherds of souterrain ware were recovered from the site suggesting it was contemporaneous with Ballywillwill I.

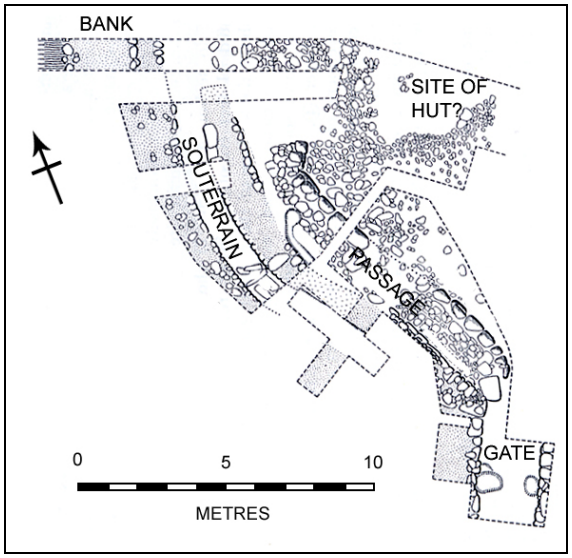


Fig. 91: Plan of entrance and structures at Ballywillwill I, Co. Down (after Waterman & Collins 1952, 76).

Reference:
Waterman, D. M. & Collins, A. E. P. 1952. The excavation of two raths at Ballywillwill, Co. Down. *Ulster Journal of Archaeology* (Third Series), 15, 71–83.

Castleskreen Co. Down
Early Medieval Settlement Enclosure.
Grid Ref: **J47304027 (34730/34027)**
SMR No: **DOW 037:037**
Excavation Licence: **N/A**
Excavation Duration/Year: **1952-3; 1955.**
Site Director: **C.W. Dickinson & D.M Waterman (Archaeological Survey of Northern Ireland)**.

The site consisted of an earthwork set on the top of a drumlin. The site was excavated in a number of small digs between 1952 and 1955 in order to inform the Archaeological Survey of Co. Down.

Excavation revealed an early medieval enclosure (34.5m in diameter) which was later re-modelled into an Anglo-Norman motte (Fig. 92). This enclosure underwent two phases of construction. In the first phase, the site was enclosed within a ditch, but with no presence of an accompanying bank. The dominant feature in the interior was an extensive hollow (7m wide and 1.8m deep) which was interpreted as a watering-hole for cattle. Finds from the occupation layer were limited to a few animal bones, a rim of souterrain ware, and a chipped sandstone disc.

In the second phase, a bank was raised around the site. Although only approximately 0.9m high, this bank was augmented by a timber palisade (indicated by the presence of a number of post-holes) located on the inner slope. Sherds of souterrain ware were recovered from this occupation phase, as were a blue glass bead, a fragment of a shale/lignite bracelet, and a fragment of a quernstone.

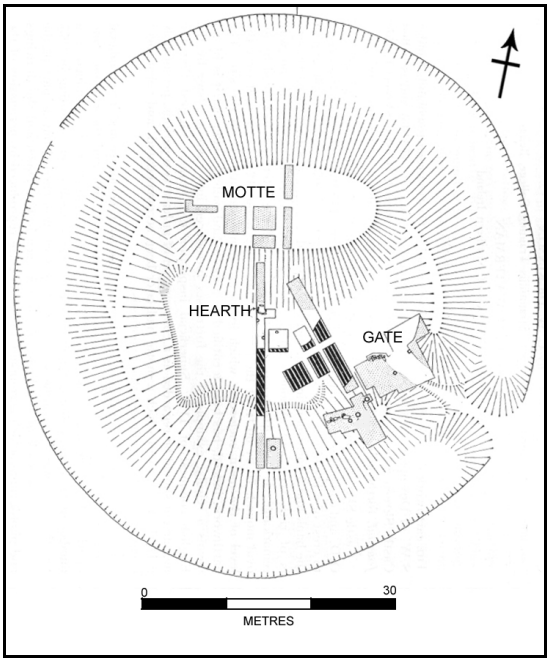


Fig. 92: Plan of excavations at Castleskreen, Co. Down (after Dickinson & Waterman 1959, 68).

Reference:

Dickinson, C. W., & Waterman, D. M. 1959. Excavations of a rath with motte at Castleskreen, Co. Down. *Ulster Journal of Archaeology* (Third Series), 22, 67–82.

'Clea Lakes' (Tullyveery td.), Co. Down
Early Medieval Crannog.
Grid Ref: **J50995494 (25099/35494)**
SMR No: **DOW 024:021**
Excavation Licence: **N/A**
Excavation Duration/Year: **June 1956.**
Site Director: **A.E.P. Collins (Ancients Monuments Branch, Ministry of Finance) & V.B. Proudfoot (Queen's University Belfast)**.

The early medieval crannog of Clea Lakes, Co. Down, was excavated in June 1956 as part of the County Down Archaeological Survey research programme (Fig. 93). The crannog had already been excavated in the nineteenth century, when finds including bronze pins, a stone disc and both early medieval souterrain ware and medieval coarse ware were found. Pat Collins and Bruce Proudfoot's excavations were limited to a narrow trench into the occupation deposits and down to the lower surface. The crannog was located in a small lake lying in the drumlins to the west of Strangford Lough, two km north-west of the coastal town of Killyleagh, Co. Down.

The site was artificially constructed by depositing sub-soil, freshly quarried rock-chips and a thin layer of peat over the natural boulder clay. This was covered by a layer of occupation debris or topsoil, a peaty sealing layer, overlain by a 1m-thick deposit of midden material. It was suggested that this midden material had been transported there from another settlement site in the vicinity. The occupation surface was enclosed within a wall built in the manner of an early medieval stone cashel, although this may also have been a stone revetment, 0.8m in height. The occupation surface was within a brown loamy and stony layer, within which there was a built hearth with ashy material around it, all overlaid by sand and clay. The uppermost surface of the crannog was enclosed by a stone wall in the manner of a cashel.

Most of the finds were from the pre-occupation, sub-structural midden deposit, though some were from the sandy deposit above this. These were all of early medieval date. They included 61 sherds of souterrain ware, two crucibles used for bronze working as indicated by the reddish staining of bronze dross, a bronze sheet fragment, an iron-socketed gouge (possible used in wood-turning), three bone pins (from pig fibulae), a glass bead, a lignite bracelet, a piece of rotary quern, a perforated stone loom weight, two spindle whorls, slate discs, nine whetstones, 36 pieces of flint with steep edge-bruising used as strike-a-lights, (as well as a Neolithic thumbnail scraper and Late Mesolithic Bann flakes), a tracked stone and a stone pebble used as a 'linen polisher'. Previous or 'old' finds from the site included souterrain ware, a stone disc, a bronze pin and a bone pin.



Fig. 93: Aerial photograph of early medieval crannog of Clea Lakes, Co. Down, the small island in the middle view. (Source: Cambridge University Committee for Aerial Photography, CUCAP ADK 93).

Reference:

Collins, A. E. P., & Proudfoot, V. B. 1959. A trial excavation at Clea Lakes crannóg, Co. Down. *Ulster Journal of Archaeology* Third Series, 22, 92–101.

Crossnacreevy, Co. Down
Early Medieval Settlement Enclosure.
Grid Ref: **J39697016 (33969/37016)**
SMR No: **DOW 010:007**
Excavation Licence: **N/A**
Excavation Duration/Year: **Summer 1971.**
Site Director: **A.E.T. Harper (Historic Monuments Branch, Department of Finance (NI))**.

The enclosure (36m by 31m) was located just to the south of the summit of a drumlin, and had been damaged prior to excavation by post-medieval building construction and occupation. Excavation was largely focused on the interior of the enclosure and this revealed a sub-circular clay house-platform, surrounded by a pebbled yard (Fig. 94). A sub-circular gully cut into the clay platform may suggest a roundhouse, although the distribution of post-holes is less clear.

Excavation of the ditch revealed a U-shaped ditch, approximately 2m deep. A number of layers within the ditch indicated re-cutting, and dating of some of these suggest this may have occurred from the thirteenth century onwards.

A number of sherds of souterrain ware (22), and iron bar (?), and a green/yellow glass bead were recovered from the area of the house platform.

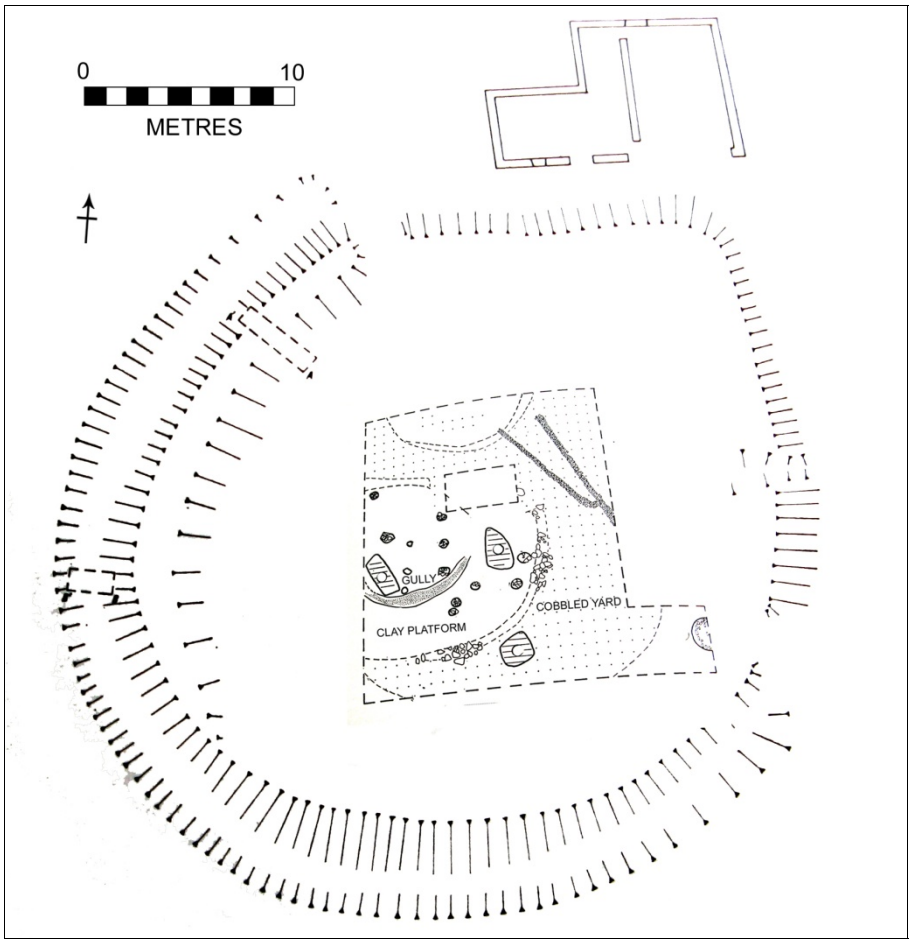


Fig. 94: Excavated area at Crossnacreevy, Co. Down (after Harper 1973-4, 33 & 34).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-674	Charcoal from burnt house-post	1350±30 BP	**A.D. 637-713**; A.D. 745-767.
UB-751	Humic acid from basal fill 0.10m of ditch fill.	715±65 BP	A.D. 1188-1198; **A.D. 1206-1401**.
UB-848	Humic acid from top 60mm of soil buried under bank	1910±90 BP	155-137 B.C.; **113 B.C. – A.D. 264**; A.D. 275-333.
UB-849	Humic acid from 0.20-0.26 from ditch base.	540±90 BP	**A.D. 1272-1520**; A.D. 1592-1620.

Reference:

Harper, A. E. T. 1973-4. The excavation of a rath in Crossnacreevy Townland, County Down. *Ulster Journal of Archaeology* (Third Series), 36—7, 32—41.

Drumadonnell, Co. Down
Early Medieval Unenclosed House.
Grid Ref: **J24393915 (32439/33915)**
SMR No: **DOW 035:053**
Excavation Licence: **N/A**
Excavation Duration/Year: **January – February 1999.**
Site Director: **J.C. McSparron (Northern Archaeological Consultancy)**.

Monitored top-soil stripping was undertaken prior to the construction of a new primary school because of the possibility that a lost early medieval ecclesiastical site may have existed in the vicinity. This claim was largely based on the survival of a high cross, which had subsequently been removed from the area.

Excavation revealed the presence of a hearth and associated posthole settings, as well as a second hearth which did not appear to have been associated with the layout of postholes (Fig. 95). Dating of charcoal from both of the hearths, however, gave an early medieval date (see below). It is suggested that the postholes may have represented a roundhouse-type structure.

A number of sherds of souterrain ware pottery were found on site, and although the site appears to be early medieval in date, there is also some evidence for earlier occupation. Two non-souterrain ware pottery sherds, and the make-up of the seed assemblage in the bottom of a cereal-drying kiln (based upon the lack of oats) suggest that the site was also occupied in the Bronze Age.

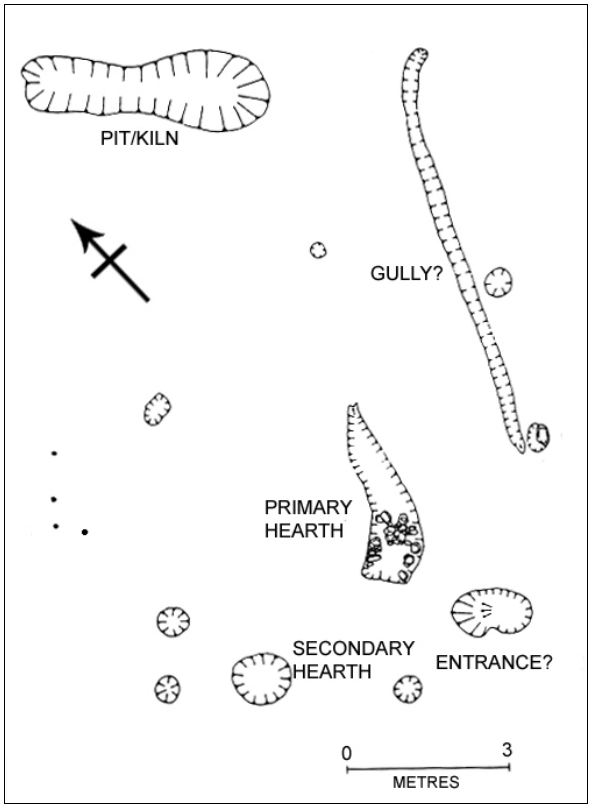


Fig. 95: Unenclosed house at Drumadonnell, Co. Down (after McSparron 2001, 49).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
N/A	Charcoal from lower fill of primary hearth	N/A	**A.D. 705-1005.**
N/A	Charcoal from secondary hearth	N/A	**A.D. 680-980**

Reference:

McSparron, C. 2001. The Excavation of an Unenclosed House of the Early Christian Period at Drumadonnell, County Down. *Ulster Journal of Archaeology* (Third Series), 60, 47–56.

Duneight, Co. Down
Early Medieval Raised Enclosure.
Grid Ref: **J27776078 (32777/36078)**
SMR No: **DOW 014:028**
Excavation Licence: **N/A**
Excavation Duration/Year: **September 1961**
Site Director: **D.M Waterman (for the Archaeological Survey of Northern Ireland)**.

The site, a motte-and-bailey castle, was to be partially destroyed during farm improvements. During excavation it became apparent that the site had been re-used through different archaeological periods. A Bronze Age burial was uncovered on the ridge, and the site was turned into an enclosure during the early medieval period, before being re-modelled by the Anglo-Normans.

Excavations in the Anglo-Norman bailey revealed an earlier enclosure (60m by 39m) within a bank (2.1m-2.4m high, and up to 6.6m wide), with some evidence for a further external ditch to the east (Fig. 96). Three structures were uncovered in the interior, although only one (Building A) was fully excavated (Fig. 97). This building was of dry-stone construction and would appear to have been sub-rectangular in shape. As with the other two structures, souterrain ware was found in association with this building.

The bottom of the inner ditch was waterlogged and produced a layer of peat, 0.6m thick, which contained animal bones and pieces of wood. The occupation layer in the ditch contained a few sherds of souterrain ware, and more burnt and un-burnt animal bone. The shallower outer ditch also produced numerous sherds of souterrain ware, along with pieces of a clay crucible and lumps of iron slag. A series of palisade trenches around the entranceway, and also along the river front, were also excavated, from which souterrain ware and fragments of a jet bracelet were recovered.

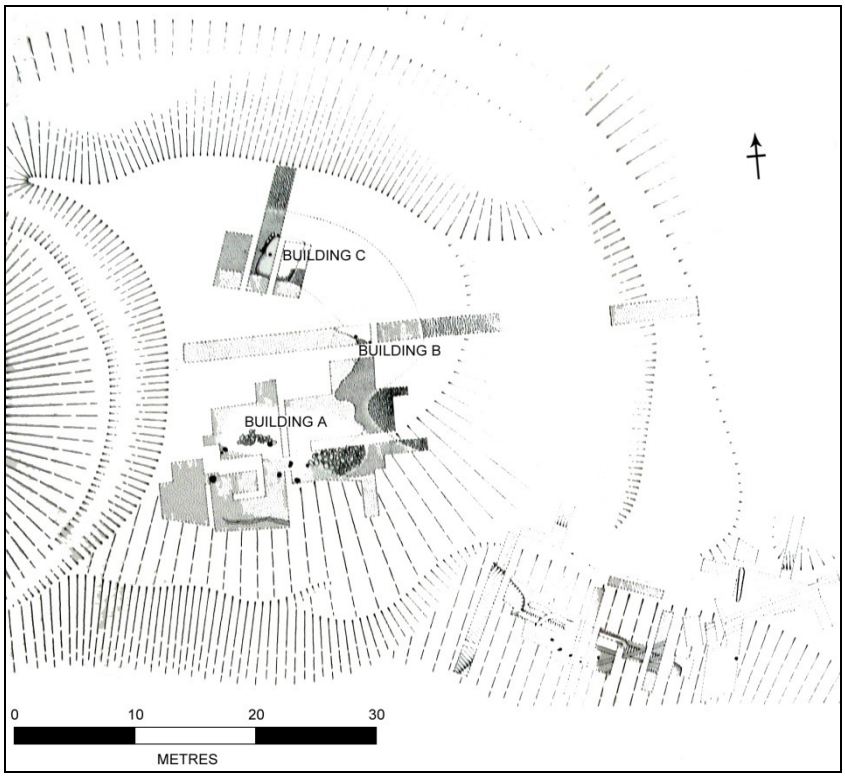


Fig. 96: Excavations at Duneight, Co. Down (after Waterman 1963, facing 74).

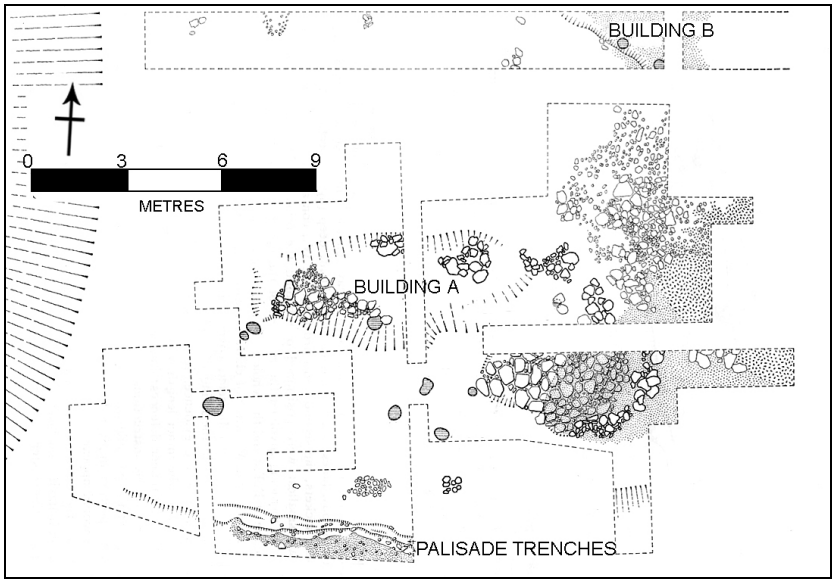


Fig. 97: Structures in South Part of Bailey at Duneight, Co. Down (after Waterman 1963, 66).

Reference:

Waterman, D. M. 1963. Excavations at Duneight, Co. Down. *Ulster Journal of Archaeology* (Third Series), 26, 55–78.

'Dunnyneil Island' (Dunnyneil Islands td.), Co. Down
Early Medieval Settlement Enclosure.
Grid Ref: **J54745384 (35474/35384)**
SMR No: **DOW 024:035**
Excavation Licence: **AE/02/90; AE/03/71**
Excavation Duration/Year: **September – October 2002; August – September 2003**
Director: **F. McCormick (Queen's University, Belfast) & P. Macdonald (Centre for Archaeological Fieldwork, Queen's University, Belfast).**

The site is an enclosure, approximately 30m in diameter, comprising two banks and an intermediate ditch, which is set on the top of the larger of the Dunnyneil Islands in Strangford Lough (although it would appear that the two Dunnyneill Islands originally were part of a single, larger island). A smaller 'annex' was added to this enclosure, and it is possible that further annexes may have been destroyed by tidal action. The site had been subject to coastal erosion and it was feared that the enclosure could be destroyed within 60 years (Fig. 98).

In the first season, excavations in the north of the enclosure revealed a number of structural features including the rubble collapse of the inner revetment of the bank; a curvilinear gully; a hearth; and two linear features (possibly representing a palisade). The limited scope of the excavation, however, made it difficult to work out a relative chronology for these features.

A second trench was laid through the banks and ditch, but again was not able to confidently establish their relative chronology, although they would appear to be contemporaneous. Excavation revealed, however, that the inner bank may have been deliberately slighted.

The artefactual remains from the site (especially the three sherds of E ware and the fragment of Germanic glass claw-beaker) suggest that activity was ongoing on the island in the sixth/mid-seventh century. This date is supported by a probable penannular brooch fragment (dated to the early-seventh century). A fragment of a crucible; four fragments of slag; and two fragments of copper alloy were also found, suggesting that metalworking occurred on site.

A more extensive excavation was undertaken in 2003 (Fig. 99). A further six trenches were opened revealing that the site had a long period of use. Possible earlier enclosure features were found under the inner bank, as well as un-associated prehistoric material. The early medieval enclosures appear to have been abandoned in the seventh or eighth century, possibly as a result of the collapse of Merovingian trade networks, and the site was then not re-occupied until the eleventh or twelfth century. The numbers of imported materials (three sherds of E ware and a number of glass fragments), and the relative lack of domestic material, suggests that the enclosure may have functioned as an *emporium*, rather than a high-status occupation site.

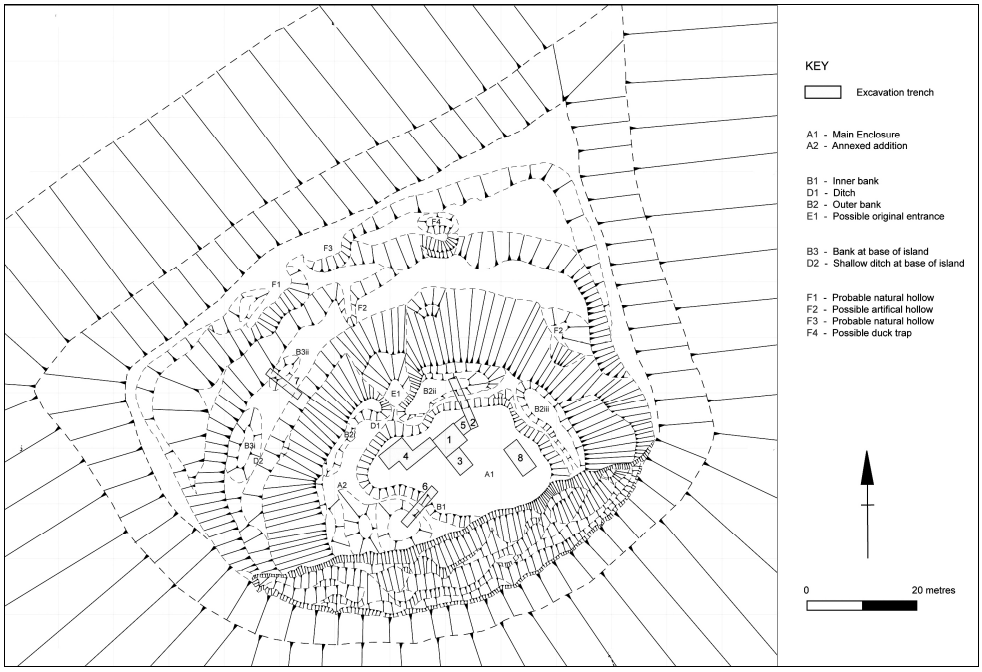


Fig. 98: Plan of Dunnyneill Island, Co. Down (after McCormick & Macdonald 2003, 15).



Fig. 99: Excavations in enclosure on Dunnyneill Island, Co. Down (after McCormick & Macdonald 2003, 30).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-4918	Animal bone from occupation layer.	1195±22 BP	**A.D. 774-891**
UB-4919	Animal bones from fill of ditch.	1292±20 BP	A.D. 667-728; A.D. 736-772.

Reference:

McCormick, F., Macdonald, P., & Adams, K. 2002. Excavations at Dunnyneill Island, Co. Down. Centre for Archaeological Fieldwork Data Structure Report #1.

McCormick, F., & Macdonald, P. 2003. Excavations at Dunnyneill Island, Co. Down. Centre for Archaeological Fieldwork Data Structure Report #29.

McCormick, F., & Macdonald, P. 2004. Excavations at Dunnyneill Island. *Lecale Review*, 2, 5–10.

Gransha, Co. Down
Early Medieval Raised Enclosure.
Grid Ref: **J53147694 (35314/37694)**
SMR No: **DOW 006:002**
Excavation Licence: **N/A**
Excavation Duration/Year: **1972; 1982**.
Site Directors: **C. J. Lynn (Historic Monuments and Buildings Branch, Department of the Environment (N.I.))**

Excavation was undertaken in 1972, and again in 1982, on top of an artificial mound, 6.7m high and 22m in diameter, which was set on the edge of a former bog.

Earliest activity on the site was indicated by a small ditch (1.8m wide and 0.8m deep) which ran around the mound. There were also traces of a low (possibly timber-revetted) bank, and the burnt remains of a possible associated palisade (Fig. 100). A bronze penannular brooch and a number of sherds of E-ware were recovered from the ditch of this phase.

The second phase was indicated by a 0.3m thick occupation layer and there was some evidence for a low external bank and shallow ditch. A number of stone-lined hearths were found from this phase, as well as an arc of stake-holes which may represent part of a circular wattle-built structure. Possible seed drills were uncovered in the upper part of the occupation layer during the 1982 excavation. Finds from this occupation phase included pottery (E ware and souterrain ware) and metal objects (iron knives, a stylus and some scraps of bronze). Stone spindle-whorls and hones were found, along with pieces of clay moulds (including one for a decorated brooch-pin terminal). Over 40 fragments of flat stones with geometric designs were also found and were interpreted as trial pieces.

In the final phase the domed second phase occupation layers were deliberately re-modelled into a steep-sided, flat-topped mound. Thirty large rubbish pits (1m wide by 1m deep) were dug into the top of the mound, but the only structural remains found were in the form of two stone-kerbed hearths and the possible foundation for a dry-stone built rectilinear building. There was some evidence for a wooden perimeter fence around the top of the mound. Finds from this phase included souterrain ware, lignite armlets, a green-and-white glass bead, and a bronze spiral-ringed pin.

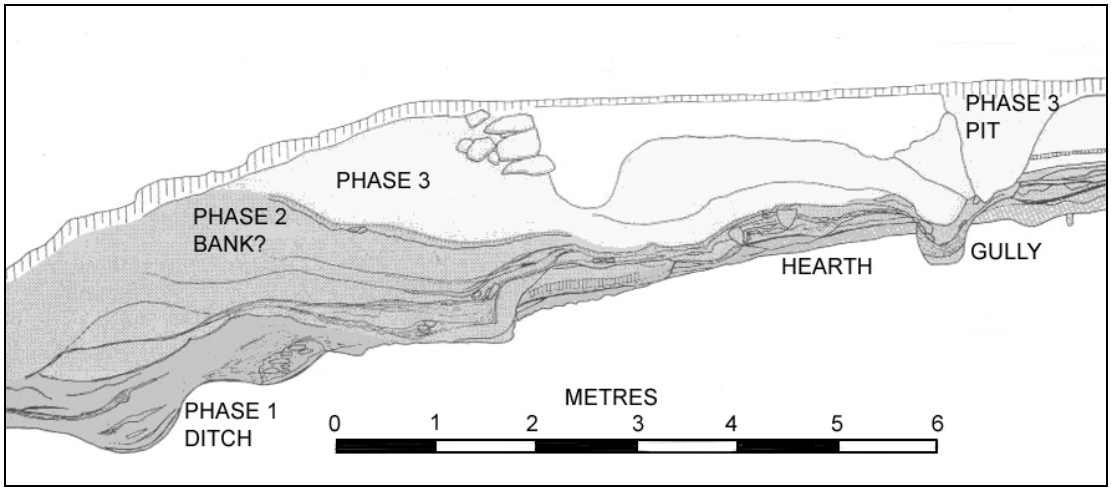


Fig. 100: Section of Gransha showing phases (after Lynn 1988, 39).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-2597	Charred timbers from possible palisade	1465±55 BP	A.D. 435-490; A.D. 509-517; **A.D. 529-662**
UB-2598	Charred timbers from possible palisade	1580±50 BP	**A.D. 386-596**

References:

Lynn, C. J. 1985. Excavations on a mound at Gransha, County Down, 1972 and 1982: an interim report. *Ulster Journal of Archaeology* (Third Series), 48, 81–90.

Lynn, C. J. 1988. The Story in a Mound: Gransha, Co. Down, in A. Hamlin & C. J. Lynn (eds.) *Pieces of the Past: Archaeological excavations by the Department of the Environment for Northern Ireland, 1970-1986*. Belfast: HMSO, 38–41.

Lough Faughan Crannog (Ballyrolly td.), Co. Down
Early Medieval Crannog.
Grid Ref: **J44644114**
SMR No: **DOW 037:050**
Excavation Licence: **N/A**
Excavation Duration/Year: **1951-2.**
Site Director: **A.E.P. Collins (Historic Monuments Branch, Department of Finance (NI))**.

The early medieval crannog of Lough Faughan, Co. Down, was excavated in 1951-1952, as part of the County Down Archaeology Survey. Prior to excavation it was suspected that the site was late medieval in date, primarily because of the antiquarian discovery of an imported medieval green-glazed pottery jug on the site. While the excavations produced some evidence for late medieval occupation, in the form of pottery and a coin, they revealed that the site was mostly early medieval in date, occupied at some unknown period between the seventh and tenth centuries A.D. (Fig. 101).

The early medieval crannog survived as a circular mound (36m in diameter, 1.2m in height) located in marshy ground. It was apparently constructed by laying down a sub-structural layer (5m thick) of brushwood (of hazel, alder, birch) and peat over a marshy deposit on the lakebed. The 'peat' was often composed of heather, bracken and scrub and there were several layers of bluish or yellowish clay but there were no large timbers. The brushwood was occasionally pinned into position using stakes. The upper surface of this substructure was then covered with planks ('random groups of timber rafts'), pinned into position, and woven wattle panels, interpreted by the excavators as the beginning of the occupation layer. There was some domestic refuse found in these structural levels, as well as a single hearth (hearth 5) interpreted as a fireplace used by the crannog builders (although it is conceivable that this was an actual early occupation horizon). Finds from the structural layers included whetstones, two crucible sherds, a wooden object, sawn antler cuttings, an iron shield boss, a small circular iron pan, an iron shears, a barrel padlock key, an unfinished comb, and animal bones which were strewn through the brushwood and peat layers. Other items from the brushwood and peat layers included wooden cart fragments, a turned wheel hub, a yew-wood hoop from a large barrel, stave-bucket fragments and a turned wooden bowl.

The primary occupation surface was based on the wicker matting that had been laid across the site and the occupation deposits consisted of dark brown, peaty soil, merged with peat and brushwood, within which there were numerous clay spreads laid on damp patches and reddened by burning, interpreted as hearths surrounded by stone kerbing and associated with spreads of timbers. The site's largest hearth (hearth 4) was 4.5m in diameter, by 0.60m in thickness, consisting of seven superimposed layers of grey ash, with yellow clay and charcoal. Finds from this 'hearth' included a bone pin and a sherd of Roman Samian ware (often perceived as a magical or medicinal item in the early middle ages). It seems likely that this so-called hearth could be interpreted as an early medieval house floor, where the excavators did not recognise the walling. Hearth 6 had a sequence of firstly a circular kerb of stones, secondly a stone-lined hearth in yellow clay, followed by wooden post-bordered hearth in peat. Hearth 3 was a rectangular construction of stones. Hearth 7 was a circular stone kerb under the wall revetment. Some of the hearths were industrial rather than domestic, as iron and bronze slag, crucibles and a clay mould for casting bronze pins were the only objects found in them. Other evidence for iron-working included iron slag, ore, and bloom.

The primary crannog occupation layers also produced souterrain-ware pottery (230 sherds). The evidence for crafts included discs used in weaving, hand distaffs, four spindle whorls and an antler peg. Evidence for metalworking included crucibles (pyramidal with triangular mouth) and moulds for casting bronze pins. Items of personal adornment included a pennanular brooch, pin, needle, bone pins, lignite bracelets, finger rings, glass beads, glass vessels and a glass armlet. There were three fragments of rotary querns and perforated whetstones. There was also an iron shield boss (found at the base of the occupation levels) and an iron axe-hammer. Throughout the occupation layers there were deposits of animal bone, including mostly cattle, with some pig, sheep, red deer bone (1.2%) and domestic fowl (possibly from a fighting cock) and fish bones from cod. There were also upper

occupation deposits that may date to the end of the early medieval period. These included thin spreads of gravel and some fire-reddened clay. The gravel covered an expanse of black, burnt material of charcoal, burnt straw, carbonised oats and barley.

The upper most occupation surface was enclosed within a stone revetment or wall, of three courses of stone with a straight outer face. This wall may only have been constructed on the north side of the crannog, perhaps to alleviate slumping. Within this enclosing feature was a dark soil of humus and occupation material, 0.3m thick at the centre of the site. There were some early medieval objects within this occupation material (as well as some sherds of medieval pottery probably dated to the thirteenth century). An early thirteenth-century coin was also found on the crannog.

The early medieval crannog at Lough Faughaun appears to have been a settlement site whose inhabitants were engaged in agriculture, domestic crafts and both bronze working and iron working. Like Clea Lakes, a midden from another settlement site was used to build the crannog. It is probable that at least one hearth (i.e. Hearth 4) was actually a circular house floor, potentially re-laid on several occasions. The various objects and finds recovered suggest domestic habitation, but the crannog was also clearly used for ironworking and bronze working, with several hearths devoted to this activity. The site economy was based on mixed farming in the surrounding landscape, with the slaughtering of cattle at a young age probably indicating a preponderance of dairying. The site was also briefly re-activated in the later middle ages, like many other crannog sites, with a stone wall or revetment built around its edges.

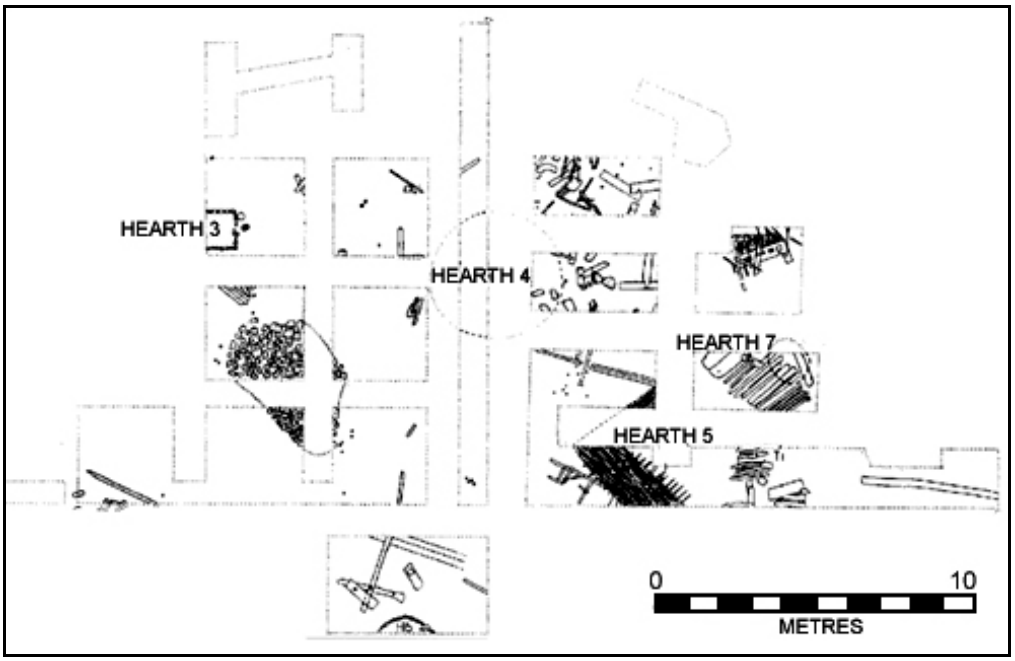


Fig. 101: Plan of Lough Faughan crannog, Co. Down (after Collins 1955).

Reference:

Collins, A. E. P. 1955. Excavations at Lough Faughan crannog, Co. Down, 1950-51. *Ulster Journal of Archaeology* Third Series, 18, 45–82.

Movilla Abbey, Co. Down
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **J50367444 (35036/37444)**
SMR No: **N/A**
Excavation Licence: **N/A**
Excavation Duration/Year: **August-September 1980 & Summer 1981**
Site Director: **M.J. Yates (N.I. Historic Monuments and Buildings Branch); Richard Ivens (Queen's University Belfast)**

The monastery at Movilla (*Mag Bile*- the plain of the tree) is said to have been founded by St. Finnian who died *c.* A.D. 579 and was a member of the *Dál Fiatach* dynasty of Ulster. The abbey together 'with its oratories' were burned by the Vikings in A.D. 825 and the site was combined with Bangor Abbey about the year 910. St. Malachy is said to have introduced the Augustinian rule to Movilla *c.* 1135 and the Arroasian observance after 1140 (Gwynn & Hadcock 1970, 188). The ruined abbey is located on the southwest side of a hill in quite a prominent position overlooking the town of Newtownards to the west. It consists of a ruined thirteenth century church with some fifteenth century additions. Nothing of the early medieval church survives although an early Christian grave slab is preserved in the north wall of the abbey church. The earliest O.S. map shows a curving semicircular field boundary around the northern perimeter of the site which may represent an early ecclesiastical enclosure.

The monastic site was extensively disturbed with much of the area to the south and east of the church used as a municipal cemetery and a large portion of the semicircular enclosure to the north and west occupied by housing estates (Fig. 102). A realignment of the Movilla road to the immediate north threatened the last remaining, relatively undisturbed area of the abbey and precipitated a trial excavation of the area by M.J. Yates in August and September 1980. The results were sufficiently promising to warrant a further large scale excavation of this small portion of area which was undertaken by Richard Ivens in the Summer of 1981. In total, five trenches covering a total area of 500m² were opened over the two seasons. The vast majority of the features were excavated in the largest trench, no. 5 (See Fig. 102). The excavations uncovered an early medieval industrial zone with gullies, pits and possible hearth and structures, which was replaced by a large thirteenth century stone building, later abandoned in the fourteenth century.

An intensive early Christian occupation of the site is indicated by the discovery of a vast number of post-holes, stake-holes, pits and gullies in the earliest levels, together with several thousand sherds of souterrain ware, considerable quantities of slag as well as crucibles, scrap copper-alloy and waste glass. In the early medieval period, the excavated area was an industrial zone, or at least, located very near to an industrial area. No certain industrial structures were found but these maybe outside the area of excavation. One possible base of a small furnace or hearth was excavated. It was undated but was probably associated with the discovery of early medieval souterrain ware, crucibles, scrap copper-alloy and glass from within a number of nearby intercutting gullies and pits. One of these pits – a large, shallow scoop – was interpreted as a working hollow measuring 3.65 x 3.1m x 0.30m deep. Pottery from the hollow indicates that it was infilled in the late thirteenth or fourteenth centuries. The working hollow cut a small pit, 1.39m x 0.76m x 0.07m containing thirteenth century pottery.

Several post- and- stake-holes, gullies, scoops and pits were excavated within the interior of the thirteenth century building; many of these were cut by the stone building, clearly pre-dating this structure and contained few finds except slag, bone and occasional souterrain ware pottery. Early medieval pits and post-holes were also uncovered in the area to the south and west of the thirteenth century building. A deep oval pit was excavated to the west of the thirteenth century stone building. It was interpreted as a possible well or storage pit and measured 1.72m x 1.53m at the top and 0.95m in maximum depth. It appears to have been deliberately backfilled or abandoned shortly after its excavation and apart from a few sherds of souterrain ware, there was no indications of its date.

A long curving gully, over 10m in length, 0.60-1.5m wide and 0.01-0.15m deep, was cut by the small pit and the foundation trench of the thirteenth century large stone building. From this gully were

quantities of slag, the vast bulk of the crucibles, almost all of the scrap copper-alloy and glass, a trial-piece and an unusual stone tool. The scrap copper-alloy comprised corroded and intact fragments of sheet and strip, many with rivet and nail-holes; two small ingots; one small rivet with a hexagonal shaft; one nail; a small ring; and the lip of a small square vessel or implement. It is possible that this feature may have been a worn pathway which was later filled with early medieval industrial waste. Alternatively, it could have formed part of an early medieval industrial structure.

The assemblage of crucibles, slag, copper-alloy rivets and nails, scrap copper-alloy and a trial-piece and stone tool from the long curving gully provides clear evidence for the working, if not smelting, of copper-alloy on the site. The considerable quantity of slag, crucibles and other materials might indicate the existence of an early medieval iron or metal-working preparation area nearby. A small piece of fine, beaded, gold wire was also found in the floor of the large thirteenth century stone building and the form and purity of the metal might indicate a sixth or seventh century date for it. Globules of glass, glass rods (or canes) and broken glass beads could provide potential evidence for early medieval glass-smelting on the site. However, the available evidence would indicate that ready-made glass was imported into the site to be worked into finished products and that glass forming from primary materials did not take place on the site during the early medieval period.

An early medieval iron pin with a decorative glass head was also discovered within the long curving gully and may demonstrate the existence of a vibrant on-site industry producing highly sophisticated composite objects. The faunal evidence from the early medieval levels indicates that the cow was the most dominant animal followed by sheep/goat and pig and to a lesser extent horse, cod and fowls. Other early medieval finds included a small fragment of lignite bracelets, whetstones, stone spindle-whorls, a marble sling-shot, a pre-mid thirteenth century lead ingot, copper-alloy and iron pins, iron nails and other miscellaneous iron objects and a rotary quern stone.

It is probable that the residential area of the early medieval monastery was located elsewhere on the site. Although the excavation uncovered traces of early medieval structures, no convincing evidence as to the form of these buildings survived. Instead, most of the features appear to have been related to an industrial zone. No substantial industrial remains were uncovered within the excavated area, though this is perhaps understandable if the activities here were primarily confined to the working and manufacture of glass and bronze items from imported raw materials. This industrial zone was discovered in close proximity to the medieval abbey, which would have posed an unnecessary fire-risk to these ecclesiastical buildings. This might indicate that the non-extant early medieval church was situated elsewhere on the site away from the medieval abbey; supporting Ann Hamlin's assertion that where an Augustinian abbey was built at a pre-twelfth century ecclesiastical site, it was sometimes placed away from the original church and on the edge of the enclosure (Hamlin, in Yates 1983, 54).

The stone footings of a large thirteenth century building were uncovered at the west end of trench 5. A dump of levelling material was deposited at the western end of this building immediately before the structure was built and its foundation trench cut the long curving early medieval gully. Only three sides of the stone building were revealed. Its walls were 1.1-1.3m wide and were composed or large irregular bounders, roughly laid in courses and infilled with smaller stones. Within the interior of the large stone building were the remains of a clay floor at its northern end and a stone paved equivalent at the southern end; both of these were roughly contemporary with each other and were probably associated with an internal hearth and stone-lined drain. The building may have supported a first or even second floor, with the ground floor used as a combined byre and store or workroom.

The thirteenth century building was contemporary with a midden outside its north wall. The midden lay to the north of the stone building directly against the outer face of its north wall and continued to accumulate during and after the life of the stone building in the thirteenth and fourteenth centuries. Also possibly associated with the building was a broad, shallow, flat-bottomed gully with gently sloping sides, measuring 0.95-1.45m wide x 0.25-0.30m in maximum depth and excavated for a length of 7.35m. It was interpreted as a thirteenth century property boundary, perhaps linked to the main building. The fill of the ditch contained a considerable quantity of medieval everted rim ware and several roof slates which may indicate the presence of other slate roofed buildings in the vicinity.

Two medieval wells were excavated to the west of the stone building. The first was unlined and consisted of a circular shaft cut into the natural. It silted up over a long period of time before being deliberately recently infilled. Finds from the lower fill indicate a later thirteenth or fourteenth century date for the well's primary silting. The second was stone-lined and constructed in a circular shaft, 1.4m in diameter at the top, 1.05m in diameter at the bottom, and cut to a depth of 1.55m. A square well faced with stone blocks was constructed within the circular shaft and a posthole on the west side of the well may have supported a post of a wooden superstructure. The well was not earlier than the thirteenth century with silting occurring in the later fourteenth and fifteenth centuries before its final blocking early in the post-medieval period. Finds from the fill of the well included a granite quern stone, the fragmentary remains of a medieval basket, souterrain ware and sherds of medieval wares.

The finds from the occupation phase of the building and its associated midden included quantities of souterrain ware and a wide range of native and imported medieval fine wares, indicating that its inhabitants was people of important status. Two secondary walls were also excavated and appear to be the foundations of a lean-to structure added to the main building. A paved area between the two walls may have been related to this later phase of occupation. A certain amount of slag was found in the medieval levels, but these may well have been redeposited early medieval debris; and the animal remains were the same as they were in the early medieval period, indicating no major change in diet. The large building may have fallen out of use by the early fourteenth century when its masonry was robbed. However, occupation continued elsewhere on the site with the dumping of an organic layer of domestic refuse over the ruins of the large, now abandoned, building. This organic deposit was identical to, and represented an extension of the midden heap, which had long existed on the north side of the building. Considerable quantities of bone, souterrain ware pottery, later thirteenth and fourteenth century medieval wares and artefacts were recovered from this layer. A steep-sided, flat-bottomed ditch was later excavated in the fourteenth century, blocking a small doorway into the abandoned stone building, but was backfilled shortly afterwards.

The excavated area appears to have been open, even waste land, during the fourteenth century. The two wells were still in use but were silting up and the micro-fauna found within the waterlogged levels of one of the wells confirm this 'sort of open, little used environment, though probably with some adjacent human activity' (Ivens 1984, 74). Finds of painted glass and lead closing strips from this destruction horizon indicate that the nearby abbey was also in a state of decay in the fourteenth century. There was little evidence for occupation after the fourteenth century and it appears that the excavated area was taken into agricultural use in this period. A rough patch of cobbling overlay the midden heap to the north of the large building and may relate to some building activity connected with the church in the fifteenth century. Also, uncovered was a steep-sided, flat-bottomed post-medieval field drain running across the eastern side of the excavated area. Other than these there were few finds of a similar date and it is possible that the construction of the modern buildings had destroyed most of the evidence for late- and post-medieval occupation in the area.

For most of its history, this small area of Movilla Abbey appears to have been peripheral to the main area of human activity. Late Mesolithic, Neolithic and Bronze Age flint scatters indicate some intermittent occupation of the area in the prehistoric period. During the early medieval period, the area appears to have been at the edge of the ecclesiastical enclosure and was used primarily for industrial purposes. This part of the abbey also appears to have been more or less abandoned by the fourteenth century and afterwards used for agriculture. Only in the thirteenth century during the use of the large stone building does this area appear to have been used primarily for residential purposes.

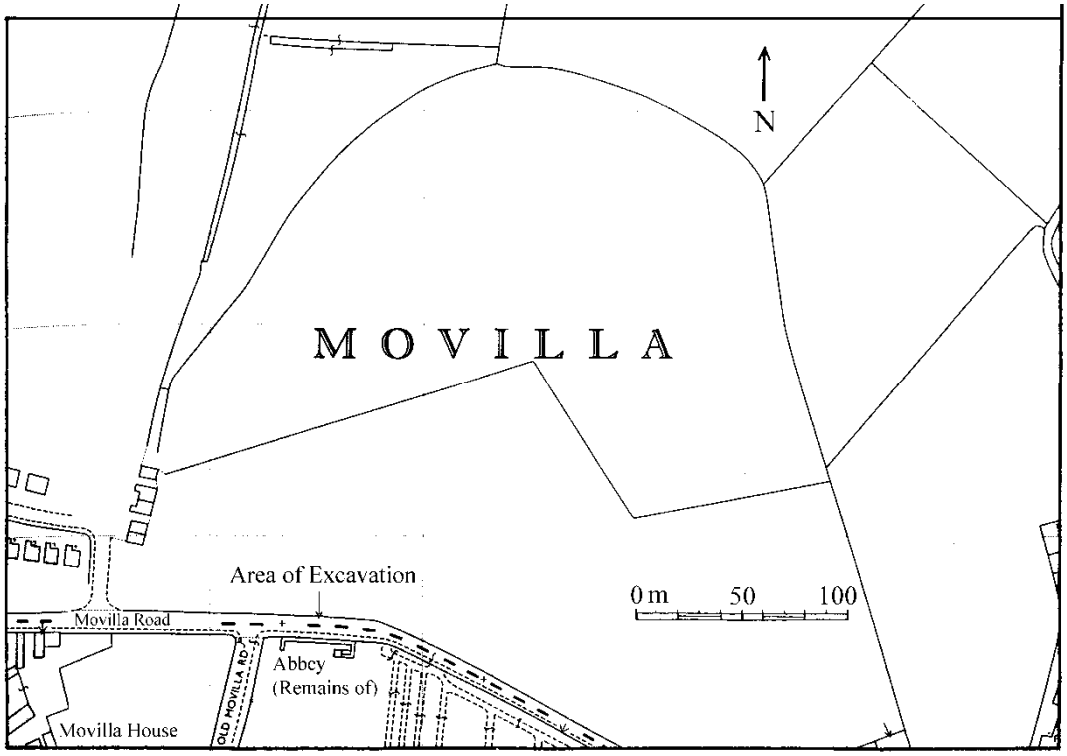


Fig. 102: O.S. Map of Movilla showing semi-circular field boundary and area of excavation (After Ivens 1984, 73)

References

Ivens, R. J. 1984. Movilla Abbey, Newtownards, County Down: excavations 1981. *Ulster Journal of Archaeology* 47, 71–108.

Yates, M. J. 1983. Preliminary excavations at Movilla Abbey, county Down, 1980. *Ulster Journal of Archaeology* 46, 53–66.

Rathmullan Lower, Co. Down
Early Medieval Raised Enclosure.
Grid Ref: **J47753736 (34775/33736)**
SMR No: **DOW 044:016**
Excavation Licence: **N/A**
Excavation Duration/Year: **1978.**
Site Director: **C.J. Lynn (Historic Monuments Branch, Department of Finance (NI))**.

The site was a man-built mound (8m high) with a faint surrounding ditch - excavation revealed it had been approximately 6m wide, and 1.8m deep - which overlooked a coastal plain. The occupants of the neighbouring bungalow had given notice that they intended to remove the mound as there was a danger of collapse. Excavation revealed a number of distinct phases of occupation dating from the early medieval period through to Anglo-Norman occupation (Fig. 103).

The earliest identified occupation phase (Phase 1) contained a series of postholes and stakeholes (Fig. 104) which, in association with the curvilinear drip-gullies, were interpreted as the remains of one or more wooden or wattle-built roundhouses. It was not possible to identify whether this settlement was enclosed by an earthwork or fence at this time. An early date (mid-fifth to mid-seventh century) was obtained from charcoal in the hearth of one of the houses, and this date coincides with the sixth- to mid-seventh century date suggested by the discovery of two sherds of imported E-ware in the occupation layer.

The primary occupation phase was then buried under a 0.6m layer of dumped topsoil. This soil dump appears to have been used as a platform on which a wattle-walled roundhouse (approximately 8m in diameter) was constructed (Fig. 105). The Phase 2 roundhouse was built almost directly over the location of the earlier roundhouse, perhaps indicating continuity of settlement.

The site was remodelled again and there is evidence for the construction of a structure of rectangular-plan structure with stone-footings. It seems probable that this structure was built in association with the souterrain which was constructed at this time. Two radiocarbon dates from this phase (UB-2527 and UB-2525) suggest occupation in the ninth/tenth centuries.

The Phase 3 structures were later covered by an enigmatic spread of boulders, which may represent the footings for rectangular-shaped clay buildings. This phase is unlikely to have ended earlier than the eleventh century, and may indeed belong wholly, or partly, to the twelfth century.

The site was raised by 2m *c.* A.D. 1200 when it was transformed into an Anglo-Norman motte, and was later increased in height by a further metre.

Souterrain ware dominated the pottery finds from the early medieval site, with the sole exception of the two sherds of E-ware from the Phase 1 occupation. A number of quern-stones (probably of Mourne granite) were uncovered from Phase 2; two mill stones (of Scrabo sandstone) were also recovered, though these would appear to have been associated with the later motte phase. Large numbers of iron objects (mainly nails) and a number of copper alloy objects (mainly clothing pins) were also found in the various Early Medieval occupation layers.

The faunal record from Rathmullan produced some rather atypical results. The percentages of major domesticates from the various early medieval phases are as follows (minimum numbers of individuals included in bold):
Phase 1: Cattle (41.4; **9**); Pig (9.6; **4**); Sheep (42.7; **12**);
Phase 2: Cattle (56; **20**); Pig (23; **34**); Sheep (16; **11**);
Phase 3 – Souterrain: Cattle (42.4); Pig (27.1); Sheep (21.5);
Phase 3/4: Cattle (51; **8**); Pig (30; **16**); Sheep (9; **4**).

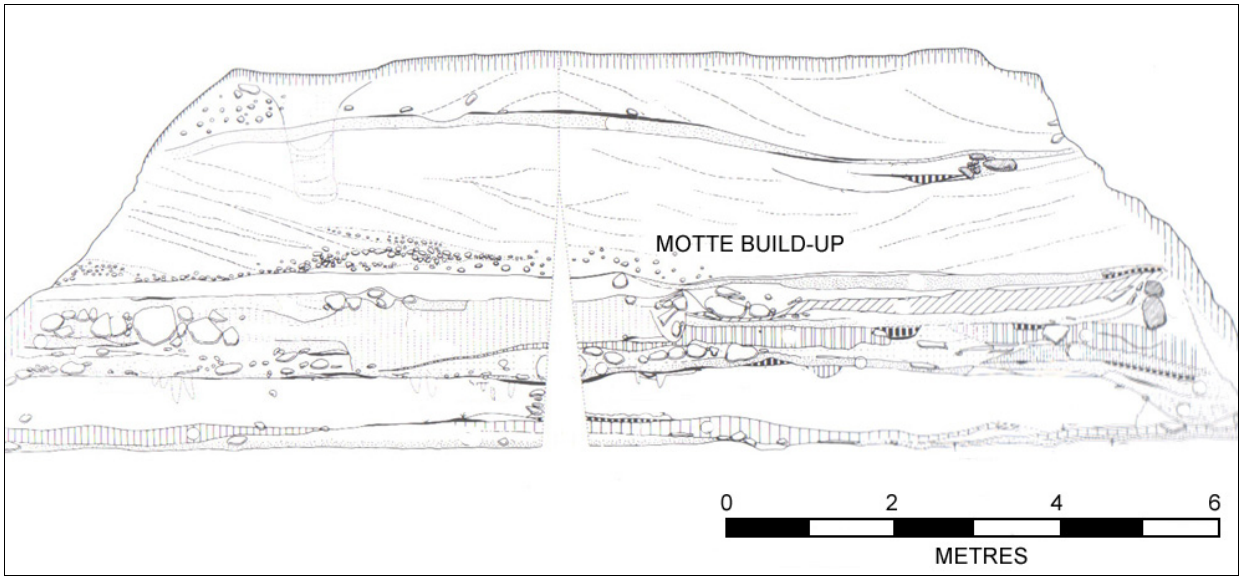


Fig. 103: Section of Rathmullan, Co. Down (after Lynn 1981-2, facing 70).

Down

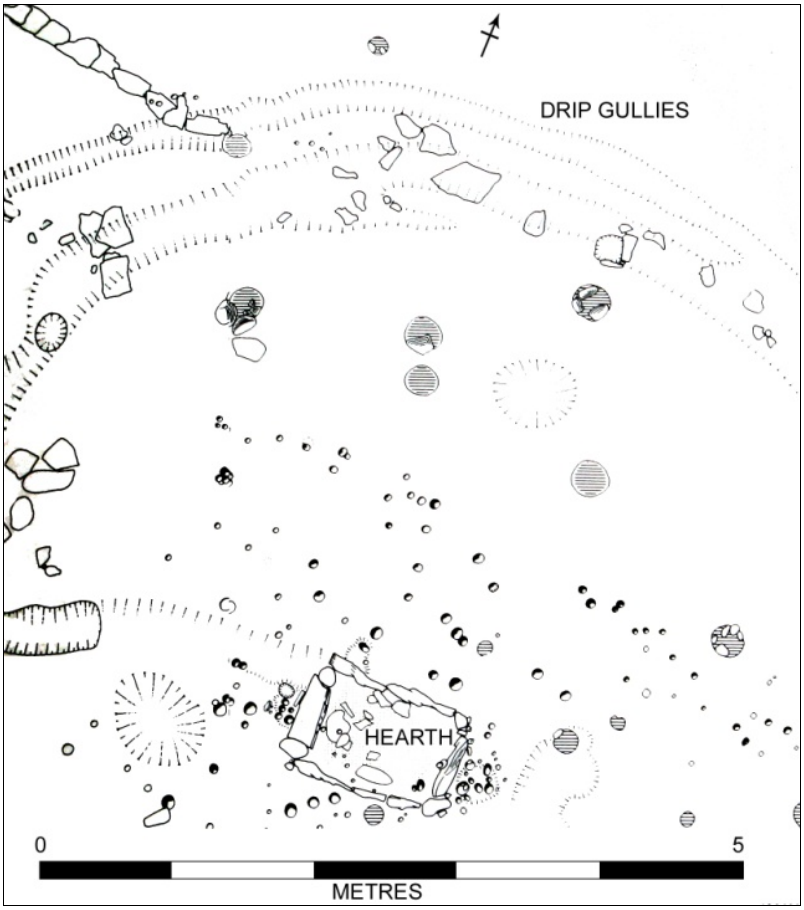


Fig. 104: Plan of Phase 1 at Rathmullan, Co. Down (after Lynn 1981-2, 73).

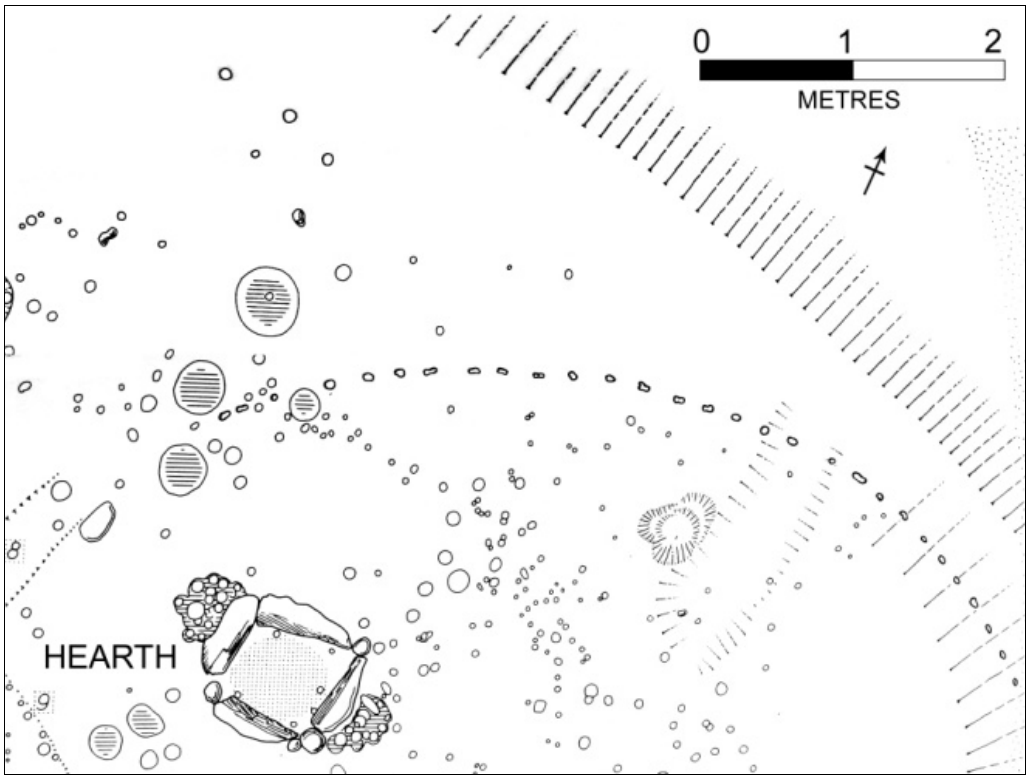


Fig. 105: Plan of Phase 2 at Rathmullan, Co. Down (after Lynn 1981-2, 79).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-2524	Charcoal from Anglo-Norman motte phase	1165±55	A.D. 695-698; A.D. 708-747; **A.D. 765-990**.
UB-2525	Charcoal from souterrain infill	1085±20	**A.D. 895-925; A.D. 936-1014.**
UB-2526	Charcoal from Phase 1 hearth.	1500±40	**A.D. 438-492; A.D. 508-519; A.D. 528-643**.
UB-2527	Charcoal from floor of Phase 3 house	1130±40	A.D. 780-792; **A.D. 803-992**.

References:

Lynn, C. J. 1981-2. The excavation of Rathmullan, a raised rath and motte in County Down. *Ulster Journal of Archaeology* (Third Series), 44–45, 65–171.

Lynn, C. J. 1985. The excavation of Rathmullan, County Down: addenda. *Ulster Journal of Archaeology* (Third Series), 48, 130–2.

Goodall, I. H. 1985. Four Medieval Iron Objects from Rathmullan, County Down. *Ulster Journal of Archaeology* (Third Series), 48, 132–3.

Bourke, C. 1985. An Enamelled Iron Object from Rathmullan, County Down. *Ulster Journal of Archaeology* (Third Series), 48, 134–7.

Warner, R. B. 1985. Observations on the Radiocarbon Dates from Rathmullan. *Ulster Journal of Archaeology* (Third Series), 48, 142–4.

Lynn, C. J. 1988. Slices Through Time, Rathmullan, Co. Down, in A. Hamlin & C. J. Lynn (eds.) *Pieces of the Past: Archaeological excavations by the Department of the Environment for Northern Ireland, 1970-1986*. Belfast: HMSO, 48–50.

Tullylish, Co. Down
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **J08274858 (30827/34858)**
SMR No: **DOW 026:005**
Excavation Licence: **N/A**
Excavation Duration/Year: **May 1983.**
Site Director: **R.J. Ivens (Historic Monuments Branch, Department of Finance (NI))**.

Excavation was undertaken on a hill-top enclosure beside the local parish church prior to the construction of a new church hall. The remains of a seventeenth century church were upstanding within the sub-circular enclosure, and subsequent excavation revealed that the site had been occupied for over a millennium before this.

Apart from some earlier Bronze Age finds, the primary phase of occupation on site was marked by the construction of a massive ditch (5m wide, and up to 4m deep). The ditch appears then to have been re-cut on a number of occasions, but also to have been allowed to naturally silt-up. During one of these latter phases there is some limited occupation evidence (charcoal and bone fragments) and also some enigmatic structural evidence – two sets of stakeholes were discovered set into this layer within the ditch and were interpreted as some form of flimsy temporary structure, perhaps a wind-break.

At a later date a second, external ditch was cut, and an internal bank made from the spoil. The primary ditch was remodelled and used as an industrial area – a kiln with three flues; a furnace bottom; and a cooking hearth were all found in this area. There were also structural remains in the vicinity of the in-filled ditch, including stone-packed post-holes representative of a substantial timber building, as well as rather more ephemeral wooden structures – possibly wind-breaks.

Almost 3,500 sherds of pottery were found on site, the vast majority of which (3,279) was found in the fill of the outer ditch. The pottery was dominated by coarse-wares (souterrain ware (678) and crannog ware) but there were also some wheel-thrown sherds, possibly dating to the thirteenth/fourteenth centuries. There was substantial evidence of industrial activity including the remains of seven clay crucibles, fragments of 26 clay moulds, and substantial quantities of slag and tuyère fragments. A large number of copper-alloy objects were also found on site which may either indicate their manufacture there, or attest to the relative high status of the monastic site recorded in A.U. 809.

(No plans were available for this site).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-2629	Raking out of kiln.	380±60 BP	**A.D. 1438-1641**.
UB-2670	Upper charcoal layer in inner ditch.	1520±100 BP	A.D. 260-282; **A.D. 324-679**.
UB-2671	Middle charcoal layer in inner ditch.	1475±60 BP	A.D. 433-495; **A.D. 504-658**.
UB-2672	Base of outer ditch	1210±60 BP	**A.D. 675-901**; A.D. 916-967.
UB-2673	Lower fill in inner ditch.	1590±75 BP	A.D. 259-285; A.D. 288-292; **A.D. 322-619.**
UB-2674	Layer sealing inner ditch.	1330±70 BP	**A.D. 597-876.**

Reference:

Ivens, R. J. 1987. The Early Christian monastic enclosure at Tullylish, Co. Down. *Ulster Journal of Archaeology* (Third Series), 50, 55–121.

'White Fort' (Drumaroad td.), Co. Down
Early Medieval Settlement Enclosure.
Grid Ref: **J36534397 (33653/34397)**
SMR No: **DOW 036:008**
Excavation Licence: **N/A**
Excavation Duration/Year: **1953**
Site Director: **D.M Waterman (for the Archaeological Survey of Northern Ireland)**.

The site is a broadly pear-shaped cashel (50m east-west) located on top of an isolated knoll of rock, and was excavated as part of the Archaeological Survey of Northern Ireland. The original stone wall is largely scattered, or reduced to ground-level, but appears to have been approximately 3m to 3.75m thick.

A central raised area was identified as a house platform (Fig. 106). This was excavated and found to be a multi-phase structure. A pit, partially paved with flat stones, which was covered by a deposit of charcoal, represented the first phase of occupation. This pit has been identified as a cooking-pit, and the sherds of souterrain ware from the charcoal deposit were indistinguishable from pottery found in later house deposits, suggesting that this pit also belongs to the early medieval period.

The Phase 1 house was probably square-shaped, although the structural evidence is rather inconclusive. Three postholes were uncovered from this phase, as well as a considerable deposit of charcoal. Numerous sherds of souterrain ware and an iron plough coulter were also recovered from this phase.

The Phase 2 house was also square-shaped, and the flat stone paving associated with it suggests that it was approximately 6 metres squared (Fig. 107). Two postholes were located in the middle of the south wall, presumably representing door posts. The roof of the house was supported by four free-standing internal posts. The only other feature within the Phase 2 house was a stone-lined hearth in the centre of the house. Occupation debris outside the Phase 2 house, but associated with it, included numerous sherds of souterrain ware, an annular glass bead (clear green with opaque yellow paste), a fragment of shale/jet/lignite bracelet and two broken quernstones.

A souterrain was located approximately 1.75 metres north of the house platform. It was not possible to definitively link the souterrain with any of the house phases, although the excavator suggested that it may have been in existence during the occupancy of the Phase 1 house.

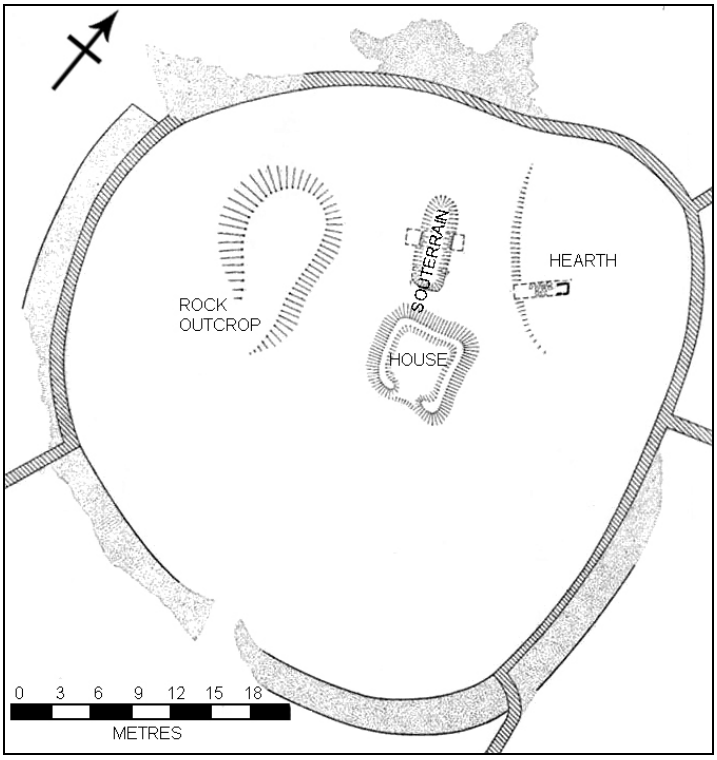


Fig. 106: Excavation at White Fort cashel, Drumaroad, Co. Down (after Waterman 1956, 74).

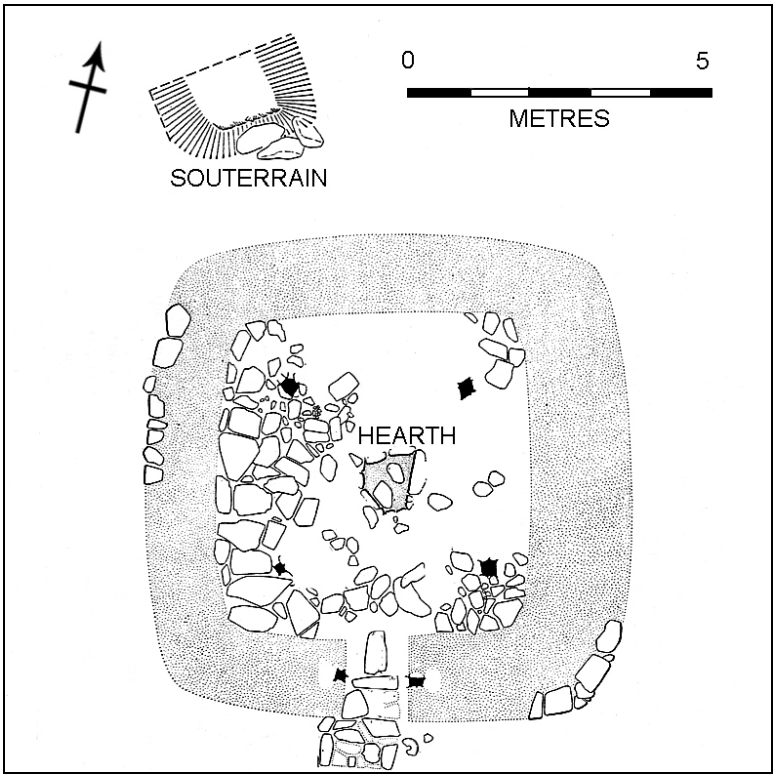


Fig. 107: Excavation of Phase 2 house at Drumaroad, Co. Down (after Waterman 1956, 78).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
D-65	From house – associated with souterrain-ware	900±120 BP	**A.D. 890-1298;** A.D. 1372-1378.

Reference:

Waterman, D. M. 1956. The excavation of a House and Souterrain at White Fort, Drumaroad, Co. Down. *Ulster Journal of Archaeology* (Third Series), 19, 73–86

County Dublin

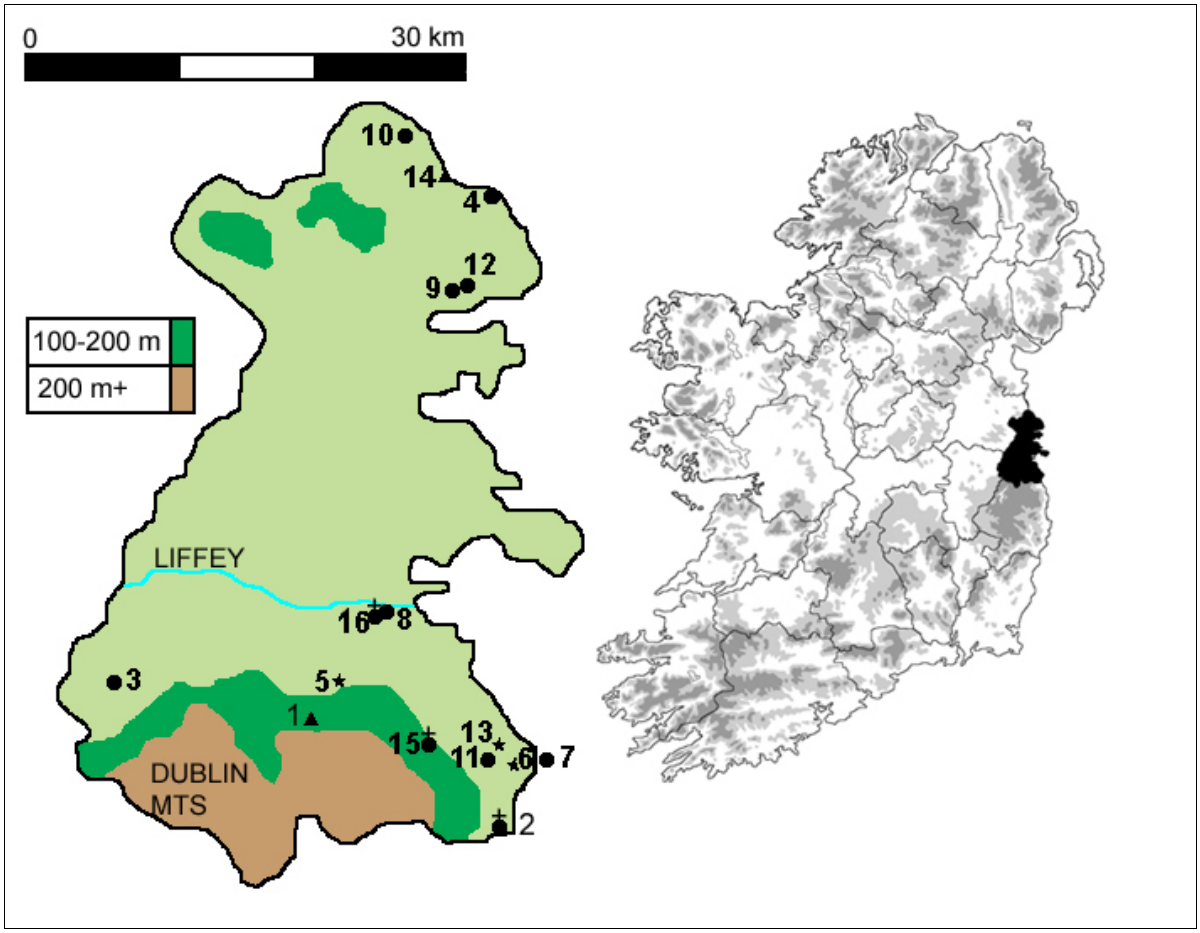


Fig. 108: Significant early medieval excavations in Co. Dublin.

1	Ballycullen	**9**	Dun Emer
2	Ballyman	**10**	Flemington
3	Ballynakelly	**11**	Glebe
4	Barnageeragh	**12**	Lusk
5	Butterfield	**13**	Mount Offaly
6	Cherrywood	**14**	Rosepark
7	Dalkey Island	**15**	St Gobban
8	Dublin	**16**	St Michael le Pole

Ballycullen, Old Court, Co. Dublin
Possible Early Medieval Unenclosed Dwelling
Grid reference: **O11542582 (31154/22582)**
SMR: **N/A**
Excavation Licence No: **02E1373**
Excavation duration: **September 2002**
Site director: **E. Larsson (Arch-Tech Ltd.)**

Excavation – in advance of a residential development – revealed a possible early medieval unenclosed house. The site was situated on the north-facing foothills of the Dublin Mountains at 100m OD.

The dwelling was defined by a C-shaped slot trench/ditch which measured 10.2m by 4.5m and was approximately 0.5m wide and 0.4m in depth. A gap was located to the south where a large posthole was evident. The external terminals of the ditch were also wider than the average width of the slot trench. Moderate amounts of charcoal and burnt and un-burnt bone fragments were identified within the trench fills.

Seventeen postholes were identified within the interior of the site and nine, which were evenly spaced, formed a pattern that respected the outline of the slot trench. These were interpreted as structural posts. A further eight internal postholes were associated with a possible hearth within the possible dwelling.

A metalled surface, which was associated with six post and stakeholes, was situated to the east of the trench while a thin, linear feature possibly constituted an entrance into the structure.

The only finds were two pieces of corroded iron from the eastern terminal of the slot trench and waste flakes of flint, which were associated with the metalled surface.

The date of the structure remains unclear but a date in the Iron Age or early medieval period appears most likely given the building's shape and the recovery of iron objects from its trench fill. The lack of artefacts and evidence for an enclosure suggests this was either a low-status dwelling or a structure used for a non-dwelling function. The presence of a possible hearth appears to favour the former option.

(**No plans were available for this site**).

Reference:

Larsson, E. 2002:0640. Site 1, Ballycullen, Oldcourt, Co. Dublin. www.excavations.ie.

Ballyman, Co. Dublin
Early Medieval Ecclesiastical Settlement
Grid reference: **O23801860 (32380/21860)**
SMR: **DU028-002**
Excavation Licence No: **E000182**
Excavation duration/year: **1983; 1984**
Site director: **E. O'Brien (Rathmichael Historical Society)**

Research excavations occurred over a number of seasons on a site that lay approximately 76m south-west of the early and late medieval church of Glen Muneri in Ballyman on the Dublin-Wicklow county border. Three periods of activity were recorded from the early, late and post medieval periods.

The earliest activity consisted of a cereal-drying kiln and items related to settlement and metalworking. The cereal-drying kiln was dumb-bell-shaped and was radiocarbon dated to the fifth century. It was, therefore, the earliest feature on site. The finds related to settlement and industry included a terminal of a bronze zoomorphic penannular brooch, with millefiori setting (dating to the sixth or seventh centuries), the ring portion of a similar brooch, and a clay mould sherd. Animal bone was also present.

Evidence for industrial activity overlay the above. This consisted of a cobbled surface that contained iron slag, furnace bottoms, burnt clay lining and flint items such as strike-a-lights. The ironworking activity has been radiocarbon dated to the fourteenth century. Other finds included one sherd of eleventh/twelfth-century Normandy ware, an eleventh/thirteenth-century bronze stick pin and sherds of thirteenth-century Leinster ware. The cobbled surface, therefore, may have been laid towards the end of the early medieval period and was used into the later middle-ages when it became the focus for industrial activity.

(**No plans were available for this site**)

References:

O'Brien, E. 1984. Ballyman, Co. Dublin. *Medieval Archaeology* 28, 255–6.

O'Brien, E. 1985. Ballyman, Co. Dublin. *Medieval Archaeology* 29, 214.

O'Brien, E. 1985:022 Ballyman, Co. Dublin. www.excavations.ie.

O'Brien, E. 1986:021. 'Glen Munire', Ballyman, Co. Dublin. www.excavations.ie.

Ballynakelly, Co. Dublin
Early Medieval Settlement Enclosure
Grid reference: **29991 22862**
SMR: **N/A**
Excavation Licence No: **06E0176**
Excavation duration: **March – July 2006**
Site director: **C. McCarthy (Arch-Tech Ltd.)**

Excavation at Ballynakelly – in advance of a residential development – revealed an early medieval settlement enclosure with internal gullies, pits and postholes. A larger outer enclosure was present and a range of internal field divisions were identified between the two enclosures. It appears that the settlement was occupied between the seventh and eighth centuries. A cereal-drying kiln and some areas of burning were also uncovered in this area, as was an extended human burial. The burial represented the earliest activity on site and was dated to the fifth/sixth centuries. A large ninth/tenth-century L-shaped cereal-drying kiln was the latest early medieval feature and post-dated the settlement enclosure. The site, situated on flat ground, was located 1km southeast of Newcastle village, south of the Dublin Mountains foothills while the River Liffey lay to the north.

An extended adult burial, possibly a male, represented the earliest archaeological activity on the site as it predated the main settlement phase and was radiocarbon dated to A.D. 401-543. The burial was positioned between the inner and outer enclosure ditches and was oriented southwest-northeast. The grave was unlined, apart from possible pillow stones, and there were no grave goods.

The inner settlement enclosure was roughly oval-shaped in plan. Its northern part lay outside the excavated area but the overall diameter would have been approximately 44m. An entrance was present to the northeast and there was evidence for a metalled surface over the causeway. The enclosure ditch at the northwest was substantial and was up to 4m wide and 1.65m deep. This was possibly a result of the surrounding unstable sandy subsoil which was prone to slippage. The ditch was at its narrowest along the northeast, at 2.4m in width and 0.9m deep, where the ground was much firmer and it was excavated to the depth of the bedrock. For the most part, the enclosure ditch silted-up naturally and there was little evidence for ditch re-cuts.

A lack of suitable organic material at the base of the ditch meant it was impossible to obtain a construction date for the settlement. However, charcoal from a middle deposit was radiocarbon dated to A.D. 775-901. The enclosure ditch was therefore excavated and occupied prior to A.D. 775. Finds were rare but included a long iron blade; possibly a plough coulter from the base of the ditch, an unidentified iron object and a flint flake. Animal bone was present but not in large quantities. It was dispersed evenly throughout the northern and eastern sections of the ditch but appeared only very occasionally from the sandy fills in the western section, possibly as a result of higher decomposition in this area. Small quantities of iron slag were also recovered from the ditch but were not concentrated in any one area.

Internal features within the settlement enclosure included a complex of ditches and gullies, a possible cistern and pits. The interior was potentially divided by a ditch in the southern part of the enclosure. Finds included iron slag and animal bone. A fragment of the latter was radiocarbon dated to A.D. 614-694 which suggests the ditch was dug during the main occupation phase. A cluster of gullies were also recorded in the west of the enclosure. They varied in length, width and depth but all had a similar fill of brown mottled silt. Small quantities of animal bone and iron slag were present within their fills and the only artefact was an iron knife. The quantity of slag was similar to that from the enclosure ditch and was indicative of small-scale smithing involving the production and repair of iron objects. The largest gully was radiocarbon dated to A.D. 664-771. A number of gullies were also present in the eastern part of the enclosure. The function and relationship of the gullies is difficult to determine.

In the northern part of the enclosure, a rectangular pit was later truncated by a circular pit. They contained dumped burnt material, animal bone, burnt bone, fragments of two iron knives, two pieces of iron slag and appear to have been used as refuse pits. Another pit was centrally located and was filled with hearth or kiln waste. An oval-shaped pit, possibly a storage pit or cistern, was located in the south-western part of the enclosure. Its primary fill was radiocarbon dated to A.D. 648-771 which suggests that it, like the above dated internal features, was contemporary with the primary occupation of the settlement. Finds from the pit included a large piece of charred wood and animal bone and it appears the pit was backfilled in a single episode after their deposition. A number of smaller pits were also present within the enclosure.

A large L-shaped cereal-drying kiln was located in the north-eastern section of the enclosure but it post-dated the occupation phase of the settlement. Similar deposits to those found within the kiln were noted as dump material in the outer enclosure ditch and this was dated between the ninth and tenth centuries (see below). Drying grain within an enclosed space would have been a fire hazard to nearby dwellings, barns and pens so this further supports the suggestion that the kiln was a later feature.

The distance between the inner and outer enclosure was consistently 20m and a number of sub-divisions were identified within this space. The outer enclosure ditch was cut into the loose stony natural subsoil and varied in width and depth throughout. In the west, it was narrow and shallow but it widened moving eastwards from 0.6m to 2.15m. It also became deeper and had a maximum depth of 0.8m. It then narrowed at the curve before it gradually widened and deepened again. The ditch was 2.8m wide and 1.05m deep at the point just before the limit of the excavation. The ditch contained one main deposit with occasional fragments of animal bone (mostly from the eastern side). Several dumps of material were also noted. An isolated dump of stone was recorded in the south-western section. An unidentifiable metal object was retrieved from this fill. Layers of charcoal-rich silt, possibly dump material from the nearby kiln, were identified in the same area of the ditch. Three layers of charcoal-rich silt, which overlay the main silting deposit, were also present in the northern part of the ditch. A date of A.D. 859-988 was retrieved from one of these deposits which likely represents a post occupational phase for the site during which time the large cereal-drying kiln was used. Further kiln waste was recorded overlying the main deposit in the south-eastern curve of the ditch. Other finds, other than the unidentifiable metal object, included another unidentifiable iron object, a whetstone fragment and three pieces of struck flint. Apart from the moderate quantity of animal bone, snail shell was also identified along the bottom fill in the south-western section. The presence of a bank was suggested by an absence of any features within 2m of the inner part of the ditch.

The space between the inner and outer enclosing ditches was divided into a number of field enclosures (Fig. 1). Area A was a roughly square-shaped small field, which measured 13m north-south by 11m east-west, to the east of the inner enclosure's entrance. Apart from very small quantities of animal bone, the ditches were relatively sterile. A north-south ditch truncated the field. It contained some animal bone, an iron knife fragment and a possible metal handle.

A second larger enclosed field was present to the east of the above field (Area B). It was roughly rectangular in plan and measured 22m north-south by 16m east-west. The ditches were absent of finds.

In Area C, another large field, roughly oval in plan measuring 45m north-south by 28m east-west, was situated in the south-eastern part of the outer enclosure. Finds within the ditch included moderate amounts of animal bone; including a piece of butchered antler, an iron knife, a possible iron nail, an unidentifiable iron object, a piece of worked bone and a flint core. Charcoal from its fill was radiocarbon dated to A.D. 663-783 which suggests that it was used during the settlement's main phase. Three areas of scorching and burning were identified within this field. A metalled surface was uncovered close to the entrance of the field.

Areas' D and E were similalrly divided by ditches while pits, postholes and two cereal-drying kilns were present in these areas. A number of ditches were also identified radiating out from the outer enclosure which probably represented the remains of further field systems.

Excavations at Ballynakelly revealed a substantial early medieval settlement enclosure with evidence for related field enclosures. Based on dated internal features and later dates from the middle fill of both the inner and outer enclosure ditches, it appears that the settlement was in use between the seventh and eighth centuries. A radiocarbon date from one of the field ditches, between the two main enclosure ditches, indicates that it too was contemporary with main settlement phase. The fields varied in size but were probably utilised for the growing of cereals. This is further supported by the presence of three cereal-drying kilns and pits containing charred seeds. It is possible that two of the kilns, between the inner and outer enclosures, were contemporary with the initial use of the settlement. The larger L-shaped kiln, within the inner enclosure, was used for drying grain after the settlement's abandonment. This probably occurred in the ninth century. Artefacts and animal bone were scarce, which is unusual for a site of this scale, although the latter may have been the result of decomposition factors. It appears that the inhabitants of Ballynakelly occupied the settlement across a few generations. They practised a mixed farming economy and repaired their own iron tools as suggested by the small quantities of iron slag. They lived a rather modest lifestyle as indicated by a general lack of dress or high-status items while the general absence of ditch re-cuts and modification also suggests they could not call upon the work of base clients.

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-7566	Left rib of human burial	1597±33 BP	**A.D. 401-543**
UB-7567	Charcoal from middle deposit of inner enclosure ditch	1173±31 BP	**A.D. 775-901**; A.D 917-966
UBA-9845	Animal bone from internal ditch within inner enclosure	1359±30 BP	**A.D. 614-694**; A.D. 704-705; A.D. 748-765
UBA-9844	Animal bone from largest gully within inner enclosure	1297±22 BP	**A.D. 664-727; A.D. 737-771**
UB-7570	Animal bone from primary fill of large pit/cistern within inner enclosure	1327±32 BP	**A.D. 648-724; A.D. 739-771**
UB-7571	Charcoal from layer overlying main silt deposit within outer enclosure ditch	1130±29 BP	A.D. 783-788; A.D. 815-843; **A.D. 859-988**
UB-7569	Charcoal from ditch of large oval field in south-eastern section between inner and outer enclosures	1271±31 BP	**A.D. 663-783**; A.D. 789-813; A.D. 844-857

Reference

McCarthy, C. 2009. Final excavation report, Vol. 1. Residential Development. Ballynakelly, Newcastle, Co. Dublin. Unpublished report prepared for Arch-Tech Ltd. Available at www.arch-tech.ie.

Barnageeragh, Co. Dublin
Early Medieval Settlement Enclosure and later Unenclosed Settlement
Grid reference: **323515 260882**
SMR: **N/A**
Excavation Licence No: **06E0477**
Excavation duration: **April – August 2006**
Site director: **E. Corcoran (Archaeological Development Services Ltd.)**

Barnageeragh, Skerries – excavated in advance of a development – was a multi-period site with evidence for a possible Bronze Age house, burnt mounds, a ring-ditch with central crouched inhumation, an early medieval settlement enclosure with an internal souterrain and possible dwelling, two unenclosed souterrains, a pennanular enclosure, and later medieval structures (Fig. 109). The site was located on a central high point on the coast. No radiocarbon dates are yet available for the site.

The settlement enclosure was 22m in diameter and was situated on the south-facing slope of a low hill (Fig. 110). No entrance was apparent so the enclosure may have been entered across the ditch by wooden boards or some other means. The enclosure ditch showed evidence for both deliberate in-filling and natural silting and contained animal bone, shell, flint, metal, bone pins and two possible whetstones.

A penannular enclosure was located north of the centre within the enclosure and measured approximately 10m in diameter. The gap was present at the south-west. This potentially marks the former presence of a dwelling within the enclosure – it may have functioned as a drainage gully around the house – and animal bone, shell and part of a possible stone mould were recovered from the ditch fill.

A drystone-constructed souterrain was located to the south just outside the entrance of the pennanular enclosure and consisted of a single chamber and passage. The souterrain fills produced a decorated bone comb, a possible whetstone, a small copper alloy disc and a worked stone.

Two shallow pits – possible hearths – were also situated within the settlement enclosure. Each contained charcoal flecking and animal bone and struck flint was uncovered from one while shell came from the other.

The enclosure ditch was re-cut to the north and west and this ditch also ran east from the enclosure before it turned south. This effectively formed a small enclosure to the east of the settlement enclosure which had an opening to the south. Finds from this ditch included animal bone, shell, possible whetstones, bone pins and an enamelled copper alloy brooch which potentially dates between the eighth and tenth centuries.

A gully, surrounding a possible stone sub-rectangular structure, was located 8m to the south of the settlement enclosure. The wall survived as a double line of stones with a gap between them and may have supported a sod or wooden wall. Some animal bone and pieces of struck flint were recovered from the wall fill. Three postholes and a possible stone platform suggest that the structure had an internal division. Its date is unknown but it may relate to either the later unenclosed souterrain phase or some later medieval structures on the site.

A couple of unenclosed souterrains were identified to the west of the settlement enclosure on a gentle slope at the bottom of a low hill (Fig. 111). Pits and possible hearths were also present in this area. One of the souterrains cut a north-south field boundary which contained animal bone and struck flints which demonstrates that the land was organised prior to the souterrain's construction. Both souterrains were drystone constructions and their entrances faced each other. In between were a number of pits, hearths and postholes which contained animal bone and shells. The western souterrain consisted of a long passage that was connected to a circular chamber with a small pit in

the floor. A circular chamber was also present in the eastern souterrain and, similalrly this had a pit cut into its floor. Finds from both souterrains included animal bone, shells, a possible iron pin and souterrain ware pottery which can date between the seventh and twelfth centuries. A sub-oval hearth, surrounded by nine stakeholes, was located to the north of the western souterrain and showed evidence for multiple burnings.

A pennanular enclosure, approximately 18m in diameter, was located to the west of the settlement enclosure and souterrains on a south-facing slope on the highest part of the site. It was open to the north and the ditch showed evidence for natural silting apart from the eastern terminus which was deliberately back-filled. Animal bone, shell and flint were identified in the ditch fills. Six pits, including two possible hearths, were evident within the enclosure and these produced animal bone, burnt bone, flint and a metal blade. A east-west ditch was located to the north of the enclosure entrance and extended for 47m. A possible whetstone and animal bone were retrieved from the ditch fill.

Excavations at Barnageeragh produced archaeological evidence from the Bronze Age to late medieval periods. Although no radiocarbon dates are available as yet, it appears that an enclosed settlement was constructed during the early middle-ages. Evidence for habitation included a possible house, pits, hearths and finds such as animal bone, shells and a number of dress and functional items. It is likely that the souterrain within the enclosure is related to that settlement phase due to its proximal relationship with the possible dwelling. The settlement's occupants modified the ditch at some point to slightly expand the site but it then appears that the enclosed settlement was abandoned in favour of two unenclosed souterrains a short distance to the west. A number of pits and hearths further testify to domestic activity. The pennanular enclosure to the west may have functioned as an animal enclosure although its chronological relationship to other features is unclear. Indeed, many of the features on the site could not be stratigraphically related so their relationships will not be fully resolved until radiocarbon dates are available.

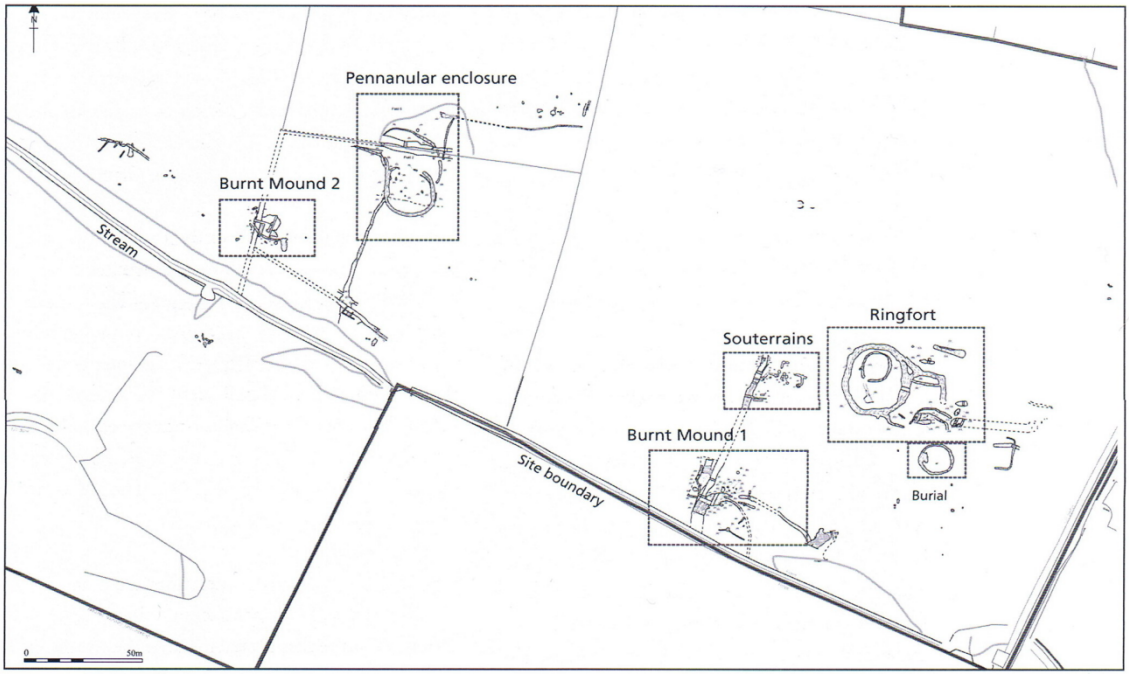


Fig. 109: Barnageeragh (After Corcoran 2009, 39)

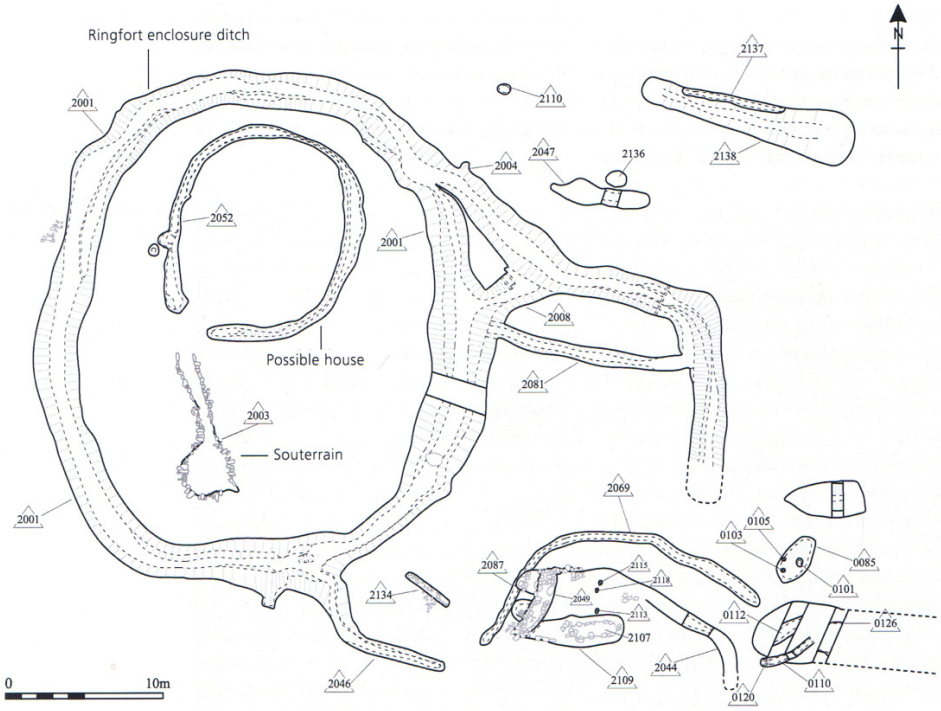


Fig. 110: Settlement Enclosure (After Corcoran 2009, 42)

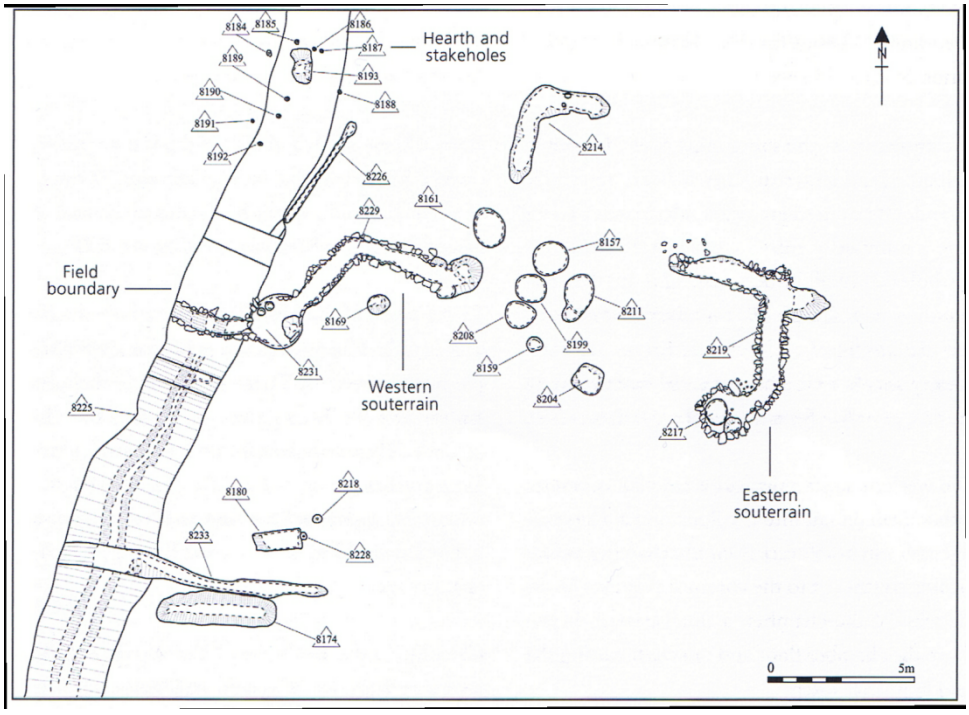


Fig. 111: Souterrains (After Corcoran 2009, 44)

Reference

Corcoran, E. 2009. Multi-period excavations at Barnageeragh, Skerries, Co. Dublin. In C. Baker (ed.) *Axes, warriors and windmills: Recent archaeological discoveries in North Fingal*, 36–50. Dublin. Fingal County Council.

'Butterfield', Rathfarnham, Co. Dublin
Early Medieval Settlement-Cemetery
Grid reference: **O13412842 (313413 228421)**
SMR: **DU022-038**
Excavation Licence No: **97E0140**
Excavation duration: **May – June 1997; August – September 1997**
Site director: **J. Carroll (J. Carroll and Co. Ltd.)**

Excavations – in advance of the expansion of the Old Orchard pub in Rathfarnham – revealed a settlement-cemetery enclosure. Settlement and industrial activity was evident from the finds within the enclosing ditch and at least 233 burials were revealed within the enclosure. Only a small area of the site was excavated and radiocarbon dates are awaited but Butterfield probably represents a secular early medieval settlement and burial enclosure.

The first phase of activity at Butterfield related to settlement and industry and was associated with the digging of the inner enclosure ditch. The ditch was identified on both the north and south sides of the excavated area which suggests that there was an enclosure. Further evidence for an enclosure was identified on the first edition OS map which shows that the site was situated within a curvilinear area formed by a bend in the old road, at Butterfield Avenue, and the surrounding field boundaries. Indicators of habitation included large quantities of animal bone, a penannular brooch terminal, iron knives and a pig fibula pin within the ditch fills. Both iron and copper slag, and vitrified clay were also recovered from the ditch which indicates that ferrous and non-ferrous metalworking occurred at, or near, the site. Quantities of iron slag were also found on the south side of the site at the edge of ditch.

A cemetery was located within the enclosure and contained at least 233 burials. Only a small area was excavated and there were approximately three layers of burials which overlapped each other. 'Ear muffs' were present in some graves and all the burials were extended inhumations and orientated west-east. Carroll has assigned the cemetery to Phase II although there is no stratigraphic information in the excavation bulletin to suggest this. It is possible that the site originated as a burial ground and then incorporated settlement activity. As the dimensions of the enclosure are not given, it is difficult to determine if Butterfield was an ecclesiastical or secular site. No historical accounts of a church are recorded so perhaps the latter option is more plausible.

The final phase incorporated the digging of a second ditch although its relationship to the first ditch is unclear. Later medieval activity was recorded in the site's northern area and included a possible structure and a range of twelfth- and thirteenth-century finds.

(**No plans were available for this site**).

Reference:

Carroll, J. 1997:184. The Old Orchard Inn, Butterfield Avenue, Rathfarnham. www.excavations.ie.

Internet reference:

http://www.judithcarrollandco.ie/project.php?pid=23

Cherrywood (Site 18), Co. Dublin

1. **Early Medieval Cemetery**
2. **Early Medieval Enclosed Scandinavian Settlement**

Grid reference: **O24252322 (32425/22322)**
SMR: **N/A**
Excavation Licence No: **99E0523**
Excavation duration: **November 1998 – September 1999**
Site director: **J. Ó Néill (Margaret Gowen and Co. Ltd.)**

Excavations at Cherrywood revealed a multi-phase enclosure which was utilised initially as a cemetery, during approximately the sixth and seventh centuries, before the site was settled between the eighth and twelfth centuries. The site was situated on a low hill and the hill's southern end overlooks the Loughlinstown River, while the confluence of the Loughlinstown and Shanganagh Rivers lies close-by to the east. The site was only 2km from Killiney Bay.

The archaeological activity was enclosed within an oval enclosure that measured 42m by 38m. The enclosing ditch was up to 3m wide and 1.6m deep. During the site's initial use, the enclosure ditch was continuous – possibly accessed by a temporary bridge – whereas two sections were backfilled to leave opposing entrances at the west and east during its later phase. No evidence for a bank survived. The only finds within the basal ditch fills were iron fragments, a copper-alloy fragment, an iron knife and a flint flake. Finds from the middle and upper ditch fills included an iron object, iron nails, iron slag, an amber bead and a single sided bone comb. The presence of Dublin-type ware in the top deposit demonstrates that the ditch had filled-in by the thirteenth or fourteenth century. A sherd of Late Roman Amphora (B ware) was recovered from the topsoil and probably relates to the primary use of the site.

1. Early Medieval Cemetery

The enclosure at Cherrywood was initially constructed to enclose a cemetery which was in use during the sixth and seventh centuries (Fig. 112). Thirty eight burials were revealed and all were extended inhumations in earth-cut graves. Twenty two were adults and 16 were sub-adults. Ear muffs were common to many graves and the majority were laid out in rows, and sometimes evenly spaced, which suggests the former presence of grave markers. The only grave goods were two buckles (one has been dated to the sixth or seventh century), a fragment of an iron pin and an iron fragment. This suggests that some of the interred were clothed.

2. Enclosed Scandinavian Settlement

A number of features, including structures (represented by stake and postholes), a cereal-drying kiln and a pit, post-dated the use of the cemetery. Four structures were revealed within the enclosure.

Structure 4, the earliest building, was sunken and was located in the south-western part of the enclosure (Fig. 113). It was represented by an oval area measuring 2.75m by 1.9m. The structure was surrounded by a U-shaped setting of stake and postholes that was open to the east. A bone needle was recovered from a charcoal-rich central area and animal bone associated with the building was dated to A.D. 680-890.

Structure 1 post-dated Structure 4. It was trapezoidal in plan and measured 17.5m in length and was between 5.75m and 6.8m wide. It appeared to have load-baring posts along the outer walls and a small number of internal stake and postholes indicated three transverse internal divisions. A hearth was situated off-centre at the southern end and a centrally-perforated piece of decorated bone (possibly a spindle-whorl, loom-weight or gaming piece) was found in its fill. The only other find was represented by fragments of a decorated bone comb from a posthole.

Structures 2 and 3 were potentially contemporary and they were constructed after Structures 4 and 1 (Fig. 113). Structure 1 was truncated by Structure 2 and the latter was clearly divided into three and was slightly sunken. The area defined by the building measured 8.15m by 5.4m and an entrance was located at the north. The doorway was cobbled and it appears that the roof was supported by internal posts but evidence for a hearth or flooring had been ploughed away. A deposit overlying the cobbled

doorway contained a ringed pin, a bone comb fragment, a lignite bracelet fragment and various fragments of bronze and iron. Animal bone from this deposit was dated to A.D. 1020-1230.

Structure 3 measured 9.4m by 5.3m and was the southernmost of all the buildings. The surviving features included a doorway and an internal partition while a metalled surface was also present outside the north-eastern corner. The partition divided the building into two rooms and the doorway was visible in the southern gable wall. The only finds were a decorated bronze strap and a piece of blue glass which were associated with the metalled area.

Further features within the enclosure included a cereal-drying kiln and a rectangular pit. The latter produced animal bone, a ringed pin, a pronged, socketed object, a domed bronze stud, a decorated whale-bone plaque, iron objects, iron slag, bronze fragments, and a sherd of coarse pottery. The whale-bone plaque dates to the second half of the ninth century so it appears that the pit was contemporary with Structure 1.

The morphology of the structures, the radiocarbon dates and the whale-bone plaque indicate a potential rural Scandinavian settlement at Cherrywood and interestingly, a former local cemetery was chosen as a place of settlement. Historical accounts indicate that the area was targeted by second generation Scandinavian raiders, while there was a tendency amongst Scandinavians to settle at or near monastic sites and Tully church is located near the site.

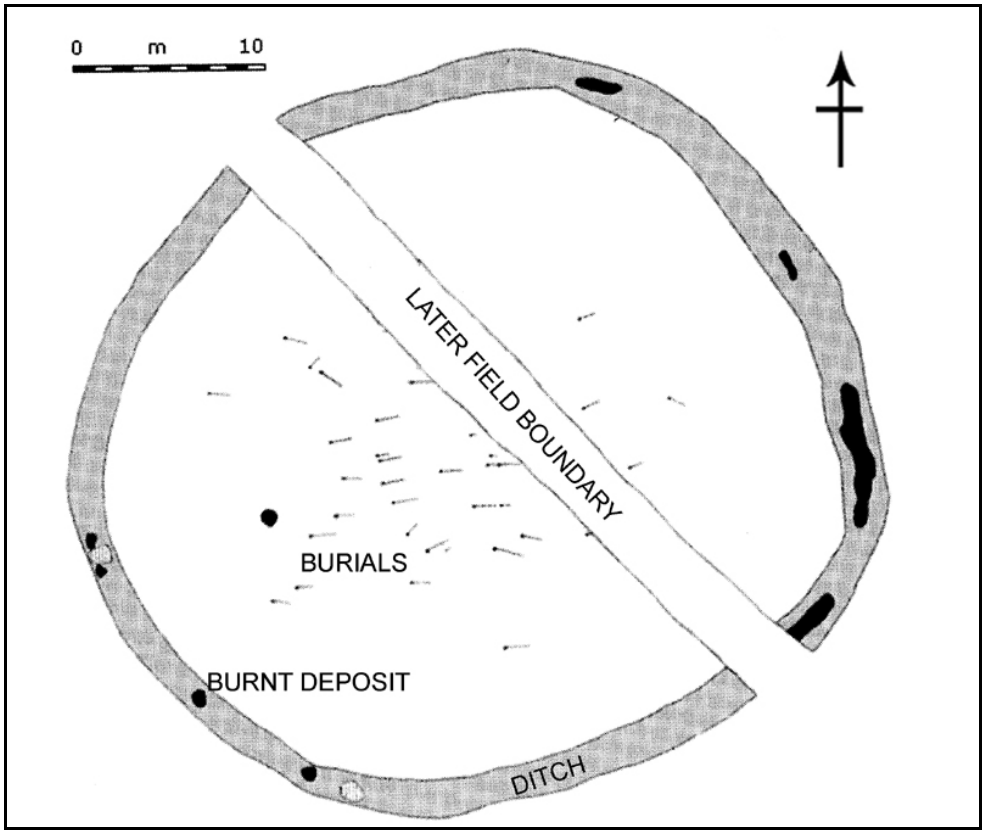


Fig. 112: Plan of cemetery at Cherrywood, Co. Dublin (after Ó Néill 2006, 68).

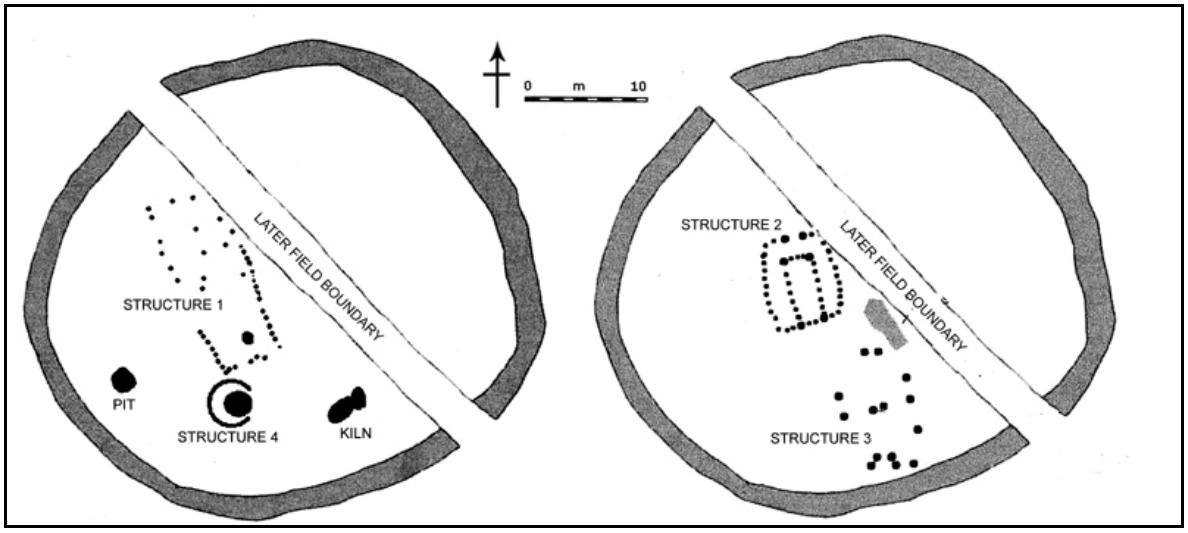


Fig. 113: Plan of Scandinavian settlement at Cherrywood, Co. Dublin (after Ó Néill 2006, 71, 75).

References:

Ó Néill, J. 1999. A Norse Settlement in rural County Dublin, *Archaeology Ireland*, 13(4), 8–10.

Ó Néill, J. 2006. Excavation of pre-Norman structures on the site of an enclosed Early Christian cemetery at Cherrywood, County Dublin. S. Duffy (ed.) *Medieval Dublin VII: Proceedings of the Friends of Medieval Dublin Symposium 2005*, 66–88. Dublin. Four Courts Press.

Dalkey Island, Co. Dublin
Early Medieval Promontory Fort
Grid reference: **O27702645 (327702/226465)**
SMR: **DU023-029**
Excavation Licence No: **N/A**
Excavation duration/year: **1956 – 1959**
Site director: **G.D. Liversage (Research)**

Excavations at Dalkey Island, during the latter half of the 1950s, revealed pre and contemporary promontory fort activity dating to the early medieval period. The presence of large quantities of imported B and E ware pottery demonstrates that the settlement was in use from the fifth to mid seventh centuries. Prehistoric finds also indicate earlier use while historical records attest to Scandinavian use of the site from the ninth century.

Dalkey Island is about eight hectares in size and is separated from the south Dublin coastline by a fast-flowing tidal sound approximately 400m in width. A well supplies the island with fresh water. The promontory fort is located on the northern side of the island and consists of a small headland cut-off by a low bank with external ditch (Fig. 114). The fort is divided into two platforms by a low granite cliff that runs from south to north. The western platform overlooks the harbour and the eastern platform is between 2m and 3m higher.

The first excavation (termed Site II), between 1956 and 1958, investigated the promontory fort bank and ditch on the lower western platform (Fig. 115). A possible entranceway was located consisting of several postholes; two of which were stone-packed. Notably, a pre-bank occupation layer was discovered and finds from the upper level included three bronze pins, B ware and E ware pottery sherds, two glass vessel fragments, iron nails, a piece of worked bone, part of a broken whetstone and part of a steatite ring. The lower fill contained only prehistoric finds. The presence of B ware and E ware pottery beneath the bank indicates settlement activity, before the promontory fort was constructed, between the fifth and mid seventh centuries.

The bank overlay the occupation layer and was approximately 1.5m high. Its related ditch was 5m wide and between 2m and 2.4m deep. A number of hearths and burnt spreads were noted within the ditch and were probably placed there to provide shelter from the weather. Two B ware sherds, iron slag, two bone pins and three bone cylinders were retrieved from the ditch fill.

Liversage recorded a number of artefacts that were not stratigraphically related to the bank and these included two sherds of Samian ware, a small bronze penannular brooch, a second possible penannular brooch, a knife and two spindle whorls. The artefacts from Site II are indicative of occupation even though no dwellings or related structures were identified.

A hearth and a possible cereal-drying kiln were revealed in the northern part of Site II but there was no evidence for the bank and ditch here.

The higher, and more exposed, eastern platform was excavated between 1957 and 1958 (Site III). The ditch and bank extended into this area although the latter was less substantial compared to the findings at Site II. Site III revealed extensive early medieval evidence that included the remains of a substantial sub-rectangular structure which was built upon the bank. The building measured approximately 6m in length by 3.5m wide and contained a central hearth. The roof may have been supported by the bank, or a ‘stone scatter’ which was not recorded on plan and may have functioned as a low wall.

A sherd of Late Roman Amphora (B ware) was sealed beneath the hearth while a dark occupation layer partially sealed the hearth and the rear slope of the bank. This contained animal bone, shell, a glass bowl sherd, five sherds of E ware, a lignite or jet bracelet fragment, an iron loop-headed ringed pin, nails, iron slag and a bone pin. A layer above this, that covered the bank, contained animal bone, an iron ringed pin with an attached bronze chain, a bone pin, nails, worked bone and a hone stone.

Also, 55 E ware sherds, from possibly the same jar, and a bronze ringed pin were recovered at the interface of this layer and the top layer. The E ware sherds were distributed in two areas at either side of the entrance which suggests that the structure may have been in use when they were deposited. This suggests that the building was in use between the mid sixth and mid seventh centuries at least and possibly earlier. Interestingly, the dwelling was situated on an elevated and exposed position – both on top of the bank and on one of the highest places in the northern part of the island – so it appears that visibility was a key factor in its choice of location.

A trench was placed across the northern promontory platform in 1959 and was labelled Site V. Early medieval activity consisted of a number of pits. One produced an E ware sherd and a lignite ring although their function is unclear. Twenty five E ware sherds were also uncovered within the trench. A number of other cuttings revealed further pits and hearths. Late Roman Amphora and E ware pottery sherds were associated with one hearth while one of the pits produced ironworking debris including slag and a possible *tuyère* fragment.

Excavations have revealed structural and artefactual evidence indicative of settlement at Dalkey Island dating to the early medieval period. The first early medieval habitation phase preceded the construction of the promontory fort probably between the fifth and mid seventh centuries. The fort bank was utilised for the construction of a building – probably a house – in the seventh century. The large numbers of imported pottery suggest that the promontory fort acted as an importation base rather than a permanent high status settlement. Therefore, specialised temporary or seasonal settlements may have been utilised on the island by a social elite who controlled the procurement of exotic foreign goods before they were redistributed on the mainland.

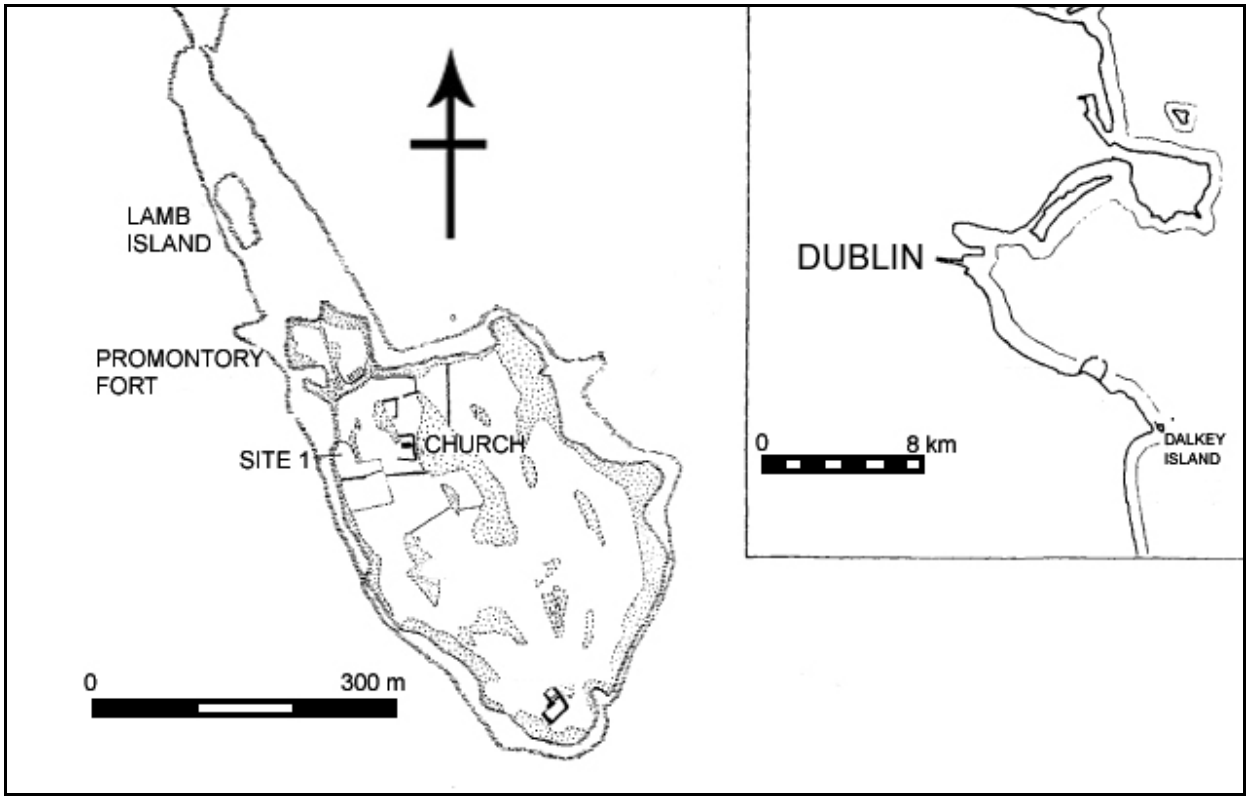


Fig. 114: General plan of Dalkey Island (after Liversage 1968, fig. 1).

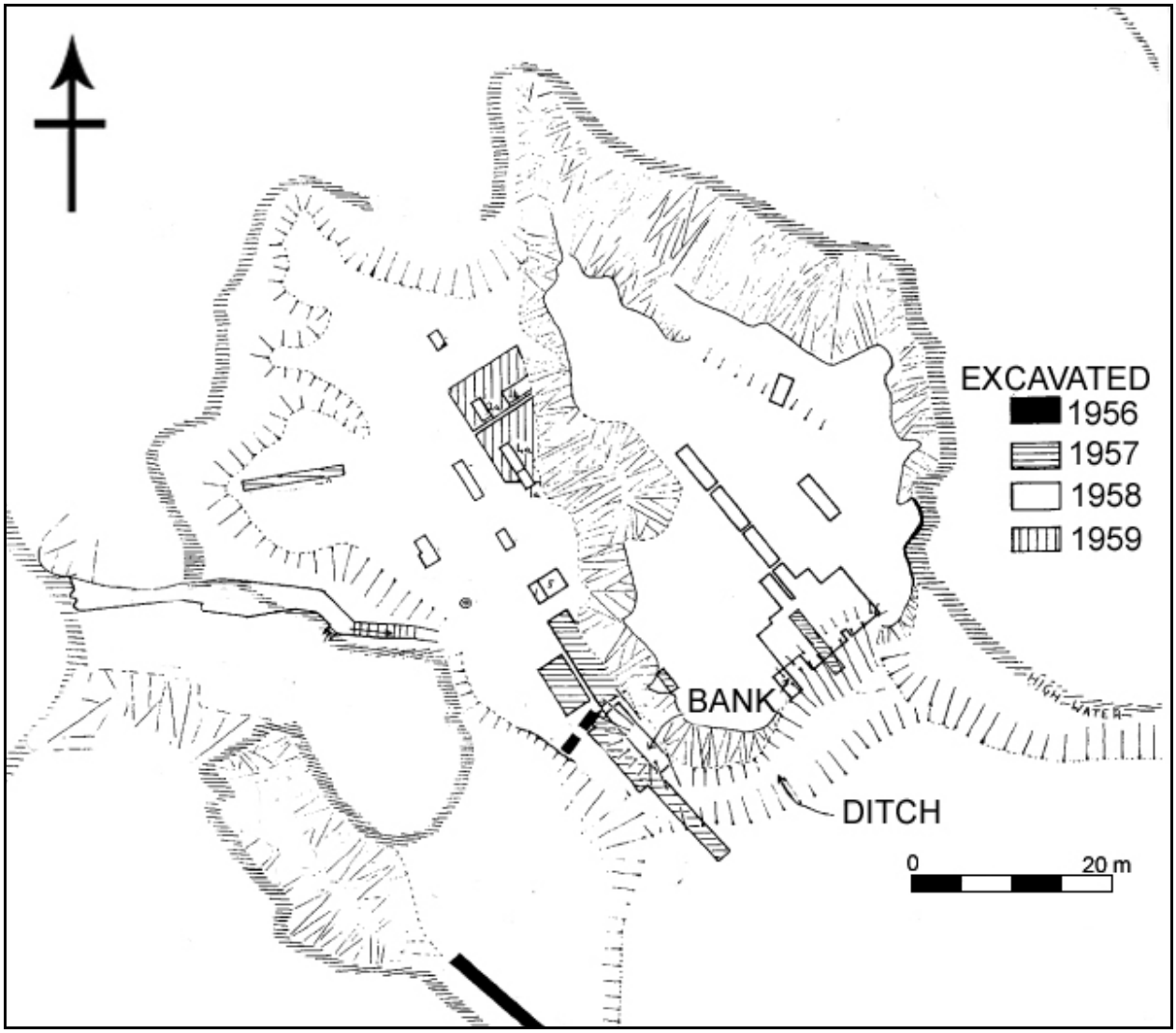


Fig. 115: Plan of excavations at Dalkey Island (after Liversage 1968, fig. 2).

References:

Doyle, I. W. 1998. The early medieval activity at Dalkey Island, Co. Dublin: a re-assessment. *Journal of Irish Archaeology* 9, 89–103.

Liversage, G.D. 1968. Excavations at Dalkey Island, Co. Dublin 1956-59. *Proceedings of the Royal Irish Academy Section C*, 66C, 53–233.

'Dun Emer', Lusk, Co. Dublin
Early Medieval Settlement Enclosure
Grid reference: **32081 25418**
SMR: **N/A**
Excavation Licence No: **05E0848**
Excavation duration/year: **2005**
Site director: **A. Giacometti (Arch-Tech Ltd.)**

Excavation at Lusk – in advance of a residential development – revealed Bronze Age activity, including an early Bronze Age hut and hearth and later Bronze Age ditch, an early medieval settlement enclosure, which dated between the seventh and ninth centuries, and associated field systems. The enclosure was centrally situated within a series of radiating ditches which extended for over 70m to the north, east and west. The site was situated on a low rise above lands prone to flooding. The settlement's location also afforded excellent views of the surrounding countryside (Fig. 116).

The settlement enclosure was D-shaped and measured approximately 35m in diameter (Fig. 117). The surrounding ditch was 2.5m wide and 1m deep and there was evidence for an inner bank. A rough cobbled surface lined the base of the ditch although its function is uncertain. However, evidence for intense burning on the base suggests this sheltered area was possibly used for small-scale iron smithing. The ditch was regularly maintained and radiocarbon dates of A.D. 681-870 and A.D. 688-883, with the probability favouring the later side, indicates a ninth-century date for the final use of the settlement.

The settlement's occupants utilised a large field boundary, which ran east-west, to form the northern part of their enclosure. The stratigraphic relationship between this and the settlement's remaining enclosing element shows that the field boundary pre-dated the settlement and was potentially excavated prior to the mid-seventh century.

Artefacts were absent from the site. Small quantities of metallurgical waste indicate low levels of tool repair and possible production within the enclosure ditch. Animal bone came from both the main settlement enclosure ditch and the neighbouring eastern enclosure (see below).

The settlement was entered at the south, where the ditch was deepest, and a set of large postholes suggested the former presence of a large timber bridge over the ditch.

Two oval or circular structures were present within the enclosure. They were defined by postholes and measured 6m and 11m in diameter. The larger building had an entrance to the southeast while the smaller structure had a central hearth with postholes on either side, perhaps to support a spit for cooking. The hearth was dated to A.D. 596-672. A well or cistern was situated to the east of the settlement and likely provided water for the occupants.

A sub-square enclosure, which measured 20m in diameter, was situated directly to the east of the settlement. Its ditch was less substantial and two possible entrances were located at the north while an entrance to the west facilitated access between both enclosures. The ditch was less well maintained compared to that of the neighbouring settlement enclosure and was allowed to silt-up during its lifetime. No features were found within the enclosure so this field may have functioned as an animal pen. The majority of animal bone was recovered from the ditch and charcoal from its fill was dated to A.D. 765-890, which relates to a late or abandonment phase for the enclosure.

A third smaller rectangular enclosure was located to the north of the main settlement enclosure and was defined by a complex of shallow ditches which contained charred seeds. A cereal-drying kiln, radiocarbon dated to A.D. 644-721, was situated in close proximity to the north of the enclosure and contained charred cereal remains. Grain chaff and weeds were recovered from the enclosure ditch and it is probable that this was the primary cereal processing area. Two other cereal-drying kilns were

located outside the settlement. Their location would have been deliberate due to the dangers of fire and one of these was dated to A.D. 658-779 which was contemporary with the main settlement phase.

A number of hearths were present in the upper fills of a ditch to the west of the settlement. A date of A.D. 803-972 was retrieved from one which indicates this activity occurred after the settlement's abandonment.

Finally, a series of ditches radiated from the settlement and extended for over 70m around the site. They are likely to represent further field division and land organisation. The total amount of land managed by the farmers and their retainers at Lusk may have been approximately two hectares.

Excavations at Lusk identified an early medieval enclosed farmstead dating between the seventh and ninth centuries. Its occupants lived centrally within an ordered and highly managed landscape where fields were divided for both livestock and cereal growing. The family residing within the enclosure practised small-scale ironworking, such as the making and repairing of tools, and they lived-off the produce of the surrounding fields. A complete lack of artefacts, both dress items and functional objects, suggests they were people of modest means. At some pint during the ninth century, the enclosure ditches silted-up and the settlement was abandoned for reasons unknown.

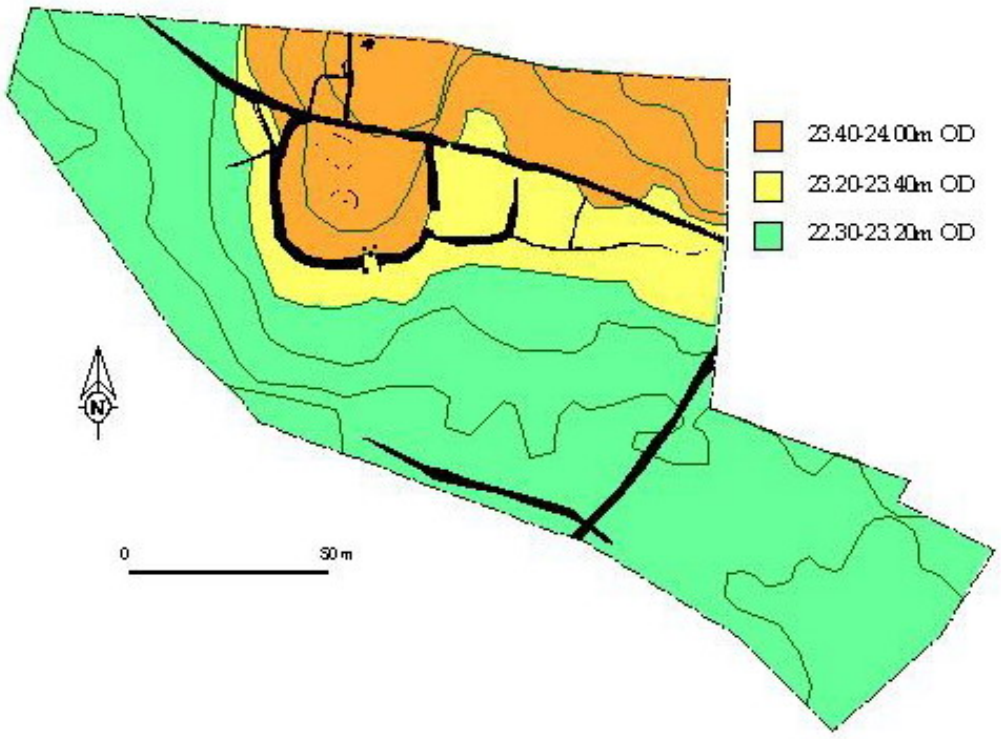


Fig. 116: Dun Emer (After Giacometti 2007)

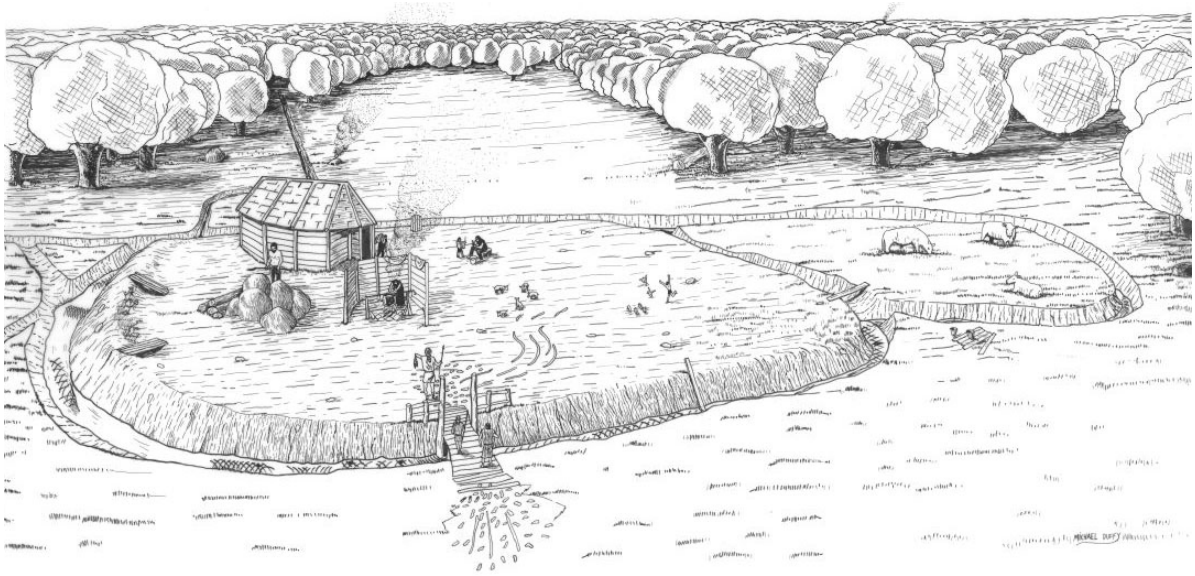


Fig. 117: Dun Emer Reconstruction (After Giacometti 2007)

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-7151	Charcoal from settlement enclosure ditch	1230±34 BP	**A.D. 688-754; A.D. 758-883**
UB-7148	Charcoal from settlement enclosure ditch	1246±32 BP	**A.D. 681-870**
UB-7143	Charcoal from hearth within structure in settlement enclosure	1398±32 BP	**A.D. 596-672**
UB-7145	Charcoal from eastern enclosure ditch	1214±31 BP	A.D. 693-748; **A.D. 765-890**
UB-7149	Charcoal from cereal-drying kiln to north of northern enclosure	1337±32 BP	**A.D. 644-721**; A.D. 741-770
UB-7150	Charcoal from cereal-drying kiln	1288±32 BP	**A.D. 658-779**
UB-7144	Charcoal from hearth to west of settlement	1151±30 BP	A.D. 780-792; **A.D. 803-972**

References

Giacometti, A. 2006. Living in the Landscape. *Archaeology Ireland* 20(2), 36–9.

Giacometti, A. 2007. Excavation report. Site of residential development. Development Phase 6, Dun Emer Estate, Lusk, Co. Dublin. Unpublished report prepared for Arch-Tech Ltd. Available at www.arch-tech.ie.

Giacometti, A. 2010. Reconstructing the human landscape before, during and after the lifespan of a ringfort at Lusk, Co. Dublin. In C. Corlett and M. Potterton (eds) *Settlement in Early Medieval Ireland in the light of recent archaeological excavations*, 38–48. Bray. Wordwell.

Flemington, Co. Dublin
Early Medieval Enclosure Complex
Grid reference: **31845 26385**
SMR: **N/A**
Excavation Licence No: **05E0663**
Excavation duration/year: **2005**
Site director: **T. Bolger (Margaret Gowen and Co. Ltd.)**

Excavations at Flemington – in advance of a housing development – revealed a Neolithic house, Bronze Age activity in the form of burnt mound material and a multi-phase early medieval enclosure complex. Areas of metalworking and cereal processing were also identified. Geophysical survey revealed further and probable related archaeological activity to the north of the excavation (Fig. 118). The site was situated on a ridge of high ground and its lower part may have been waterlogged in antiquity.

The early medieval activity at Flemington consisted of a multi-phase ditched complex (Fig. 119). The ditches varied in size and morphology and there was no indication of a central enclosure. Habitation evidence was minimal and was suggested in the northern part of the site by occasional post- and stake-holes and a couple of shallow slot trenches. The main settlement enclosure may have existed beyond the excavated area. A short arc of curving ditch, approximately 3m wide and 2m deep, was present at the northern part of the site and has been suggested as forming part of the main settlement enclosure. However, a radiocarbon date of A.D. 894-998 from a primary fill suggests this is a later feature. The earliest dated feature, A.D. 575-672, came from a ditch in the south of Area E. Common to the ditches was evidence for re-cuts and modification, often with variation in size and layout. The ditches were pronounced at the interface of the probable wetland and a palisade trench was recorded in this area.

A variety of functions have been suggested for the ditches. Macro-fossil plant remains from the primary fills of many of the ditches have been identified in significant quantities and represent seeds from hedgerow-type plants. This suggests they functioned as field boundaries. That the ditches were re-cut also lends support to their identification as boundary divisions over a long period. However, other ditches contained metalling or cobbling at their bases which suggests another function. Others terminated and opened out at the probable wetland area, or in other instances into a large pits or cisterns. This indicates that water management and control was another function of the many multi-phase ditches at Flemington. A radiocarbon date of A.D. 690-877 was obtained from the primary fill of a ditch which possibly drained water from a sub-triangular cistern that was approximately 10m wide. Two sherds of E-ware (dated between the sixth and early eighth centuries) were retrieved from deposits overlying the cistern, a metal pin (from a ringed pin) was discovered in its upper fills, while the wooden hoop of a stave-built vessel came from its primary deposit. Similar cisterns or pits with related ditches were recorded in other areas of the site.

Evidence for ironworking was identified solely from Area B and consisted of a series of small bowl furnaces with associated pits. Approximately 30kg of metallurgical waste – mainly slag – came from these features. Very little slag came from any other areas of the site.

A cluster of cereal-drying kilns were uncovered in Area C in proximity to the wetland area. They were heavily truncated but one of the later examples was stone-lined and keyhole-shaped. The fill from one was radiocarbon dated to A.D. 894-1020 which suggests it was contemporary with the curved ditch to the north of the site. Another cluster of kilns was recorded in Area D. A possible related feature in this area was a large irregular metalled surface located centrally which may have functioned as a threshing floor. The upper stone of a rotary quern was found on its surface. Other finds from this area included a number of possible iron knives.

Finds from the site were few and consisted of those already mentioned and some ringed pins which came mainly from the ditch fills. The most distinctive artefact was s triangular mount with traces of wood and leather which may once have been attached to a wooden box.

Excavations at Flemington have revealed a broad variety of differently sized and shaped ditches that were re-cut and modified across generations. This early medieval community was clearly concerned with maintaining an organised and managed landscape. The identification of cereal processing and ironworking testifies to further peripheral settlement activity in which dangerous activities such as drying corn and smelting or smithing iron was undertaken in places removed from the settlement. It is likely that the main settlement focus lies outside the excavated area and perhaps to the north.



Fig. 118: Flemington Geophysical Survey (After Bolger 2009, 24)



Fig. 119: Flemington Aerial View (After Bolger 2009, 29)

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UBA-8520	Primary fill from curving ditch in northern area of site	1088±25 BP	**A.D. 894-998**; A.D. 1002- 1013
UBA-8526	Fill of ditch in the south of Area E	1404±38 BP	**A.D. 575-672**
UBA-8518	Fill of a cereal-drying kiln in Area C	1074±36 BP	**A.D. 894-1020**
UBA-8516	Primary fill of ditch related to cistern or pit	1232±24 BP	**A.D. 690-750; A.D. 762-877**

Reference

Bolger, T. 2009. Organising the landscape: archaeological excavations at Flemington, Balbriggan. In C. Baker (ed.) *Axes, warriors and windmills: Recent archaeological discoveries in North Fingal*, 23–35. Dublin. Fingal County Council.

Lusk, Co. Dublin
Early Medieval Ecclesiastical Settlement
Grid reference: **321600 254440**
SMR: **DU008:010**
Excavation Licence No: **C010**
Excavation duration: **June – July 2005**
Site director: **A. O'Connell (Archaeological Consultancy Services Ltd.)**

Excavation at Lusk occurred 200m west of the round tower and at the junction of Church Road and Tree Lane. It revealed part of the ecclesiastical enclosure ditch, a cemetery and a souterrain (Fig. 120). It now appears that the enclosure ditch represents a third outer enclosure around the ecclesiastical site.

A 5m portion of the ecclesiastical enclosure ditch was revealed within the excavated area of the site. It was 2.5m wide and 1.5m deep and had a V-shape profile. The primary fill consisted of redeposited boulder clay on the base and western side of the ditch cut. It has been suggested that this originated from the bank and that the latter was situated externally to the ditch. However, this would be an unusual occurrence as associated banks at both ecclesiastical and secular early medieval settlements occur internally to the ditch. The remaining deposits contained animal bone and analysis indicates it represented the remains of food refuse. The only other finds were an iron nail and a piece of slag. The slag came from the second ditch fill which was radiocarbon dated to AD 420-600.

O'Connell, through an integration of his excavation with previous excavations and an analysis of street plans, has identified a third enclosing element to the ecclesiastical site at Lusk which enclosed an area measuring approximately 515m north-south by 280m east-west. It also appears that the outer ditch was in use during the fifth and sixth centuries and was contemporary with the earliest phase of the monastery.

The cemetery was located to the west and externally of the enclosure. Eight burials were revealed within the excavated area and all were supine extended inhumations and orientated west-east. Disarticulated human bone from the topsoil suggests further burials within the vicinity. The burial ground was mixed but of note was the occurrence of a grave containing two adult males. Analysis showed they had multiple blade injuries and were beheaded prior to burial. An iron spearhead was uncovered in the upper torso of one of the males. This burial was radiocarbon dated to AD 410-570. Their position outside the ecclesiastical enclosure is not surprising given that ecclesiastical cemeteries were reserved mainly for clerics prior to the seventh and eighth centuries.

The fragmentary remains of a dry-stone-constructed souterrain were also identified to the west of the enclosure ditch and in proximity to the burials. The passage was accessed through a short recess and extended for 12m and beyond the excavation limit. It was 1.7m wide and 1.8m deep and had a well-laid metalled surface. The recess was 1.5 long and a rotary quern stone was reused as one of the roof lintels. The passage had two backfilled layers which contained numerous thirteenth-century pottery sherds. The passage was linked to the chamber by a 2.2m long creep-way which also had a metalled surface. The chamber was rectangular in plan and measured 2.2m in length by 1.7m wide. It similalrly had a metalled surface and backfilled deposits containing twelfth and thirteenth century pottery sherds.

The excavation at Lusk has revealed convincing evidence for the presence of a third outer ecclesiastical enclosure that was designed and constructed during the monastery's formative years. Settlement and burial evidence occurred in proximity to the west and outside the enclosure. At least one of the burials was contemporary with the enclosure ditch and shows that this community were denied access to bury their dead within the ecclesiastical site's boundaries during the fifth and sixth centuries. The souterrain likely represents an unenclosed settlement that was probably built during the eighth century or sometime after and possibly when the ecclesiastical site was an established and bustling place.

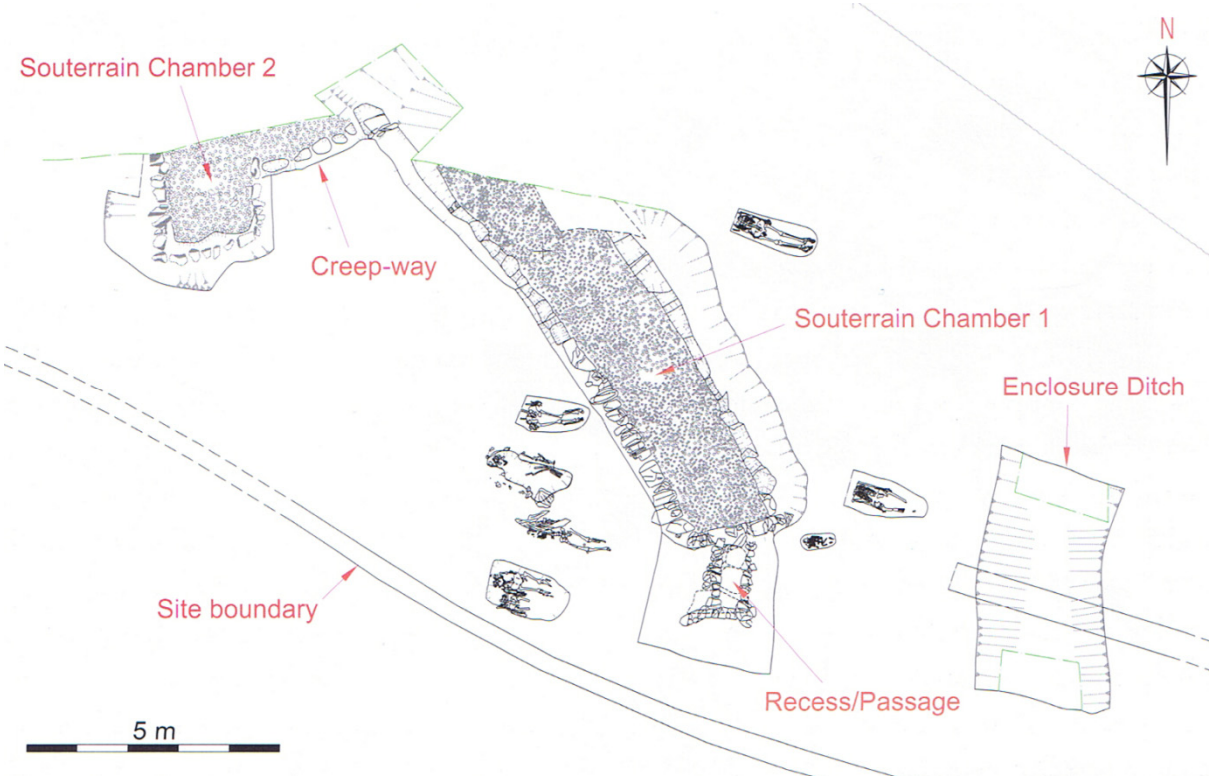


Fig. 120: Plan of Lusk (After O'Connell 2009, 52)

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
SUERC 17878	Hazel charcoal from second fill of ecclesiastical enclosure ditch	N/A	**AD 420-600**
SUERC 16999	Human burial	N/A	**AD 410-570**

Reference

O'Connell, A. 2009. Excavations at Church Road and the early monastic foundation at Lusk, Co. Dublin. In C. Baker (ed.) *Axes, warriors and windmills: Recent archaeological discoveries in North Fingal*, 51–63. Dublin. Fingal County Council.

Scandinavian/Hiberno-Scandinavian Dublin
Urban town (mid-ninth/twelfth century)
Christchurch Place
Grid reference: **O15003400 (31500/23400)**
SMR: **N/A**
Licence Number: **N/A**
Excavation Duration/Year: **1972-6**
Director: **A.B. Ó Ríordáin (National Museum)**

Dublin Castle
Grid reference: **O15403400 (31540/23400)**
SMR: **N/A**
Excavation Licence No: **N/A**
Excavation Duration: **April 1985 – Feb. 1987**
Director: **A. Lynch and C. Manning (Office of Public Works)**

1 Essex Gate
Grid reference: **O14503440 (31450/23440)**
SMR: **N/A**
Excavation Licence No: **96E0040**
Excavation Duration/Year: **1997**
Director: **G. Scally (Margaret Gowen and Co. Ltd.)**

5-7 Exchange Street Upper/33-34 Parliament Street
Grid reference: **O14603430 (31460/23430)**
SMR: **N/A**
Excavation Licence No: **93E0143**
Excavation Duration: **Oct. 1993- Jan. 1994**
Director: **G. Scally (Margaret Gowen and Co. Ltd.)**

8-10 Exchange Street Upper
Grid reference: **O14703440 (31470/23440)**
SMR: **N/A**
Excavation Licence No: **96E0040; 98E0198**
Excavation Duration/Year: **1997; 1998**
Director: **G. Scally (Margaret Gowen and Co. Ltd.)**

Fishamble Street
Grid reference: **O15003400 (31500/23400)**
SMR: **N/A**
Excavation Licence No: **N/A**
Excavation Duration/Year: **1974-8**
Director: **P. Wallace (National Museum)**

High Street
Grid reference: **N/A**
SMR: **N/A**
Excavation Licence No: **N/A**
Excavation Duration: **1962-3; 1967-1972**
Director: **A.B. Ó Ríordáin (National Museum)**

John's Lane
Grid reference: **N/A**
SMR: **N/A**
Excavation Licence Number: **N/A**
Excavation Duration/Year: **1978-9**
Director: **P. Wallace (National Museum)**

35 Parliament Street
Grid reference: **N/A**
SMR: **N/A**
Excavation Licence No: **E000635**
Excavation Duration/Year: **1991**
Director: **G. Scally (Margaret Gowen and Co. Ltd.)**

Ross Road
Grid reference: **O15203490 (31520/23490)**
SMR: **N/A**
Excavation Licence No: **N/A**
Excavation Duration: **February – May 1993**
Director: **C. Walsh (Margaret Gowen and Co. Ltd.)**

Ship Street Great
Grid reference: **O15503370 (31550/23370)**
SMR: **N/A**
Excavation Licence No: **01E0722**
Excavation Duration: **February – March 2002**
Director: **L. Simpson**

South Great George's Street
Grid reference: **O15603380 (31560/23380)**
SMR: **N/A**
Excavation Licence No: **99E0414**
Excavation Duration: **April – December 2003**
Director: **L. Simpson (Margaret Gowen and Co. Ltd.)**

Temple Bar West
Grid reference: **O15403410 (31540/23410)**
SMR: **N/A**
Excavation Licence No: **96E0245**
Excavation Duration: **Sept. 1996- Sept. 1998**
Director: **L. Simpson (Margaret Gowen and Co. Ltd.)**

Werburgh Street
Grid reference: **O15203370 (31520/23370)**
SMR: **N/A**
Excavation Licence No: **94E0025**
Excavation Duration: **March – May 1994**
Director: **A. Hayden (Archaeological Projects Ltd.)**

Winetavern Street
Grid reference: **N/A**
SMR: **N/A**
Licence Number: **N/A**
Excavation Duration/Year: **1969 – 1972**
Director: **A.B. Ó Ríordáin (National Museum)**

Wood Quay
Grid reference: **O15103420 (31510/23420)**
SMR: **N/A**
Excavation Licence Number: **N/A**
Excavation Duration/Year: **1974 – 1981**
Director: **P. Wallace (National Museum)**

The following is based on general and thematic papers on Scandinavian Dublin (Murray 1983; Simpson 2000; Wallace 1992a, 1992b, 2001, 2004) and a range of excavation publications related to the town. It will focus on various aspects of the town's layout including its location, defences, streets and pathways, plots and fences, structures and evidence for craft and industry. The summary will begin with an assessment of Dublin's earliest Scandinavian phase in the ninth century – the settlement and potential *longphort* site – and will be followed with a chronological appraisal of the Hiberno-Scandinavian town's tenth, eleventh and twelfth century archaeological levels (Fig. 121).

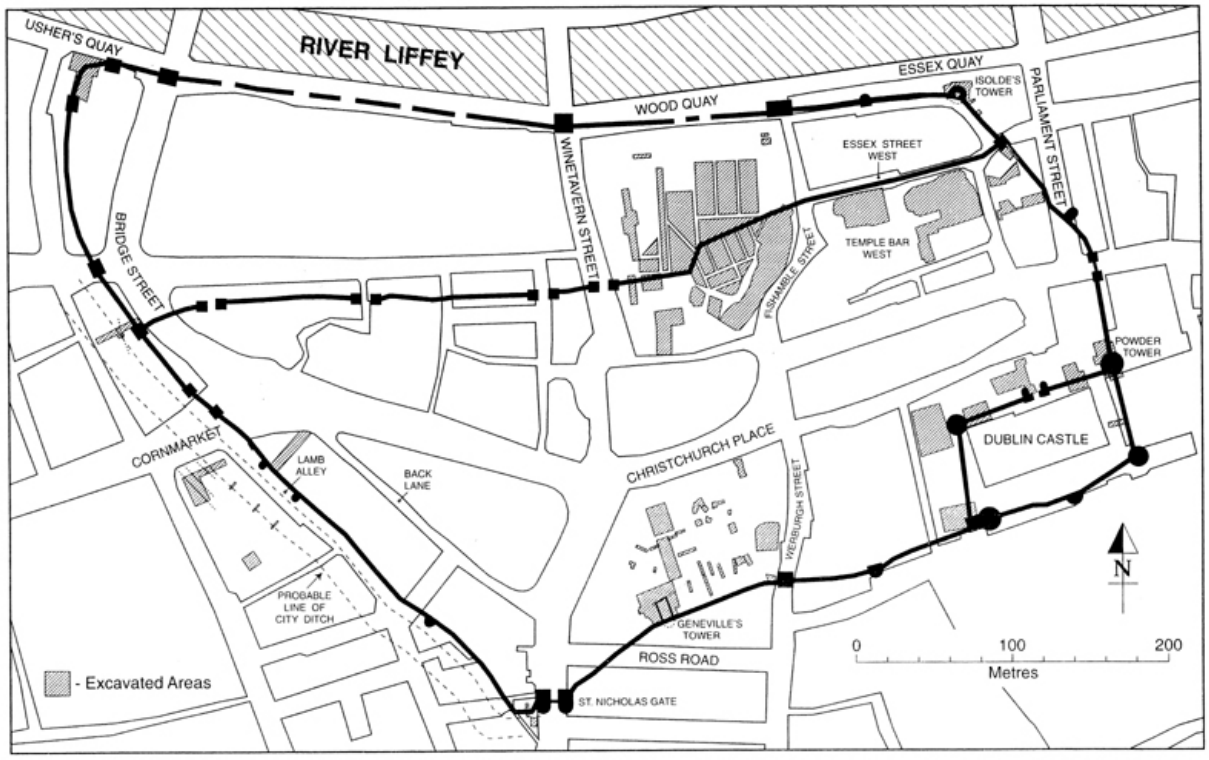


Fig. 121: Plan of Hiberno-Scandinavian Dublin (after Walsh 2001, 90).

Ninth Century (Fig. 122)

Archaeological evidence for the first Scandinavian settlement in Dublin has, until recently, been absent leading to disagreement amongst scholars about its whereabouts. The sites of Dublin Castle, Kilmainham/Islandbridge, the ecclesiastical enclosure (either the area bounded by Stephen Street, Whitefriar Street and Peter's Row or the church of St Michael le Pole) and Usher's Island have all been suggested for the location of the *longphort* (see overview in Simpson 2000, 21–1). However, excavations at Exchange Street Upper/Parliament Street (Gowen with Scully 1996; Scally 2002) and Temple Bar West (Simpson 1999) have revealed banks, a road, pathways, structures and plots dating between the mid ninth and tenth centuries based on radiocarbon dates and artefact comparisons. The sites were located in the north-eastern section of the later tenth-century town with the River Liffey to the north and the River Poddle to the east. An early bank at Ross Road potentially marks the southern boundary (see below) while Halpin (2005, 102–4) proposes that the western edge of the settlement occurred at Fishamble Street/Werburgh Street prior to the expansion of the town in the tenth century.

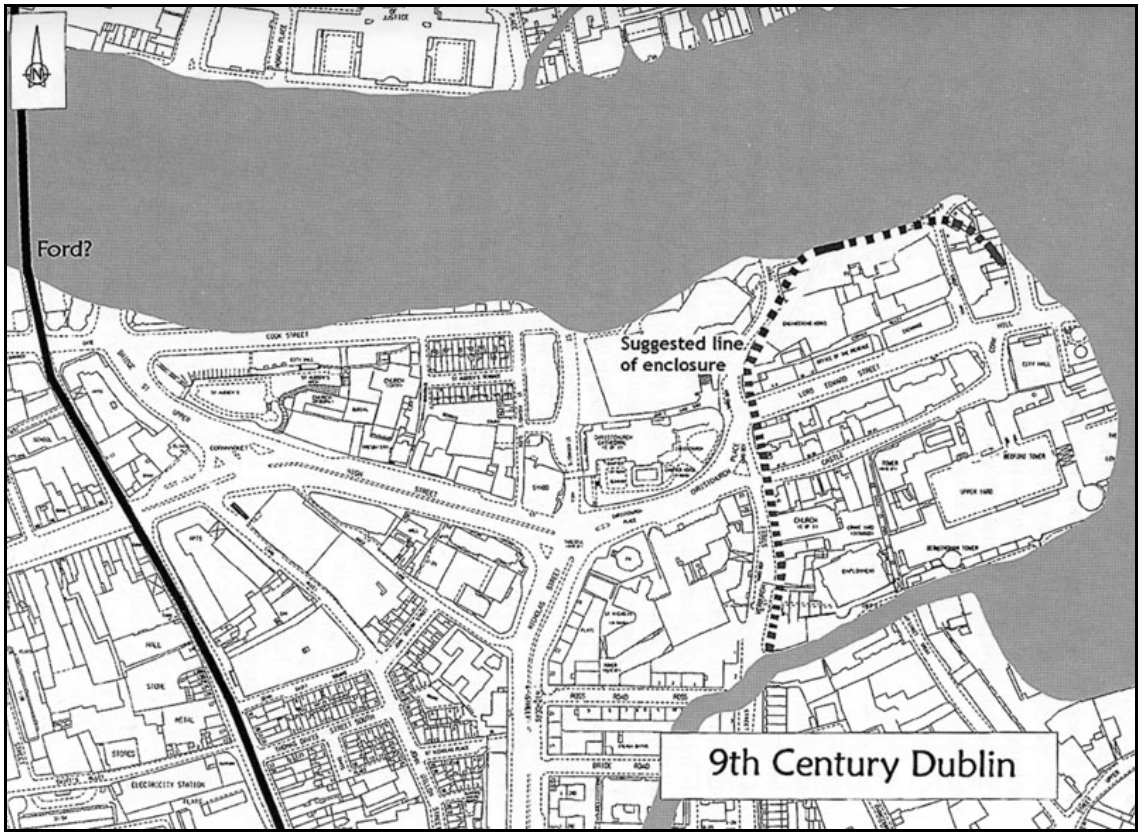


Fig. 122: Plan of ninth-century Dublin (after Halpin 2005, 103).

The archaeological settlement evidence at Exchange Street Upper/Parliament Street and Temple Bar West demonstrates that Scandinavians had settled this area from the mid ninth century and hints strongly for the presence of the *longphort* close by. The evidence was further strengthened by the discovery of five Scandinavian warrior burials with grave goods at Ship Street Great and South Great George's Street outside the town walls which were dated to the late seventh and late ninth century (Simpson 2005). Occupation evidence was also identified at South Great George's Street that both pre- and post-dated the burials. The initial settlement activity consisted of a series of posts, a later bank, drainage ditches, deposits of shell, animal bone and charcoal fragments and artefacts including iron nails, a drop-bearded axe and part of an iron shears. Occupation also occurred on the eastern part of the site and included refuse pits, open hearths, postholes, possible cultivation furrows, seeds and burnt animal bone (Simpson 2005, 36–7). A later large rectangular house with two building phases was also revealed and was dated to the later ninth century (see below).

Simpson (2005, 56–9) proposes that the South Great George's Street site may represent the southern part of the *longphort* site. She bases this on its strategic location at the southern edge of the 'Black Pool' (*Duiblinn*) and its close proximity to the Poddle and the presence of the early potentially defensive palisade and bank on the eastern side of the inlet. The site appears to have been established prior to the settlement at Exchange Street Upper/Parliament Street and Temple Bar West and may represent the earliest Scandinavian occupation in Dublin related to the first raids in the area. Evidence for continual occupation – both prior to, and after, the mid ninth century – also makes it a strong candidate for an early Scandinavian raiding base and settlement.

Tenth Century (Fig. 123)
The tenth-century town of Dublin developed from its inception during the mid ninth century and expanded to the west and south. The most eastern part of mid ninth century settlement was abandoned and replaced by an industrial area while the western part of the excavated area at Essex Street West and Exchange Street Upper witnessed an intensification of settlement. Approximately at the same time, and directly to the west, Fishamble Street and Wood Quay was developing (Simpson 1999, 27). Similarly dated sites have been identified to the south at Werburgh Street and Ross Road

(see below). The western position of the town is possibly located along Nicholas Street/Winetavern Street because no early tenth century evidence has been located beyond this point yet (Halpin 2005, 104–6).

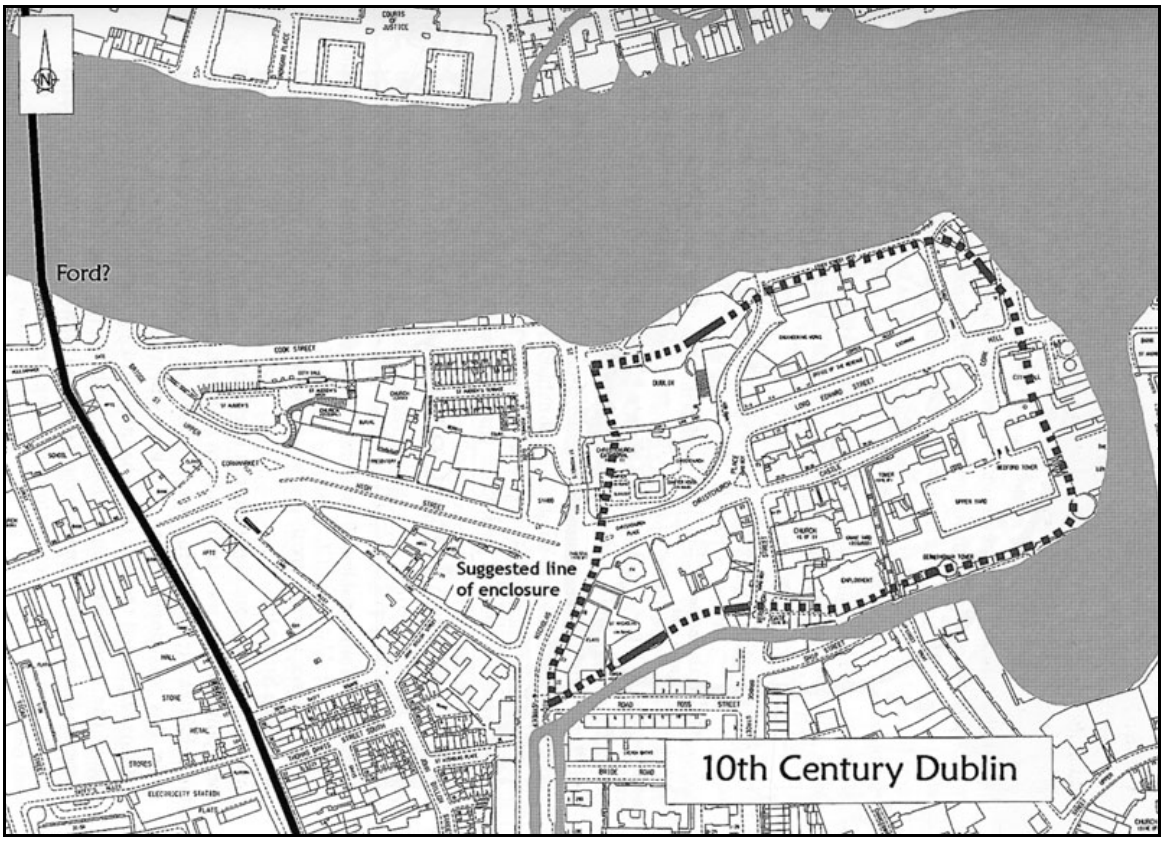


Fig. 123: Plan of tenth-century Dublin (after Halpin 2005, 105).

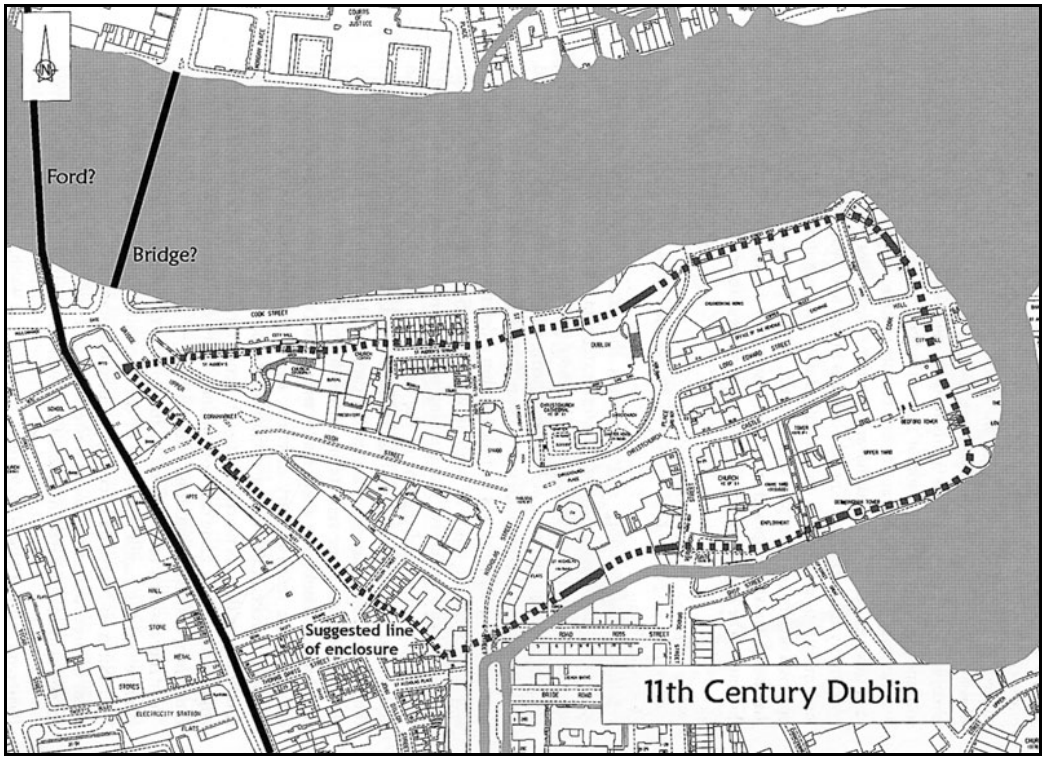


Fig. 124: Plan of eleventh-century Dublin (after Halpin 2005, 108).

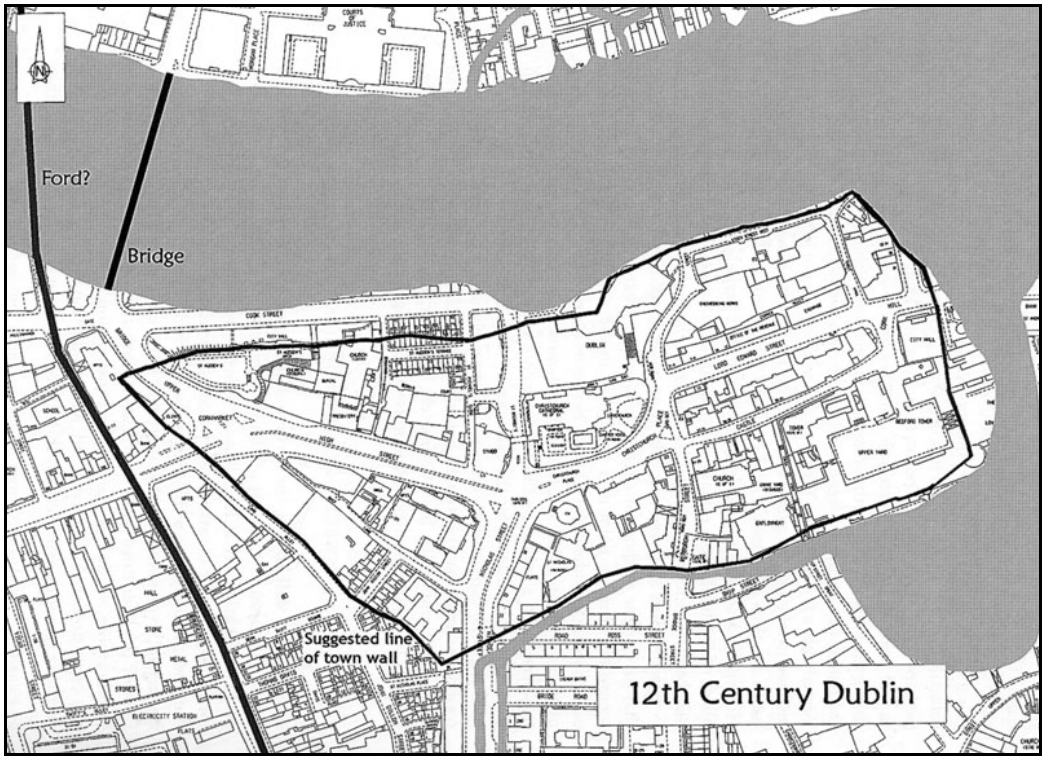


Fig. 125: Plan of twelfth-century Dublin (after Halpin 2005, 110).

Eleventh Century (Fig. 124)
Excavations demonstrate that High Street was settled during the early eleventh century which pushed occupation in the town further west (see below). Halpin (2005, 107–9) argues that the earthen wall identified beneath the town wall at Lamb Alley is Hiberno-Scandinavian and may date to the eleventh century. He suggests that the eleventh century enclosure ran along the line of Lamb Alley although he is cognisant of the fact that excavation has, of yet, not conclusively revealed its location. The remaining banks to the north, east and south followed the earlier tenth century lines.

Twelfth Century (Fig. 125)
By the early twelfth century, the enclosing earthen banks of Dublin had been replaced by a stone wall. It appears, based on the evidence from Essex Gate/Parliament Street, Wood Quay, Ross Road and possibly Lamb Alley, that the enclosing wall was built along and utilised the earthen bank. Therefore, the town's size did not increase until the arrival of the Anglo-Normans later in the century.

DEFENCES
Ninth Century
The mid to late ninth century banks in Dublin were not defensive in nature and functioned primarily as floodbanks. Excavations at Fishamble Street revealed a series of nine banks running along the south side of the River Liffey. The earliest banks were low – approximately 1m high – and were non-defensive and probably functioned as flood banks (Wallace 1992b, 44). These appear similar to the ninth century floodbanks below and may date to the middle or later part of the century.

Evidence for a bank survived at Exchange Street Upper/Parliament Street in the north-eastern area of the settlement (Gowen with Scully 1996, 11). It was probably 0.8m high and 3.7m wide and acted as a barrier to the Poddle which flowed immediately to the east.

Another bank was identified close by at Essex Street West (Simpson 1999, 14). It ran parallel to the River Liffey and was made from clay and strengthened with wattle screens.

A bank (excavated by the National Museum of Ireland) – predating the early tenth century – was identified on the south side of the town at Ross Road. It was 3.6m wide and 0.8m in height and was located 10m further north of the early tenth century bank excavated in 1993 (Walsh 2001, 96). The bank was positioned on the crest of a steep slope and would have overlooked the Poddle. The dimensions are similar to the Exchange Street Upper/Parliament Street bank which suggests that Dublin was enclosed from the middle ninth century.

The partial remains of an early bank were also detected to the south of the settlement at Werburgh Street. It contained a slot trench, measured at least 3m wide and 0.75m in height and has been dated to the late ninth or early tenth century based on its association with the Ross Road banks (Hayden 2002, 47, 66). This bank, therefore, may be linked with the Ross Road and Exchange Street Upper/Parliament Street banks and may represent another point of the settlement's early enclosure. It also raises the possibility that the earliest defences are approximately 15m further north of the currently accepted settlement defences at Ship Street Little (Simpson 2008, 155–6).

Tenth Century
Bank 2 at Fishamble Street was built along the high water line. It was bonded in mud and a cobbled pathway was present inside and parallel to the bank along its eastern stretch (Wallace 1992b, 44–5). This is likely to relate to the tenth century banks at Exchange Street Upper/Parliament Street and Ross Road.

Excavations in the Parliament Street, Essex Gate and Exchange Street Upper areas – in the north-eastern section of the town – revealed tenth and eleventh century banks (Scally 2002). A potential early tenth century bank was identified directly east of Exchange Street Upper. It was 0.5m high and 1.8m wide and was non-defensive (Scally 2002, 16).
A number of banks were identified at Ross Road dating between the tenth and twelfth centuries in the southern part of the town (Walsh 2001). Bank 1, which has been dated to the early tenth

century, was 2.5m wide and 0.45m high and may have had a pathway along its top. This was probably not a floodbank – unlike similarly dated banks from this period – because it was situated high above the Poddle. Therefore, it possibly functioned as a town boundary (Walsh 2001, 97–8).

A second bank was recorded at Exchange Street Upper/Parliament Street and was stratigraphically dated between the mid and late tenth century. It lay 14m closer to the river than the preceding bank – possibly to reclaim further space – and was composed of compact stony clay that was laid on the natural silt. It was 0.7m high and was between 3.1-3.7m in width (Gowen with Scully 1996, 15; Scally 2002, 17–21). It was probably constructed to increase the amount of space in the north-eastern part of the town.

By the middle of the century, the first bank at Ross Road was replaced and this possibly relates to the second bank at Exchange Street Upper/Parliament Street (Walsh 2001, 98). A third bank, which consisted of deposits of clay, silt, small stones and sods, was then placed over the previous bank which had burnt down. A fence was erected on the northern part of the site along the crest of Bank 2. The burnt areas may relate to the historical accounts of the burnings of Dublin in AD 936 and 944 and a mid to late tenth century date has been suggested for its construction (Walsh 2001, 101–2).

Eleventh Century

At Fishamble Street, a considerable bank was constructed with gravel, stone and earth and was reinforced with post-and-wattle screens (Wallace 1992b, 45). It was crowned with a palisade fence and probably relates to the banks below at Exchange Street Upper/Parliament Street and Ross Road.

A third bank was constructed at Exchange Street Upper/Parliament Street but, unlike the previous two which acted as floodbanks, this was a substantial and defensive enclosure. It had a maximum width of 6.4m and was 1.2m high on the settlement side but was at least 2.3m in height on the eastern riverfront side (Gowen with Scully 1996, 17; Scally 2002, 21–5). The bank was constructed over Bank 2 and consisted of clays and much of the domestic waste, such as animal bone, from the preceding occupational layers. Dates of AD 900-1150 and AD 960-1020 were retrieved from the bank's material and a date between the late tenth and early eleventh century has been favoured by the excavator.

A similarly substantial bank at Ross Road – Bank 4 – replaced Bank 3 and was approximately 6m wide and over 4m high. The bank was probably mounted by a palisade trench and its form remained the same until the early twelfth century (Walsh 2001, 106). This bank formed the southern defence of the town and was similar in scale to the roughly contemporary banks in the north and north-east at Fishamble Street and Exchange Street Upper/Parliament Street respectively.

A section of a pre-Anglo-Norman bank was identified below the Powder Tower in Dublin Castle along the south-eastern lines of the town. The bank was composed of clay and had a stone facing without mortar. It was 2.7m high and 2.6m wide. A later bank – revetted with timber – was also identified and consisted of refuse layers which were dumped over the earlier bank. These banks have been dated to the tenth/eleventh centuries (Lynch and Manning 2001, 180, 182).

Twelfth Century

By the beginning of the twelfth century, a stone wall which was 1.5m wide and potentially up to 3.5m in height, was built along the earlier earthen embankment at Fishamble Street. It had a rubble fill with mortared stone facings and was not completely free standing (Wallace 1992b, 45). This wall is very similar to the late Hiberno-Scandinavian walls found at Essex Gate, Parliament Street and Ross Road (see below).

At Essex Gate and Parliament Street, in the north-eastern part of Hiberno-Scandinavian Dublin, a substantial stretch of the defensive wall was detected (Scally 2002, 25–7). The wall, 1.48m high and 1.4m wide, was constructed with square and rectangular blocks, which were secured with mortar, and had a rubble stone core. It was similar in form to the early twelfth century wall at Fishamble Street and Ross Road and this has led to its suggested date based on morphological similarities (Scally 2002, 27).

Evidence for two stone walls, dating to the early twelfth century, was detected at Ross Road. The earlier wall measured 0.8m in height and was over 1.2m wide. The second wall replaced this and survived to a height of 2.6m and was 1.6m wide at its base. The walls – similarly to those at Fishamble Street and Essex Gate/Parliament Street – were cut into earlier banks and were never completely free-standing (Walsh 2001, 108–11). The excavations at Ross Road demonstrate that the Hiberno-Scandinavian wall ran 11m north parallel of the Anglo-Norman wall rather than along Dublin Castle and Ship Street Little which had previously been accepted. It also confirms that the Ship Street Little stretch is Anglo-Norman in date (Simpson 2008, 156–7).

STREETS AND PATHWAYS (Fig. 126)

Ninth to twelfth centuries

The street lines and gradual expansion of Dublin occurred along the natural contours while many of Dublin's early streets probably lie beneath the present streetscape (Wallace 1992b, 39). Both streets and pathways were continually upgraded and replaced and utilised a variety of different materials from organic to sturdier stone types. By the middle of the eleventh century, for example, quality carpentry construction was noted on some of the Winetavern Street pathways (Wallace 1992b, 42).
Paths were found leading from streets directly into property plots, houses and outbuildings. The following are some examples from the many Dublin excavations.

One of the earliest known Scandinavian roads in Dublin – dating between the mid and late ninth century – was identified at Essex Street West (Simpson 1999, 25). The road – built as a permanent route – replaced a demolished house and led to the river (Fig. 115). It divided the houses to the west at Fishamble Street and to the east at Exchange Street Upper. A substantial wattle path or road was built at the northern part of the site at Fishamble Street. It ran parallel to the River Liffey and continues as a route today indicating the antiquity of some of Dublin's early route-ways (Simpson 1999, 30). Two potentially early tenth-century roads were identified at Werburgh Street in the southern part of the town. The first road was metalled and ran south-eastwards around a mound. This road was replaced by a larger road which contained a heavier layer of metalling (Hayden 2002, 47).

A variety of pathways have been excavated in Hiberno-Scandinavian Dublin. A complex timber surface was recorded at Exchange Street Upper/Parliament Street which consisted of a woven wattle path on the north and a series of layers of brushwood with large planks laid along the leading edge of Bank 2 on the south. The northern section gave access to the river while brushwood and planks provided a working surface (Gowen with Scully 1996, 16). Numerous pathways were revealed at Werburgh Street in the southern area of the town and many led to the entrances of the 31 structures uncovered or were positioned alongside or to the front of the houses (Hayden 2002). The paths were continually mended and replaced. For example, a pathway leading to House E1 was initially floored by a layer of sod, was then covered with grass and straw before finally being laid with wattle screens. After a certain period, both the house and pathway were replaced and the latter was wider and delimited by a fence (Hayden 2002, 47–9).

At Fishamble Street, in both the tenth and eleventh centuries, the pathways led from the street to the houses. The length of the paths indicated that the houses were set back several metres from the streets. The paths were approximately 1.5m wide and usually consisted of elongated woven mats laid on top of each other. In other cases they were formed with round or half round logs laid on longitudinal runners. In rare cases, they were constructed of gravel and paving stones (Wallace 1992b, 42). In the eleventh century, the route, running east-west and parallel to the Liffey, remained constant during the Hiberno-Scandinavian settlement of Dublin. Paths leading from the plots at Temple Bar West linked up with it and wattle types were replaced by substantial stone paths or roads during the late tenth and early eleventh century (Simpson 1999, 32).

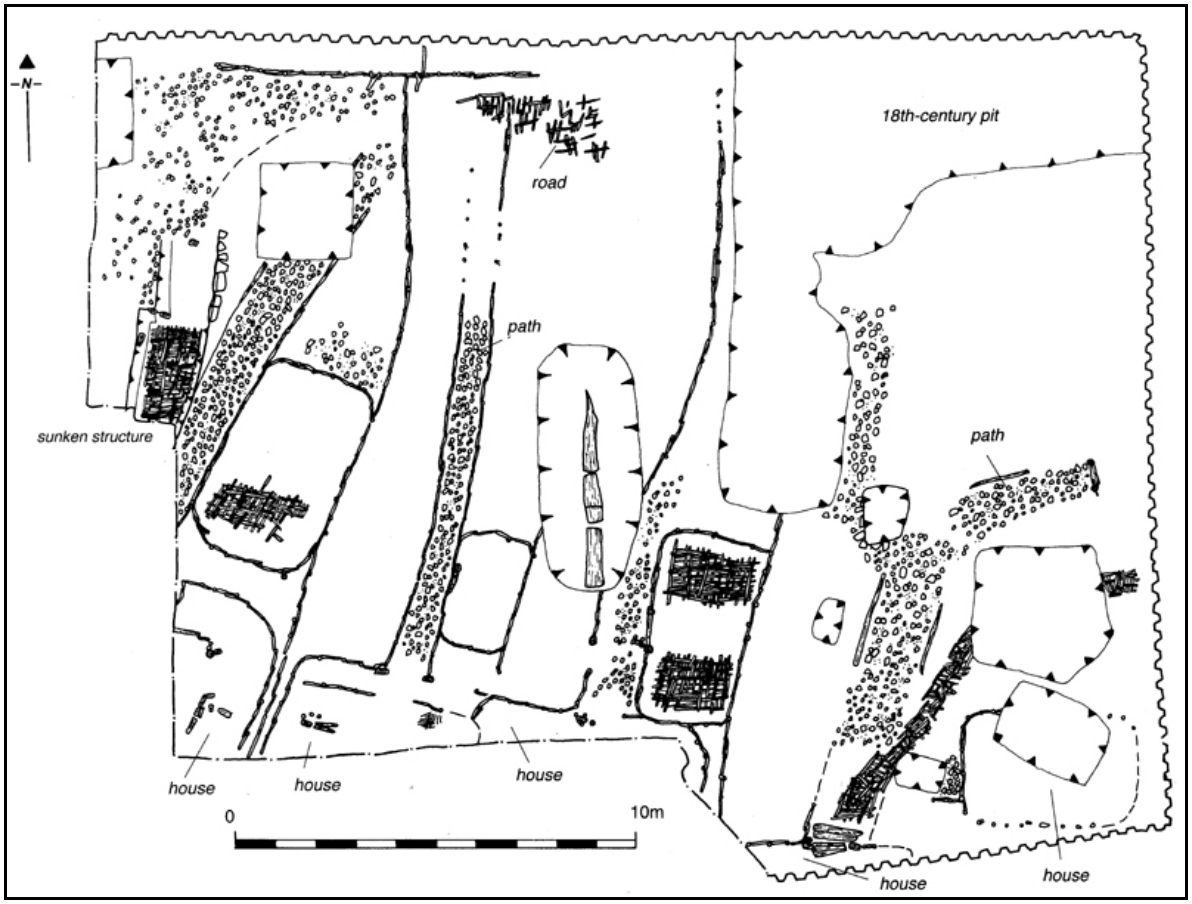


Fig. 126: Plan of 'road' at Essex Street West, Dublin (after Simpson 1999, 28).

PLOTS AND FENCES (Fig. 127)

Ninth to twelfth centuries

A noteworthy feature of many of the Dublin excavations is that property plots remained largely static across the centuries, which indicates an ordered and regulated town. Plots and fences are evident in the mid ninth century and this demonstrates planning and regulation during the settlement's earliest days. Although fences had to be repaired and rebuilt, this was done so along the lines of the preceding property boundary. Conversely, the houses, outbuildings and pathways within were not static but utilised different parts of the plots from generation to generation. The following are some examples from the Dublin excavations.

Structures within plots were evident from excavations at Exchange Street Upper/Parliament Street in the lower levels in the mid to late ninth century. The first plots were defined by sod deposits which were later replaced by light post and wattle walls. These plots remained constant for the most part until the construction of a clay platform in the twelfth century (Gowen with Scully 1996, 14).

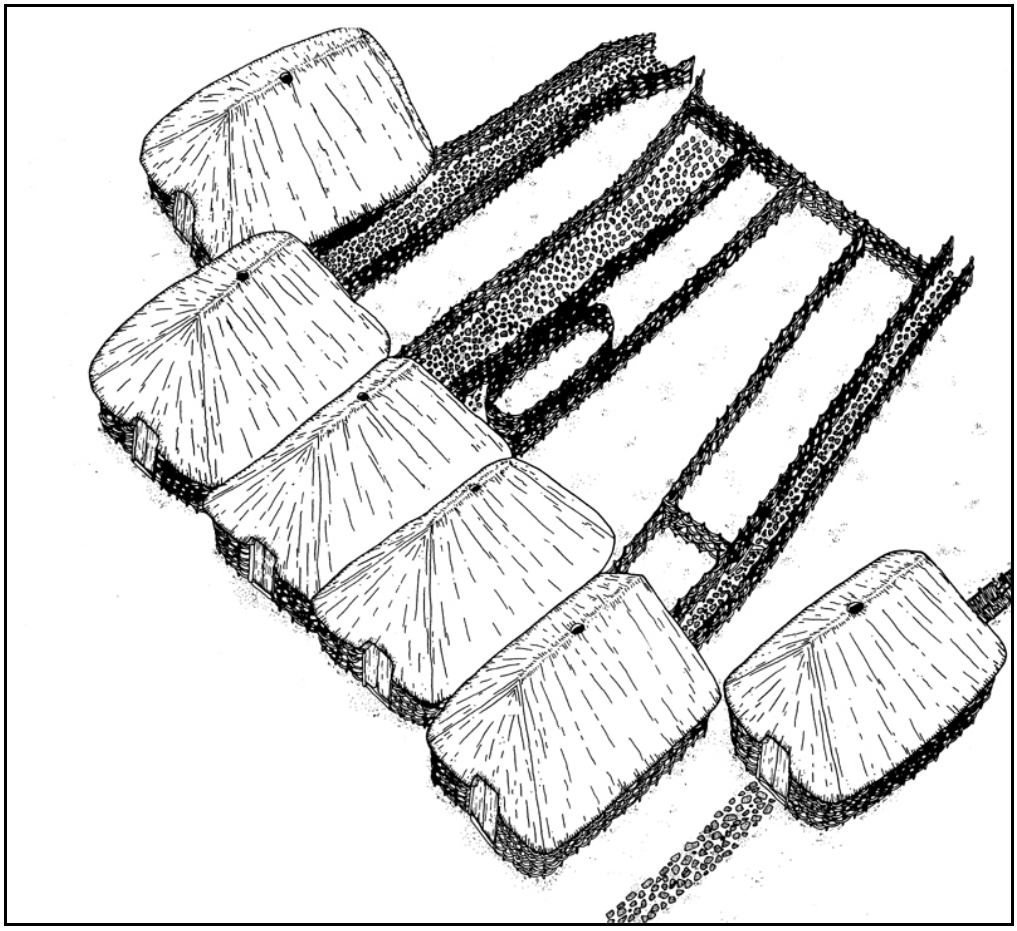


Fig. 127. Reconstruction of houses and property boundaries at Fishamble Street, Dublin (after Simpson 1999, 24).

A number of mid ninth-century sunken structures were excavated at Temple Bar West but were not associated with property boundaries. However, shortly after and during the middle and latter decades of the century, a series of houses, structures and associated plots were constructed over the sunken structures (Simpson 1999, 20). A post and wattle fence separated structures R and P at Essex Street West, for example, while a house at Exchange Street Upper was confined by property boundaries and had a trapezoidal yard at its western end. Property boundaries were also evident at Fishamble Street to the west of the site and these boundaries, similarly to most plots at Temple Bar West, remained the same from the late ninth until the eleventh centuries and, in one case (Property 2), the early twelfth century (Simpson 1999, 25, 30).

Plots were present on Fishamble Street in the tenth century and they largely remained unchanged for over 200 years. Contrary to this, the position of houses, outbuildings and pathways regularly changed as successive building phases utilised different areas within the static plot boundaries (Wallace 1992b, 40). Plots varied in shape from rectangular to trapezoidal and from skinny to wide. In Fishamble Street, the most northerly plots had their widest end at the street side and their narrowest end at the waterfront but it was vice-versa at the southern end. The plots were divided by post-and-wattle fences which were regularly replaced.

Structures within plots were excavated at Werburgh Street to the south of the town (Hayden 2002). The plots were small and were filled mainly by houses. In some cases, for example level 3 which has been dated to the mid tenth century, the plot boundaries remained the same as structures were built and replaced. However, by the end of the century, the level 6 plots were laid out in different lines and the layout of the area had changed (Hayden 2002, 56). This is unusual when compared to many other examples where plot boundaries remained static. Both plots and pathways were defined by post and wattle fences.

Murray's (1983, 43–57) study of the relationship between Hiberno-Scandinavian buildings identified differences in the size and function of the plots at High Street, Christchurch Place and Winetavern Street. The plots on High Street were usually large with small buildings. However, there were larger structures within the plots at Christchurch Place and the buildings were set back further from the street and had individual pathways leading to their entrances. Winetavern Street was similar to High Street in that small buildings were placed on either side of a pathway in a congested layout.

STRUCTURES

Types

This section will identify the different types of structures that were present in Scandinavian Dublin and follows with descriptions of some of these buildings from a variety of excavation reports. Wallace (1992a) has identified five types of Scandinavian buildings in Dublin. Type 1 buildings comprise the vast majority of excavated examples and have been found from the mid-ninth/twelfth-century levels. Type 1 structures were long, rectangular buildings with rounded corners (Fig. 128). They had low post-and-wattle walls and a roof that was supported by two pairs of large posts that were set in from the side and end walls. A stone-lined hearth was centrally placed and doors were usually located at each end of the building. The buildings were divided by aisles and the long central floor was flanked on both sides by built-up bedding which ran parallel to the side walls. The average floor area was 40m^2 (Wallace 1992a, 9–14).

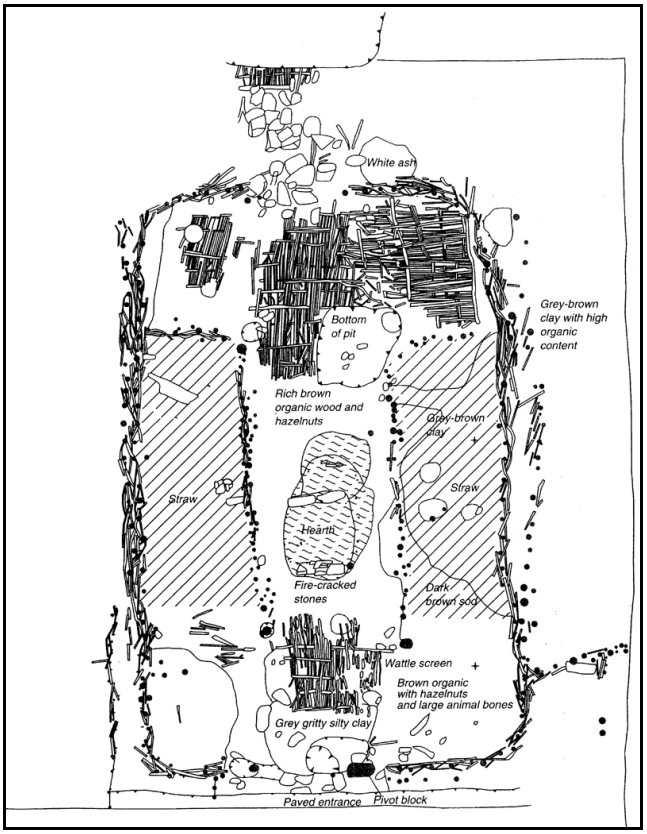


Fig. 128: Plan of Type 1 House (after Simpson 1999, 11).

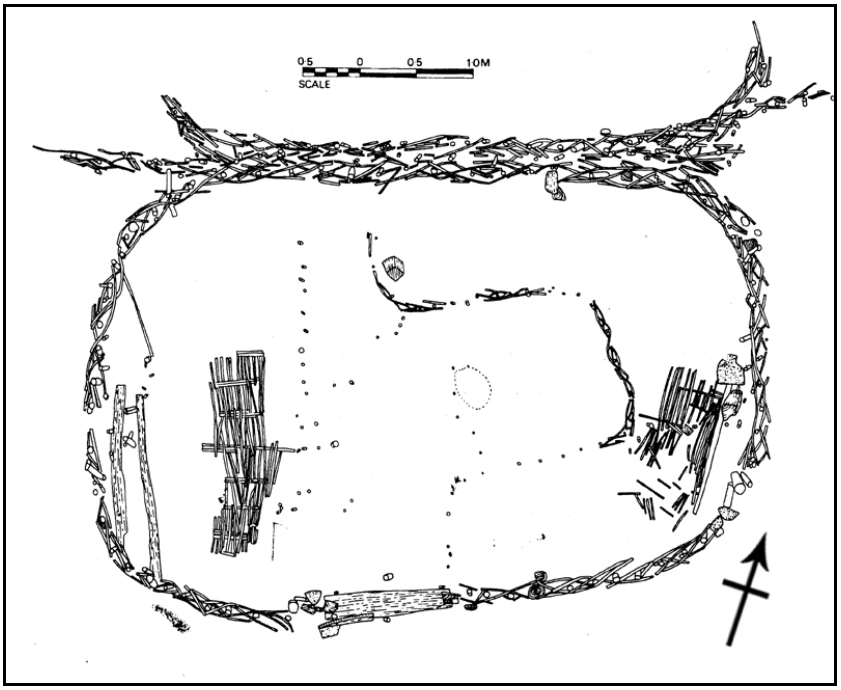


Fig. 129: Plan of Type-2 House (after Wallace 1992b, 52).

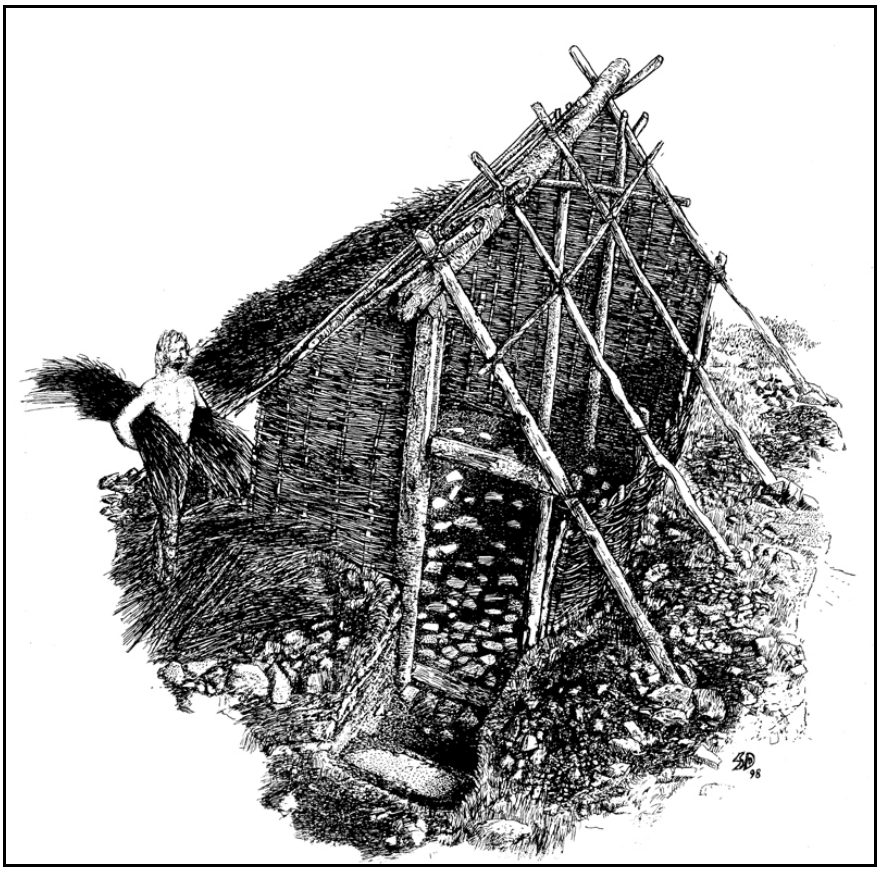


Fig. 130: Artistic reconstruction of Type 4 House (after Simpson 1999, 17).

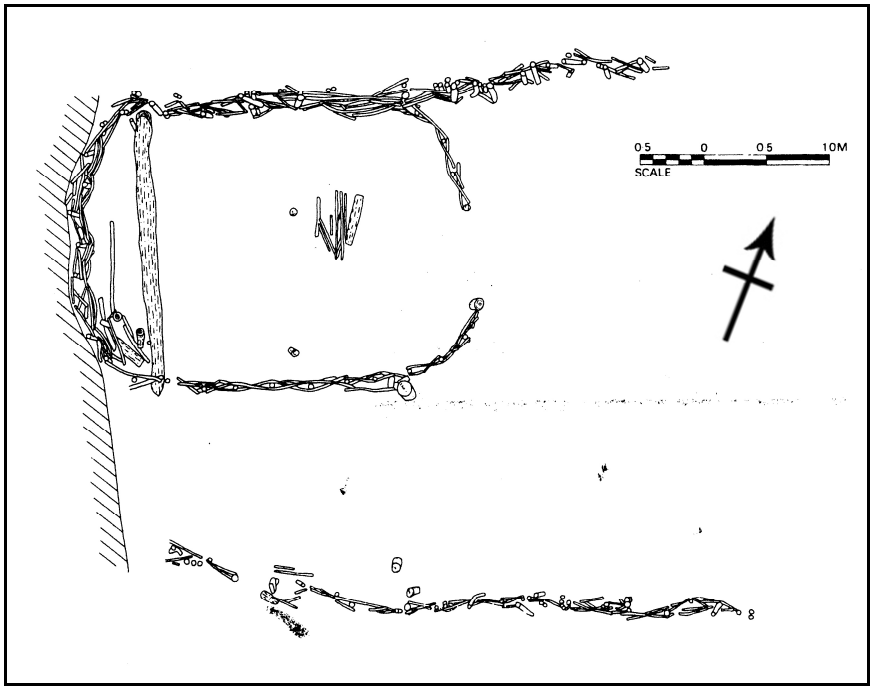


Fig. 131: Plan of Type 5 House (after Wallace 1992b, 58).

The Type 2 buildings were sub-rectangular in plan, with pronounced rounded corners, and were smaller than Type 1 structures with an average area of 15m^2 (Fig. 129). They were not aisled and rarely had formal fireplaces. The door was usually in the sidewall and the walls were generally formed with a double line of post-and-wattle. Only a small percentage of the Dublin buildings were of this type (Wallace 1992a, 14–6).

Wallace's Type 3 (1992a 16–7) are typically slimmer and shorter versions of Type 1 structures that were built in narrow and smaller plots. Type 4 buildings are sunken structures in which the floor is situated below ground level (Wallace 1992a, 17; Fig. 130). They are generally rare in Dublin but have been found from the earliest ninth century levels. Type 5 structures describe small huts without roof supports which probably functioned as animal pens or were utilised for other outdoor activities (Wallace 1992a, 17–8; Fig. 131).

Ninth Century

Scully's excavations at Exchange Street Upper/Parliament Street in the north-eastern area of the settlement revealed a number of phases and the first included four structures dating between the mid ninth and tenth centuries (Gowen with Scully 1996, 11–5). Structure A – orientated north-south – was the most clearly defined and is suggestive of Wallace's Type 1 structures. Two parallel rows of stake-holes formed a central aisle and a posthole on its western side demarcated the entrance. It contained a centrally placed stone-set hearth and a paved area was evident in its north-eastern corner. It measured approximately 5.5m in length by 3-3.5m wide. Finds included a copper-alloy implement, a wooden barrel stave and a bone comb. Importantly, the latter has been found in late ninth century contexts from other Irish and overseas excavations. The comb was found on a clay layer alongside animal bone and the latter produced a date of AD 690-888. This further strengthens the likelihood of a pre-tenth century date for the house's construction and occupation. The house was not associated with any plots or boundaries.

The partial remains of three other structures were revealed at Exchange Street Upper/Parliament Street. They replaced Structure A and were located within property plots. A sample of wattle retrieved from one of the walls (Structure B) was dated to A.D. 779-983 (Gowen with Scully 1996, 14). A bone pin recovered from the same level is comparable to pins from ninth-century Kaupang, Norway.

Excavations occurred directly west of Exchange Street Upper/Parliament Street levels at Temple Bar West which also revealed ninth century Scandinavian levels (Simpson 1999). Five sunken structures; three at Site A (Fishamble Street) and two at Site C (Copper Alley), were identified to the west and south of the site respectively (Simpson 1999, 13–6). The structures were not orientated regularly and were not associated with property plots. Each structure contained a sunken floor which was dug into the bedrock. They were rectangular in shape but small with average dimensions of 2.25m by 3m. The chambers had wattle walls and the roof was supported by an arrangement of internal vertical posts which were usually located at either end of the structure. No hearths were present internally but a paved area and external hearth was situated beside the structures at Fishamble Street. A late eighth to late ninth century date was retrieved from one of the Fishamble Street structures while a road, which removed part of a sunken structure at Copper Alley, was dated between the late ninth and tenth centuries. The latter structure, therefore, was also early in date.

Between the middle and late ninth century the sunken structures were filled-in and replaced by Type 1 post and wattle houses and other structures (Simpson 1999, 17–30). Two phases of activity were evident at the eastern part of the site at Essex Street West (Site B) and Exchange Street Upper (Site D). At the latter, a large post and wattle house (Structure R), orientated east-west and measuring 6m north-south by 10m east-west, was constructed. A wattle screen floor was dated between the late eighth and late ninth centuries with the highest probability in the middle ninth century (Simpson 1999, 20). Two houses (Structures O and P), typical of Type 1, were located in close proximity. Structure O revealed a well-preserved central hearth and both were three-aisled structures. Structure P was dated to the late ninth/early tenth century. A similar house, dating to the late ninth century, was identified at the same level a short distance south at Site D. The houses at Sites B and D were defined by property boundaries.

The Site B and D structures were replaced by a second phase of housing. Structure H – a Type 1 house – directly replaced the earlier house (Structure I) in Site B. Also, a second, smaller, post and wattle house (Structure F) – of Wallace's Type 2 – was revealed directly to the west in an adjoining yard. The houses were small and contained wattle floors. The lack of hearths has led to the suggestion that they functioned as sleeping dwellings, possibly for children (Simpson 1999, 25; Wallace 1992a, 15). Another house at Site A also replaced an earlier house. This smaller dwelling had four roof posts and a central hearth but lacked aisle divisions. Rough paving led to its eastern entrance and finds associated with the house included a belt buckle, a loom weight, a gaming piece, a comb and a walrus ivory pin (Simpson 1999, 26).

A number of non-dwelling type structures were revealed within the plots at Temple Bar West including circular wattle pens. Some of these functioned as animal enclosures while others seem to have had a different use possibly related to craft (Simpson 1999, 25–6).

A large rectangular house – which may relate to the early *longphort* – with two building phases was revealed to the south of the town at South Great George's Street. It was at least 10.5m long, the central aisle was 3m wide and the roof was supported by large posts. Both floor phases contained a stone layering and a hearth was present at the north-eastern end. Two habitation layers produced burnt animal bone and fish, charcoal and artefacts such as bone beads and a pin head. Two radiocarbon dates of A.D. 793-971 and A.D. 894-1011 were returned from the posthole fills and this house has many of the characteristics of Wallace's Type 1 buildings (Simpson 2005, 48–50).

Tenth Century

Although the eastern settlement at Temple Bar West was abandoned in favour of industrial activities in the early tenth century, the western part of the settlement at Fishamble Street expanded to incorporate six plots with accompanying houses and outbuildings (Simpson 1999, 30–1). The houses – which are dated approximately to the mid tenth century – were Type 1 dwellings and fronted onto a road. Nine building phases were recorded as earlier houses and outbuildings were regularly replaced by newer constructions across the tenth century. A tenth-century sunken structure was also identified at Fishamble Street.

Two structures ('E' and 'F') were partially excavated at Exchange Street Upper/Parliament Street and were dated between the mid and late tenth centuries (Gowen with Scully 1996, 16). Structure E was destroyed by fire and was represented by a hearth, three, and possibly four, potential roof supports and a large posthole – possibly from a door jamb – to the west of the hearth. The partial remains of Structure F lay 2m to the west and survived as a row of paired posts (one inside and one outside the post and wattle wall) and may resemble Wallace's Type 1 structures. Another structure (Structure G) extended over the first bank and was dated to the late tenth and early eleventh centuries. Partial excavation revealed a double post and wattle wall with curved corners that was 3.5m wide. A similarly dated building (Structure H) also only survived as a post and wattle wall and finds in this area included metal stick pins, bone items including pins, a bone with a decorated crest, combs and a toggle (Gowen with Scully 1996, 17–8).

Excavations at Werburgh Street to the south of the town revealed 31 structures approximately dating to the tenth and eleventh centuries (Hayden 2002). The majority of houses were Type 1 structures with two variations. One house had its entrance on a side wall while another was a sunken structure (Hayden 2002, 67, 51). Similarly to excavations to the north, the houses were regularly re-built and replaced.

Post-and-wattle rectangular houses dating to the tenth and eleventh century were revealed in Phases' 5, 8 and 9 at Dublin Castle but the full results of the excavation are yet to be published (Lynch & Manning 1990, 67; 2001, 178).

Eleventh and Twelfth Centuries

Structures dating to the eleventh and early twelfth century consisted mainly of Wallace's Type 1, variations of these and a range of outbuildings and pens that equate to his Type 2 – Type 5 buildings. For example, excavations at High Street revealed structures dating to the eleventh century and the majority of these were small Type 1 buildings with double post-and-wattle walls (Murray 1983, 43–6).

However, improvements in carpentry methods also resulted in better-built buildings such as the rare stave-built structure from Christchurch Place which was dated to the middle and late part of the eleventh century. It measured 4.85m by 8m and the roof was supported on four groups of timbers. The interior was divided into three aisles and four small corner rooms were screened off by plank walls set into the beams. A hearth was present and water was channelled by a wooden drain under the floor. Two doors were present; one to the south and another on the east wall (Murray 1983, 95–9).

CRAFT

Ninth to twelfth centuries

The scale and variety of craft activities in Scandinavian Dublin increased as the town expanded from its inception during the middle ninth century. Some of the earliest evidence included a number of circular wattle pens within the property plots which were excavated at Temple Bar West (Simpson 1999, 25–6). They were approximately 7m in diameter and the organic deposit in one example produced large quantities of textile and leather scraps suggesting that clothes were made and/or mended here.

Advances and changes in carpentry techniques and building styles have been recorded in both houses and pathways. At Christchurch Place, double post-and-wattle walls replaced single walls which were fashionable in the late tenth century. By the mid to late eleventh century the double wall buildings gradually made way, in rare cases, for more complex structures of stave-built and plank-and-wattle construction (Wallace 1982). The change in pathway construction has been noted above.

Between the eleventh and thirteenth centuries, Winetavern Street was occupied by wood-turners and coopers as indicated by the many lathe-turned bowls platters and staves that were found. Toy ships were also made and one has been dated to the twelfth century (see separately Ó Ríordáin and Wallace in Bradley 1984).

An amber and jet workshop was identified on Fishamble Street by the presence of unworked amber, waste chips and unfinished objects (Wallace 1984, 123–4).

Leather and bone working appears to have been concentrated in High Street. Waste from the workshops indicates that the manufacture and repair of shoes was the major activity. Antler workshops were also located on High Street as well as Christchurch Place. Antler combs were made on a large scale and many motif pieces were found in this area (Murray 1983, 54; Wallace 1984, 123–4).

INDUSTRY

Tenth to twelfth centuries

Evidence for large-scale metalwork production occurred at High Street and Christchurch Place. A workshop, which manufactured copper-alloy ringed and stick pins, was located on High Street. Clay crucibles, heating rays and a mould for casting Thor's hammer symbols were also found in the area. (Wallace 1984, 123–4).

Small scale and isolated industrial activity also occurred. At Exchange Street Upper/Parliament Street, there was evidence for possible charcoal production in the form of two charcoal-rich pits (Gowen with Scully 1996, 15). During the early tenth century, an industrial area replaced the settlement at Temple Bar West on its eastern side at Exchange Street Upper and Copper Alley (Simpson 1999, 30). The area included many unenclosed hearths with neighbouring paved areas, a large hearth which contained vitrified clay and slag, burnt spreads, charcoal and ash deposits and a large number of postholes which did form a coherent plan. This industrial area remained active until the early to mid twelfth century. Similalrly, at Werburgh Street in the tenth century, houses in some plots were demolished and replaced with furnaces and troughs so that the open spaces could be utilised for ironworking (Hayden 2002, 49, 51). A final example concerns a crucible that was found in a sheltered area beside Bank 2 at Ross Road and is suggestive of non-ferrous metalworking in the area during the middle tenth century (Walsh 2001, 101).

References:

Gowen, M. (with Scally, G.). 1996. *Summary Report on Excavations at Exchange Street Upper/ Parliament Street, Dublin*. Archaeology in Temple Bar, No.4. Dublin. Temple Bar Properties.

Halpin, A. 2005. Development phases in Hiberno-Norse Dublin: a tale of two cities, in S. Duffy (ed.) *Medieval Dublin VI: Proceedings of the Friends of Medieval Dublin Symposium 2004*, 94–113. Dublin. Four Courts Press.

Hayden, A. 2002. The excavation of pre-Norman defences and houses at Werburgh Street, Dublin: a summary, in S. Duffy (ed.) *Medieval Dublin III: Proceedings of the Friends of Medieval Dublin Symposium 2001*, 44–68. Dublin. Four Courts Press.

Lynch, A. & Manning, C. 1990. Dublin Castle – the archaeology project. *Archaeology Ireland*, 4(2), 65–8.

Lynch, A. & Manning, C. 2001. Excavations at Dublin Castle, 1985–7, in S. Duffy (ed.) *Medieval Dublin II: Proceedings of the Friends of Medieval Dublin Symposium 2000*, 160–204. Dublin. Four Courts Press.

Murray, H. 1983. *Viking and Early Medieval Buildings in Dublin*. BAR British Series 119. Oxford. BAR.

Ó Ríordáin, A. B. 1984. Excavations in old Dublin, in J. Bradley (ed.) *Viking Dublin Exposed*, 134–43. Dublin. O'Brien Press.

Scally, G. 2002. The earthen banks and walled defences of Dublin's north-east corner, in S. Duffy (ed.) *Medieval Dublin III: Proceedings of the Friends of Medieval Dublin Symposium 2001*, 11–33. Dublin. Four Courts Press.

Simpson, L. 1999. *Director's Findings, Temple Bar West*. Archaeology in Temple Bar, No.5. Dublin. Temple Bar Properties.

Simpson, L. 2000. Forty years a-digging: a preliminary synthesis of archaeological investigations in medieval Dublin, in S. Duffy (ed.) *Medieval Dublin I: Proceedings of the Friends of Medieval Dublin Symposium 1999*, 11–68. Dublin. Four Courts Press.

Simpson, L. 2005. Viking warrior burials in Dublin: is this the *longphort*? in S. Duffy (ed.) *Medieval Dublin VI: Proceedings of the Friends of Medieval Dublin Symposium 2004*, 11–63. Dublin. Four Courts Press.

Simpson, L. 2008. The medieval city wall and the southern line of Dublin's defences: excavations at 14-16 Werburgh Street, in S. Duffy (ed.) *Medieval Dublin VIII: Proceedings of the Friends of Medieval Dublin Symposium 2006*, 150–77. Dublin. Four Courts Press.

Walsh, C. 2001. Dublin's southern town defences, tenth to fourteenth centuries: the evidence from Ross Road, in S. Duffy (ed.) *Medieval Dublin II: Proceedings of the Friends of Medieval Dublin Symposium 2000*, 88–127. Dublin. Four Courts Press.

Wallace, P. 1982. Carpentry in Ireland, AD 900-1300 – the Wood Quay evidence, in S. McGrail (ed.) *Woodworking Techniques Before A.D. 1500*. Greenwich. National Maritime Museum.

Wallace, P. 1984. A reappraisal of the archaeological significance of Wood Quay. J. Bradley (ed.) *Viking Dublin Exposed*, 112–33. Dublin. O'Brien Press.

Wallace, P. 1992a. *The Viking Age buildings of Dublin*, Series A, Volume 1. Dublin. Royal Irish Academy.

Wallace, P. 1992b. The archaeology of the Hiberno-Norse town. *Journal of the Royal Society of Antiquaries of Ireland*, 122, 35–66.

Wallace, P. 2001. Ireland's Viking towns, in A. C. Larsen (ed.) *The Vikings in Ireland*, 37–50. Roskilde. Viking Ship Museum.

Wallace, P. 2004. The archaeology of Ireland's Viking-age towns, in D. Ó Cróinín (ed.) *A New History of Ireland*, Vol. 1, 814–41. Oxford. Clarendon.

Glebe (Site 43), Co. Dublin
Early Medieval Settlement Enclosure
Grid reference: **O22892362 (322892/223620)**
SMR: **N/A**
Excavation Licence No: **00E0758**
Excavation duration: **August 2000 – May 2002**
Site director: **M. Seaver (Valerie J. Keeley Ltd.)**

Excavations at Glebe – in advance of the construction of a road interchange – revealed a circular early medieval enclosed settlement and associated field system dating between the late seventh and late ninth centuries AD. Slightly earlier cereal processing was also evident in the form of four cereal-drying kilns. The enclosure was situated on a steep scarp, on the townland boundary between Glebe and Laughanstown, and on rich agricultural land.

Four 'figure-of-eight' cereal-drying kilns were situated to the west of the enclosed settlement in the townland of Laughanstown. Two returned radiocarbon dates between the mid sixth and mid seventh centuries, which probably places this agricultural activity before the construction of the settlement enclosure (see below for radiocarbon dates).

The enclosure measured 46m in internal diameter and had an entrance at the south-east (Fig. 132). Large slabs and boulders within the ditch on either side of the entrance suggest that the bank on either side was revetted with stone. The enclosing ditch contained large quantities of animal bone and evidence for butchery was recorded on the three main domesticates of cattle, sheep and pig. Middens of seashell show that the inhabitants utilised the nearby sea shore which was approximately 3km away to the east. A portion of the bank survived on the western side while there was evidence for a post-built fence or palisade on the northern side of the enclosure. The latter was possibly constructed after erosion of the bank.

The interior was heavily ploughed but a cluster of postholes, a hearth and a pit, measuring 8m by 5m, were identified off-centre. They may possibly denote the area of a former dwelling.

A reasonable number of artefacts were recovered from the site including ringed pin fragments, bone pins (including an unusual zoomorphic example with the head stylised as a horse's head), a bone scoop with dot and spiral decoration, blue glass beads, a stone spindle whorl, a broken rotary quern and iron slag. Possible ecclesiastical connections, with the nearby monastic site at Tully, were indicated by the presence of inscribed worked pieces of wood. One piece featured a raised cross while another contained an inscription of the word '*Deo'* and a *chi-rho* symbol. These motif pieces may indicate that the inhabitants were involved in the manufacture and decoration of church manuscripts or artefacts.

Two smaller ditches radiated from the enclosure to the south and represented field enclosures. The curving hedgerow of the townland boundary complemented one of these which demonstrates an associated field system and suggests the early medieval antiquity of townland divisions. When the two field ditches were taken together they formed a petal-shaped field enclosure. Material from a posthole marking one of the boundaries was dated between the late seventh and late ninth centuries.



Fig. 132: Aerial photograph of Glebe, Co. Dublin (after Seaver 2005, 52).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
OxA-12814	Charcoal (Poimoideae) from structure associated with cereal-drying kiln	1473±32 BP	**A.D. 543-645**
OxA-12816	Seeds from cereal-drying kiln	1460±32 BP	**A.D. 551-648**
OxA-12718	Charcoal (Prunus?) from hearth	1263±26 BP	**A.D. 669-782**; A.D. 789-812; A.D. 845-855
OxA-12720	Charcoal (Poimoideae) from occupation deposit under bank	1244±27 BP	**A.D. 684-832**; A.D. 836-869
OxA-12719	Charcoal (Poimoideae) from posthole fill of field ditch	1321±27 BP	**A.D. 653-721; A.D. 741-770**

References:

Seaver, M. 2005. From mountain to sea: excavations in the townlands of Glebe and Laughanstown, Co. Dublin, in J. O'Sullivan and M. Stanley (eds.) *Recent Archaeological Discoveries on National Road Schemes 2004*, 51–64. National Roads Authority Monograph Series 2. Dublin. Wordwell.

Seaver, M. 2007. Final Report on the Archaeological Excavation of a Ringfort, Glebe Townland, Co. Dublin. Unpublished report prepared for Valerie J. Keeley Ltd.

'Mount Offaly', Cabinteely, Co. Dublin
Early Medieval Settlement-Cemetery & Possible Later Ecclesiastical Site
Grid reference: **O23302420 (32330/22420)**
SMR: **DU026-119**
Excavation Licence No: **98E0035**
Excavation duration: **February – August 1998**
Site director: **M. Conway (Margaret Gowen and Co. Ltd.)**

Excavation in advance of the construction of an Esso service station revealed a large multi-phase enclosed cemetery (Fig. 133). The site remains undated but it probably originated during the late Iron Age. It is difficult to determine when it fell out of use. It appears that the cemetery began as an ancestral burial place and was then taken over by the Church. The large number of internments suggests it was utilised over many centuries, and potentially into the later middle-ages. The burial ground contained 1553 burials as well as disarticulated remains and charnel pits. Settlement, on the site or in the vicinity, was evident by numerous dress items, functional objects, imported pottery, butchered animal bone and areas of cobbling. Evidence for industry included a furnace and associated hearth. Excavation only revealed a section of the site and further burials and features undoubtedly lie outside the excavated area.

Twenty individuals were associated with the first burial phase at Mount Offaly. They were all extended W-E inhumations and were well-spaced and consistently aligned on the same axis. No grave-goods or finds were associated with this phase, which remains undated, but the cemetery probably originated during the late Iron Age (see below).

Phase II included 48 burials. Conway associates the inner ditch with this phase but it may have been constructed for the first phase of internment. A bone pin was retrieved from the primary fill and E ware, dating between the mid-sixth and seventh centuries, came from a secondary fill. A 6.5m stretch of the ditch was filled with dark occupation soil and included a large quantity of butchered animal bone and a double-sided bone comb. Further animal bone and E ware fragments were identified in the upper fill. Therefore, the ditch was open prior to the mid sixth or seventh centuries. Also, the site name suggests the former presence of a mound and this is strengthened by accounts of a mound on the site in the early twentieth century. Based on evidence from many other mound, or *ferta*, sites and settlement-cemeteries, Mount Offaly probably originated during prehistory and most likely in the Iron Age.

During Phase III, the inner ditch was back-filled and burials extended over this area. At least 120 individuals were buried during the third phase. The cemetery expanded as far as the second or middle ditch which was between 2m and 3.5m further east of the original enclosure.

The numbers interred within the confines of the middle enclosure ditch greatly increased during Phase IV. A further 262 individuals were buried and some of the third-phase graves were re-opened to accommodate further burial. The ditch produced less domestic waste than its predecessor. Its upper fill contained butchered animal bone and numerous small finds including a rare sherd of D ware which dates to the sixth century. Part of the newly expanded enclosure remained burial-free during Phases III and IV which suggests the former presence of a structure or perhaps some form of activity that left no trace archaeologically.

The cemetery expanded in size again during Phase V to incorporate further burial. The middle ditch was filled-in and a third, and final, outer enclosure was created. It was positioned between 8m and 9m east of the former middle enclosure and its fill was mostly sterile apart from numerous stones. At least 424 burials and a unique charnel pit were associated with Phase V. The latter contained at least three individuals and the bones were carefully and deliberately positioned around a millstone base. Potential settlement evidence was identified and included several areas of cobbling, significant deposits of butchered animal bone, domestic waste and small finds. Iron working was also present. A furnace and associated hearth were built over the former middle ditch and they contained dump deposits and ironworking debris including large amounts of slag and several iron objects.

The final phase was associated with at least 450 burials. The outer enclosure was filled-in and a large cobbled area was constructed that partly overlay the final back-filled ditch.

A large variety of artefacts, indicative of settlement, craft and trade, were retrieved from the inner and middle ditch fills at Mount Offaly. These included ringed pins, stick pins, belt buckles, glass beads and bone combs. The presence of spindle whorls, bone pin beaters and iron shears testify to cloth or textile manufacture. Evidence for woodworking included gouges, chisels, punches and knives. Bone and antler working was also identified from bone blanks and antler tines and burrs. The status of Mount Offaly, notably during the sixth and seventh centuries, is evident from its imported pottery including Late Roman Amphora (B ware), D ware, and E ware. The inner and middle ditches also produced large quantities of butchered animal bone which testify to the processing and consumption of meat at the site or nearby.

Perhaps the site developed from its inception as a *ferta* into a larger settlement-cemetery. Religious-type artefacts were uncovered including box or book mounts and a composite bronze cross. The lack of domestic evidence from the final enclosure may suggest that the site functioned solely as a cemetery by this stage and was under the control of the Church. When this changeover occurred, however, is unclear and the findings from the final report should clarify a number of these issues.

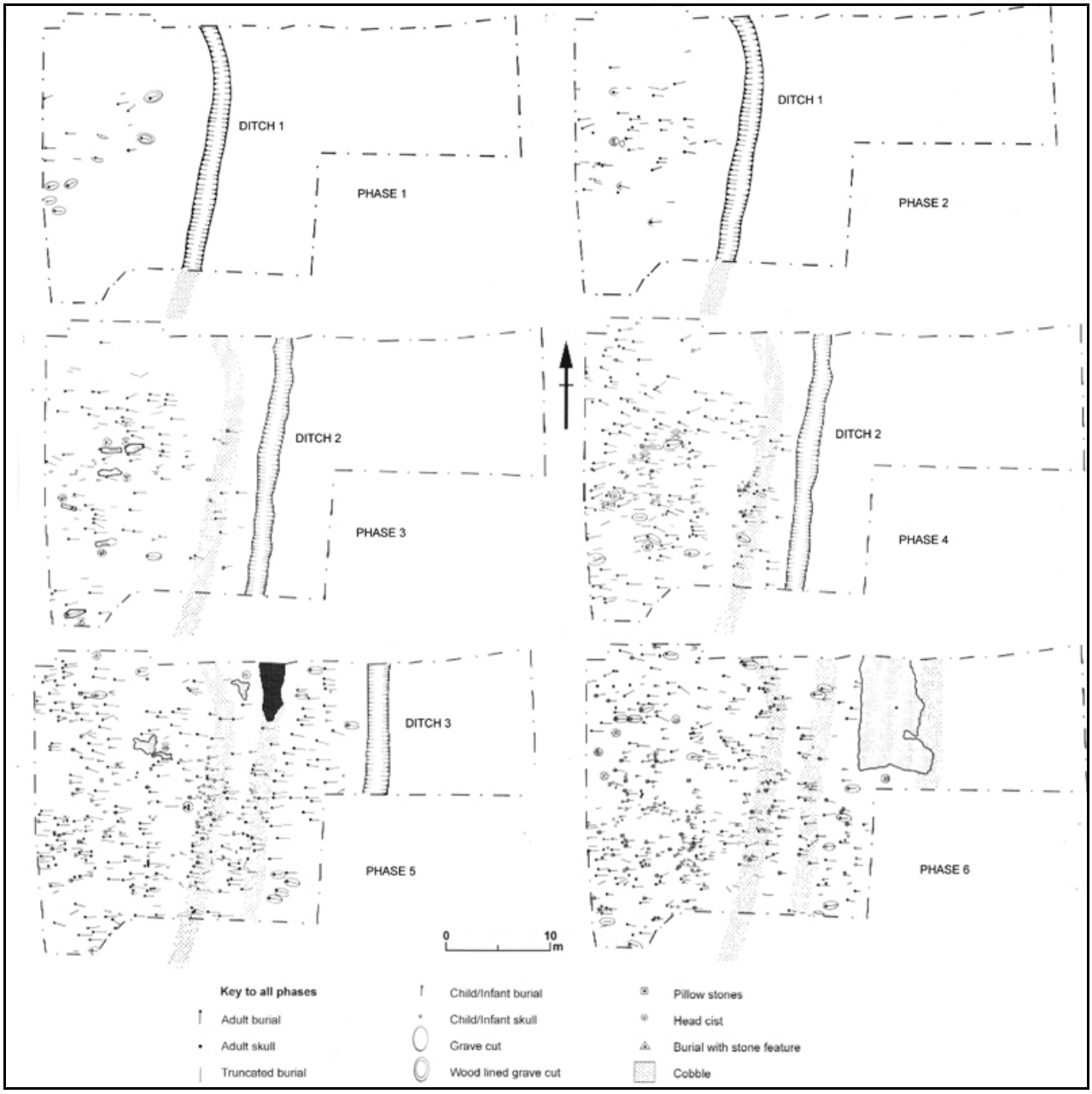


Fig. 133: Phases at Mount Offaly, Co. Dublin (after Conway 1999, 23; 28; 29).

Reference:

Conway, M. 1999 *Director's First Findings from Excavations at Cabinteely*. Transactions Volume 1. Dublin. Margaret Gowen and Co. Ltd.

Rosepark, Co. Dublin

1. **Early Medieval Hilltop Enclosure Complex**
2. **Early Medieval Unenclosed Souterrain Complex**

Grid reference: **O20206121 (32020/26121)**
SMR: **DU005-013**
Excavation Licence No: **99E0155**
Excavation duration: **July 2000 – June 2001**
Site director: **J. Carroll (Judith Carroll and Co. Ltd)**

Excavations at Rosepark, Balrothery, Co. Dublin – in advance of a housing development – revealed a hilltop multi-phase enclosure complex spanning approximately the late Iron Age until the eighth or ninth centuries A.D. Unenclosed habitation, consisting of seven souterrains, potentially succeeded the hilltop settlement but was abandoned prior to the arrival of the Anglo-Normans. A small number of disarticulated burials were identified on the summit of the hill and agricultural activity, especially cereal processing, was present including eleven cereal-drying kilns and quantities of animal bone. Approximately a little over half of the site was excavated.

1. Early Medieval Hilltop Enclosure Complex

Phase I (Fig. 134) witnessed the digging of an enclosure ditch (Ditch G); only a small section was excavated, on the summit of the hill and it has been dated to A.D. 259-411 (see Table A for radiocarbon dates). The highest part of the site was 58m OD and there were clear views of the surrounding countryside in all directions from the hilltop. The coastline was just 2km away. Only 12m of the ditch was revealed within the excavated area and it contained a stony layer throughout its fill as well as animal bone, charcoal and iron slag. The remainder of the ditch may have been removed due to the digging of later ditches' A and F. Contemporary agricultural activity occurred at the base of the hill as two cereal-drying kilns produced similar radiocarbon dates. The remainder of the kilns were undated but it is likely that many were contemporary. A number of possible huts may also date to this phase as they were truncated by the Phase II ditch (Ditch E). Phase I was largely devoid of artefacts except for a possible iron axehead. Analysis of the animal bones showed that cattle represented the vast majority of the domesticate animals (89%), followed by pig (9%) and sheep/goat (3%).

Both an inner (Ditch A) and outer ditch (Ditch B) were excavated on the hilltop during the second phase of activity between the fifth and sixth centuries (Fig. 135). A linear ditch (Ditch E) also extended eastwards from Ditch B while a large house was constructed at this time between the inner and outer enclosures. An entranceway, represented by parallel trenches, was located to the east of the outer enclosure. Ditch A contained large quantities of charcoal and animal bone and its lower fill was dated to A.D. 431-607. E ware sherds were identified in its upper fill and can be dated between the mid sixth and seventh centuries. It is likely that the outer enclosure was contemporary with the inner enclosing ditch as it related to Ditch E which cut a number of the Phase I features. Only a few finds came from Ditch B, including a possible iron belt buckle and a bone needle, while the only find from Ditch E was an iron escutcheon. Generally, therefore, artefacts were scarce from the Phase II enclosure ditches. During this phase, cattle remained the dominant domesticated species but were less abundant than the preceding phase. Pigs were also fewer when compared to Phase I whereas, conversely, sheep/goat numbers increased and they represented the second most utilised species after cattle.

Burial evidence was also revealed at Rosepark as the disarticulated remains of three adults were found in a shallow pit on top of the hill. One of the individuals was dated to A.D. 582-694. The burial activity may relate to the latter part of Phase II or Phase III

The hilltop enclosure was again extensively modified between the sixth and eighth centuries during Phase III (Fig. 136). Ditch F was largely a re-cut of Ditch A – the inner enclosure – and E ware was recovered from its fill. A new outer enclosure, Ditch C, was dug but was not as extensive as the previous outer enclosure. However, it showed evidence for an associated stone-revetted bank. Charcoal from Ditch C was dated to A.D. 671-778 while E ware was also recovered. Other finds from the upper fill included an iron belt buckle, a bronze pin, a knife and a loom weight. Ditch J was likely

a continuation of Ditch C and it also probably had a related stone-revetted bank. The ratio of the three main animal domesticates was similar to Phase II.

2. Early Medieval Unenclosed Souterrain Complex

The Phase III outer enclosure enclosed two souterrains while a further five were located further downhill from the hilltop enclosure. The enclosed souterrains may relate to this phase or, alternatively and more likely, they all belong to Phase IV.

Phase IV consisted of occupation at Rosepark from the ninth century until the arrival of the Anglo-Normans. The souterrains possibly represent a movement from enclosed to open settlement at this point and it appears that the hilltop enclosure was abandoned by the eighth or ninth centuries. Some of the souterrains were used, after their abandonment, as cereal-drying kilns. Kilns nearby at Glebe South were radiocarbon dated between the early eleventh and thirteenth centuries. It could tentatively be suggested that the souterrains at Rosepark were utilised between the ninth and tenth centuries before their abandonment. Some were thereafter reused as cereal-drying kilns contemporary with cereal processing at Glebe South.



Fig. 134: Phase I at Rosepark, Co. Dublin (after Carroll 2008, 24).



Fig. 135: Phase II at Rosepark, Co. Dublin (after Carroll 2008, 30).



Fig. 136: Phase III at Rosepark, Co. Dublin (after Carroll 2008, 52).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RWReimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-4808	Charcoal from fill of Phase I Ditch G	1693±22 BP	**A.D. 259-296; A.D. 321-411**
UB-4807	Charcoal from cereal drying kiln (Kiln 1)	1689±15 BP	A.D. 262-279; **A.D. 326-410**
UB-4809	Charred cereal grains from cereal drying kiln (Kiln 2)	1639±21 BP	**A.D. 343-440**; A.D. 486-531
OxA-11472	Charcoal from lower fill of Phase II Inner Enclosure (Ditch A)	1524±36 BP	**A.D. 431-607**
UB-4810	Charcoal from Phase III outer enclosure (Ditch C)	1269±23 BP	**A.D. 671-778**
Beta-236600	Human bone from shallow pit	1380±40 BP	**A.D. 582-694**; A.D. 704-705; A.D. 748-765

Reference:

Carroll, J. 2008 *Archaeological Excavations at Rosepark, Balrothery, Co. Dublin*. Volume 1 Balrothery Excavations. Dublin. Judith Carroll and Co. and the Heritage Council.

'St Gobban', Kilgobbin, Stepaside, Co. Dublin
Early Medieval Ecclesiastical Settlement
Grid reference: **O18902440 (31890/22440)**
SMR: **DU025-016**
Excavation Licence No: **04E1373 (Bolger); 04E0981 (Larsson)**
Excavation duration: **Summer 2004**
Site director: **T. Bolger (Margaret Gowen & Co. Ltd.); E. Larsson (Arch-Tech Ltd.)**

Excavations were undertaken in advance of a residential development in two fields directly to the west and south of the early medieval church of Kilgobbin. Evidence for settlement, agriculture and industry was revealed that was mostly related to the ecclesiastical site. Although radiocarbon dates are awaited, much of the archaeological activity most likely dates to the early medieval period.

Teresa Bolger excavated the area directly to the south-east of the church. It revealed multi-phase activity including curvilinear and linear ditches, slot trenches, post and stakeholes, and pits. The earliest phase predated the enclosure ditches and consisted of a circular slot-trench and pit. No finds were recovered from this phase.

The second phase consisted of a ditch aligned north-south and a concentration of postholes in the northern part of the excavated area. The relationship between the two was unclear but the former may have been a field boundary. Artefacts indicative of settlement and metalworking associated with this phase included two possible copper-alloy pins a clay mould fragment.

A curving ditch was revealed in Phase III and it defined a circular area approximately 37m in diameter. It was evident that the ditch did not enclose the church or graveyard. It possibly represented a secular settlement enclosure which predated later enclosure activity related to the church. Scatters of postholes were identified in the centre and southern part of the enclosure while the only finds were an iron knife and pin.

Phase IV was related to the ecclesiastical site. A large curvilinear ditch was revealed which defined a circular or sub-circular enclosure. This cut the Phase III enclosure and it would have encircled all, or a large section, of the present church and graveyard. The ditch was back-filled before another enclosure was created that enlarged the space. An annexe was created at the southern end and this defined an area of industrial activity which included metalworking features, slag and crucible fragments. A number of pits also produced metalworking debris.

Evidence for habitation was identified from the large artefactual assemblage associated with Phase IV. Some of the artefacts included a selection of iron and copper-alloy pins, a polychrome bead fragment, a lignite bracelet and a highly ornate copper-alloy clasp.

Further excavation at the north-west of the site revealed probable early medieval activity. Two ditches, from the first phase, appeared to define a large sub-rectangular enclosure that extended beyond the excavation limit. Occupation was evident by the presence of large amounts of animal bone, a possible refuse pit and artefacts from the upper fill of one of the ditches. The finds included iron knives, a possible shears, and both iron and copper-alloy studs or mounts. It is probable that this enclosure is related to the enclosure activity described above but their chronological relationship cannot be determined until radiocarbon dates are available.

Excavation to the south of the church identified further multi-phase activity. Additional ditches were revealed, as well as a number of cereal-drying kilns, which may relate to the church's agricultural activities. Phase I consisted of a linear ditch and the remains of hearth at its base. There was a marked increase in farming activity during Phase II including the creation of a sub-rectangular field enclosure and two cereal-drying kilns. Additional phases were date late medieval in dates based on the occurrence of pottery sherds within the ditches.

Further excavation by Ellinor Larsson to the south, and in proximity, of the church revealed an area of ironworking, a possible kiln, pits, postholes and ditches. Condensed areas of post and stakeholes were suggestive of a number of structures but no discernible plan could be made. These were located beside two large linear ditches. One contained two iron knives in its upper fill. It is likely that these features represent agricultural and industrial activity related to the nearby church.

(**No plans were available for this site**).

References:

Bolger, T. 2004:0647. Kilgobbin, Stepaside, Co. Dublin. www.excavations.ie.

Larsson, E. 2004:0644. Kilgobbin Lane/Enniskerry Road, Stepaside, Co. Dublin. www.excavations.ie.

Larsson, E. 2004:0645. Kilgobbin Lane/Enniskerry Road, Stepaside, Co. Dublin5. www.excavations.ie.

Larsson, E. 2004:0646. Kilgobbin Lane/Enniskerry Road, Stepaside, Co. Dublin. www.excavations.ie.

St Michael le Pole

Ecclesiastical Site
Ship Street
Grid reference: **O152330 (31520/23300)**
SMR No: **N/A**
Excavation Licence No: **E000217**
Excavation Duration/Year: **1981**
Site director: **K. Campbell (Margaret Gowen and Co. Ltd.)**

Bride Street
Grid reference: **O153337 (31530/23370)**
SMR No: **N/A**
Excavation Licence No: **93E0153**
Excavation Duration: **Oct. – Dec. 1993**
Site director: **M. McMahon (Freelance)**

Golden Lane/Chancery Lane (On east side of Chancery Lane)
Grid reference: **O15393373 (31539/23373)**
SMR No: **N/A**
Excavation Licence No: **04E1030**
Excavation Duration/Year: **2005**
Site director: **E. O'Donovan (Margaret Gowen and Co. Ltd.)**

Golden Lane/Chancery Lane (On west side of Chancery Lane)
Grid reference: **O154336 (31540/23360)**
SMR No: **N/A**
Excavation Licence No: **04E0237**
Excavation Duration/Year: **May – August 2004**
Site director: **C. Walsh (Archaeological Projects Ltd.)**

Dubhlinn – a large natural pool that was formed by the tidal action of the River Poddle – gave its name to the modern city. The pool has been associated with an ecclesiastical centre and the annals record abbots there in the seventh and eighth centuries (Clarke 2000, 40). Its exact location is not known but the curving streets of Peter Row, Whitefriar Street, Upper and Lower Stephen Street and Lower Mercer Street have been postulated as forming the extent of the ecclesiastical enclosure (Clarke 1990, 61–2). However, archaeological evidence in this area has been disappointing with little corroborating evidence that it marks the earliest part of Dublin (Simpson 2000, 15). Excavations at St Michael le Pole church and its surrounding areas *have* however revealed archaeological evidence for settlement, agriculture and industry. It both predates the first Scandinavian raids and settlement and indicates continuous occupation while the Hiberno-Scandinavian town was at its most powerful. St Michael le Pole, therefore, may be the early ecclesiastical site referred to in the annals.

The church of St Michael le Pole was situated to the south of the town walls and to the southwest, in close proximity, of *Dubhlinn* (Fig. 137). Excavation initially occurred on the site at Ship Street in 1981 and focused on identifying the church and round tower (Gowen 2001). A number of phases were identified both pre and postdating the construction of the church in the twelfth century.

Phase I was represented by a group of shallow gullies, hearths and postholes (Gowen 2001, 28–31). Some of the latter were large and stone-packed but no discernible structural plans could be identified. Charcoal from a hearth was dated to A.D. 659-870 (see Table A for radiocarbon dates). These features tentatively suggest occupational activity in the area between the mid seventh and late ninth century.

The second phase consisted of layers of clays containing ash, mortar and butchered animal bone that sealed the first phase. These layers were also cut by graves – one of which was a lintel grave – that predated the church (Gowen 2001, 31–7). The presence of lime and mortar from Phase II is suggestive of mortar production and potentially the construction of buildings in the vicinity. However, the church cut these features so was not the focus of this construction phase. The presence of butchered animal bone and mussel shells shows that people were eating and possibly living here prior to the site's use as a cemetery. The burials appear to slightly postdate the Phase II activity and some definitely predate the construction of the church as they were truncated by it. However, it is probable that some of the graves are also contemporary with the church. The single lintel grave was dated to A.D. 894-1262 which suggests that this person was interred close to the construction date of the church.

Phase III has been dated between A.D. 1100 and the fourteenth century and this witnessed the construction of the church and round tower (Gowen 2001, 37–40). The west wall of the church was revealed as well as the foundation for an internal round tower at the western end of the church (Fig. 138). The church and round tower have been dated to the twelfth century on stylistics grounds with similar engaged round towers at Ferns and Glendalough. Following this, the cemetery continued to be used into the post medieval period although historical accounts demonstrate that St Michael le Pole church declined in importance after the arrival of the Anglo-Normans.

Excavations on the east side of Bride Street in 1993 revealed a number of phases of archaeological activity that have been associated with the church at St Michael le Pole (McMahon 2002). The site lies to the west of the church and round tower and possibly represents the westernmost activity of the ecclesiastical site. Although St Brigid's church is situated close by to the east, Bride Street currently divides the two sites and this road probably has an early origin because it joins Werburgh Street to the north which is pre-Norman in date (Hayden 2002). Therefore, McMahon's excavations probably pertain to St Michael le Pole as the road would have acted as a boundary between the two ecclesiastical sites. It is also noteworthy that the two ecclesiastical sites may not be contemporary and it has been suggested that St Brigid's is post-Scandinavian in date (Bradley 1992, 52). Finally,

and significantly, the archaeological activity at Bride Street has produced a similar sequence of activity to that found at Ship Street which draws parallels between the two (McMahon 2002, 68).

The earliest archaeological activity at Bride Street consisted of a refuse spread which contained charcoal, animal bone fragments, shellfish remains and two refuse pits (McMahon 2002, 71–4). One of the pits contained charred animal bone, apple pips, blackberry seeds, hazelnut shells, shellfish, fish bones and charred grain. Post and stakeholes were present around the pit's edge which may have held a post-and-wattle lining. Activity ceased in Phase I when the features were covered with boulder clay in an attempt to level the ground prior to the second occupational phase.

Once the ground was level, Phase II witnessed much more intensive activity including the construction of a timber structure, associated hearths and rubbish pits and a sunken channel (McMahon 2002, 74–7). A series of post and stakeholes potentially formed the south-western corner of a rectangular structure. The building was associated with a hearth which contained animal and fish bone. Potential hearth debris on the south of the site contained food refuse as did a pit which contained animal bone, fish bone and human faeces which suggests it both functioned as a refuse and cess pit.

The initial settlement phases at Bride Street may relate to the first and second occupational phases at Ship Street. These potentially date between the seventh and ninth centuries and represent the earliest occupational evidence thus far discovered south of the town in this area of Dublin (McMahon 2002, 77).

During Phase III, people were interred to the east of the site as represented by two articulated burials, disarticulated human remains and grave cuts. Burials were not placed at the west of the site and this was the first evidence for a division between the two sides (McMahon 2002, 77–83). One of the burials – dated to A.D. 770-984 – was an adolescent who was buried face down and orientated north-south. A stratigraphically later burial returned a date of A.D. 866-1017. A layer above the burials contained a ringed pin – similar to tenth and eleventh century examples from Dublin – animal bone and metalworking refuse. A curved roof tile was also discovered in a sealed context above a grave cut that can be dated to the eleventh century at the earliest. It appears that the burials discovered on the east side of the site at Bride Street relate to St Michael le Pole church – just 100m to the east – and the burials identified at Ship Street. They may represent the western edge of the cemetery. The west side of the site was largely absent of features except for rubbish pits containing animal bone and shell fragments. Roof tiles from the area indicate an eleventh century date for this activity. The cemetery went out of use, possibly in the twelfth century, and this part of the burial ground was covered by large quantities of organic waste which may relate to a large garden in Bride Street known as Earl Hascald's garden which survived into the late medieval period (McMahon 2002, 86).

More recently, in 2005, excavations at the southern part of the ecclesiastical site on Golden Lane/Chancery Lane revealed settlement, agriculture and industrial evidence and a further section of the cemetery (O'Donovan 2008; Fig. 139). Phase I consisted of a series of shallow pits in the north-eastern corner of the site that predated the cemetery. These may relate to the earliest levels at Ship Street and Bride Street.

The second phase included 272 burials. Two hundred and sixty eight were located in a cemetery and consisted of a dense cluster of graves in which many were placed on top of each other. St Michael le Pole church is just 15m to the north and the burials represent the southern portion of the cemetery. The graveyard has been provisionally dated between the eighth and eleventh centuries (O'Donovan 2008, 45). A further four Scandinavian burials were identified on the periphery of the cemetery between 10m and 30m away. One was dated to A.D. 678-832 which suggests that the individual was buried here prior to A.D. 832 and the establishment of the historically recorded *longphort* (O'Donovan 2008, 50–3). A

Scandinavian warrior burial has been recorded from Bride Street (Ó Floinn 1998, 132), while similar burials have also been identified nearby at Ship Street Great and South Great George's Street (Simpson 2005). This strongly indicates an early Scandinavian settlement in the area and they may have lived alongside the natives for a number of years (possibly related to the earliest phases at Ship Street, Bride Street and Golden Lane) before the town was established across the River Poddle to the north.

Evidence for habitation, agriculture and industry – contemporary with the cemetery – consisted of refuse pits, a cereal-drying kiln, a lime kiln, a mortar pit and a well (O'Donovan 2008, 53–63). The settlement evidence consisted of two pits. Charcoal from the primary fill of one of the pits dated it to A.D. 868-1018. This refuse pit contained large quantities of animal bone and five perforated bone pins. The other pit produced a belt buckle fragment. An L-shaped cereal-drying kiln – dated to the tenth century – was located close to the pits and was potentially contemporary. Several episodes of cereal drying were evident and oats dominated the assemblage. The oats dried at the kiln were probably utilised by those in the immediate settlement and also for the inhabitants of the enclosed town to the north. Finally, a complex of features – including the lime kiln, mortar pit and well – were utilised for lime production and possibly the construction of St Michael le Pole church. The well was dated to A.D. 1022-1164 and this overlaps with the construction date for the church in the early twelfth century. Contemporary evidence for lime production was also recorded from Phase II at Ship Street which indicates organised and relatively large scale construction.

Excavation also occurred directly west of O'Donovan's investigations and on the opposite side of Chancery Lane (Walsh 2009). The earliest activity was dominated by a metalled roadway which extended over 21m and had a maximum width of 2.35m. The road consisted of a surface with closely set stones and was flanked by a gully on its north-west side and was slightly sunken on its south side. The gully contained small quantities of butchered animal bone and shell fish. Animal bone from the road was dated to A.D. 765-895 and it probably functioned as a route-way before going out of use by the end of the ninth century (Walsh 2009, 15–9). A series of stakeholes revealed a small potential structure – 4m north-south by 2.5m east-west – with rounded corners along the west side of the road. No hearth or flooring levels were identified but its presence may explain the occupational debris along the road and in the gully (Walsh 2009, 20–1). Rounded corners are not typical of rectangular Irish dwellings so this could tentatively represent a small Scandinavian Type 2 structure based on its morphology and lack of hearth. A similarly sized and shaped structure has been recorded from mid ninth century levels at Temple Bar West (Simpson 1999), while an early Scandinavian presence in the area has already been discussed (above). Walsh (2009) has linked the road to the sunken channel at Bride Street and suggests that this area was laid out in an ordered fashion with road and plots in the middle ninth-century (Fig. 140).

The remains of four burials were associated with Phase I. Three were dated between approximately the eighth and late ninth centuries while another was slightly later and was dated to A.D. 777-969 (Walsh 2009, 19–21).

Phase II has been dated between the tenth and twelfth centuries and consisted of a possible small structure, stakeholes, refuse and cess pits. Artefacts, animal bone and charcoal were rare and the roadway had gone out of use (Walsh 2009, 21–4).

The presence of a Scandinavian group – potentially both living and burying their dead – within or at the edges of an ecclesiastical site from the early and middle ninth century deviates from the historical accounts of raids and bloodshed at monastic sites. The church and round tower at St Michael le Pole has been dated to the early twelfth century while the preceding phases indicate settlement, agriculture and industry from possibly the late seventh century. The archaeological evidence points to natives and newcomers living and burying their dead side-by-side prior to the construction of the stone church and tower. The annals suggest the presence of a monastery in this area in the seventh and eighth centuries so a wooden church may have preceded the stone building at St Michael le Pole. If this is

accurate, it further points to the peaceful coexistence of the two groups at a time when history tells of the heathen Norsemen.

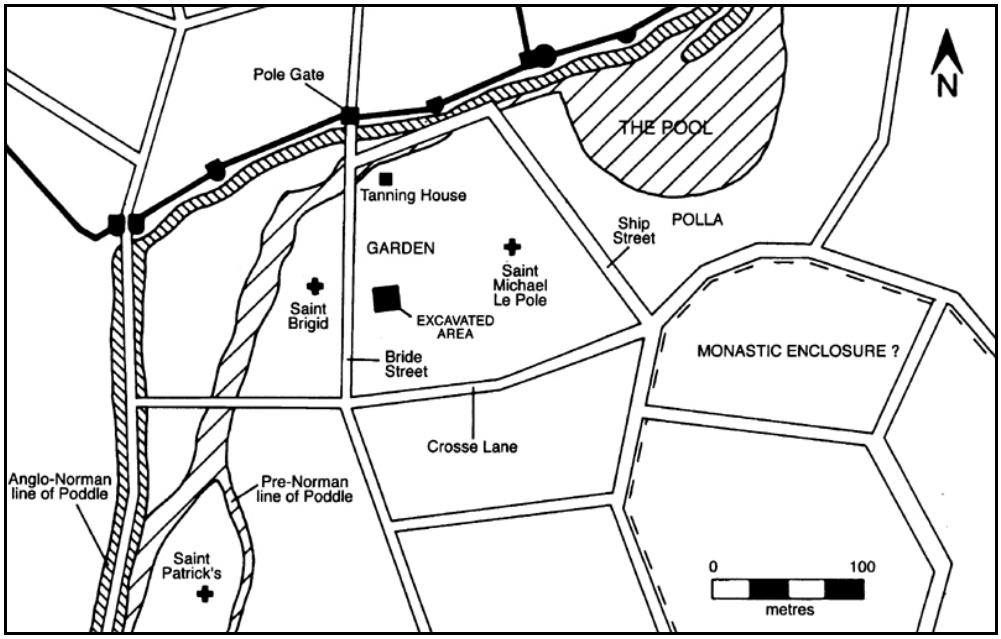


Fig. 137: Location of St. Michael le Pole, Dublin (after McMahon 2002, 119).

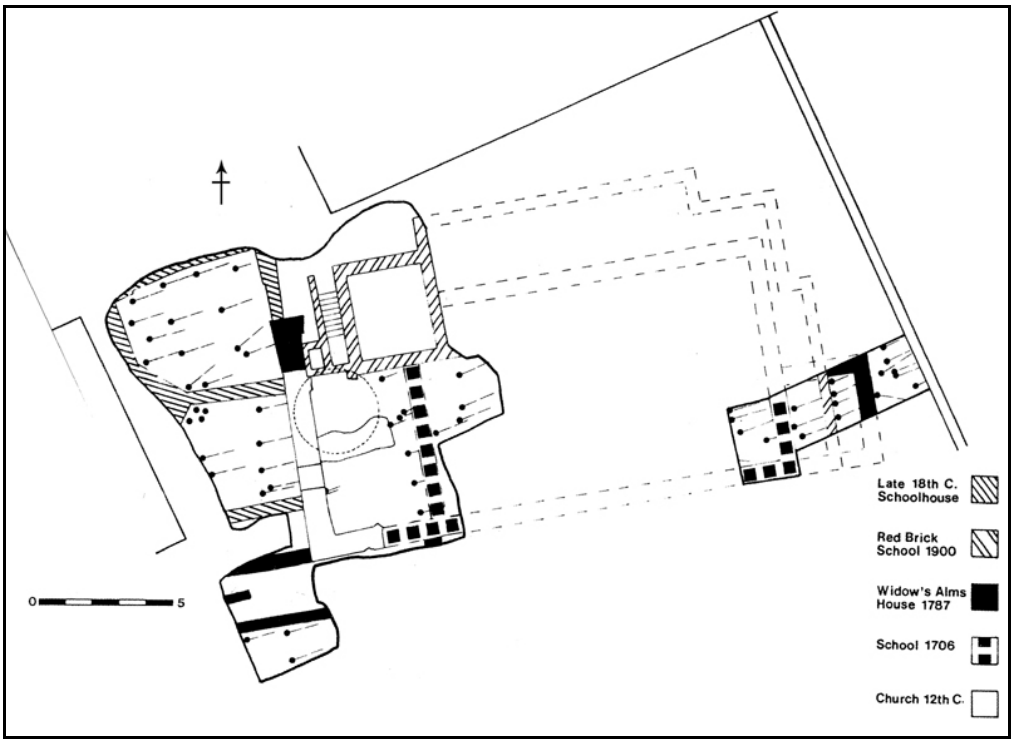


Fig. 138: Plan of St. Michael le Pole, Dublin (after Gowen 2001, 25).

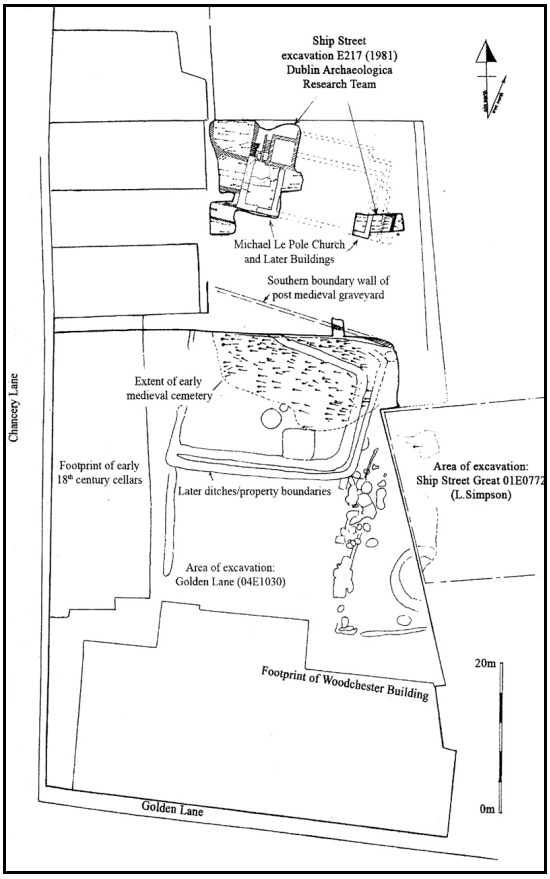


Fig. 139: Plan of excavations at Ship Street and St. Michael le Pole (after O'Donovan 2008, 43).

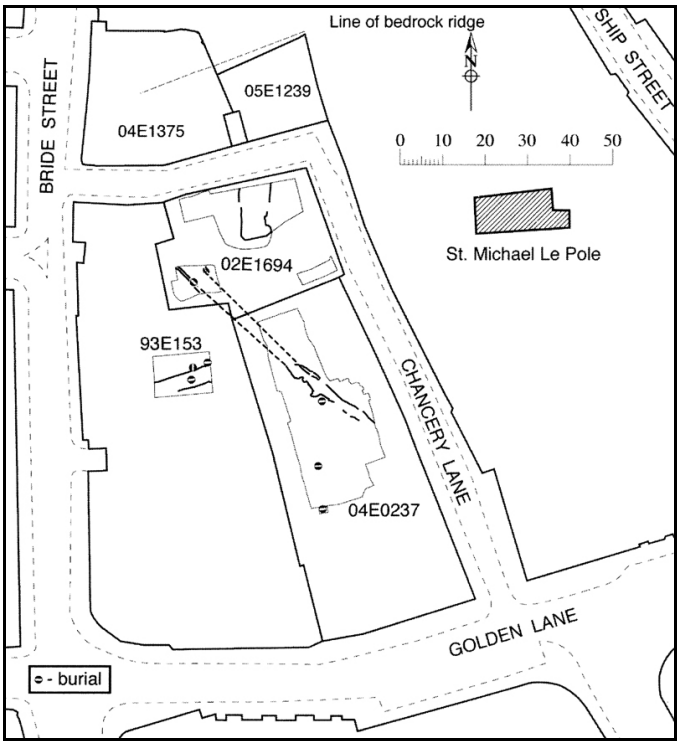


Fig. 140: Plan of excavations at Bride Street/Golden Lane/Chancery Lane (after Walsh 2009, 14).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
N/A	Ship Street: Charcoal from hearth	1275±50 BP	**A.D. 659-870**
N/A	Ship Street: Human bone from lintel burial	955±100 BP	**A.D. 894-1262**
UB-3768	Bride Street: Human bone from burial	1165±45 BP	A.D. 723-740; **A.D. 770-984**
UB-3767	Bride Street: Human bone from burial	1110±35 BP	A.D. 828-838; **A.D. 866-1017**
UB-7074	Golden Lane/Chancery Lane (O'Donovan 2008): Wood from well	941±33 BP	**A.D. 1022-1164**
UB-7075	Golden Lane/Chancery Lane (O'Donovan 2008): Charred cereals from cereal-drying kiln	1073±34 BP	**A.D. 894-928; A.D. 933-1020**
UB-7079	Golden Lane/Chancery Lane (O'Donovan 2008): Charcoal from refuse pit	1108±35 BP	A.D. 830-837; **A.D. 868-1018**
UB-7076	Golden Lane/Chancery Lane (O'Donovan 2008): Human bone from Scandinavian burial LXXXV	1249±32 BP	**A.D. 678-832**; A.D. 836-869
UB-7077	Golden Lane/Chancery Lane (O'Donovan 2008): Human bone from Irish-type burial LXXXIII	1180±31 BP	**A.D. 772-900;** A.D. 917-965
UB-7078	Golden Lane/Chancery Lane (O'Donovan 2008): Human bone from female burial CXXIX; possibly associated with Scandinavian grave goods	1247±33 BP	**A.D. 680-870**
UB-6337	Golden Lane/Chancery Lane (Walsh 2009): Animal bone from road	1202±32 BP	A.D. 694-700; A.D. 708-747; **A.D. 765-895**; A.D. 925-937
UB-6367	Golden Lane/Chancery Lane (Walsh 2009): Human bone from burial 22	1229±31 BP	**A.D. 689-752; A.D. 760-883**
UB-6369	Golden Lane/Chancery Lane (Walsh 2009): Human bone from burial 40	1236±32 BP	**A.D. 687-877**
UB-6370	Golden Lane/Chancery Lane (Walsh 2009): Human bone from burial 50	1198±32 BP	A.D. 710-746; **A.D. 766-897**; A.D. 922-941
UB-6336	Golden Lane/Chancery Lane (Walsh 2009): Human bone from burial 78	1164±32 BP	**A.D. 777-904; A.D. 914-969**

References:

Bradley, J. 1992. The topographical development of Scandinavian Dublin, in F.H. Aalen & K. Whelan (eds.) *Dublin City and County: from Prehistory to Present*, 43–56. Dublin. Geography Publications.

Clarke, H.B. 2000. Conversion, church and cathedral: the diocese of Dublin to 1152, in J. Kelly & D. Keogh (eds.) *History of the Catholic Diocese of Dublin*, 19–50. Dublin. Four Courts Press.

Gowen, M. 2001. Excavations at the site of the church and tower of St Michael le Pole, in S. Duffy (ed.) *Medieval Dublin II: Proceedings of the Friends of Medieval Dublin Symposium 2000*, 13–52. Dublin. Four Courts Press.

Hayden, A. 2002. The excavation of pre-Norman defences and houses at Werburgh Street, Dublin: a summary, in S. Duffy (ed.) *Medieval Dublin III: Proceedings of the Friends of Medieval Dublin Symposium 2001*, 44–68. Dublin. Four Courts Press.

McMahon, M. 2002. Early medieval settlement and burial outside the enclosed town: evidence from archaeological excavations at Bride Street, Dublin. *Proceedings of the Royal Irish Academy Section C*, 102(C), 67–135.

O'Donovan, E. 2008. The Irish, the Vikings and the English: new archaeological evidence from excavations at Golden Lane, Dublin, in S. Duffy (ed.) *Medieval Dublin VIII: Proceedings of the Friends of Medieval Dublin Symposium 2006*, 36–130. Dublin. Four Courts Press.

Simpson, L. 2000. Forty years a-digging: a preliminary synthesis of archaeological investigations in medieval Dublin, in S. Duffy (ed.) *Medieval Dublin I: Proceedings of the Friends of Medieval Dublin Symposium 1999*, 11–68. Dublin. Four Courts Press.

Walsh, C. 2009. An early medieval roadway at Chancery Lane: from Duibhlinn to Áth Cliath? in S. Duffy (ed.) *Medieval Dublin IX: Proceedings of the Friends of Medieval Dublin Symposium 2007*, 9–37. Dublin. Four Courts Press.

County Fermanagh

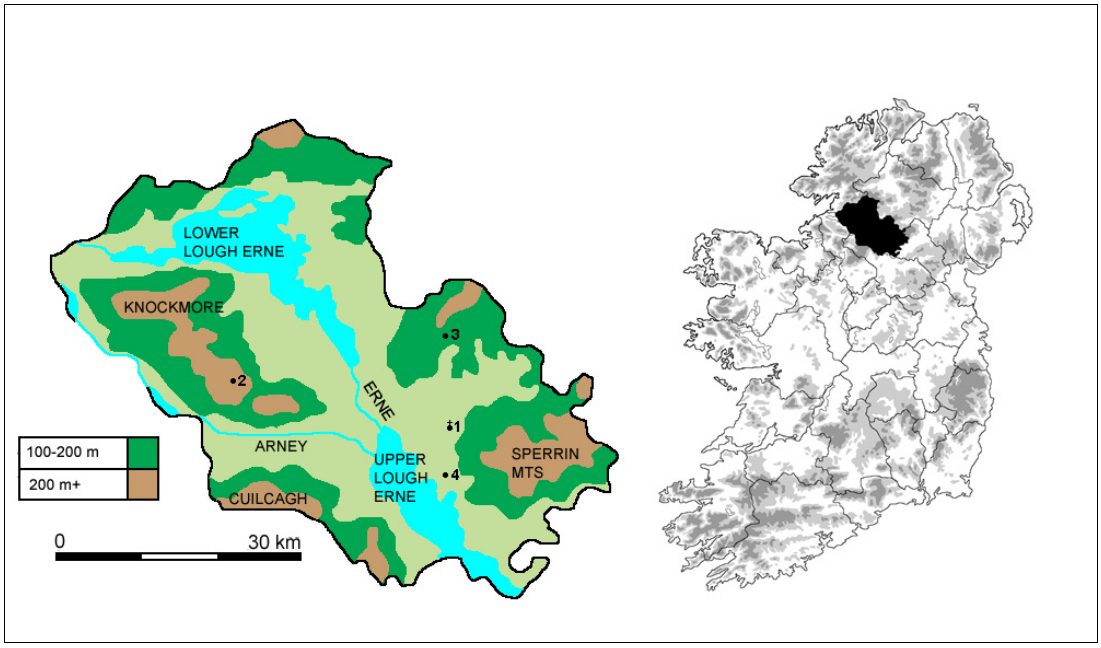


Fig. 141: Significant early medieval excavations in Co. Fermanagh.

1	Aghavea	**3**	Coolcran
2	Boho	**4**	Lisdoo

Aghavea, Co. Fermanagh
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **H3706 3883**
SMR No: **231:036**
Excavation Licence: **00E0227**
Excavation Duration/Year: **13th-20thApril & 6th June-11th August 2000**
Site Director: **Ruairí Ó Baoill (Archaeological Excavation Unit, EHS)**

Aghavea or *Achadh -beithe* (the field of the birch trees) was the site of an early sixth century ecclesiastical foundation associated in mythology with the virgin *Lasair* and St. *Molaise*. There is a record of a church on the site of the present 19th century Church of Ireland building in the 1306 Taxation. An early Christian stone with an inscription *Ór Do Dunchad/PSPIT BIC* (Pray for Dunchad the little priest) was formerly found at Aghavea and is now in the care of the National Museum in Dublin. The church is situated in Aghavea parish and townland approximately 2.5km east of Maguiresbridge in the barony of Maghersteffany and is located on a low local hilltop in gently undulating countryside with sloping ground especially to the south down towards a low marshy area and stream. A wide, low roughly circular stone and earthen bank encloses the site and measures roughly 60m northwest/ southeast, 3 meters in maximum width and up to 0.40m in height.

A preliminary assessment was undertaken in April 2000 in advance of proposals to build a church hall and car park in a field across the road from the church and uncovered significant multi-period early Christian and medieval archaeological deposits and features across most of the interior of the ecclesiastical site. Following agreement to move the church hall to the eastern side of the site, a further 9 week rescue excavation was undertaken in June-August 2000 which fully excavated trial trenches in the proposed car park and in the whole new area of the proposed church hall. Elsewhere, archaeological features uncovered across the site during the preliminary assessments were recorded but not fully excavated and were covered in terram for protection and possible future investigation. The main excavated features to the east of the 19th century church included a ditch with internal palisade slot cut by a later medieval structure, areas of industrial activity, early Christian period ditches, various medieval ditches and enclosures, a medieval metalled roadway leading towards the church and a large collection of finds (Fig. 142).

The excavated early medieval features to the east of the 19th century church comprised five ditches, palisade slots, an industrial area, bowl furnaces, gullies and truncated postholes. Three of these ditches formed part of enclosures of the early medieval ecclesiastical site. A steep-sided flat bottomed ditch (1) was identified in the southwestern quadrant of the excavated area and traced for a distance of 9meters. It had a maximum recorded width of 1.85m and depth of 0.80m and may represent an early medieval enclosing ditch. Fragments of burnt bone and a blue glass bead were found in its uppermost fills and fragments of tooth enamel, lignite and burnt hazel nuts in contexts below these.

A northwest/southeast aligned ditch (3) was investigated in the west of the excavated area and was possibly associated with an internal palisade trench running 0.40m parallel to, but east of it. It had a recorded max width of 1.8m x depth of 0.70m and was uncovered to a length of 6m. Twenty seven pieces of slag, one metal object and seven sherds of Souterrain ware pottery were found within its uppermost fill. The palisade slot was constructed with interrupted stone packed post-holes and was uncovered below the wall slot of a medieval structure in the west of the site for a distance of 5.60m. It varied in width from 0.20-0.40m and a depth from 0.10m-0.20m and revealed fragments of slag from its lower fill. The palisade and ditch may represent the remains of an early medieval ecclesiastical enclosure.

A section of the main ecclesiastical enclosure (ditch 4) was also excavated and extended roughly east-west from the direction of the church. It was uncovered for a distance of 20m

and measured approximately 3m wide x 0.80m deep. It's charcoal and organic-rich fills contained nineteen pieces of slag, one metal object and large fragments of burnt bone within its fills and appears to have pre-dated the main medieval ditch and a smaller medieval ditch.

A north-south ditch (2) was located in the west of the excavated area and was recorded for a distance of 13.5 meters. It had a max width of 3.10m x 0.20m deep and contained animal bone, fifteen pieces of slag and six flint pieces. It was cut by an early medieval enclosing ditch and must be of this date or earlier. Another early medieval ditch (5) was located in the southeast of the excavated area, west of ditch (1) for a distance of 5.60m. It had sloping sides and a flat bottom and had a maximum excavated width of 1.60m and depth of 0.80m. One piece of slag, fragments of burnt bone, a fragment of lignite and two metal objects were recovered from its uppermost fill which was similar to the uppermost fill of ditch (2). The ditch widened towards its northern end to merge with Ditch (2) and was also cut by an arced foundation gully/trench of a possible structure of uncertain date.

An early medieval industrial area was located immediately outside and close to the entranceway of the early medieval ecclesiastical enclosure. It comprised a large irregular shaped cut - 14m long, north-south, x 10m wide x (a maximum) of 0.30m deep - in the southwest of the excavated area, close to the termination of ditch (1). Its fills contained occasional charcoal flecking, large quantities of slag, three pieces of tuyere and stone objects - some of them pot boilers -, metal artefacts, flint and animal bone. Artefacts of both early and late medieval date in the form of a fragment of lignite bracelet and two sherds of Medieval Ulster Coarseware pottery were recovered from one of the fills.

Two early medieval bowl-furnaces also indicate significant industrial activity at the site. The northern edge of the industrial area was cut by one of these bowl furnaces (1), 1.1m in diameter and 0.40m deep which contained a large quantity of charcoal, burnt stone, bone and over two hundred fragments of slag. A second bowl furnace (2) with near vertical sides and a flat bottom measured approximately 0.80m in diameter and 0.17m deep and was uncovered at the western edge of the excavated area. Its fill also contained charcoal flecking and burnt stone and bone. Adjacent to the first bowl-furnace (1) was a linear northwest/southeast aligned gully tracked for a distance of 13m. The feature had gently sloping sides and a flat base and had a maximum width of 1.30m wide and depth of 0.35m. It contained two charcoal-flecked fills, from which a metal object, twenty eight pieces of slag and a fragment of burnt bone were recovered from. Another gully north of but close to the same bowl furnace (1) was tracked for a distance of 5.10m. It had gradually sloping sides and a concave base and had a maximum width of 1.10m and depth of 0.43m. Its fills contained over forty pieces of slag and fragments of animal bone. The functions of the gullies are unknown but the large quantities of slag would indicate that they served an industrial use.

A second palisade slot, 13.60m long east-west, was located close to but north of the most easterly located bowl furnace (1). The slot was U-shaped in profile and a maximum of 0.60m wide and 0.40m deep. The palisade slot-trench was interpreted as the remains of a possible windbreak or screen for the industrial area. Also excavated on the site were two truncated postholes overlain by a soil horizon from which was recovered two sherds of medieval Ulster Coarse pottery and fragments of burnt sandstone. This spread was in turn cut by a substantial medieval enclosing ditch. The function of the two postholes is unknown but maybe early medieval in date.

The main excavated medieval features comprised a large enclosure ditch, an internal division, a structure, pathway, metalled surface and an occupation layer. The first medieval ditch (1) appears to have formed part of a substantial enclosure- perhaps the outer enclosure ditch. It was uncovered for a distance of twenty five meters across the north of the area and had a maximum recorded width of three meters and depth of 0.80m. This medieval enclosure cut the main early medieval ditch (4) on the site. Finds from the medieval ditch included several dozen sherds of Ulster coarse ware pottery, fragments of slag, burnt bone, metal object and a fifteenth century coin. A further medieval ditch section (2) across the northern portion of

the site - 1.10m wide x 0.40m deep - may have helped form an entrance into the medieval ecclesiastical complex along with ditch (1). It was traced for a distance of 22.40m and also cut the possible main early medieval enclosure ditch (4).

A sub-rectangular medieval structure was uncovered in the extreme north of the excavated area. It was defined by a slot trench and several internal stake- and post-holes and had dimensions of 4m north/south by 6m east/west. One of the wall slots cut the uppermost fill of an early Christian enclosure ditch (3) which indicates a change in layout in this part of the site in the medieval period. A possible north/south aligned medieval internal division (3) within the medieval ecclesiastical enclosure was located approximately 2.5m south of the medieval structure. It was recorded as being 0.80m wide and traced for a distance of 12.80m and contained nine sherds of medieval Ulster coarse ware pottery and two fragments of burnt bone. A small sub-circular pit was excavated in the north of the site and in excess of 100 sherds of Medieval Ulster Coarse pottery were recovered from its single fill.

A well defined linear medieval pathway was excavated in the western side of the excavated area; at its widest it was 3.20m wide and was tracked for a distance of 15.40m. The remains of a metalled surface were uncovered at the western extent of this surface. The cut for the pathway contained sherds of medieval Ulster coarse pottery, iron nails, slag and a fragment of a quern stone- re-used as a hone or sharpening stone. The pathway ran in the direction of the church at its most westerly end and at its most easterly end petered out above the large area of early medieval industrial activity in the middle of the site. The pathway was probably a linking route between two of these zones within the ecclesiastical complex. Another metalled surface investigated for a length of 6.50m north-south x 2.30m east-west was uncovered directly beneath the early Christian industrial area and bowl furnace. Finds from this metalled surface included thirty pieces of slag and three metal objects.

Two main medieval soil horizons were identified within the excavated area. The first contained two sherds of Medieval Ulster Coarse pottery and fragments of burnt sandstone. It overlay two truncated postholes and was cut by the substantial medieval enclosure ditch. The second horizon covered much of the middle of the site and appeared to be the remains of an occupation layer dating to the medieval period. Excavated features of uncertain date included a pit cut into the fill of the large area of industrial activity and the arced foundation gully or trench of a possible structure which lay beyond the western limits of the excavated area. The slot was a maximum of 0.25m wide x 0.12m deep and was traced for a distance of 3.30m. Finds from its fill comprised fragments of burnt bone and slag.

Only a small proportion of the site was properly excavated and there was no evidence for masonry remains, burials, grave cuts, cross-slabs or any other religious artefacts or structures, suggesting that the area investigated was on the periphery of the ecclesiastical complex. The excavation indicated that the early Christian and medieval enclosures were located in the more northerly and westerly parts of the excavated area though most of the industrial activity appears to have taken place in the eastern and southern sectors. The overlapping and differently aligned boundaries of the early Christian and medieval ditches indicate that the layout of the site changed through time. However, the limited extent of the excavation failed to demonstrate whether many of these ditches were contemporary with each other or reflect a constantly evolving ecclesiastical complex.

Early Christian finds included approximately nine sherds of souterrain ware pottery, fragments of lignite bracelets, blue glass bead, iron and metal objects, flint, a considerable quantity of slag, burnt bone and hazel nuts. Medieval finds included 356 sherds of medieval Ulster Coarse pottery, metal work, a fragment of a quern-stone reused as a sharpening stone and an early fifteenth century coin.

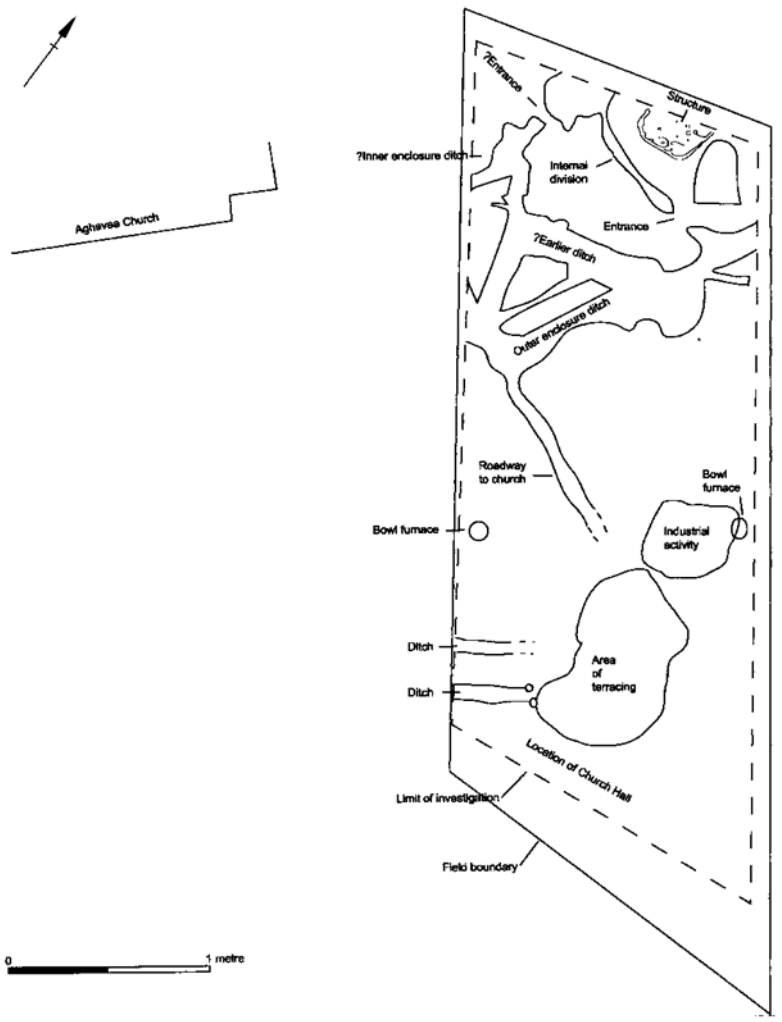


Fig. 142: Schematic Plan of excavated area showing main features (After Ó Baoill 2000, 5)

References

Ó Baoill, R. 2000. 2000:0352, Aghavea Church, Aghavea, early Christian/medieval church enclosures. www.excavations.ie.

Ó Baoill, R. 2000. Excavations at Aghavea, Co. Fermanagh. Unpublished CAF Data Structure Report No. 046, on behalf of the Environment and Heritage Service, Belfast.

Ó Baoill, R. 2000. Aghavea Parish Church. *Church Archaeology*, 4, 79-80.

Dunlop, W. 2000. Aghavea, Co. Fermanagh, *Ulster Archaeological Society (UAS) Newsletter*, September 2000 Newsletter Report.

'Boho' (Carn td.), Co. Fermanagh
Early Medieval Settlement Enclosure.
Grid Ref: **H12814440 (21281/34440)**
SMR No: **FER 210:030**
Excavation Licence: **N/A**
Excavation Duration/Year: **October 1952**.
Site Directors: **V.B. Proudfoot (Queen's University, Belfast).**

The site consists of a univallate enclosure (30m by 18m) set on the lower slopes of an escarpment (Fig. 143). Excavation was required due to quarrying encroaching on the site. The site had earlier been disturbed by local 'treasure hunters'.

Excavation on the bank of the enclosure suggests that it was built over two phases – with an original gravel and turf bank, which may have been heightened by a stone-faced turf bank. Stone scatters in the centre of the enclosure were interpreted as representing hut-bases, presumably with turf walls which were strengthened by upright wooden posts (several postholes were found along the lines of these wall footings). Two hearths were also excavated which may have been used for iron smelting, since iron slag was found on site.

A round-backed tanged knife; a bone pin; and fragments of a horseshoe were recovered from the site.

The animal bones found on site were all of domestic animals – cattle (67%), pig (20%), sheep/goats (7.6%), horse (1.8%), domestic fowl (0.4%) – except for six bones of red deer (2.7%). Five carbonised seeds were recovered from one of the hearths, one of which was identified as madder (*Rubia sp.*).

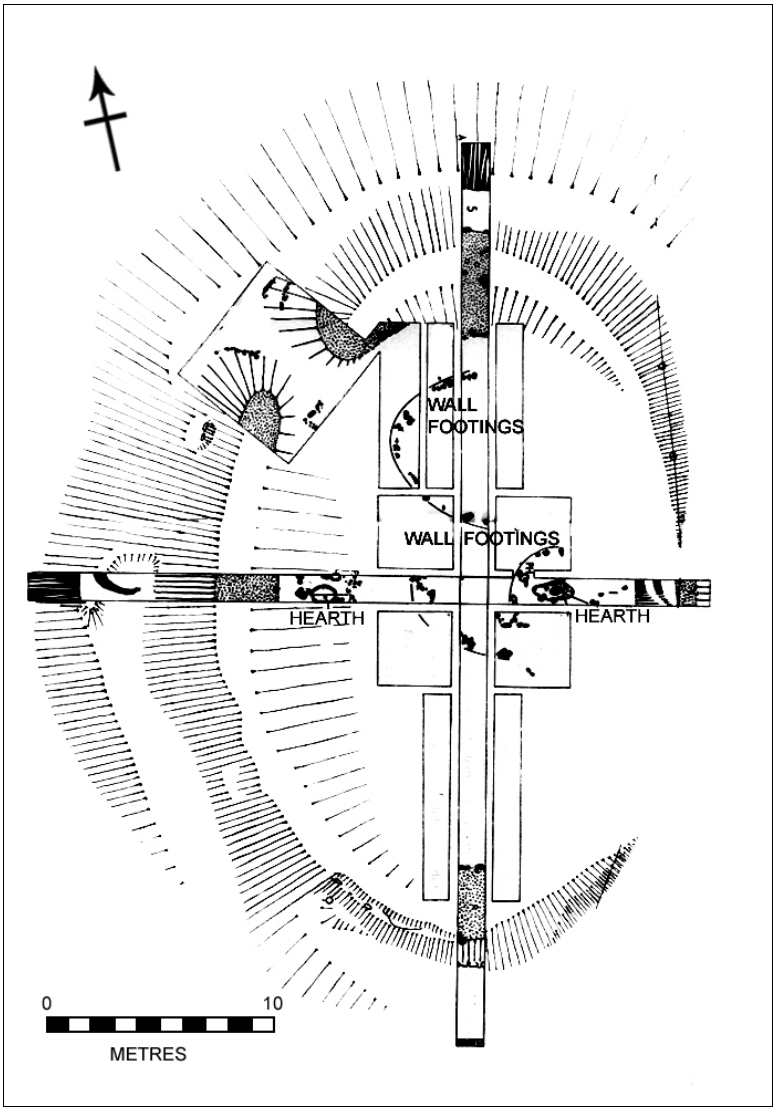


Fig. 143: Enclosure at Boho, Co. Fermanagh (after Proudfoot 1953, facing 44).

Reference:

Proudfoot, V. B. 1953. Excavation of a rath at Boho, Co. Fermanagh. *Ulster Journal of Archaeology* (Third Series), 16, 41–57.

Coolcran, Co. Fermanagh
Early Medieval Settlement Enclosure.
Grid Ref: **H36495002 (23649/35002)**
SMR No: **FER 194:006**
Excavation Licence: **N/A**
Excavation Duration/Year: **May – June 1983**.
Site Directors: **B.B. Williams (Historic Monuments and Buildings Branch, Department of the Environment (NI)).**

The site consisted of a low circular earthen platform (2m high and 43m in diameter) set on the edge of a marshy valley. Excavation was necessitated due to a farm improvement scheme.

Excavation revealed that the site had originally consisted of a univallate enclosure, just over 30m in diameter. A line of stakeholes under the bank of this enclosure suggest that this settlement may have been preceded by a palisaded enclosure, which occupied a similar area.

The interior of the site had been badly damaged by post-medieval agricultural activity, and only fragmentary structural features survived. These would appear to be from the later, raised phase of the site. Three areas of cobbling survived (Fig. 144), and it has been suggested that these may represent an external yard surface. Two fire-pits were interpreted as potential domestic hearths, rather than furnace bottoms, because of the lack of accompanying iron slag. There was, however, evidence for three furnaces nearby: one was indicated by a concentration of charcoal, iron slag and a fragment of a tuyère; and another one appears to have had an associated stake-built structure.

The most significant feature of this site was the discovery of the souterrain (Fig. 145). The water-logged condition of the site meant the survival of almost 50 oak timbers which supported the souterrain roof. A dark organic material, which ran around and between these timbers, was interpreted as the remains of wattle walling. Dates from thirteen of the timbers provided a felling date of A.D. 822±9 (suggesting that they were from the same tree) and, therefore, that the structure was built in the 820s. The construction date of the souterrain appears to have been contemporary with the raising of the mound on site.

Apart from the metalworking debris, the only find of note was a rotary quernstone.

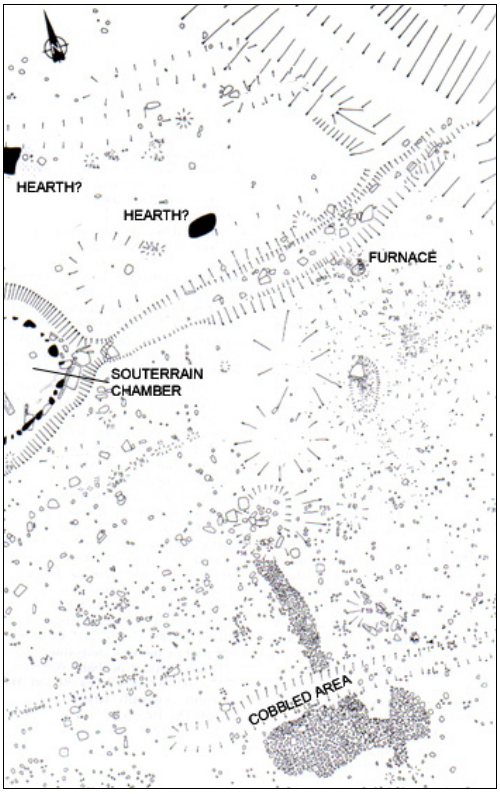


Fig. 144: Excavated area of Coolcran, Co. Fermanagh (after Williams 1985, 72).

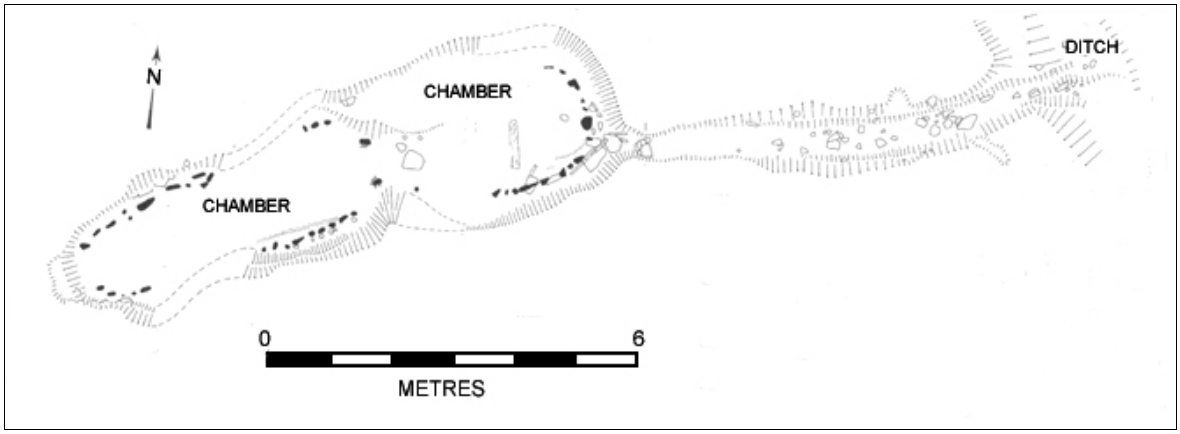


Fig. 145: Plan of souterrain at Coolcran, showing wooden timber-placements (after Williams 1988, 31).

References:

Williams, B. B. 1985. Excavation of a rath at Coolcran, County Fermanagh. *Ulster Journal of Archaeology* (Third Series), 48, 69–80.

Williams, B. B. 1988. Unexpected Wooden Souterrain: Coolcran Co. Fermanagh, in A. Hamlin & C. J. Lynn (eds.) *Pieces of the Past: Archaeological excavations by the Department of the Environment for Northern Ireland, 1970-1986*. Belfast: HMSO, 30–32.

'Lisdoo' (Castle Balfour Demesne td.), Co. Fermanagh
Early Medieval Settlement Enclosure.
Grid Ref: **H36273313 (23627/33313)**
SMR No: **FER 246:015**
Excavation Licence: **N/A**
Excavation Duration/Year: **August 1977**.
Site Directors: **N.F. Brannon (Historic Monuments and Buildings Branch, Department of the Environment (NI)).**

The site consisted of a bivallate enclosure set on the summit of a small hill. Prior to 1977, half of the enclosure had been destroyed by building, and the pending destruction of the remainder demanded an archaeological excavation (Fig. 146).

The interior of the enclosure was badly degraded by subsequent agricultural activity. A (possible) portion of a souterrain passage was discovered in the interior (Trench 5), from which the articulated skeleton of a young male was recovered (Fig. 147). The excavator speculated that this individual may have been suffocated by a collapse of the souterrain roof.

Excavations in the inner ditch revealed that it had originally been approximately 2m deep and up to 8m wide; the outer ditch was found to be about 1.5m deep, and at least 5.5m wide (the outer edge was not fully traced). The artefactual remains suggest that both of these ditches were deliberately in-filled during the later medieval period. Excavation through the bank and internal ditch (Fig. 147) revealed a couple of layers of charcoal, including one such layer from beneath the construction phase of the bank (see below). A series of stakeholes were also found at this level, perhaps suggestive of an earlier palisade enclosure.

A single sherd of E_1 ware was found in the occupation layer of the enclosure, and a number of examples of coarse ware (crannog ware or souterrain ware), were also found. The only other notable finds were six sherds of a crucible from the upper fill of the inner ditch.

The domestic animal bones are dominated by cattle (80%) with roughly equivalent percentages of sheep and pigs. In later layers the percentage of cattle bones drops to 70%, and sheep make up over 20%.

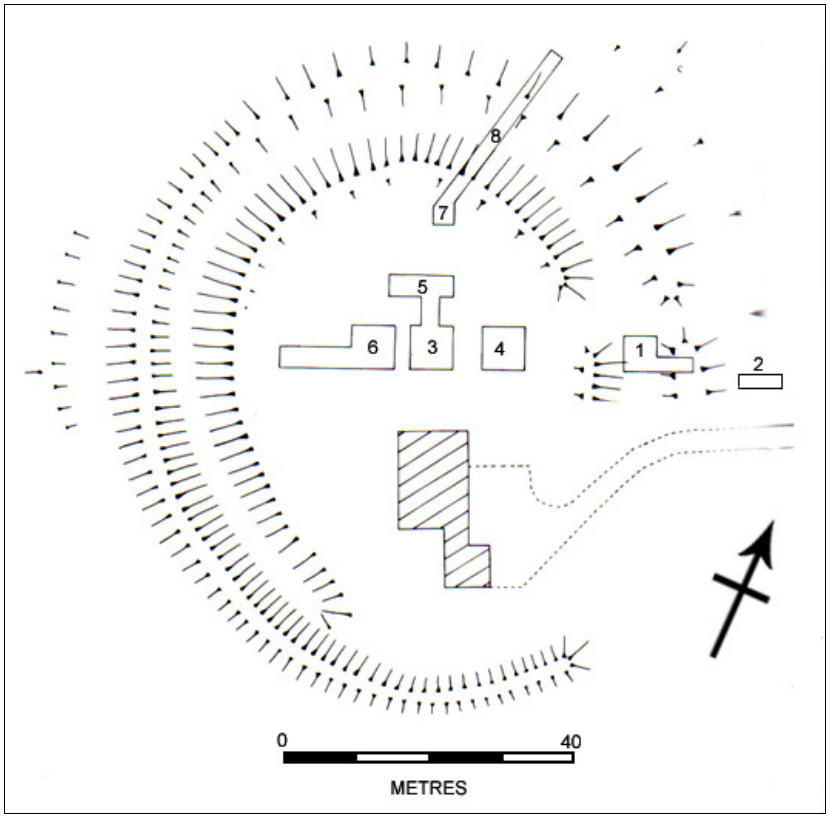


Fig. 146: Plan of Lisdoo, Co. Fermanagh (after Brannon 1981-2, 54).

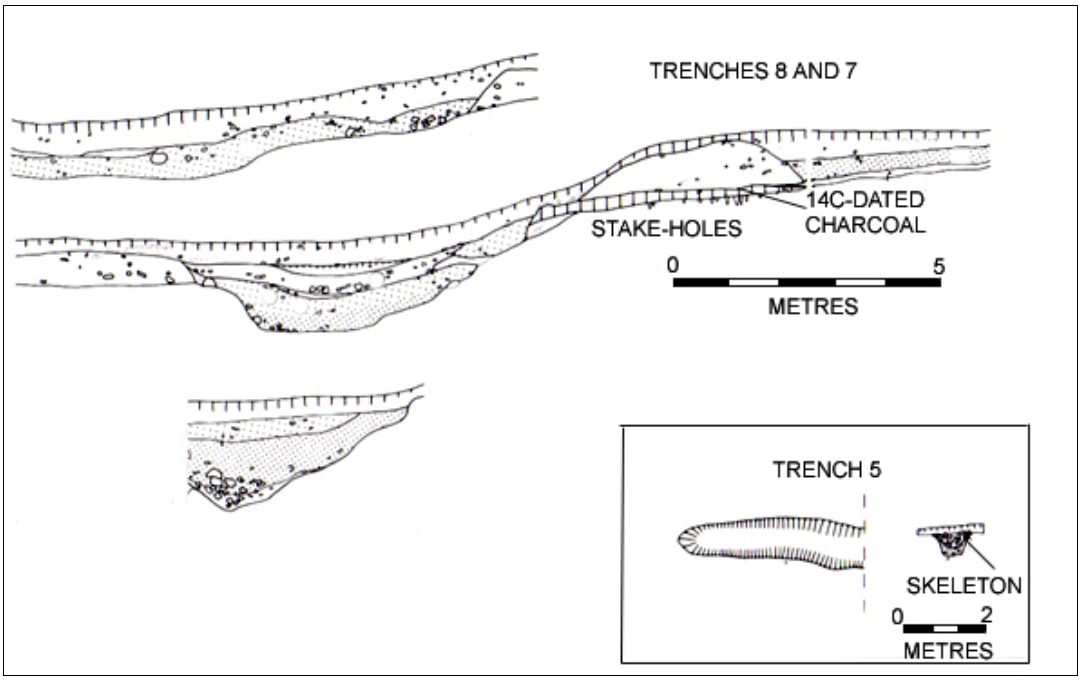


Fig. 147: Section of bank and inner ditch, and location of skeleton in ‘souterrain’ (after Brannon 1981-2, 56).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-2202	Charcoal from under bank	1655±45 BP	A.D. 258-298; **A.D. 319-472; A.D. 476-534.**

References:

Brannon, N. F. 1981–2. A rescue excavation at Lisadoo Fort, Lisnaskea, County Fermanagh. *Ulster Journal of Archaeology* (Third Series), 44–45, 53–9.

County Galway

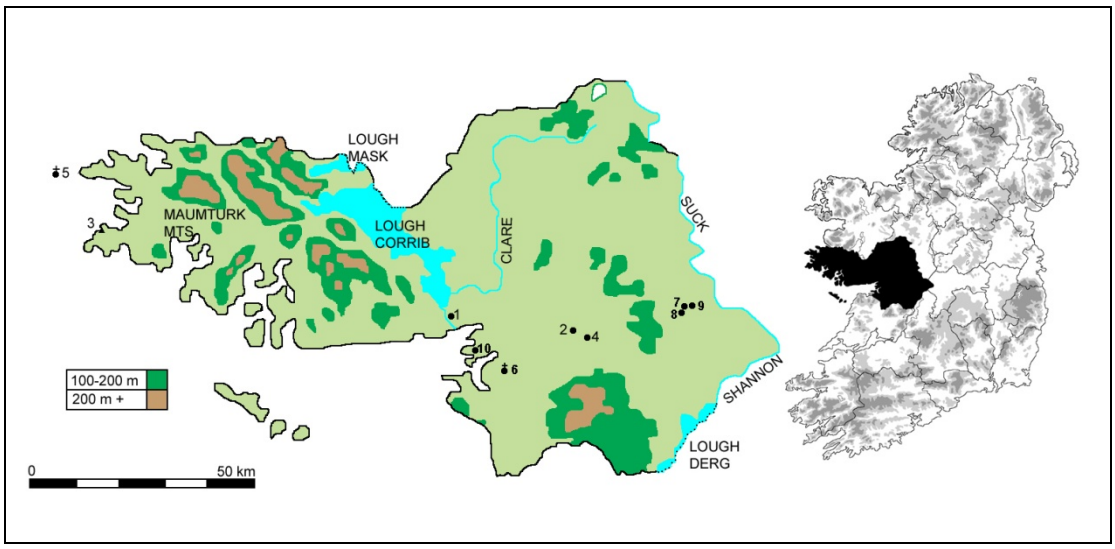


Fig. 148: Significant early medieval excavations in Co. Galway.

1	Ballybrit	**6**	Kiltiernan
2	Carrowkeel	**7**	Loughbown 1
3	Doonloughan	**8**	Loughbown 2
4	'Feerwore'	**9**	Mackney
5	High Island	**10**	Rathgurreen

Ballybrit, Co. Galway
Early Medieval Settlement Enclosure.
Grid Reference: **F33642740 (133645/227406)**
SMR No: **GA082-013001**
Excavation Licence: **N/A**
Excavation Duration/Year: **July 1971.**
Site Director: **J. Waddell (University College, Galway)**.

The site consists of an enclosure set on an area of flat land. It averaged 56m in diameter, with a surrounding bank approximately 8m wide and 1m high (Fig. 149). The site was partially destroyed during expansion of the racecourse at Ballybrit.

Excavation revealed the corner of a stone-built rectangular building (Fig. 150), and another rectangular house (12m by 6.5m) was indicated in the centre of the enclosure which was un-excavated. It was not possible to date these structures (the portion excavated was built directly onto the limestone bedrock), and they may post-date the primary occupation phase. A small semi-circular enclosure 25m to the west of the main enclosure was also excavated. With the exception of one sherd of post-medieval pottery, this enclosure revealed no evidence for human occupation. No occupation layer was identified for the main enclosure either, although a number of finds were recovered from this area including post-medieval pottery, a fragment of a whetstone, and an Iron Age bronze spear-butt (in the make-up of the enclosure bank).

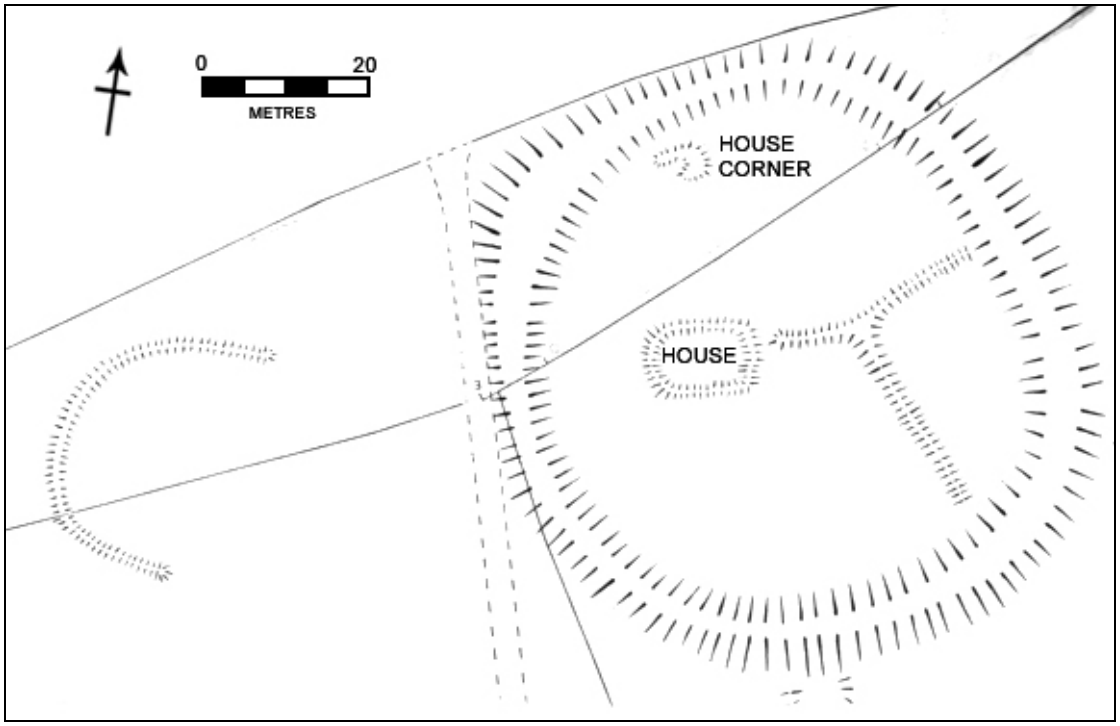


Fig. 149: Plan of enclosures at Ballybrit, Co. Galway (after Waddell 1971, 74).

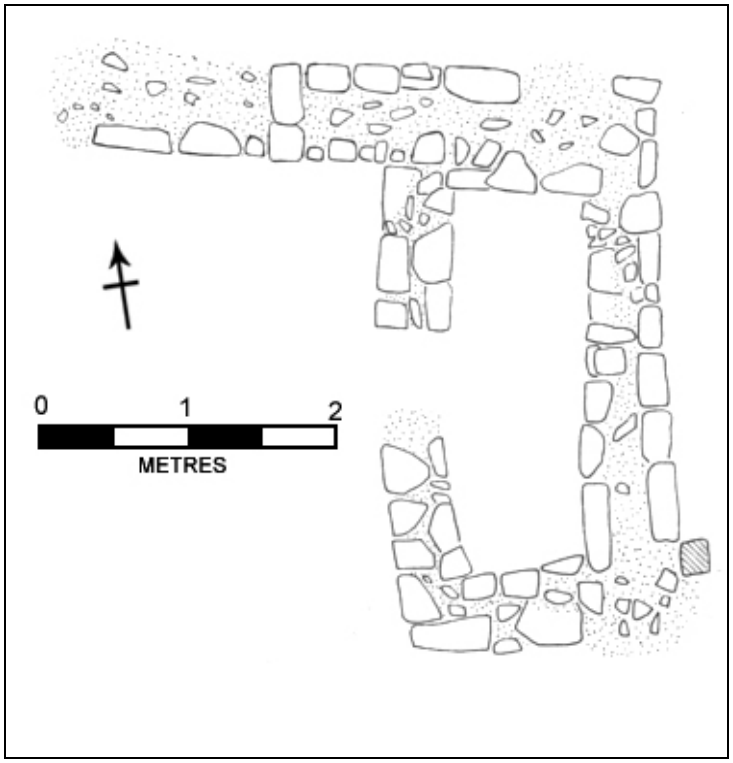


Fig. 150: Plan of corner of house excavated at Ballybrit, Co. Galway (after Waddell 1971, 77).

Reference:

Waddell, J. 1971. A Ringfort at Ballybrit, Co. Galway. *Journal of the Galway Archaeological and Historical Society*, 32, 73–9.

Carrowkeel, Co. Galway
Early Medieval Settlement-Cemetery.
Grid Ref: **M59322394 (159326/223949)**
SMR No: **GA097-066**
Excavation Licence: **A024/E2046**
Excavation Duration/Year: **September 2005 – January 2006.**
Site Director: **B. Wilkins (Headland Archaeology)**

The site consisted of a large enclosure, contained within a bank and ditch, set on the brow of a ridge (Fig. 151). Excavation was required to facilitate road construction. Three main phases of occupation were discovered during excavation – a series of ditches of Neolithic date; an early medieval enclosure associated with a cemetery; and later cultivation.

The main early medieval enclosure was defined by a U-shaped ditch, on average 3m wide and 1.5m deep. This enclosed an area 65m by 47m at the top of the hill. Traces of three contemporary and parallel ditches appear to have subdivided this enclosure and delineated the eastern edge of a burial area that contained 158 individuals. The fill layers from the ditches suggest a gradual natural silting, followed by a deliberate in-filling of the ditch, possibly as a result of field clearance.

Few structural features were identified from this phase, and consisted mainly of two (or three) 'cooking pits' – i.e. negative features associated with burning and animal bone. A large number of animal bones (13,631) were recovered from this phase, consisting only of domesticates. The nature of the assemblage - including neo-natals – suggests that there was a viable settlement on site, rather than it being the result of feasting associated with the burial site. Radiocarbon dates from 40 skeletons (see below) suggest that the site was used for around four centuries from A.D. 650 – 1050. Later skeletons appear to relate to the cemetery being used as a *cillín*.

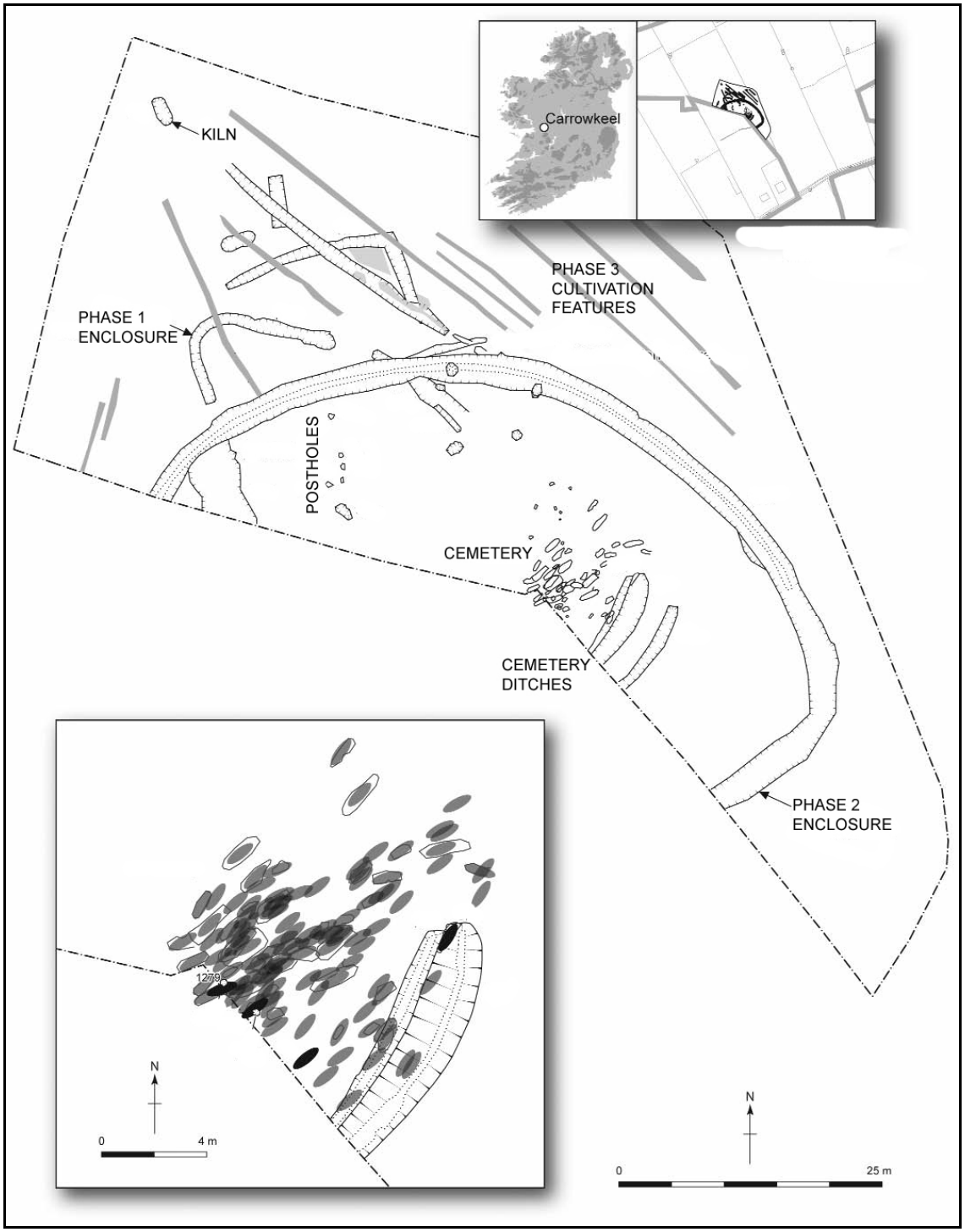


Fig. 151: Plan of enclosure at Carrowkeel, Co. Galway (after Wilkins & Lalonde 2008, 58).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
GU-15326	Mouse bone from ditch pre-infill	**N/A**	**A.D. 670-890.**
GU-15327	Mouse bone from ditch pre-infill	**N/A**	**A.D. 860-1020.**
UB-7410	Foetus	499±29 BP	**A.D. 1400-1447**.
UB-7411	Child	1129±31 BP	A.D. 782-788; A.D. 812-845; **A.D. 857-989**.
UB-7412	Adult male	1186±32 BP	A.D. 721-741; **A.D. 770-899**; A.D. 918-952; A.D. 959-960.
UB-7413	Foetus	1148±31 BP	A.D. 780-792; **A.D. 804-975**.
UB-7414	Child	1156±31 BP	**A.D. 779-794**; **A.D. 798-906**; **A.D. 911-971**.
UB-7416	Infant	1125±31 BP	A.D. 783-788; A.D. 814-844; **A.D. 859-991**.
UB-7417	Adult female	1228±31 BP	**A.D. 689-752**; **A.D. 761-884**.
UB-7418	Infant	1214±31 BP	**A.D. 693-748**; **A.D. 765-890**.
UB-7419	Foetus	638±30 BP	**A.D. 1284-1329**; **A.D. 1340-1396**.
UB-7420	Adult female	1264±31 BP	**A.D. 667-783**; A.D. 787-823; A.D. 841-861.
UB-7422	Foetus	815±31 BP	**A.D. 1169-1269**.
UB-7423	Adult male	1244±32 BP	**A.D. 682-872**.
UB-7424	Child	1182±32 BP	A.D. 726-737; **A.D. 771-900**; A.D. 918-964.
UB-7425	Adolescent	1250±34 BP	**A.D. 676-870**.
UB-7426	Infant	830±31 BP	**A.D. 1159-1265**.
UB-7427	Adult female	940±31 BP	**A.D. 1024-1161**.
UB-7428	Adult male	906±31 BP	**A.D. 1038-1208**.
UB-7429	Child	1104±31 BP	**A.D. 885-999**; A.D. 1002-1013.
UB-7430	Child	1185±31 BP	A.D. 723-740; **A.D. 770-899**; A.D. 918-951.
UB-7431	Child	1193±34 BP	A.D. 710-746; **A.D. 766-899**; A.D. 919-949.
UB-7432	Child	1261±33 BP	**A.D. 668-827**; A.D. 839-864.

UB-7433	Adult female	954±31 BP	**A.D. 1022-1156**.
UB-7434	Infant	1215±32 BP	**A.D. 692-749**; **A.D. 764-890**.
UB-7435	Child	1203±32 BP	A.D. 694-701; A.D. 707-747; **A.D. 765-895**; A.D. 926-936.
UB-7436	Adult male	1193±31 BP	A.D. 716-743; **A.D. 768-897**; A.D. 921-943.
UB-7437	Infant	949±32 BP	**A.D. 1023-1158**.
UB-7438	Adult male	935±31 BP	**A.D. 1024-1165**.
UB-7439	Child	1168±32 BP	**A.D. 775-903**; **A.D. 915-968**.
UB-7440	Adult male	1301±31 BP	**A.D. 660-772**.
UB-7441	Adult female	1182±31 BP	A.D. 728-736; **A.D. 771-900**; A.D. 918-962.
UB-7442	Child	907±30 BP	**A.D. 1037-1192**; A.D. 1196-1207.
UB-7443	Adult female	1305±34 BP	**A.D. 658-773**.
UB-7444	Child	1113±32 BP	A.D. 832-836; **A.D. 869-1015**.
UB-7445	Adult female	1196±35 BP	A.D. 694-701; A.D. 707-747; **A.D. 765-898**; A.D. 920-946.
UB-7446	Infant	1223±33 BP	**A.D. 689-752**; **A.D. 761-887**.
UB-7447	Foetus	1193±33 BP	A.D. 712-745; **A.D. 767-898**; A.D. 920-947.
UB-7448	Adult female	1249±31 BP	**A.D. 678-832**; A.D. 836-869.
UB-7449	Child	1113±32 BP	A.D. 832-836; **A.D. 869-1015**.
UB-7482	Child	1127±32 BP	A.D. 782-788; A.D. 812-845; **A.D. 857-991**.
UB-7483	Foetus	1227±31 BP	**A.D. 689-752**; **A.D. 761-884**.

References:

Lalonde, S., & Tourunen, A. 2007. Investigating social change through the animal and human remains from Carrowkeel, east Galway. *Archaeology Ireland*, 21(4), 36–8.

Wilkins, B., & Lalonde, S. 2008. An early medieval settlement/cemetery at Carrowkeel, Co. Galway. *Journal of Irish Archaeology*, 17, 57–83.

Doonloughan, Co. Galway
Early Medieval Coastal Settlement.
Grid Ref: **L580459 (05800/24590)**
SMR No: **N/A.**
Excavation Licence: **97E0197**
Excavation Duration/Year: **1997.**
Site Director: **F. McCormick & E. Murray (Queen's University, Belfast)**

The sites at Doonloughan were identified while sampling midden sites for marine shells, and are part of a larger number of sites located in the sand dunes around the False Bay area. Most of these sites were discovered because artefacts (bronze pins, sheet bronze and bronze wire, and chert arrowheads), animal bones and miscellaneous burials had been exposed by erosion.

Two trenches were excavated at Doonloughan Site 3. In Trench 1, an area of burning was uncovered, and charcoal from this was radiocarbon dated to the late-eighth/early-ninth century (see below). The remains of four stakes, and the possible remains of a fifth, were also discovered. The burning extended into Trench 2, where a small pit was discovered. Finds from this site consisted of a plain bronze penannular brooch, a small piece of worked antler, and an iron knife blade.

A further two trenches were excavated at Doonloughan Site 11. These uncovered the lower stone courses of a house of sub-circular shape (4.4m in diameter), and it is suggested that these stones may have acted as anchors for a wicker-walled structure (Fig. 152). The structure had a central stone-lined hearth and an east-facing entrance marked by two upright stones. A shell midden, composed of periwinkles and limpets, was found against an exterior wall. Shells of dogwhelks (*Nucella lapillus*), from which purple dye may have been extracted, were also found in these sites. Artefacts from this site consisted of two glass beads and a flint core.

Given the coastal location of the site it is not surprising that a relatively large quantity of fish bones, and a small quantity of mammal bones, were recovered from the site.

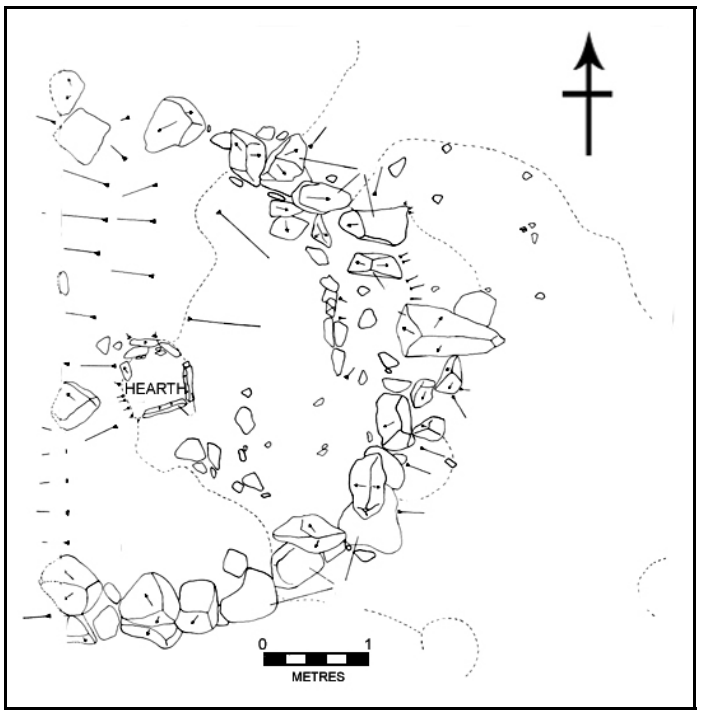


Fig. 152: Plan of house at Doonloughan, Co. Galway (after Murray et al. forthcoming).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

(* - calibrated with marine reservoir effect: KA Hughen, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, PJ Reimer, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1059-1086.)

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-3640	Burnt wicker from Square 1	1025±26 BP	A.D. 904-912; **A.D. 971-1038**.
UB-4317	Charcoal	1276±30 BP	**A.D. 662-781**; A.D. 791-807.
UB-4327	*Patella* sp.	1600±30 BP	***A.D. 713-987**.
UB-4324	*Littorina littorea*	1524±23 BP	***A.D. 794-1040**.
UB-4325	*Nucella lapillus*	1819±30 BP	***A.D. 494-752**; *A.D. 758-761.
UB-4002	*Nucella lapillus*	1780±35 BP	***A.D. 548-801**.
UB-4073	*Nucella lapillus*	1756±45 BP	***A.D. 560-846**.

References:

Murray, E. V., McCormick, F., Plunkett, G., & Hamilton-Dyer, S. in prep. Excavations at Doonloughan, Co. Galway, 1997: two Early Christian coastal sites.

'Feerwore Rath' (Turoe td.), Co. Galway
Early Medieval Settlement Enclosure.
Grid Reference: **M61692259 (161692/222590)**
SMR No: **GA097-150001**
Excavation Licence: **N/A**
Excavation Duration/Year: **September – October 1938.**
Site Director: **J. Raftery (Office of Public Works)**.

The site consists of a banked enclosure approximately 28.5m in diameter, set on a gently sloping hill. No ditch was evident prior to excavation. The excavation was carried out under an Irish Government Scheme for the Relief of Unemployment.

Excavation revealed the presence of a surrounding rock-cut ditch, 2.5m in width and 1.5m deep (Fig. 153). The ditch appears to have originally been allowed to silt-up naturally, although there are occasional layers which may represent bank tumble or deliberate in-filling. The entrance to the enclosure was cobbled and flanked by two large stones and there was evidence for the existence of substantial timber posts. The bank was formed by the construction of a dry-stone walled internal revetment, which supported the earthen bank (although evidence from one area suggests that the outer face of the bank was also stone-revetted). This wall overlay an earlier organic-rich layer, which, in turn, was overlain by a yellow clay horizon occupation layer that included charcoal and animal bones.

The shallowness of the soil in the interior meant that few stratigraphical and structural features remained. However, a number of occupation horizons were identified. An early Iron Age occupation was inferred from the presence of an iron fibula, half a bronze ring, some pieces of iron and iron slag, and a couple of flint tools. The second phase of occupation was identified with the yellow clay horizon. A possible posthole-built structure belonged to this phase. A fragment of a crucible, two glass ring-bead fragments, a penannular bronze ring, an iron bell, and an iron knife-blade were found in association with this occupation layer. The third phase of occupation was identified with the construction of the banked and ditched enclosure. It is possible that the two hearths were associated with this phase, but this could not be corroborated from the archaeological evidence. The final phase of occupation appears to have followed on from either abandonment of the earlier site, or a collapse of the bank, since at this time the enclosure bank was remodeled. Two burials located in the interior of the enclosure – both oriented east-west, and neither buried with grave goods – were dated by the excavator to this final phase of occupation. It is possible that a cremation that was enclosed in a cist, described by the antiquarian T. H. Knox, belonged to this final phase.

The absolute chronology of the site is more difficult to ascertain. The excavator notes the fact that cremations had been replaced by inhumations by *c.* A.D. 500, and that the iron fibula found in the earliest phase of occupation has similarities to examples from the first century B.C.

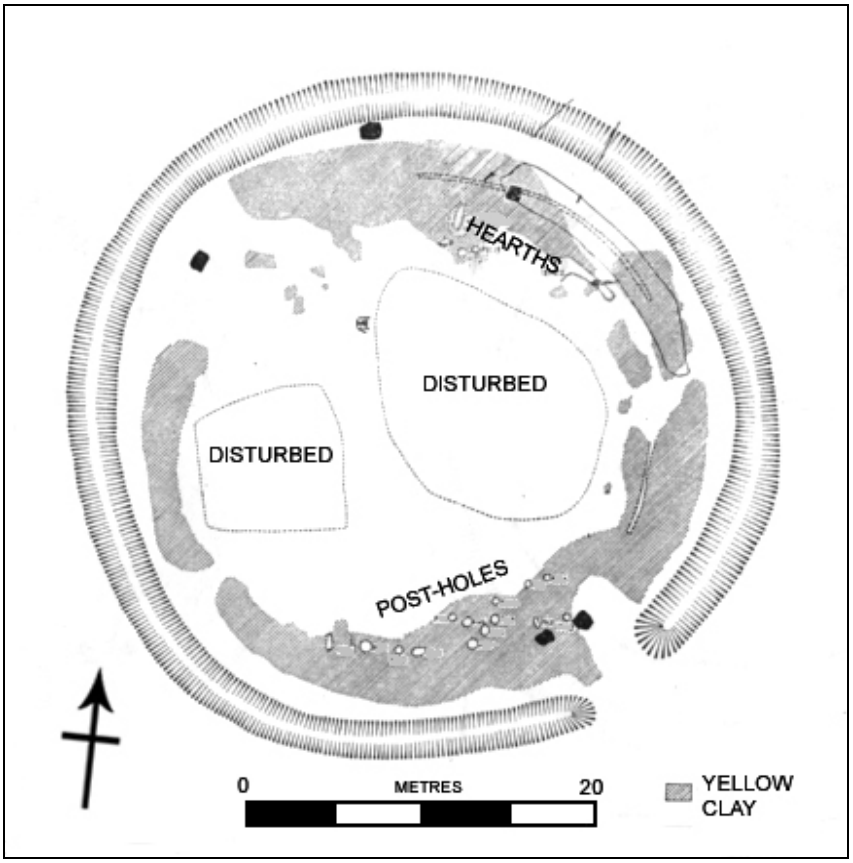


Fig. 153: Plan of early medieval occupation phases at Turoe, Co. Galway (after Raftery 1944, facing 52).

Reference:

Raftery, J. 1944. The Turoe Stone and the Rath of Feerwore. *Journal of the Royal Society of Antiquaries of Ireland*, 74, 23–52.

High Island, Co. Galway (Georgina Scally)
Early medieval Ecclesiastical Enclosure
Grid Ref: **L501572 (05010/25720)**
SMR NO: **GA021-026**
Excavation Licence: **95E0124**
Excavation Duration/Year: **1995-2002**
Site Director: **G. Scally (National Monuments and Historic Properties Service, DoEHLG)**

The site is an ecclesiastical settlement located on an island off the west coast of Co. Galway. Traditionally the site is reputed to have been founded by St Feichin in the seventh century. The excavation was initiated by J. White-Marshall and G. Rourke who had been engaged in a survey of the island and its monastic remains since the early 1980's in advance of their publication 'High Island An Irish monastery in the Atlantic, 2000'. Excavation in co-ordination with specific conservation aims began in 1995 under the directorship of G. Scally and continued each summer until 2002.

A number of stone-built domestic huts were identified around the monastic church (Fig. 154). The largest and most easterly, Cell A, was thought to have functioned as the monastic refectory, dating to the mid- late 11th century. The cell (2.7m x 2.8m) was built against the east wall of the church enclosure wall and clearly post-dated it. A smaller cell, Cell B, located toward the northeast of the site, was later in date. This cell (2.2m x 1.85m), with surrounding annulus, was built within the thickness of the enclosing monastic wall during a period when the wall, or at least the northern flank of the wall, was rebuilt and enlarged. The cell is thought to date to around the 12th century.

In the western portion of the site, a number of roughly circular mounds of rubble were located in the lee of the enclosing monastic wall. It is suggested that these are the remains of at least three and possibly up to five bee--hive huts. Antiquarian records attest to several small huts in this area and to the north-west. No excavation took place in these areas to confirm the records.

In the northern portion of the site, a hitherto unknown sub-rectangular structure was found during excavation abutting the exterior face of the monastic wall. This building was akin to a lean-to type structure and was entered from the south, via a breach in the monastic wall that never appeared to have been re-built. The function of this building is unknown but it is suggested to be a late structure, dating to a period of re-occupation after the monastery had been abandoned in the late 12/early 13th century.

A large rectangular shaped-building (thought to have functioned as a guest house) together with smaller, ancillary structures (all unexcavated) were located at the main south-east entrance to the monastery. The larger of two wall-chambers in the western flank of the monastic wall were also excavated. No remains were found in side to suggest a use apart from the commonly suggested functions of storage and shelter. The smaller chamber is largely obscured by rubble and was not excavated.

Apart from the church and domestic structures, the entire excavated area of the monastery, which encompassed the area east and north of the church as far as the monastic wall, was composed of extensive paved areas, elaborate drainage and water collection features and several small leachts? A small collection of finds and an extensive assemblage of c. 60 decorated cross-slabs were recovered. The monastery also had a highly developed system of millraces and millponds feeding a horizontal mill set on the south-western cliff edge. Several other structures of unknown date are scattered around the island.

Radiocarbon dates from a number of burials and other features show that the ecclesiastic site was in use from 8th/9th century until the late 12th/early 13th century, with a period of re-occupation some time after.

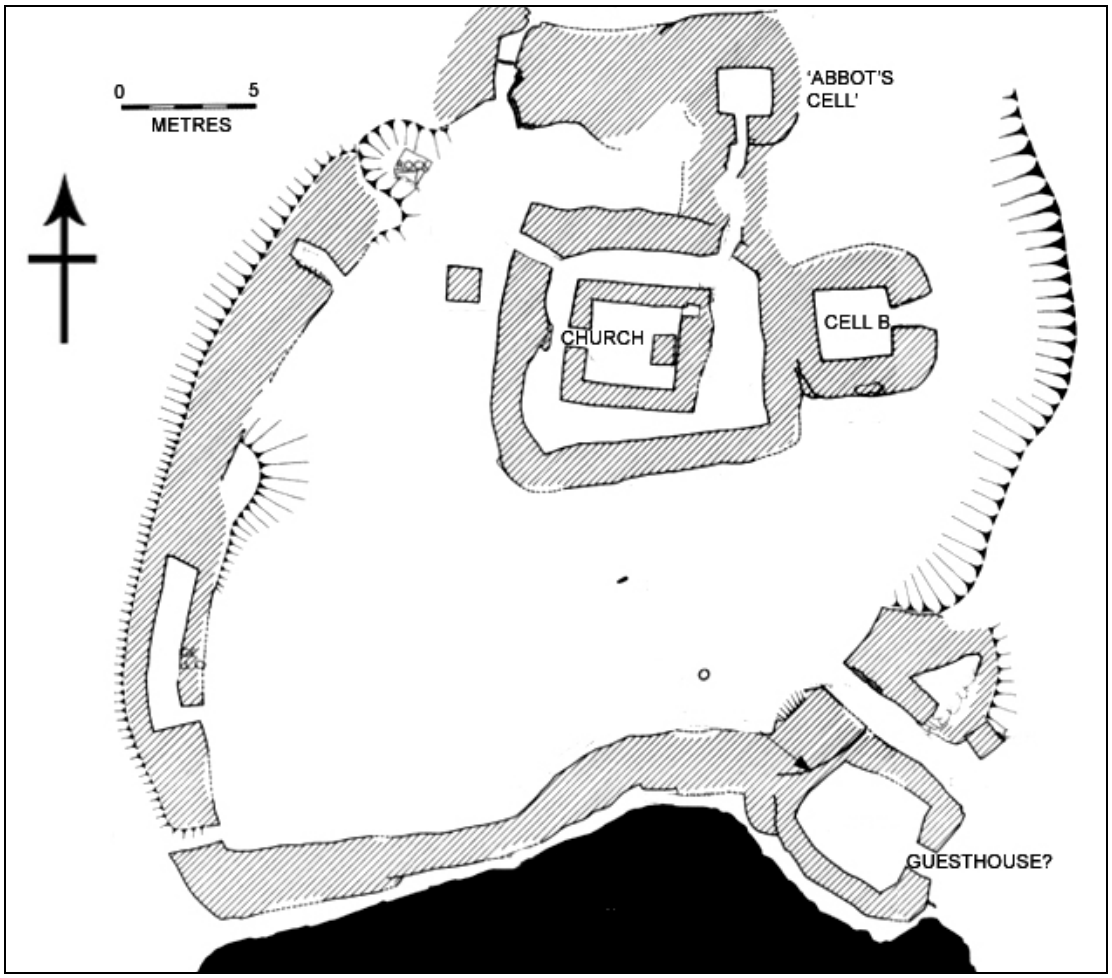


Fig. 154: Cells and church at monastic enclosure on High Island, Co. Galway (after Marshall & Rourke 2000, 47).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1029-1058).

Samples No.	Contexts	14C Date	Cal. 2 Σ
UB-3992	Human skeleton	1126±22 BP	**A.D. 881-984**.
UB-4255	Human skeleton	1027±19 BP	**A.D. 986-1026**.
UB-4256	Human skeleton	913±19 BP	**A.D. 1037-1171**.
UB-4266	Human skeleton	1023±21 BP	**A.D. 985-1030**.
UB-6453	Charcoal from sub-floor deposit of Cell B		**A.D. 1176-1276**
UB-4988	Barley grains on paved floor of Cell B		**A.D. 1287-1424**
OxA-8917	Charcoal from smithing pit beneath Cell A		**A.D. 870-1030**

Reference:

Marshall, J. W. & Rourke, G. D. 2000. High Island: an Irish Monastery in the Atlantic. Dublin. Town House & Country House.

Kiltiernan, Co. Galway
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **M 438 157**
SMR No: **N/A**
Excavation Licence: **E936 (National Museum Registration Number)**
Excavation Duration/Year: **July 6th- August 2nd & October 16th-24th 1950, July 16th-September 5th 1951 and June 16th- 28th 1953**
Site Director: **Michael V. Duignan (University College Galway)**

Kiltieran is the site of an early monastery which revealed evidence for a cemetery of over 18 burials (14 earlier than the pre-Romanesque church), possible early medieval domestic stone buildings, occupation horizons and ironworking activity as well as various early medieval artefacts. The monastery is located in the townland of Kiltiernan East about 3km southeast of Kilcolgan village in South, Co. Galway. The monastic site is situated in relatively flat countryside, about 30-45m above OD and covers an area of approximately 1.4 hectares (3 acres) enclosed by a circular drystone wall in ruins. The monastic site of Kiltiernan in South, Co. Galway is said to have been founded by a late fifth century figure called *Tiernan*, mentioned in the *Book of Hy Fiachrach* and possibly in the *Martyrology of Donegal*. There is also a tradition that connects the monastic site with the seventh century St. Colman whose greatest foundation was at Kilmacduagh in the same territory.

Trenches were excavated in the interior of the church, within its surrounding enclosure and at three houses and adjacent sections of the monastic enclosure wall in the southeastern quadrant of the site. The excavations were undertaken before the use of radiocarbon dating and no precise dates can be assigned to the phases of burial activity, the domestic occupation or the industrial activity. The church and its surrounding cemetery were located inside a central square enclosure and were excavated in 1950. Work concentrated the following year in the southeast of the monastic enclosure where two house sites, houses II and III and the monastic enclosure entrance were investigated. In addition, some explorations were undertaken on a third house site, house I. The final season in 1953 was confined to House I and to cuttings opened to the north and south of it along the enclosure wall.

The earliest securely dated activity preceded the construction of an eleventh/twelfth century stone church and comprised an early cemetery and its surrounding central stone enclosure, *c.* 30.5m² internally. The foundations for the wall of the central cemetery enclosure were exposed along its western side and measured c. 1.1m wide and c. 0.25 in depth. Its masonry consisted of thin slabs with the flat sides of the stones forming the wall faces. The wall foundations were built upon yellow grey till and an early medieval polished bone peg or pin was recovered from this level close to the west face of the wall. The basal course of a portion of the north wall of the cemetery enclosure was also exposed. It measured 0.73m-0.99m and contained a core of packing stones faced externally with large flat stones. The wall rested on a foundation plinth built on the yellow grey till.

The axis of the central enclosure is orientated southwest-northeast and does not conform to the alignment of the stone church in its interior. Instead, excavations have demonstrated that it was aligned with an earlier cemetery which preceded the stone church. Two adult burials in the northwest interior of the church were orientated southwest-northeast. The burials were disturbed by the packing stones of the foundations of the early medieval stone church and clearly antedated this structure. Their alignment with the central enclosure wall may indicate that the cemetery enclosure was built on the same alignment as an earlier (wooden?) church, not yet identified.

Over a dozen other shallow, narrow graves were excavated to the north of the stone church inside the central square enclosure and were also orientated southwest-northeast in the same direction as the surrounding enclosure. All of these burials consisted of fully extended supine skeletons, except for one crouched example. A number of these burials were uncovered in an

isolated trench immediately inside the north wall of the central enclosure. Although one of these burials lay underneath this section of the central enclosure, the burial post-dated the construction of this wall, as the soil had been scooped out from underneath the foundations to allow internment. Those other burials immediately next to the church were extensively disturbed by intruded infant and foetal burials.

Further evidence for activity preceding the early medieval stone church was indicated by an occupation deposit in the northwest area of the nave. It contained scattered charcoal and bone fragments and oyster shell and was partly sealed beneath the packing stones of the unmortated foundations of the wall of the nave. A small pit was uncovered between the packing stones in the nave foundation underneath this occupation deposit. It measured 0.35m x 0.26m at the top and 0.2m x 0.19m at the base and contained fragments of bone and occasional small pieces of charcoal. An irregular-shaped fire site associated with numerous fragments of meat bones was also uncovered in the western side of the nave, but it was unclear if it antedated the construction of the nave.

Phase two comprised the construction of the nave of the stone church, probably in the eleventh or early twelfth century. It measured 10.5m x 6.3m externally and 9.2m x 4.25m internally and contained antae and a western trabeate doorway. The mortar-built walls of the nave were built of limestone masonry with a rubble core, resting on a stone plinth supported by underlying unmortared packing stone foundations. A rotary quern fragment was discovered resting on the packing stones close to the northwest corner in the nave. A small triangular-headed window survived on the south wall of the nave, *c.* 2m from its eastern end. A third and final phase of the church comprised the addition of the stone chancel, 5.6m in external length with internal dimensions of about 4.6m x 4.25m. Its walls were of similar construction to those of the nave, but were of inferior workmanship and was added, not by piercing the east wall of the nave with an arch, but by removing it completely and continuing the line of the inner faces of the north and south walls of the nave to the east.

A small number of burials to the north were aligned on the same long axis as the church and evidently post-date it. Two supine, extended burials in the southeast quarter of the nave and two children outside the north wall were orientated on the same alignment as the nave. Concentrations of charred cereal grains and fragments of human and animal bone were found close to the burials inside the nave. A gap in the cemetery enclosure wall on its western side was found to be in line with the west door of the nave and was probably constructed after the church was built.

A large collection of finds from inside the church and the surrounding cemetery indicate early medieval activity from at least the ninth century. The excavations inside the church uncovered evidence for a ninth-thirteenth century bone comb, a bone handle of possible medieval date, fragments of iron nails and other objects as well as pieces of slag. Fragments of animal and human bone, concentrations of charred cereal grain, charcoal and oyster, mussel, limpet and periwinkle shells were also frequently encountered. The finds from the cemetery and its surrounding enclosure recovered similar archaeo-botanical and zoological evidence as well as a small tanged tenth-fourteenth century knife, a fragment of a single-edged ninth-thirteenth century bone comb, hone-stones, hammer-stones and a possible barrel-padlock key of medieval date.

The early medieval ecclesiastical site was defined by an enclosure wall. It was 1.5-2.5m wide and ranged in extant height from 0.3m to 1m with a modern field wall built on top of the original ecclesiastical enclosure. The enclosing wall of the ecclesiastical site was partly excavated along its southeastern perimeter. It was reasonably well preserved and was constructed with rubble masonry with their flat sides facing outwards. A low bank, 0.52m in maximum height, was identified beneath the enclosure wall and formed the core of this structure. The wall survived to one or two courses high and measured between 1.46m-1.95m wide. Two pieces of iron slag came from the fill of the enclosure wall. Large blocks formed the northern side of the southeastern enclosure entrance which was 1.9m wide. A narrow V-

sectioned ditch, 1.22m wide at the top, 0.18m wide at the base and 0.67m deep, was revealed outside the enclosure wall to the east of House I and contained occasional scattered cockle and periwinkle shells and meat bones. However, no evidence for this external ditch was uncovered in an excavated section nearby, to the south of House I.

There was extensive evidence for domestic structures and internal divisions within the site. The site's interior was divided up into fifteen or sixteen sub-enclosures by radial and other walls, surviving now as grass-covered mounds, *c.* 0.3m high. The remains of *c.* ten houses were traced in the interior; traces of six or seven of these were identified in the peripheral sub-enclosures to the south and east and a further two or three at the west. The remains of a souterrain, comprising a hollow area, c. 9m by 4m, delimited by upright side stones, were visible at the west side of the interior.

Three rectangular houses with externally rounded corners (I-III) and adjacent sections of the enclosure wall were excavated in the southeastern quadrant of the site and produced a wide range of finds dating from the early medieval period to modern times. The artefacts found within these buildings do not provide precise dates for their domestic occupation. House II was clearly a later building constructed and used probably well into the post-medieval period. The two other structures are at least medieval in date, and possibly even earlier, though post-medieval finds were also found. Many of these buildings in the interior of the enclosure appear to have been occupied by squatters in the later medieval and post-medieval periods after the ecclesiastical site had fallen out of use.

House I was rectangular in shape with externally rounded corner and measured c. 7m x 3.96m internally. Its walls abutted the inner face of the enclosure wall at the east and were constructed with rubble masonry, surviving to two courses high. A quern fragment was incorporated into the west wall and a small fragment of window? glass was found in the core. Finds from the floor of the house included a quern fragment, a tenth-fourteenth century knife, corroded iron nails and other fragments and pieces of slate. A kidney-shaped pit was located in the eastern half of the building and contained occasional oyster shells and charcoal pieces.

The trenches to the north and south of House I produced evidence for a wide range of early medieval artefacts and other features. A tenth-fourteenth century knife was found immediately outside the north wall of House I and a fragment of a decorated quern stone was also uncovered beside a concentration of shell. An 'occupation layer' of dark humus to the north of House I also contained a wide range of finds including early medieval bronze and iron-pins, a small mount of sheet bronze with an engraved chequer-board pattern, a stone hone, possible loom-weight, iron nails and pieces of slag. Other features to the north of House I included three pits containing shell, bone and charcoal.

House III was a drystone-built structure with external dimensions of 6.4m x 4.27m. The walls were 0.97m-1.22m wide and survived to one or to two courses high of rubble masonry. Find included iron slag and an early medieval bone die just outside the northeast wall. The southeast wall of the house was built inside the enclosure wall and 'the house may date from the period in which the enclosure wall was ruinous'. The finds from the occupation layer indicate a wide date range and include a bronze strap mount, possibly of medieval date, a sherd of fifteenth or sixteenth green glazed pottery, three crucible fragments, slag, clay-pipe stems and a flint flake. A black occupation soil between the external angle of the northeast house wall and the enclosure wall contained bones, shells, an early medieval bone die and a possible knife.

House II was a long, rectangular drystone-built structure located to the southeast of the church and the cemetery enclosure. The building had internal dimensions of 15.9m x 4.27m and was in a poorly preserved condition, containing a single wall course of faced stones and a core. House II did not belong to the primary occupation of the site and its walls were built on or into an earlier dark occupation horizon. The finds from this building also range in date

from the early medieval period to modern times and include an early iron looped pin, a bone knife? handle, a hammer stone, three iron knives and quantities of unstratified slag. Two pits were dug into the yellow boulder clay inside the house; and one of these had been used for the disposal of butchery waste.

Over fifty pieces of slag was scattered across the site with the vast majority recovered from the areas of the three houses. Iron slag, crucible sherds and a possible furnace bottom were found within the dark humus layers from House I and III. One large crucible from House III had traces of copper on its inner surface plus a thick glassy deposit. No accurate dates can be assigned to these industrial features though it is possible that some may belong to the early medieval period. Numerous forged iron nails were also uncovered across the site and many of these are probably medieval in date.

Other craft-working evidence is indicated by various finds including a possible early medieval socketed chisel from beneath the sod on the west side of the church and a possible loom-weight from the dark humus in the collapse of the enclosure wall to the north of House I. Fragments of seven rotary querns and concentrations of charred cereal grains also indicate cereal-processing at the site in the medieval periods. A large animal bone assemblage was recovered and consisted primarily of cattle followed by sheep/goat, pig, horse, dog and cat. The bone was too mixed and unstratified to provide meaningful information about the economy of the site. Significant quantities of shell were also recovered indicating that its medieval occupants were also exploiting maritime resources.

A large collection of post-medieval finds confirm that the site was probably occupied by squatters till the eighteenth or nineteenth century. The post-medieval pottery from the church, the surrounding cemetery and the Houses included Buckley-type storage vessels, Staffordshire slipware and sherds of modern white earthenware. Some other notable post-medieval finds included a bronze token dated to between 1653-1679, a possible Jew's harp, a seventeenth century horse shoe, window glass and wine bottles. Seventeenth and early eighteenth century clay pipe pieces were also recovered across the site. The cemetery was also re-used as a children's burial-ground or cillin in the last few centuries, perhaps after the site had ceased to be occupied by squatters. A number of infant and neonate burials were uncovered in the cemetery; at least four of these infant burials were found along the northern side of the nave and chancel, one in the northwest of the nave and one in the chancel.

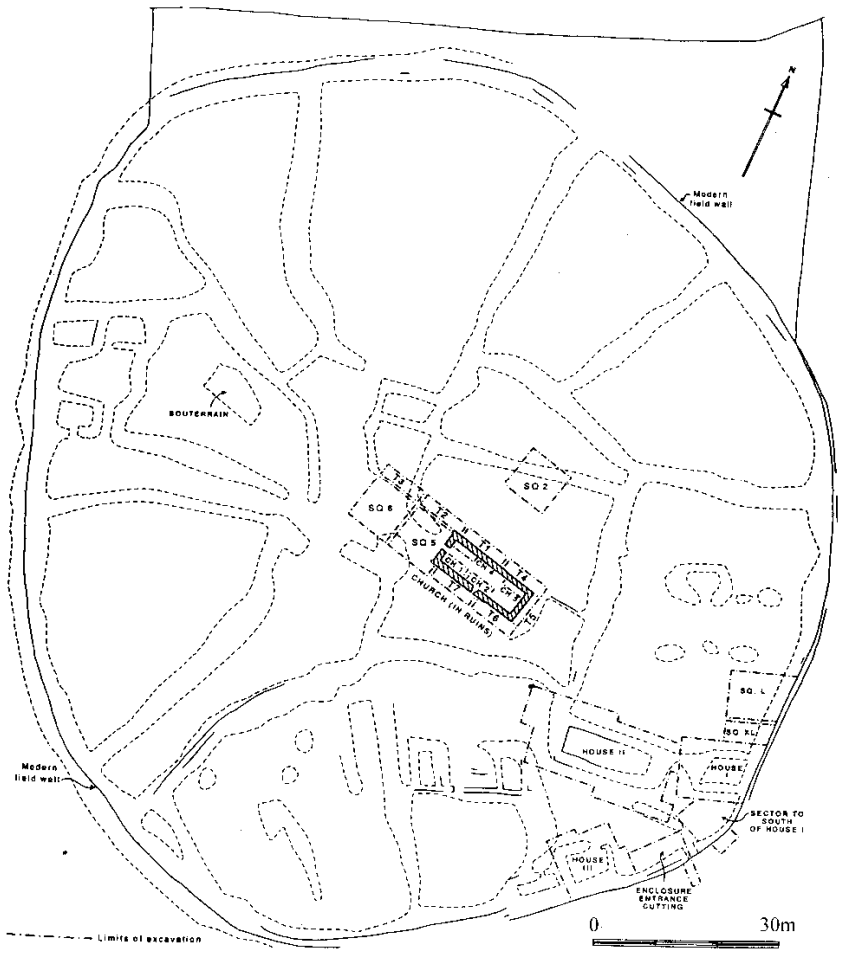


Fig. 155: General Plan of Kiltiernan Enclosure showing excavated areas (After Waddell and Clyne 1995, 151).

References

Duignan, M. 1951. Early monastic site, Kiltiernan East townland, Co. Galway. *Journal of the Royal Society of Antiquaries of Ireland* 81, 73–75.

Waddell, J. & Clyne, M. 1995. M.V.Duignan's excavations at Kiltiernan, Co. Galway, 1950–1953. *Journal of the Galway Archaeological and Historical Society* 47, 149–204.

Loughbown (1), Co. Galway
Early Medieval Settlement Enclosure.
Grid Ref: **M82162894 (182163/228944)**
SMR No: **GA087-178**
Excavation Licence: **A024/E2442**
Excavation Duration/Year: **January 2006.**
Site Director: **N. Bower (Eachtra)**

The site consisted of a bivallate enclosure set on the side of a hill (Fig. 156). The site was enclosed by two ditches – the outer ditch (1.5m wide and 0.8m deep, with a diameter of 63m); and the inner ditch (3m wide and 1.1m deep, with a diameter of 42m). Excavation was required to facilitate road construction.

The enclosure would appear to have been the site of earlier activity, and a linear ditch uncovered during excavation produced a Bronze Age radiocarbon date (see below). This ditch was truncated by the outer ditch of the enclosure, but appears to have remained open throughout the early medieval period as an iron knife blade (dated by the excavator to the ninth to fourteenth century) was also found in this feature.

The outer ditch was V-shaped in profile and was in-filled with largely sterile silts. Some bone was recovered from the earliest fill, and one of these returned a radiocarbon date in the sixth/seventh century (see below). The upper fill of this ditch to the east of the entrance was overlain by metalworking spoil, suggesting that the ditch had been in-filled by the time iron-working was conducted in this area. Dates from one of the three smithing hearths would indicate that this occurred in the eleventh/twelfth century.

The entranceway appears to have had an outer gate (indicated by large postholes just beyond the outer ditch), and may have been bounded by a possible palisade trench or associated drainage trench.

The inner ditch showed evidence of two subsequent phases of re-cutting and the skeleton of a juvenile human was found in the western terminus of this ditch. The lack of cut features to the rear of this ditch led the excavator to suggest the presence of a contemporary bank, some evidence of which may be seen in the in-fill of the ditch. Two corn-drying kilns were cut into the in-fill of the inner ditch, and radiocarbon dates from one of these suggest that this occurred around the fourteenth century.

Two possible structures were identified in the interior of the site. Structure A was trapezoidal in shape (indicated by eleven postholes), and had an occupation layer that contained charred cereals and hazelnuts. This structure may potentially have acted as a gate-house. Structure B comprised five postholes and a slot trench arranged in an L-shape; animal bones, burnt clay, and charred cereal remains were recovered from this structure. Another area of occupation debris was indicated to the north of Structure B. This had been truncated during excavation, but revealed charcoal, shell, bone, slag and cereal remains, as well as an iron fish hook and a ringed pin. A stone-built souterrain was also discovered in this area, and this produced a large number of animal bones (largely cattle and sheep/goat).

Other finds from site included fragments of eight quernstones, a silver penny of Edward I (1272-1307), two iron bars, a copper alloy ring, a copper stud fragment, and six other fragments of copper alloy. Almost 5,000 animal bones were recovered from this site, and cattle and sheep were the most dominant species identified (with cattle only slightly more numerous than sheep).

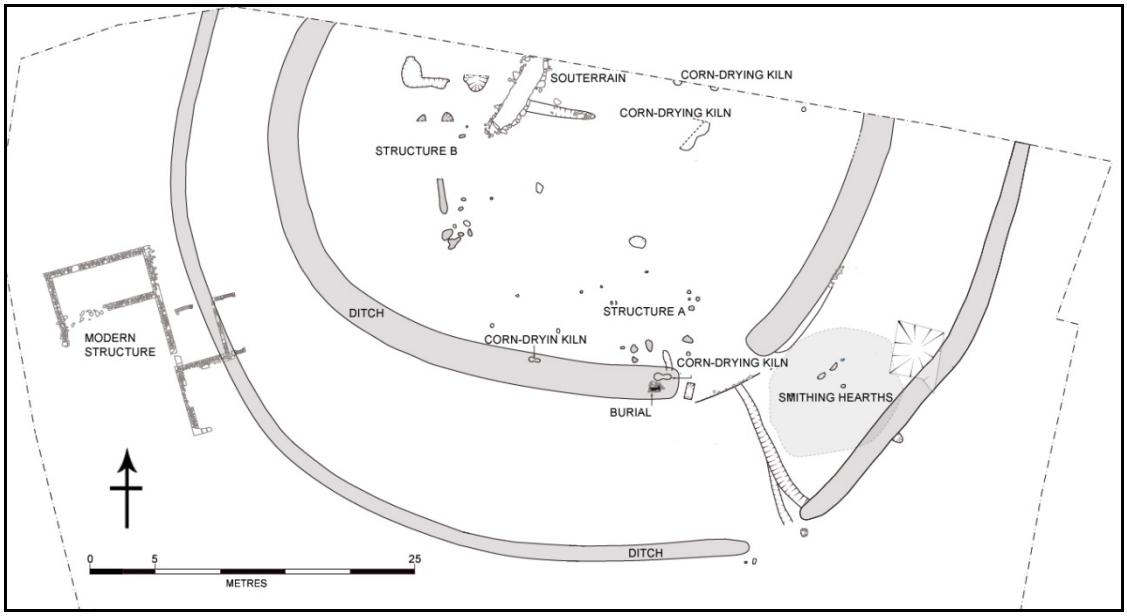


Fig. 156: Plan of excavation at Loughbawn (1), Co. Galway, showing relevant features (after Bower 2009, 42).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-7362	Charcoal from basal fill of outer ditch	1444±32 BP	**A.D. 563-653**.
UB-7363	Charcoal from fill of smithing hearth	863±31 BP	**A.D. 1047-1088**; **A.D. 1122-1139**; **A.D. 1149-1257**.
UB-7364	Charcoal from fill of linear ditch	2881±32 BP	1193-1171 B.C.; 1169-1143 B.C.; **1132-973 B.C.**; 958-938 B.C.
UB-7365	Charcoal from layer in outer bank	614±30 BP	**A.D. 1294-1401**.
UB-7366	Charcoal from fill of corn-drying kiln	644±29 BP	**A.D. 1282-1327**; **A.D. 1342-1395**.
UB-7367	Charcoal from fill of gully in entrance	1572±30 BP	**A.D. 419-554**.
UBA-8096	Bone from human burial	1138±29 BP	A.D. 782-789; A.D. 810-848; **A.D. 855-983**.

References:

Bower, N. 2009. Archaeological Excavation Report E2442 – Loughbown 1, Co. Galway: Ringfort with souterrain and metalwork. *Eachtra Journal*, 2. http://eachtra.ie/index.php/journal/

Loughbown (2), Co. Galway
Early Medieval Settlement Enclosure.
Grid Ref: **M81732872 (181730/228729)**
SMR No: **GA087-177**
Excavation Licence: **A024/E2054**
Excavation Duration/Year: **2005.**
Site Director: **N. Bower (Eachtra)**

The site consists of a banked-and-ditched enclosure (37m by 48m) placed on the brow of a small hill (Fig. 157). Excavation of the site was required to facilitate road building. Prior to the main excavation a test excavation had taken place in 2004, and a geo-physical survey of the interior had indicated a number of anomalies.

Excavation of the enclosure bank revealed postholes along the inner and outer faces of the bank, and these were interpreted as evidence for wooden shoring on both faces. Radiocarbon dates from this construction phase suggest that material from an earlier Iron Age site may have been re-worked into the early medieval bank (see below). This wooden facing may have been complimented by a facing of small limestone stones on the interior face of the bank. A metalled entrance-way was revealed, associated with two large postholes for the gate.

Around 60% of the site interior was composed of exposed bedrock, thus there were few structural remains. An area of activity was however identified in the northwest of the interior, consisting of a slot trench, ten postholes (in an irregular pattern), and three pits. An early medieval radiocarbon date was returned from associated charcoal (see below).

Few finds were recovered from this site, leading the excavator to suggest it may have been used as a cattle corral. These consisted of an incomplete shale/lignite bracelet; a quernstone; an iron knife-blade; and a flint flake and hammer stone.

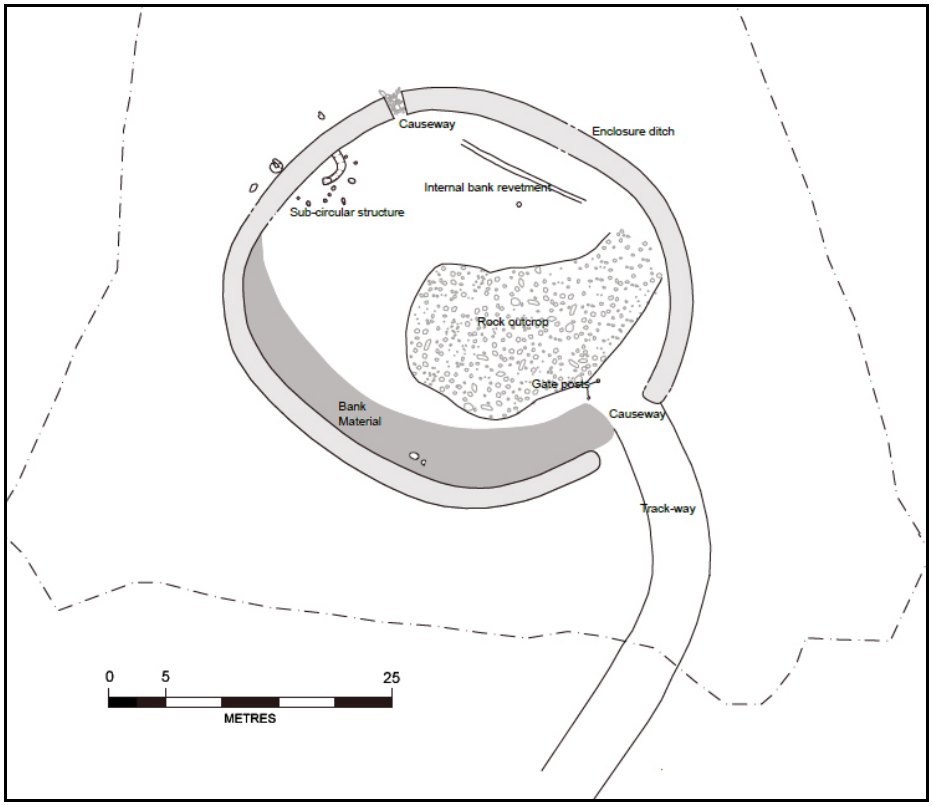


Fig. 157: Plan of excavation at Loughbawn (2), Co. Galway, showing relevant features (after Bower 2009, 30).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UBA-8103	Bone from base of ditch	1159±29 BP	**A.D. 778-903**; **A.D. 914-969.**
UBA-7360	Charcoal from bank-fill	2245±33 BP	**392-345 B.C.**; **323-205 B.C.**
UBA-7361	Charcoal from lower bank fill.	2162±34 BP	**361-272 B.C.**; **263-102 B.C.**
UBA-7759	Charcoal from ditch	342±32 BP	**A.D. 1467-1640**.
UBA-7760	Charcoal from post-hole in occupation area	941±33 BP	**A.D. 1022-1164**.
UBA-7758	Charcoal from fill of slot-trench of sub-circular structure	2266±24 BP	**396-352 B.C.**; **295-228 B.C.**; 221-211 B.C.

References:

Bower, N. 2009. Archaeological Excavation Report E2054 – Loughbown 2, Co. Galway: Ringfort with earlier ringditch. *Eachtra Journal*, 2. http://eachtra.ie/index.php/journal/

Mackney, Co. Galway
Early Medieval Settlement Enclosure.
Grid Ref: **M83742941 (183745/229417)**
SMR No: **N/A.**
Excavation Licence: **A024/E2444**
Excavation Duration/Year: **December 2005 – February 2006.**
Site Director: **F. Delaney (Eachtra)**

The site consisted of a partially destroyed enclosure (55.64m in diameter) set on the side of a low hill (Fig. 158). The enclosure was not included in the SMR and was only recognised during field-walking undertaken as part of the Environmental Impact Assessment. The site was excavated to facilitate road construction.

Excavation revealed three main phases of occupation on site. The earliest phase of occupation was indicated by the presence of two fire pits, and a number of linear features, all of which underlay the later enclosure bank. A radiocarbon date from charcoal associated with one of these fire-pits suggests that the bank was constructed quite late in the early medieval period (see below). This date (A.D. 771-899) is almost identical to one of the dates returned from the ironworking area (A.D. 775-900), however, which suggests that at least some ironworking may have been conducted on site prior to the construction of the bank.

The second phase of occupation was marked by the construction of the enclosure ditch, which had maximum dimensions of 6m wide and 3.1m deep. The lower ditch fills were composed of silts, presumably from gradual slippage, but a series of higher ditch fills, composed of medium to large sub-rounded stones, would appear to represent the collapsed remains of the stone revetment from the outer face of the bank. A similar stone revetment appears to have existed on the interior face of the bank. A series of large postholes, found at the entrance, have been interpreted as either representing a gateway into the enclosure, or possibly as the remains of a more substantial gatehouse structure. A series of structures were identified in the interior. The foundation trench for the roundhouse, Structure A (5.4m in diameter), appears to have been divided into eight straight sections, which may represent the presence of wooden foundation planks. A porch and possible roof-supports were also indicated by the pattern of postholes. The partial remains of another roundhouse, (Structure C (4.48m in diameter), were also indicated by a curvilinear foundation trench. As with Structure A, this had some evidence for internal sub-division. A possible curvilinear lean-to structure, (Structure B), was also identified. This structure measured 3.8m by 8.4m and appeared to use the bank as a rear wall; a hearth was located within this building. Another curvilinear structure, (Structure E), which was composed of six postholes with a central post, was identified in the north-west of the interior. It appeared to have been open to the north and may have constituted a shelter or wind-break. Patterns of postholes also identified two rectilinear structures in the interior – a rectangular building (Structure D); and an L-shaped structure (Structure F). Other groups of postholes were uncovered, but these could not be identified with possible structures. A dry-stone built souterrain was constructed during this phase, and may have been associated with House F.

A series of bowl furnaces/smithing hearths were also identified to the north of the entrance. Dates from these features range from the ninth/tenth century, to the eleventh/twelfth century (see below). Two series of postholes found in the vicinity of this metalworking area are presumably related to workshops, but the pattern of these could not be clearly identified.

Four large fire pits were later dug into the interior of the site. Three radiocarbon dates from these place them in the fourteenth to seventeenth centuries. The site was then used as quarry, before being utilised as a *cillín* – 143 infant skeletons were recovered during excavation.

Just over 5000 animal bones were recovered from the early medieval phase of the site, mainly of domesticates (cattle dominant, then sheep and pigs). Few finds were directly

attributable to the early medieval phase, but these included three iron knife blades, an iron bar, and an iron 'tool'. A silver penny of Henry III (1216-1272), and two un-dated bone 'toggles' were also found in site.

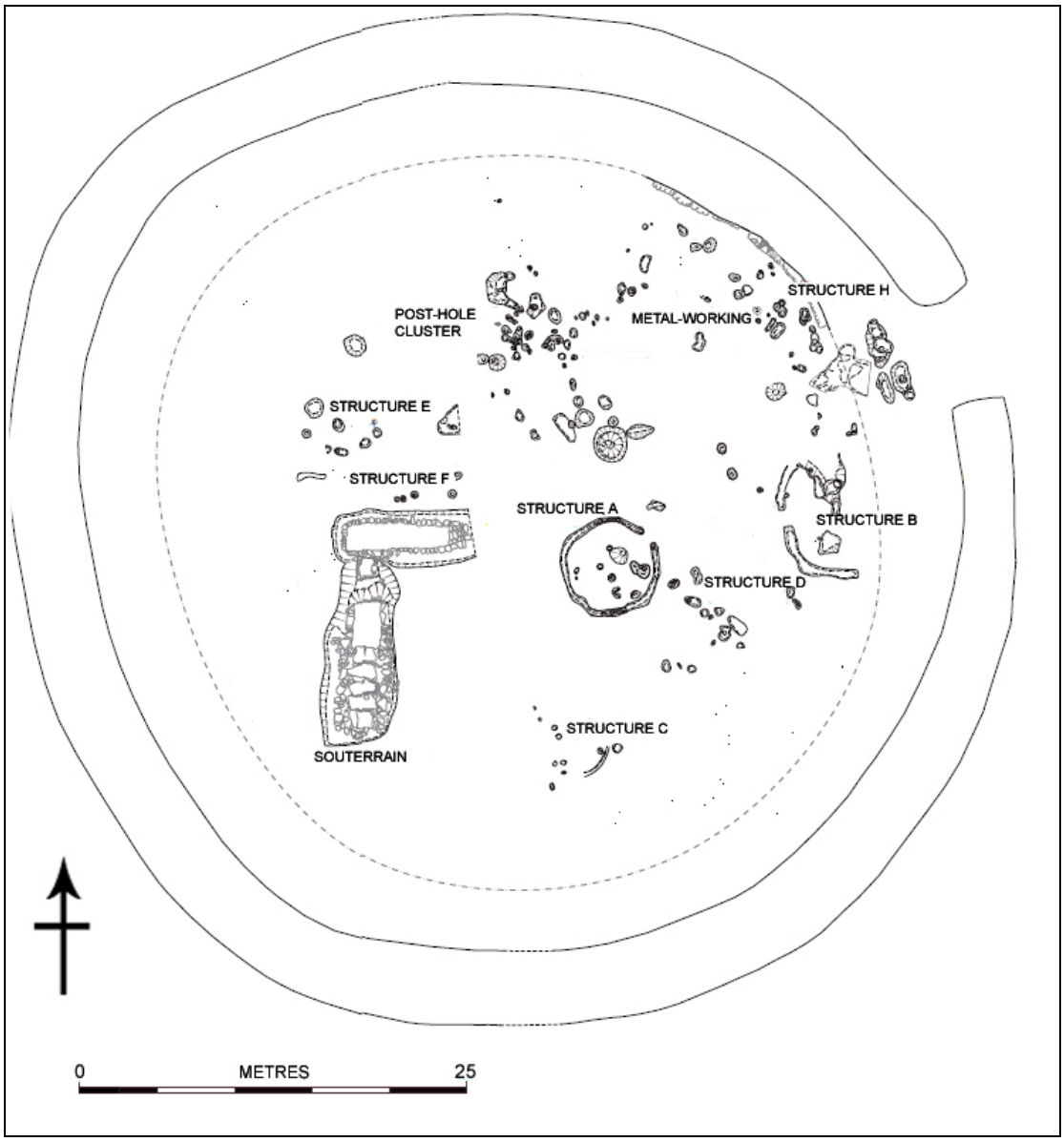


Fig. 158: Plan of excavation at Mackney, Co. Galway, showing relevant features (after Delaney 2009, 56).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-7368	Charcoal from later fire-pit	524±30 BP	A.D. 1323-1347; **A.D. 1392-1442**.
UB-7369	Charcoal from later fire-pit	484±28 BP	**A.D. 1409-1448**.
UB-7370	Charcoal from later fire-pit	385±29 BP	**A.D. 1443-1523**; **A.D. 1559-1563**; **A.D. 1570-1631**.
UB-7371	Charcoal from double bowl-furnace	1173±30 BP	**A.D. 775-900**; A.D. 917-965.
UB-7372	Charcoal from post-hole C861	702±30 BP	**A.D. 1261-1308**; **A.D. 1361-1386**.
UB-7373	Charcoal from later occupation layer C765	377±30 BP	**A.D. 1446-1525**; **A.D. 1557-1632**.
UB-7374	Charcoal from fire-pit	1183±29 BP	A.D. 728-736; **A.D. 771-899**; A.D. 919-949.
UB-7375	Charcoal from hearth	365±30 BP	**A.D. 1449-1528**; **A.D. 1545-1546**; **A.D. 1551-1634**.
UB-7376	Charcoal from metal-working feature	991±31 BP	**A.D. 988-1054**; **A.D. 1078-1153**.

References:

Delaney, F. 2009. Archaeological Excavation Report E2444 – Mackney, Co. Galway: Ringfort with Killeen Burials. *Eachtra Journal*, 2. http://eachtra.ie/index.php/journal/

Rathgurreen, Co. Galway
Early Medieval Settlement Enclosure.
Grid Reference: **F37872002 (13787/22002)**
SMR No: **GA095-009**
Excavation Licence: **N/A**
Excavation Duration/Year: **1948; 1949.**
Site Director: **M.V. Duignan (University College, Galway)**.

The site is a bivallate enclosure set in a strategic position on the Maree peninsula and was excavated in the late-1940s as a research dig. The enclosure consisted of an inner enclosure with an internal diameter of 49m, and an outer enclosure with an internal diameter of 76m (Fig. 159). Like many bivallate enclosures, excavation revealed that the site had originally been a univallate enclosure. Unlike the vast majority of such sites, however, Rathgurreen was converted into a bivallate enclosure, not by adding an external circuit of bank-and-ditches, but by building a second series of vallation inside the original univallate enclosure. Both sets of banks were faced internally and externally with dry-stone walls. A suggested 'fighting terrace' or palisade trench had been identified in previous visual surveys of the outer bank, however in excavation this was revealed to be a result of the gradual settling of the bank material between the dry-stone walls that formed the inner and outer faces of the earthen bank.

There was some evidence of possible metalling in the interior of the site, but no structural remains were identified during excavation. A number of pits were excavated in the interior, some of which may have functioned as rubbish pits, but others may have been used for iron-smelting.

The artefactual remains, therefore, constitute the majority of information from this site. Finds from the univallate phase included a bronze pin; a decorated bronze ring; two bronze links; and a fragment of bronze. Bronze working appears to have been undertaken on site and sherds of clay crucibles found from this phase may relate to this. The discovery of a shell midden of dog-whelks suggests that purple dye was produced on site. A sherd of E ware, and a possible painted clay bead were also recovered from the early phase.

Bronze-working may have also been carried on during the bivallate phase; ironworking appears to have been practised throughout the life of the site as iron slag was found for both phases. Finds from the bivallate phase included fragments of an iron knife; an iron pin; possibly an iron triskele-shaped object; and possibly an iron penannular brooch – both the latter are unprovenanced. Parts of tuyères with green/red vitreous material and/or slag were found from this phase. The presence of a Roman-type pottery oil lamp, like the sherd of E-ware from the earlier phase, suggests that Rathgurreen had some access to imported goods in the seventh/eighth centuries. There are some problems, however, with fitting the oil-lamp into the later phase, and it is suggested that it may have been a curated item on site, having been imported perhaps during the earlier phase.

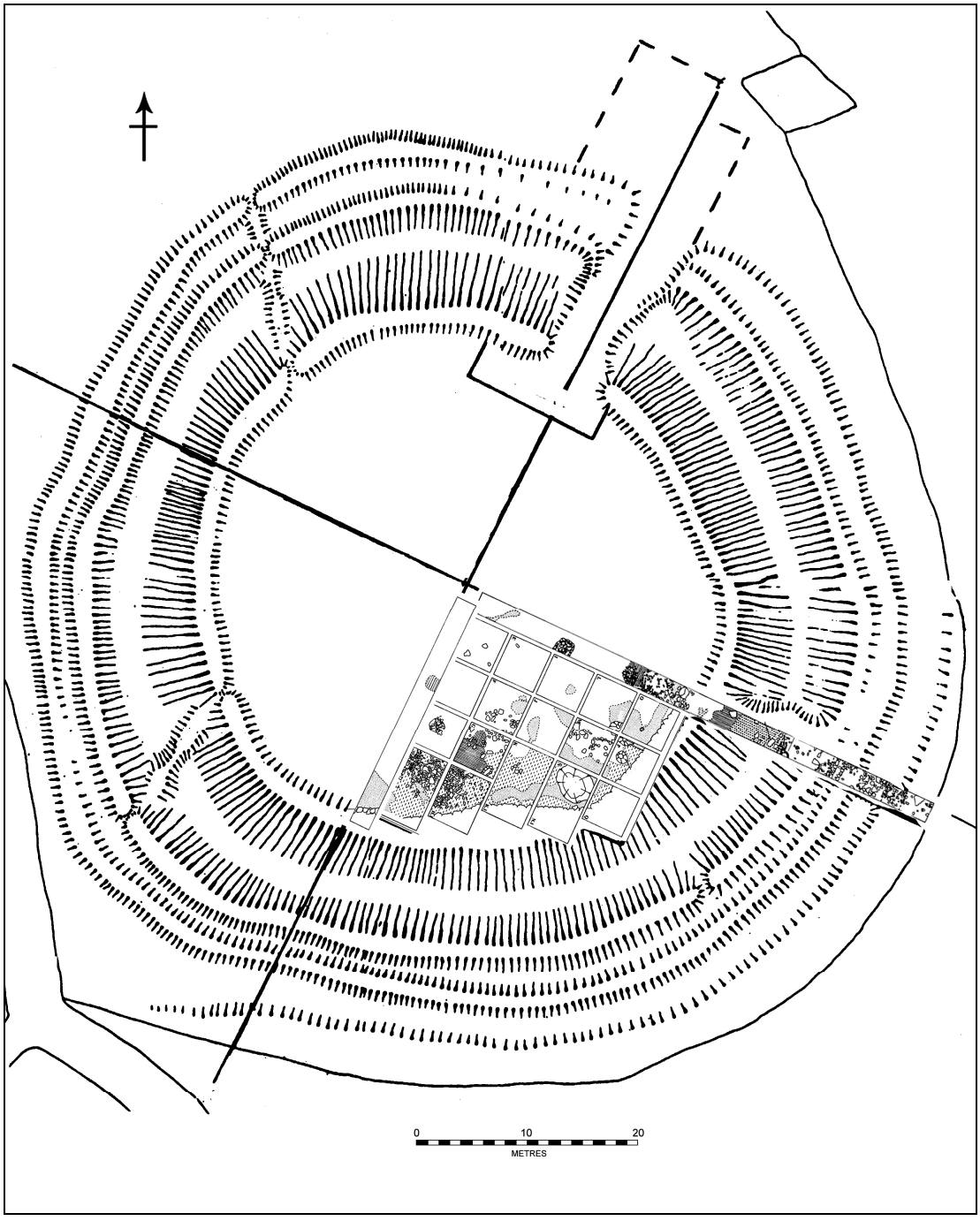


Fig. 159: Excavated area at Rathgurreen, Co. Galway (after Comber 2002, 141, 158-9).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

(* - calibrated with marine reservoir effect: KA Hughen, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, PJ Reimer, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1059-1086.)

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-4323	Bone- Phase 2 - in inner ditch	1275±36 BP	**A.D. 660-783**; A.D. 788-821; A.D. 842-860
UB-4331	Shell- Phase 1 - under inner bank	1925±30 BP	***A.D. 408-659**.

Reference:

Comber, M. 2002. M. V. Duignan's Excavations at the Ringfort of Rathgurreen, Co. Galway, 1948-9. *Journal of the Royal Society of Antiquaries of Ireland* Section C, 102C, 137–97.

County Kerry

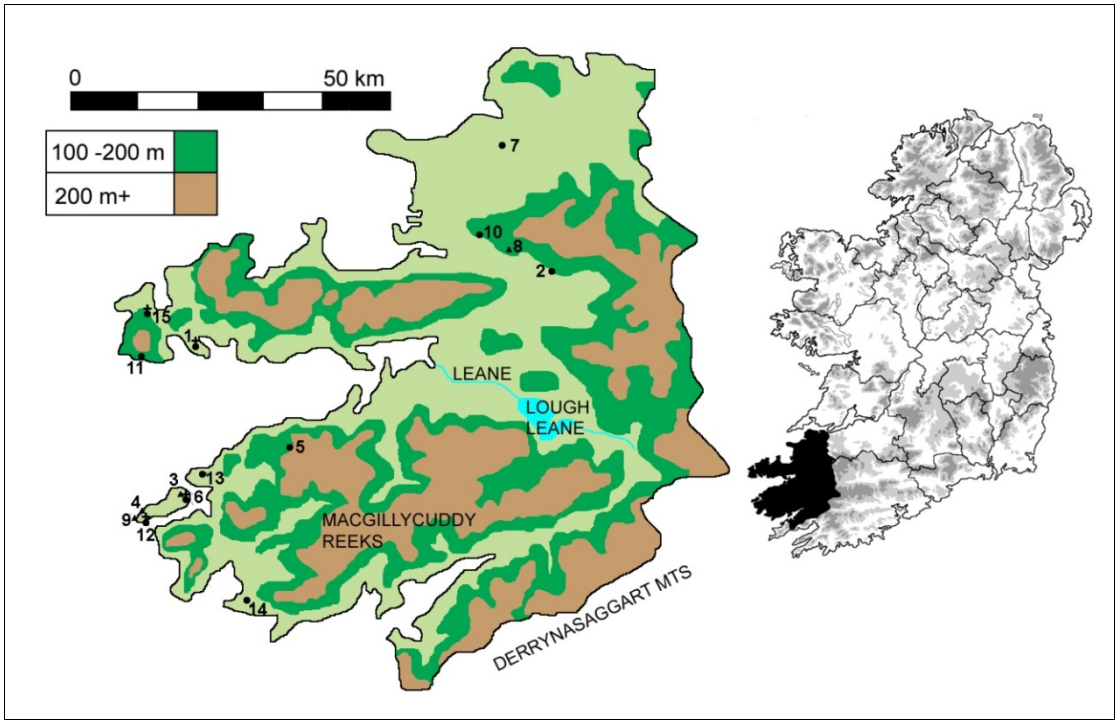


Fig. 160: Significant early medieval excavations in Co. Kerry.

1	Ardfert	**9**	Coarhabeg
2	Ballyegan	**10**	Dromthacker
3	Begenish	**11**	Dunbeg
4	Bray Head	**12**	Illaunloughan
5	Caherlehillan	**13**	Leacanabuaile
6	Church Island	**14**	Loher
7	Clogher	**15**	Reask
8	Cloghermore		

Ardfert, Co. Kerry
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **Q786214**
SMR No: **20:46**
Excavation Licence: **E000493; 97E0302**
Excavation Duration/Year: **1989-1992; 1995; 2000, 1997; 1999 & 2000**
Site Director: **Fionnbarr Moore (National Monuments Service); Martin Reid (National Monuments Service); Isabell Bennett (Freelance)**

Ardfert is an important ecclesiastical site in north Kerry which revealed considerable evidence for a seventh-eighteenth cemetery, remains of an eleventh century stone church or *damliac* as well as significant early medieval domestic and agricultural evidence. The area around and inside Ardfert Cathedral was substantially excavated as part of major restorative works on the buildings by the National Monuments Service from 1989-2000. The place name Ardfert or *Ard ferta* means the height of the burial mounds though the site is also known as *Ard Ferta Brenainn* indicating its strong traditional links with the late fifth century saint Brendan 'The Navigator' who is reputed to have founded the monastery. The monastic site is located near the northwest Kerry coastline on a very slightly elevated area of good limestone enriched ground commanding views to the west, north and east over a flat plain. A small river known as the 'Tyshe' flows by the monastic site to the north and may well have coursed through the monastic enclosure.

Three medieval churches survive on the site today. The Cathedral consists of a long nave and chancel with a short south aisle and remains of a vestry on its north wall and can be variously dated from the eleventh-seventeenth centuries. To the northwest of the cathedral is a small late twelfth century Romanesque nave and chancel church known locally as 'Templenahoe'. A plain fifteenth century structure known as 'Templenagriffin' is located to the northwest and was constructed at a period when major renovations were being carried out on the cathedral. The building is aligned with 'Templenahoe' and early burials beneath the cathedral which might indicate that it was built on the site of an earlier church. Two other churches and an anchorite's cell were recorded by William Molyneaux on the site around A.D. 1683 (Moore 2007, 38) but do not survive today. A round tower once stood to the southwest of the cathedral but collapsed in a storm in A.D. 1771. The ruins of a Franciscan friary founded by Thomas Fitzmaurice in A.D. 1253 survive to the east of Ardfert village.

The earliest finds on the site comprised two fifth-eighth century ogham stones: one incorporated into the north wall of Templenagriffin with a further example originally discovered in a field to the west of this building. The excavations at Ardfert uncovered evidence for a large early medieval cemetery extending over a wide area, inside and immediately outside the later thirteenth century cathedral and containing over 2,300 burials dating from the seventh to eighteenth century. The earliest burials were uncovered underneath and even above the plinth level of the eleventh century *damliac* - the stone church at Ardfert mentioned in the Annals of Inisfallen in A.D. 1046. Eleven burials within the nave area of the cathedral were sealed by the *damliac* walls. In total, thirty five burials were directly sealed by the walls of the thirteenth century cathedral.

The earliest burials were orientated on a significantly different alignment to both the eleventh century *damliac* and the later thirteenth century cathedral and can be considered earlier than both of these buildings. Forty two burials out of a total of seven hundred and twenty five burials in the entire nave and south aisle area were aligned southeast of the cathedral's orientation while a further twenty were aligned to the northeast of it. Apart from one, all the burials deviating from the cathedral's alignment in this area were in the lowest and earliest levels; a pattern replicated elsewhere within the south transept's eastern chapel and along the north wall of the cathedral.

Radiocarbon dates support this chronology. A burial on a southeast orientation under the first arch between the nave and south aisle at the west end of the cathedral pre-dated a burial dated to A.D. 1050-1232. Pillow stones were found associated with a number of the earliest burials; one at the east end of the cathedral was radiocarbon dated to A.D. 884-990 and pre-dated a sequence of four burials, while another – that of a young adult was partially sealed underneath the plinth of the eleventh century *damliac* (Moore 2007, 87-91). An adult male with pillow stones along the north wall was orientated northeast of the cathedral's axis and produced a radiocarbon date range from A.D. 890-1002; it was the lowest in a burial sequence and pre-dated thirty burials, twelve of which included pillow stones. A small annular green glass bead was also recovered from a secondary burial in an early medieval cist grave. Three early medieval cross-slabs were also uncovered in the excavations and can be variously dated from 9-11th century (Moore 2007, 31-32).

The different orientation of the earliest burials from the alignment of the *damliac* or the thirteenth century cathedral may indicate that these burials were probably associated with an earlier unexcavated church. Post-holes were discovered outside the foundations of the *damliac,* and may have been perhaps used as scaffolding posts used during the building of the church. A deposit of mortar and mortar-flecked stones was also discovered beneath the foundations of the eleventh century *damliac* and a quern stone was found in association with this feature. This building was generally free of mortar which might indicate that 'the original foundation had been robbed out at this point and re-deposited as part of a later tomb building'.

The foundation remains of the south, east and west walls of the *damliac* were uncovered within the cathedral. The north wall of this stone church also survived incorporated into a section of the north wall of the thirteenth century cathedral and stood to a height of 4m above the foundations with a stone plinth defining the base of the surviving section of wall. The walls of this early church were built from large blocks of cut limestone fitted neatly together with the gaps filled by smaller stones. The excavated remains indicate that the *damliac* originated as a rectangular structure, 10.2m by 6m with a chancel - 5.5m by 5.6m - later added, probably in the twelfth century. One of the larger stones in the external north wall of the *damliac* was decorated with a pair of linked Latin crosses.

The *damliac* had the same orientation as the later cathedral and was aligned northeast-southwest. The sun rises exactly opposite the east end of the cathedral on St. Brendan's feast day on the 16th of May and it has been suggested that there was a decision made in the eleventh century to lay the foundation stone for the *damliac* on his feast day (Moore 2007, 34). The construction of the *damliac* had an impact on the orientation of burials close to the cathedral as those close to this building generally followed this new alignment. A significant number of the burials close to the north wall - below an upper layer of late medieval cobbling in the vestry area - were possibly earlier than the thirteenth century and may have contemporary with the use of the *damliac* and the twelfth century church. A silver ring with *carnelian intaglio* and three oval glass cabochons were found associated with the skeleton of a possible bishop at the east end of the cathedral. The skeleton contained pillow stones and a lining of stones around the head and although following the orientation of the later thirteenth century cathedral, it was undoubtedly earlier than this building. It was dated to A.D. 900-1032, though the type and style of the ring and the jewellery is more suggestive of a twelfth or early thirteenth century date. Part of a bone comb was also found under the skull of a skeleton at the western end of the nave and was dated to the mid eleventh-late twelfth century.

The excavations at Ardfert also uncovered evidence for early medieval domestic and agricultural activity. There was much evidence for the butchered remains of cattle, sheep and pigs and also for the early medieval cultivation of oats and barley. Apple pips were also recovered in similar early contexts indicating that they were also consumed in the early medieval period. Seven fragments of sandstone querns and two fragments of sandstone millstones indicate food preparation on site. Three of these were re-used as building material

in stone foundations or modern tombs and another formed a pillow-stone for a pre-thirteenth century burial. A pre-twelfth century date was established for one of these; a fragment of an upper quern stone with an unusual oval shaped perforation used as a turn mechanism for the upper surface. The remainder were recovered from the modern burial layers.

Evidence for the spinning of yarn in the eleventh and twelfth century is confirmed by the discovery of a bone and stone spindle whorl on the site. The bone spindle whorl was uncovered beneath medieval cobbles while the stone equivalent was recovered from the pelvic area of a medieval adult burial. A small iron adze or slice from an early medieval pit or possibly hearth in the south transept indicates evidence for woodworking on the site. In addition, the pit contained a long thin socketed iron implement which was also possibly used as an early medieval woodworking tool. A whittle tanged knife was uncovered between the legs of a middle-aged female skeleton and was tentatively identified as a possible eighth to thirteenth century 'scribe's' knife used for manuscript illumination.

A range of early medieval domestic objects were recovered. These included whet-stones, as well as an iron spike with an attached chain found inside a pit to the east of the cathedral and probably used as a wall-hanger for a pot or similar item. The context of its discovery would indicate an early medieval date. Other domestic items included a twelfth/thirteenth century copper-alloy toilet implement found beneath the cross wall at the east end of the cathedral, but above a child burial radiocarbon dated to between A.D. 1038-1220 (Moore 2007, 63-66). A ninth century bronze hanging bowl with an ogham inscription was also found near Ardfert in a bog in Kilgulbin townland.

Items of early medieval personal use or clothing included a tenth-twelfth century bone comb, polished bone pins or needles, tenth-twelfth century copper-alloy stick pins, early eleventh to early twelfth century crutch headed ringed pins, a tenth-eleventh century hooked tag, a possible twelfth century baluster headed pin and glass beads. A small prehistoric polished stone axehead possibly kept as some form of charm or amulet was found in an early medieval pit in the south transept and an eleventh-thirteenth century gaming piece was recovered from a fill of a grave containing two juveniles – one of which was protected by pillow-stones. Other finds included a twelfth century baptismal font and a Hiberno-Norse silver imitation long cross penny of Aethelred II (A.D. 1020-1035) in a disturbed context beside a modern coffin.

The *damliac* was probably roughly contemporary with a round tower which formerly stood to the southwest of the cathedral before collapsing in the eighteenth century. Large limestone blocks encircling a family tomb to the southwest of the cathedral may possibly indicate the remains of this disappeared structure. The early medieval monastic site also appears to have been defined by an enclosure or *termonn*. Part of a wide, shallow curving enclosing ditch with possible entrance causeway was excavated to the east of the cathedral. It measured 1m in width and may have been wider originally but was disturbed when two large pits were cut into it. Two post holes, one at the northern terminal of the fosse and another between the two pits, suggest a structural feature connected with the entrance causeway (Moore 1991). A simple medieval iron key for a casket was found within an early fill of this ditch feature. A north-south flat bottomed ditch measuring 14.5m in length, 1.3m-1.6m in width and up to 0.55m in depth was also found to extend across the area of the south aisle and the west end of the nave, to the west of the *damliac* foundations. It contained animal bone and pre-dated the thirteenth century cathedral but it is unclear if it was related to the shallow, curving enclosing ditch to the east of the cathedral (Moore 1991).

All that remains of the twelfth century nave and chancel church is its sandstone Hiberno-Romanesque portal, incorporated into the western wall of a later thirteenth century Gothic building containing three lancet windows at the east end and a row of nine lancets along the south wall. This thirteenth century building with some additions and alterations dominates the site today. One of the main excavated features of this cathedral comprised a stone wall plinth which formed part of the base of a medieval rood screen (ornamented wooden or stone altar

screen) that demarcated the chancel of the church from the nave. This wall footing sealed four burials and a bone scatter. A quern stone was found under the supporting wall and a polished thirteenth century bone pin shaft was found in association with the rood screen wall foundation.

Excavations within the choir area of the cathedral uncovered the remains of a cross wall which probably retained a 'dais' (raised platform) at the altar end of this area. The 'dais' sealed twenty three burials – two of which contained ear-muff stones, indicative of a medieval date. Also excavated at the cross-wall in the choir under the lancets in the south wall was the foundation spread for choir stalls. A silver farthing of Edward I found under these stones may indicate that the cathedral was constructed in this period during the episcopacy of Nicholas from A.D. 1288-1336. A section of the south wall of the south aisle of the cathedral was uncovered extending from the west wall of the south transept for a length of 3.80m. It was a substantial structure with a batter on the outer face and contained four irregular stone courses surviving to a maximum height of 1.40m above the foundations.

The foundations of a fourteenth century vestry (sacristy) were uncovered with a fifteenth century phase of construction superimposed almost directly over the earlier structure. The construction of the vestry involved the removal of some earlier burials which were dumped into a large charnel pit underneath its west end. To the North and northeast of the vestry three post-holes were revealed - one cut by a pit that pre-dated the vestry- and may form part of structure. To the west of this a circular stone spread within a shallow pit may be the remains of a small building (Moore 1992). Both are probably medieval in date. Also built in the fifteenth century was the original south transept, linked to the cathedral by a pair of pointed arches. Here, excavations uncovered the lower courses of a wall representing the vestiges of the original fifteenth century wall of the south transept. Other fifteenth century additions included the battlements with window loops and lookout places along the cathedral's walls which served to create the impression of a strongly fortified building.

The south transept of the cathedral was extended through an existing cemetery and converted into a Protestant church in A.D. 1671. Much of the material used in the construction of these later phases came from existing features including fifteenth century windows from the earlier transept and the bell and bell-cote of 'Templenagriffin'. Wall plaques inside the south transept of the cathedral indicate that the area became the burial place of the local Crosbie family in the seventeenth and eighteenth centuries. A number of Catholic bishops and some Franciscans were also interred under the east lancet window and inside the nave of the cathedral in the penal period.

Most of the early- and late-medieval finds from the site were recovered from the general disturbed burial layers. Objects of medieval note included two thirteenth-fourteenth century tomb-covering carved stone effigies, water sprouts or gargoyles, two piscina, fragments of a baptismal font, corbels, a fifteenth century pilgrim's badge, a number of possible thirteenth or fourteenth century cross-slabs, an armorial plaque of the O'Briens of Thomond and two possible thirteenth-fifteenth century jet paternoster beads – one of which was recovered from a medieval juvenile burial against the east wall of the cathedral beneath an elaborate pillow stone burial.

A variety of pottery types were found including Ham Green, North Devon, Saintonge and other continental wares. Other medieval and post-medieval finds included thirty coins, tokens, jetons nine hone or sharpening stones, a fragment of a twelfth or thirteenth century iron tweezers, iron keys, a thirteenth century iron arrowhead, a sixteenth or seventeenth century iron spur buckle, a writing lead, two lead balls, metal buttons, a possible bone pen holder and a large number of post-medieval clay pipes; and medieval copper-alloy finds included buckle plates, pins, sewing pins, a stirrup-shaped ring, a strap end and a decorative mount for a book cover.

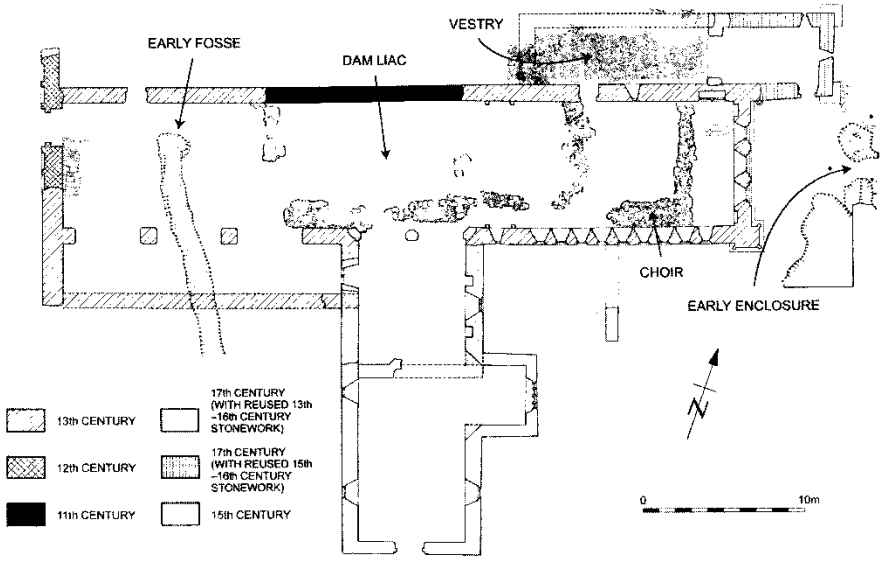


Fig. 161: Plan of Cathedral showing excavated features (Drawing by N. Roe and T. O'Sullivan; after Moore 2007, 14)

References

Bennett, I. 1997. 1997:226, Ardfert Community Centre, Ardfert, adjacent to monastic site. www.excavations.ie.

Bennett, I. 1999. 1999:317, Ardfert Community Centre, Ardfert, adjacent to ecclesiastical site. www.excavations.ie.

Moore, F. 1989. 1989:051, 'St Brendan's Cathedral,' Ardfert, medieval cathedral, Co. Kerry. www.excavations.ie.

Moore, F. 1990. 1990:066, 'St Brendan's Cathedral', Ardfert, medieval cathedral, Co. Kerry. www.excavations.ie.

Moore, F. 1991. 1991:062, 'St Brendan's Cathedral', Ardfert, medieval cathedral, Co. Kerry. www.excavations.ie.

Moore, F. 1992. 1992:098, 'St Brendan's Cathedral', Ardfert, medieval cathedral, Co. Kerry. www.excavations.ie.

Moore, F. 2000. 2000:0407, St. Brendan's Cathedral, Ardfert, medieval Cathedral, Co. Kerry. www.excavations.ie.

Moore, F. 2007. Ardfert Cathedral: Summary of Excavation Results. Dublin: Stationery Office.
O'Sullivan, M. 1988. A history of the development of St Brendan's Cathedral, Ardfert. *Journal of the Kerry Archaeological and Historical Society* 21, 148–165.

Reid, M. 1995. 1995:129, St Brendan's Cathedral, Ardfert, medieval cathedral, Co. Kerry. www.excavations.

Ballyegan, Co. Kerry
Early Medieval Settlement Enclosure & Souterrain
Grid Ref: **Q966110 (09660/11100)**
SMR No: **KE039-023**
Excavation Licence: **N/A.**
Excavation Duration/Year: **July-November 1991**
Site Director: **M.E. Byrne (University College, Cork)**

The site was located in a generally low-lying field 18.5m OD with the ground falling slightly to the west and south. It had been almost completely levelled and was heavily disturbed in recent times. Excavation was required in advance of quarry development. This revealed the partial outline of the walls of a cashel, as well as associated internal structures and a souterrain. External features were also discovered, for example an external corn-drying kiln, animal corral and field boundaries.

The site was roughly sub-circular in plan and had internal dimensions of 30m by 35m (Fig. 162). The basal remnants of the enclosure's walls (2.4m wide) survived along the northern portion and consisted of a rubble core faced with blocks; no remnants of the southern portion survived. No evidence of a formal entrance was uncovered on the site, although it was suggested that the remains of a cobbled surface in the south-east area of the site may indicate the location of the entrance.

The fragmentary remains of five possible structures were uncovered in the interior. Four were identified by the remains of truncated stake- and postholes. The fifth was identified by the remains of a stone wall with an associated hearth. Extensive disturbance to the site in the 1970s made it impossible to establish any information about the size and shape of these structures.

An L-shaped stone-lined souterrain containing two levels and linked to a natural cave was revealed inside the cashel. The remains of an articulated horse skeleton were recovered from collapsed material of one of its chambers, and a type of iron ploughshare dated to the tenth century (Brady 1987, 236) was recovered in the basal backfill layer of the souterrain passage. Two of the internal structures were truncated by the souterrain, while one of them post-dated its construction.

A 'key-hole'-shaped corn-drying kiln was uncovered to the north-west of the cashel; and the remains of two field boundaries and a possible animal corral were investigated to the south and south-east of the cashel. The corn-drying kiln measured 2.6m long by 0.45-0.26m wide and was connected to a roughly circular stone-lined drying chamber with an internal diameter of 0.8m; while the field boundaries survived to a maximum of 2.0m wide and 0.96m high. They were built of earth and stone and were similar to those excavated at 'The Spectacles', Lough Gur.

A quantity of animal bone, four fragmented bone combs, a bone gouge, five iron knives, a possible awl and a fibula brooch fragment, a bronze strap fitting, two shale bracelet fragments, a stone spindle whorl, an unfinished rotary quernstone and a fragment of another and a large quantity of hone-stones and other sharpening stones were recovered in various contexts on site.

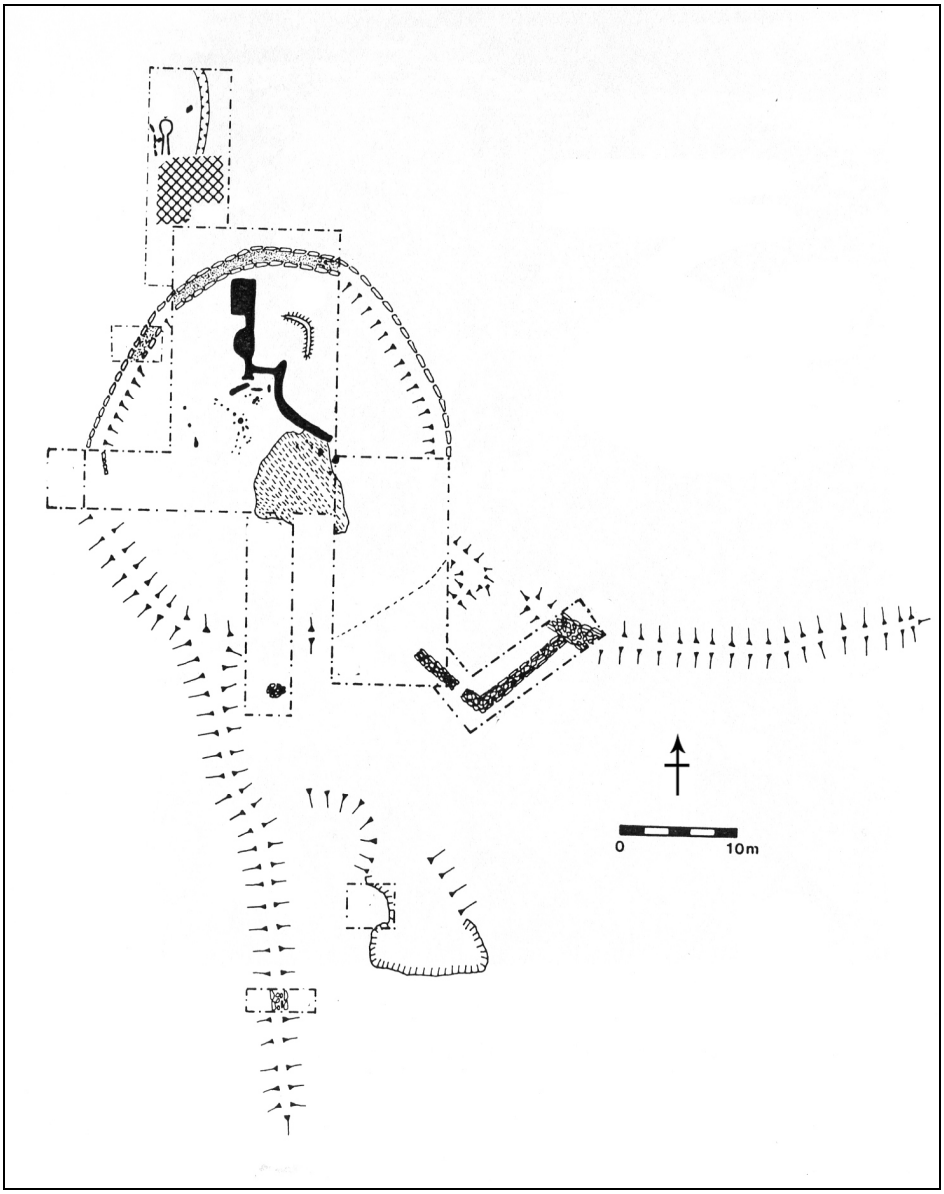


Fig. 162: Plan of site showing areas excavated (after Byrne 1991, 7).

References:

Brady, N. 1987. A Late ploughshare type from Ireland. *Tools and Tillage*, 4, 228–43.

Byrne, M. E. 1991. Report on the excavation of a cashel at Ballyegan, near Castleisland, Co. Kerry. *Journal of the Kerry Archaeological and Historical Society*, 24, 5–31.

Beginish, Co. Kerry
Early Medieval Nuclear Settlement
Grid Ref: **V42587873 (042588/078739)**
SMR No: **KE079-031**
Excavation Licence: **E977**
Excavation Duration/Year: **Early 1950s**
Site Director: **M.J. O'Kelly (University College Cork)**

Beginish is an island at the tip of the Iveragh Peninsula, connected to nearby by a sand bar at its south-eastern corner. An early medieval settlement consisting of eight houses, fifteen cairns, eight animal shelters and two poorly constructed structures lying within a network of low stone field walls were identified at the eastern end of the island (Fig. 163). The site may have originally been an unenclosed settlement, possibly associated with the monastery at Church Island, which was re-used as a maritime way-station by a Hiberno-Scandinavian community.

An excavation in the early 1950s investigated two houses, a cairn and an animal shelter within this settlement. The excavator suggested two early medieval occupation phases, although he admitted the possibility that the distinction between primary and secondary phases may be inaccurate as not all of the structures could be stratigraphically related to each other due to soil and sand erosion. Two distinct Hiberno-Scandinavian settlements (a tenth century one; and an eleventh/early-twelfth century one) have been identified within O'Kelly's second phase recently.

O'Kelly's primary occupation phase consisted of five circular buildings (Houses 2, 3, 4, 5 and 8), fifteen cairns, six animal shelters and all but four of the field walls. The five circular houses appear to have been built directly on the turf surface of the original boulder clay and were marked only by the remnants of their foundation courses.

Excavations at House 2 (6.5m in internal diameter) revealed a later structure within this building, which in turn appears to have been cannibalised for field walls. No internal hearths or habitation refuse was recovered within either structure. The primary field walls were formed of upright stones, one stone in thickness and were poorly preserved, surviving to a maximum height of 0.50m. They were all built directly on the original turf layer covering the boulder clay or on outcropping rock surfaces.

The cairns were composed of small stones, resting on the original boulder clay. The excavated cairn yielded no finds and measured 3.5m in diameter and survived to a height of 0.5m. The cairns of field-stones were interpreted as possible evidence for a tillage economy in Phase I; a theory supported by the re-use of two quernstones in the walls of House 1 from Phase II.

After an accumulation of sand, the primary settlement appears to have been abandoned for a period of time before a Hiberno-Scandinavian settlement was built on the site. The earliest Hiberno-Scandinavian settlement was represented by two roughly rectangular structures (House 6 and House 7), dated to around the tenth century. Finds from near these buildings included a probable tenth-century soapstone bowl, a type of tenth-century ringed pin produced in Hiberno-Scandinavian Dublin, a hollow bone cylinder commonly found in Hiberno-Scandinavian urban contexts, and a type of rotary whetstone found in the North Atlantic Scandinavian region.

The second Hiberno-Scandinavian settlement was at House 1, 300m distant from Houses 6 and 7, and was dated to the eleventh/early-twelfth centuries. House 1 consisted of a sunken-floored dry-stone built circular house (11m externally) with central hearth with a smaller rectangular adjunct (4.5m by 3m internally) with its own hearth (Fig. 149). It represented a

unique mix of architectural concepts from the native Irish and Hiberno-Scandinavian urban building traditions.

A lintel from the stone-lined eastern entrance bore a runic inscription dating to A.D. 1050 or perhaps later. Finds from the habitation deposits inside the main circular building included a polished bone or ivory cruciform-headed pin of Scandinavian character, an eleventh/thirteenth- century bone comb, an eleventh/twelfth-century bronze disc-headed pin of Scandinavian type, three bone points, an antler ring, four iron knives, a line sinker and two net sinkers.

O'Kelly's secondary phase of occupation also comprised two animal shelters and four field-walls. One of these small animal shelters (2m by 1.2m internally) was excavated 50m to the north of House 1. The structure contained roughly-built low walls and revealed no evidence for any trace of fire or associated domestic activity. The secondary field walls differed to the earlier walls in that they were formed by a double line of upright stones.

After another accumulation of sand, the secondary occupation phase appears to have ended for a period of time before a number of poorly built, possibly late medieval, structures were erected over both rooms of House 1. Finds from these structures included an iron knife of indeterminate type as well as animal bone, limpet, periwinkle and a fragment of an adult human jaw.

Numerous lumps of iron slag as well as vitrified clay from the lining of a small furnace and some fragments of *tuyères* were recovered in a scatter of charcoal at the western end of the settlement. Middens of limpet and periwinkle were associated with almost every building on the site from both phases.

Tillage appears to have been practiced during the earliest occupation phase though a greater emphasis on stock-raising during the second period was suggested by the recovery of cattle, pig and sheep bone from inside House 1; and fishing was also practiced during the second period as indicated by fish bone and the net and line sinkers from House 1.

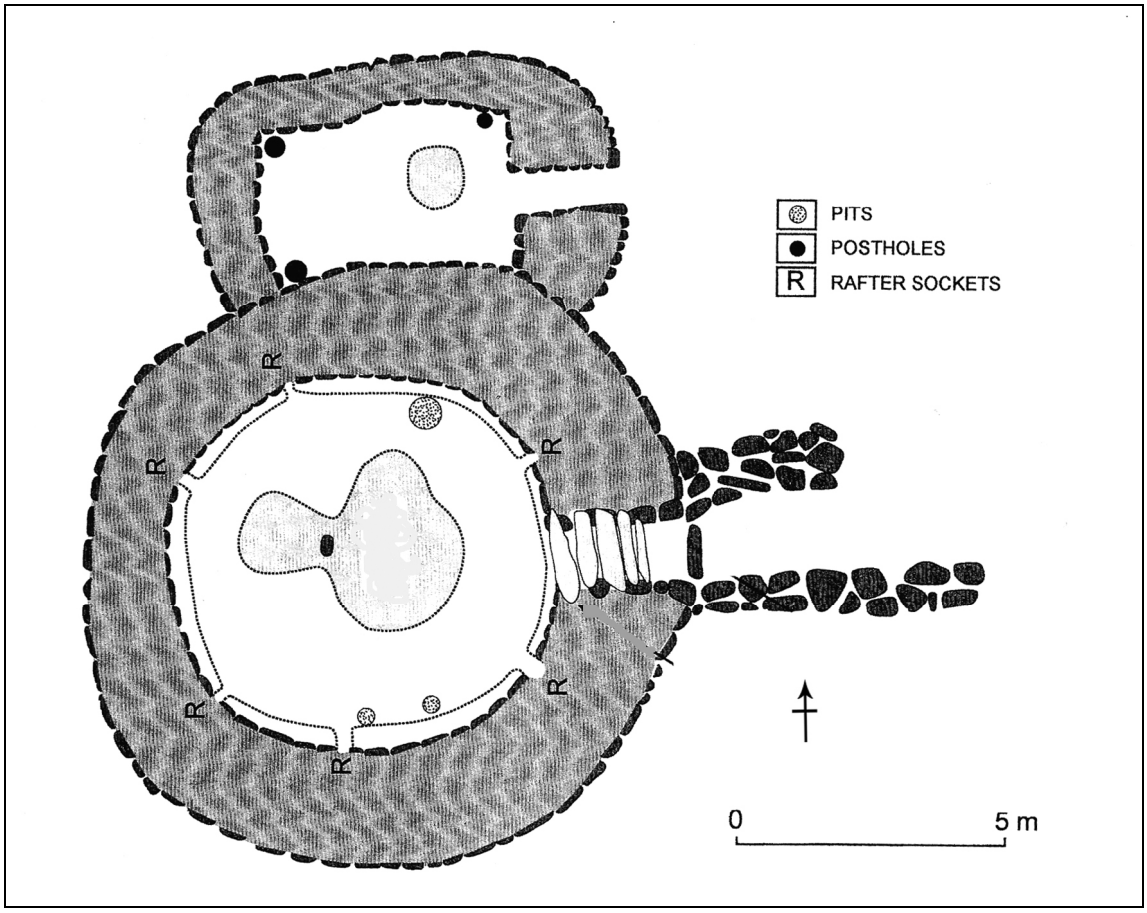


Fig. 163: Plan of House 1 at Begenish, Co. Kerry (after O'Kelly 1954-6, 164).

References:

O'Kelly, M. J. 1954-6. An island settlement at Beginish, Co. Kerry. *Proceedings of the Royal Irish Academy Section C*, 57C, 159–94.

O'Kelly, M. J. 1961. A stone bowl of Viking type from Beginish Island, Co. Kerry. *Journal of the Royal Society of Antiquaries of Ireland*, 91, 64.

Sheehan, J., Hansen, S. S., & Ó Corrain D. 2001. A Viking Age maritime haven: A reassessment of the island settlement at Beginish, Co. Kerry. *Journal of Irish Archaeology*, 10, 93–119.

Bray Head, Valentia Island
Early Medieval Unenclosed Settlement Complex
Grid Ref: **V31743121 (34174/73121)**
SMR No: **KE-087---**
Excavation Licence: **93E0121, 94E0119, 95E0166, 97E0278 & 01E0814**
Excavation Duration/year:
Site Director: **A. Hayden & C. Walsh (Archaeological Projects Ltd.); G.F. Mitchell (Trinity College Dublin)**

A rich agricultural palimpsest landscape of unenclosed early medieval houses and kilns, broad medieval furrowed fields with lynchets and a fifteenth to seventeenth-century house cluster probably associated with narrow ridge and furrow of roughly the same date was uncovered during a series of excavations on the southern slopes of Bray Head, the most westerly projection of Valentia Island, just off the southern tip of the Iveragh peninsula. The excavations were financed by grants from Trinity College Dublin (1993-95) and funding from the Department of the Environment (1997-2001). The buildings and ridges and furrows pre-dated an early nineteenth century track and the banks aligned on it.

The early medieval complex comprised over 32 huts and structures, mainly in two house clusters. The group of best preserved buildings at the west end – the 'west settlement' (Fig 164: 1135, 1136, 1137, 1138, 1142 and 1457) - has been briefly described by Westropp (1912), Henry (1957) and O'Sullivan & Sheehan (1996). The remaining structures (in Roman numerals) across Bray Head were identified during field-walking by the excavators beneath late medieval cultivation furrows across the southern slopes, particularly at the eastern end – the 'east settlement'.

The early medieval excavated evidence (1993-99) comprised a group of eleven early medieval houses (1-11) and a corn-drying kiln on steeply sloping ground at the north-eastern end of an area of broad medieval ridge and furrows (Fig. 164: 1-11 and kiln). The sites were situated within a large polygonal enclosure measuring 100m by 100m. Houses 1-9 were built in five clear phases with a noticeable shift from round/oval to rectangular buildings at the settlement. The excavation identified a progression through time from the use of vertically set masonry to the use of horizontally laid masonry at the base of the houses' walls. Though no stratigraphic links could be established between the structures at the northern and southern ends, the buildings are described below in rough chronological order.

House 1 was located at the south-eastern side of the excavated area and appears to have been the earliest building of the group. It was oval in shape and measured at least 6.7m by 5m. Its walls measured between 0.9m and 1.1m in thickness, and were originally constructed by two lines of vertically-set stones set in trenches which retained a mass of sod and stone. The doorway was at the eastern end of the building. There was no trace of a laid flooring or internal hearth. A small piece of burnt animal bone and charcoal were recovered from the top surface of a thin layer of grey silty friable clay which overlay most of the interior. The finds occurred at the base of a layer of brown stony loam which overlay the robbed out walls of the building.

House 3 appears to have been roughly circular in plan measuring 7m-7.5m in diameter. It contained neatly built dry-stone walls, between 1m and 1.2m wide, set into a trench. The basal stone of a rotary quern was recovered on top of the wall and it is unclear if it was placed there after the destruction of the building or originally incorporated into the wall. A stony layer of carbonized material (probably the final habitation of the structure) was uncovered in the interior beneath the stone collapse. An area of low terracing was uncovered to the south of Houses 2 and 3.

House 2 was uncovered beneath Houses 6 and 7, and was truncated at its southern end by House 4. The remains indicate a circular structure (3.4m-3.6m in diameter internally) composed of walls of large un-mortared stone (0.9m-0.95m thick). An annulus (0.8m-0.9m in

width) appears to have originally encircled the structure and consisted of redeposited boulder clay revetted by a stone facing set in a shallow trench. A layer of burnt material and stone was uncovered in the building's interior, and a small spud stone was uncovered set into the floor on the inside of the north jamb of the doorway.

House 4 was located in the centre of the excavated area and survived relatively intact though its southern half had been trunctuated by House 8. The house was roughly circular in shape and measured 6.2m by 5.4m internally. The walls of House 4 were built using a variety of methods involving conventional horizontal dry-stone masonry as well as the use of vertical-set slabs in narrow trenches which anchored cores of insulating sod, small stones and redeposited sub-soil. A splayed door opening was located at the southeast side of the building and was as originally defined by large upright slabs.

Various phases of activity were identified within House 4 with some pre-dating the structure. Two parallel stone-lined drains extended from the house downslope and were dug before the walls and door entrance was built. A partially earth-cut souterrain was dig into the hillside and accessed from the north side of House 4. A large number of pits, postholes, slots and lines of stakeholes were uncovered in the interior of House 4 and may have formed part of supports for a roof, internal partitions and possible structural elements, e.g. raised bedding or seating areas. Various occupation deposits and a secondary hearth were also excavated.

House 6 was located at the north end of the excavated area and was partly truncated by House 7 at its southern and south-eastern sides. The house was roughly rectangular in shape (5.2m by 5.8m internally), and its walls appear to have been a mixture of conventional horizontally-laid dry-stone masonry and vertically-set slabs in its individual walls. Four small un-lined drains capped with flat stone flags were uncovered in the interior and exited the structure beneath the entrance. A series of occupation deposits and an internal hearth - identified as a deposit of ash- were excavated. Internal features consisted of a small number of postholes, scatters of stakeholes and two pits. A small deposit of fish bone and sea shells (limpets and periwinkles) was found among the collapsed rubble over the building.

House 7 was located at the north end of the excavated area and partly cut House 6. Only its western and south-western walls survived but trenches marked the line of the northern wall and an internal north-south aligned wall were uncovered. The building measured at least 4.6m by 4.3m, and its dry-stone walls (up to 0.8m wide) consisted of large slabs set upright at the base of the internal faces of the walls with horizontally-laid masonry completing the upper parts of the internal face as well as its external face. One un-lined drain capped with flat stone flags extended from the northwest corner of the building southwards for approximately 3.6m to a pit, probably intended to act as a sump. A pit outside the southwest corner of the building contained a fragment of a quern stone. A stone-capped drain extended on a north-south line to the west of the building.

House 8 was located at the centre west side of the excavated area and partly overlay House 9 at its southern end. Only part of its western and southern walls survived with the western end of the north wall evidenced by a trench cut into the hillside. The building measured 5.1m by 4.8m internally, and its walls were 0.7-0.8m wide, built exclusively of horizontally-laid masonry. A sump and a series of unlined drains capped partly with flagstones were uncovered within the interior. A series of occupation deposits and internal features- pits, stakeholes and two hearths- were also excavated within the interior. A north-south unlined drain was also excavated immediately outside the west side of the building.

House 5 was located at the southeast side of the excavated area. It overlay drains extending southwards from Houses 4 and 8 and was truncated by late medieval agricultural activity and possibly House 9. Most of the masonry of its walls had collapsed though the structure was probably rectangular in plan originally. The surviving section of the house measured 5m by 3m, and no finds or burnt material were recovered from the interior.

House 9 was located at the southwest side of the excavated area and was truncated by a small enclosure scarped into the hillside at its southern extent. Its internal dimensions were approximately 4.6m by 5m, and a doorway was located in the eastern wall flanked by large horizontally laid blocks. Its walls, which survived to a maximum of 1.1m thick and 0.7m high, were built exclusively of horizontally-laid masonry. No laid floor survived and the interior was heavily disturbed by later cultivation. A possible drainage channel defined by a gully (1m-1.4m wide) was uncovered to the west of the house.

The much disturbed basal remains of a possible corn-drying kiln were excavated within the large polygonal enclosure, approximately 15m to the north of the cluster of houses. It consisted of a rectangular block of masonry containing a circular chamber (1m diameter) at its west side and a rectangular stone-lined passage at the southern end. The kiln overlay one of two excavated drains which would have kept the area of the possible drying chamber dry. Charcoal from one of the drain produced a radiocarbon date of A.D. 934 ± 110. Charcoal from the excavated kiln yielded a two sigma radiocarbon date of A.D. 710-740 or 770-1220. Three cultivation furrows aligned north-south cut into the kiln. The excavated structure compared closely in plan and dimensions with a better preserved kiln at the southern extent of the western settlement

House 10 was 11 were revealed during excavations in 1999. They were poorly preserved circular structures (Hayden 1999:324).

A circular house (IV) (3.5m in internal diameter) was excavated to the west of the cluster of houses (1-9) on sloping ground close to an area of marshy ground. Like Houses 1 and 4, its walls were constructed by two lines of vertically-set stones set in trenches which originally retained a mass of sod and stone. A paved pathway led to the door of the house at its south-eastern side. To the north (uphill) and east side of the house were a number of unlined drains which diverted water downslope around the building. A series of internal features and occupation deposits were excavated. A stone-capped drain extended from a pit in the centre of the house to its wall trench. Associated with the pit were a posthole and a number of small stakeholes. Charcoal from the base of a stone-lined hearth in a later occupation deposit produced a two sigma radiocarbon date of A.D. 676-984. From the house included two flat stone discs, broken whetstone and a fragment of a carbonized wooden vessel.

The remains of another large, early medieval, stone circular house with a souterrain were uncovered 100m west of the early medieval complex of houses. The circular house was replaced by a sub-rectangular, bow-sided building. The walls of the latter consisted of regularly spaced large posts. It was suggested that the shape and construction of this house indicated a possible Scandinavian origin. The building was in turn overlain by the truncated remains of a medieval, rectangular, stone-walled house (Hayden 2000:0423).

A medieval (i.e. eleventh/fifteenth century-) agricultural landscape of broad ridges and furrows (up to 4.0m wide) was uncovered to the east of a possible medieval drainage channel along the southern slopes (Fig. 164). The broad ridge and furrows were contained within eleven fields defined by large earthen and stone banks and all had developed lynchets varying from 1.3m to 2.0m at their lower ends. No medieval farmstead could be definitely associated with the broad ridge and furrows.

Two stone and earthen field banks (Fig. 165) were recorded to the south and southeast of the house cluster (1-11) and were built from a level under or within an old plough soil. The south-eastern field boundary formed the fourth side of the polygonal enclosure (A) surrounding the house cluster 1-9. Part of a quernstone and stone socket was recovered from the southern bank. The fields delimited by these banks contained broad ridge and furrows which cut through and overlay the early medieval houses and corn-drying kiln. Charcoal from one of the furrows overlying the corn-drying kiln yielded a two sigma radiocarbon date of A.D. 1292-1324 or A.D. 1332-1396. A series of other trenches were also excavated in various other fields on the southern slopes.

The fifteenth- to seventeenth-century settlement comprised a 70m east-west 'street' of house platforms west of the early medieval house cluster. The house platforms- five rectangular (II-VI) and two circular (VII-VIII) structures- overlay the broad medieval ridge and furrow in fields B and C as well as overlay and slighted the upper bank of Field B and extended west over the north bank of field C. The house cluster has been identified with a settlement marked as 'Crompeol' on the southwest corner of Valentia Island on the early seventeenth century 'Carew' map of the area.

The narrow ridge and furrow on the southern slopes overlay the broader cultivation furrows where they occur close together and were mainly concentrated to the west of the possible medieval drainage channel. They appear to have been worked for a short period between the fifteenth/seventeenth centuries and are probably roughly contemporary with the 'Crompeol' settlement. A possible mill site was uncovered 100m southwest of the 'Crompeol' settlement and radiocarbon dates indicate it was roughly contemporary with the 'Crompeol' settlement.

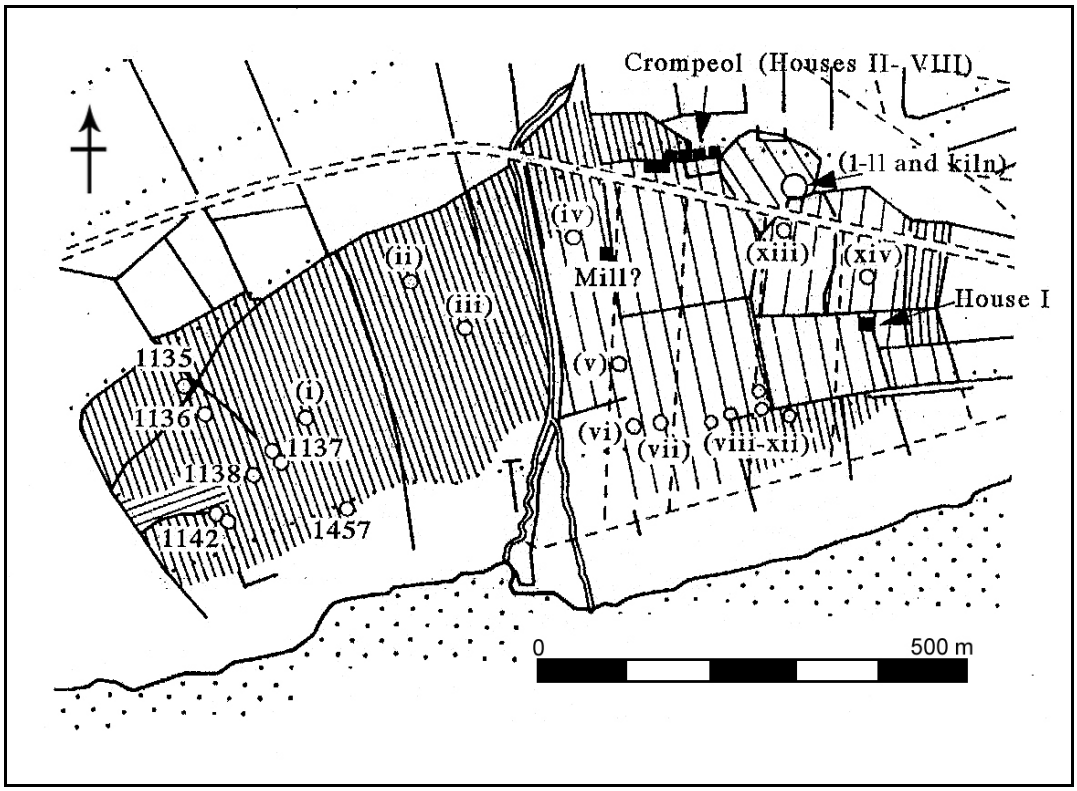


Fig. 164: Plan of Bray Head- houses, kilns and possible mill site (after Mitchell et al. 1998, 47).

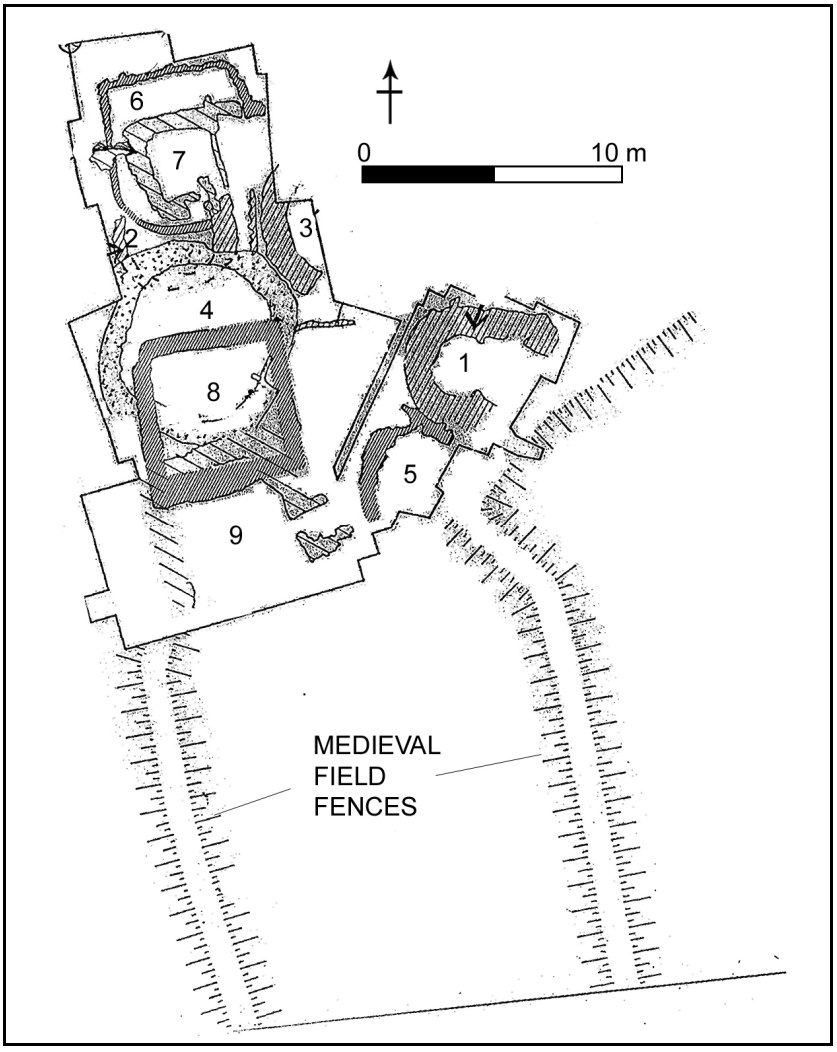


Fig. 165: Plan of early medieval cluster of Houses 1-9 (after Mitchell et al. 1998, 53).

References:

Hayden, A. 1993. Excavation of a possible Corn drying Kiln and Stone hut, Valentia Island, Co. Kerry, Dublin (Unpublished Report for Archaeological Projects Ltd.).

Hayden, A. 1998:267 Bray Head, Valentia Island, www.excavations.ie

Hayden, A. 1999:324 Bray Head, Valentia Island, www.excavations.ie

Hayden, A. 2000:0423 Bray Head, Valentia Island, www.excavations.ie

Hayden, A. 2001:549 Bray Head, Valentia Island, www.excavations.ie

Mitchell, G. F., A. Hayden & C. Walsh 1998. A tattered agricultural palimpsest- Ten centuries of farming on Bray Head, Valencia Island, Co. Kerry, Dublin (Unpublished report for Archaeological Projects Ltd.).

Caherlehillan, Co. Kerry
Early Medieval Ecclesiastical Enclosure
Grid Ref: **V571834**
SMR No: **70:43**
Excavation Licence: **93E0073**
Excavation Duration/Year: **1992-2004**
Site Director: **J. Sheehan (UCC)**

Caherlehillan is a small enclosed ecclesiastical site located 10 km from Cahersiveen along the northern top of the Iveragh peninsula. The site is situated on a small level terrace at the north side of a valley formed by the Mullaghnarakill and Teeromoyle mountains and commands extensive views to the west along the course of the Fertha River and towards Valentia Harbour. The founder of the early ecclesiastical site is unknown. The Fertha valley contains a large number of archaeological sites including the remains of a substantial *cathair* or stone fort and ancient field systems and isolated huts, some of which appear to be early medieval in date (O'Sullivan and Sheehan 1996, 173; Harte 2002). Research excavations were undertaken at the site by John Sheehan from 1992-2004 as part of an undergraduate training programme of UCC's Department of Archaeology. Various trenches were excavated in the interior and across the enclosing elements revealing evidence for a short-lived late fifth-seventh century enclosed site comprising a church, cemetery and domestic sector. This was abandoned sometime in the eighth century, before being finally re-used as a *ceallunach* in the early modern period.

Only a portion of the original ecclesiastical enclosure survived along its southern and south-eastern sides with modern field walls overlying its western side and a roadway bisecting the site across its northern portion. It appears to have originally enclosed a space approximately 30m in diameter with an infilled entrance along the eastern side. The surviving enclosing element at the southern end of the site consisted of a rubble built wall with an outer facing of large horizontally laid slabs and measured about 1m in height, 1.05m wide with a 0.2m thick layer of internal stone collapse. The entrance and a portion of the enclosing wall at the southern end of the site were excavated. Two test trenches were also excavated across a low tree-lined bank in the field to the north of the bisecting roadway and revealed evidence for a stone wall with similar morphology and dimensions to the original ecclesiastical enclosure (Sheehan 2003).

The north-eastern portion of the interior is locally known as the *ceallunach* or children's burial ground and it was here where all the early medieval ecclesiastical structures and features were revealed. The *ceallunach* was defined as a slightly raised area marked by a large number of uninscribed grave-markers. The remains of a corner-post shrine and two upright early medieval cross-slabs – one with the overall design of a flabellum surmounted by the profile of a bird – were situated in its south-eastern quadrant. Both of these slabs were excavated and appear to have been in secondary contexts. Prior to excavation, the shrine consisted of a rectangular mound 2.9m north-south by 1.9m east-west largely composed of stone, including quartz, and retained by substantial upright slabs set on edge.

The site was conceived, at its planning stages, as an enclosed church, cemetery and domestic sector with radiocarbon dates for this primary phase centring on the late fifth and sixth century. The earliest primary features on the site consisted of a number of substantial drainage trenches, the longest of which was at least 7.5m in length, 2m in width and up to 0.8m deep below contemporary ground level. They were virtually devoid of finds and appear to have only been left open for a short period of time before they were backfilled with a loose mixture of upcast spoil, stones and boulders. One of these drainage trenches produced a 2-sigma radiocarbon date range from the early fifth to early seventh century. The site's enclosing element was roughly contemporary with these drainage trenches. The enclosing wall produced a 2-sigma radiocarbon date range from the early fifth to later seventh century and was found to directly overly the drainage trenches in two places across the site.

Another primary feature of the site comprised a rectangular wooden posthole structure, defined by corner postholes, which was also found to directly overlie one of the drainage trenches. This structure measured 3.8m X 2m and was interpreted as a timber church a conclusion supported by its shape, orientation and alignment with a number of burials. An internal post-hole positioned along the longer axis of the structure about one third of the way from its eastern end was interpreted as a possible wooden altar supported on a single freestanding post. A drain was also found and identified as a possible *sacarium* or ablution drain. A slab-covered sump lay directly outside the doorway and it was suggested that it may have been used to drain the entrance area outside the church. A context overlying the wooden church produced a 2-sigma radiocarbon date range from the early seventh-ninth century indicating that the church was probably in use sometime earlier than this date range (Sheehan 2009, 196-97, 204).

A total of eighteen early medieval burials were uncovered in the excavated areas to the east, west and south of the wooden church with the main concentration to the south and east, the area where the later shrine was located. Most of these graves were aligned with the longer axis-line of the church indicating they were contemporary with it. Three separate type of graves existed: simple dug graves, lintel graves and slab-lined cists. No bones survived from any and no consistent chronological pattern emerged for the three types of graves. One definite slab-lined cist was excavated. Although no stratigraphical relationship was established between it and the other graves, O'Brien (2003, 66) has suggested that this type of grave dates to the fifth and sixth centuries.

One of the oldest graves in the cemetery and the second oldest in the cluster of graves to the south of the church – where it cut through the *sacrarium* – was found to lie directly beneath the corner-post shrine. It was interpreted as a a 'special' lintel-type grave of a possible 'saint' or founder of the site as it lay directly beneath the later shrine, several of its side stones and lintels bore clear evidence of tooling and one of its covering stones at the head of the grave was in the form of a rough stone cross. Furthermore, this lintel-grave appears to have been the focus of some veneration resulting in the worn state of the upper edges of its side-stones and covering lintel; evidence probably 'consistent with devotional pilgrimage activity at the grave' (Ó Carragáin 2003, 134; Sheehan 2009, 198-99).

The enclosed church and cemetery were associated with an early domestic sector uncovered in the centre and southwestern quadrant of the site. Stake-and post-holes near the centre of enclosure indicated the existence of a conjoined circular building and other possible structures (Sheehan 1996a; 1997; 1998, 1999b). The long axis of the conjoined building ran NE/SW and both its houses measured just over 3m in diameter each. The central area of the conjoined house was disturbed by a pit which contained two coins dating to the reign of Edward I in the late thirteenth century and the northwest corner was disturbed by *ceallunach* burials. There were no artefacts directly associated with the conjoined house except occasional rubbing stones (Sheehan 1999b).

At least one rectangular posthole structure was excavated in the southwestern quadrant of the site close to a metalworking area (Sheehan 1998, 2000). The conjoined house and rectilinear structure(s) as well as the area of the shrine were all associated with B and E ware, though the imported pottery was most frequently found in the southwestern sector. Seventh-century glass was also associated with the buildings (Laing 2006, 230). The discovery of Bii Mediterranean pottery in the site confirms that the domestic sector was already in use by the mid-sixth century (Sheehan 2009, 196; Doyle 2009, 40-41).

The southwestern quadrant of the site appears to have been used as a smelting and possibly smithing area indicated by the evidence for iron slag, crucibles, furnace bottoms, possible furnace areas, hearths and a possible stone anvil (Sheehan 1993b, 1995a, 1995b, 1996b, 2000). Features excavated particularly within this area, included pits with burnt sides and bases containing iron slag, charcoal, crucibles, animal bone, refuse pits and spreads with dumped metalworking waste and the remains of a north-south lintelled drain (Sheehan

1996a, 1999b, 2000). This latter feature cut through postholes and a metalworking deposit and contained moderate inclusions of charcoal, burnt animal bone fragments and iron slag (Sheehan 2000, 4).

The site appears to have continued to develop in the later sixth and seventh century. After the main period of metalworking activity, the area appears to have been backfilled with a large dump of material which included B and E ware pottery, slag, whetstones, spindle whorls, corroded iron objects and burnt animal bone. This dumped material also overlay a number of the structural features and appears to indicate the abandonment of the site (Sheehan 1995b, 1999b). Two dates from contexts overlying the earliest features in the domestic sector of the site produced a combined sixth to eighth century radiocarbon date range when calibrated to 2 sigma (Sheehan 2009, 196). A number of burials, most noticeably three to the west of the wooden church, had a different orientation to the burials aligned with the wooden church. This could either suggest that they were aligned with a second unexcavated later church or that they were perhaps orientated on the 'corner-post' shrine.

This 'corner post' shrine was built directly above the 'special' lintel grave. It represented a structural elaboration of this grave and involved the construction of a roughly square stone box shrine - 1.9m x 1.9m and c. 0.8m high - formed of large sandstone slabs with pillars surviving at three of its corners. The excavation demonstrated that the 'corner post' shrine marked the location of the 'special' grave beneath but did not contain any translated remains. Based on this evidence Sheehan (2009, 199-200) has suggested that 'corner-post' shrines of this type in Kerry date to 'between the period when the 'special' grave was the primary focus of devotion', which at Caherlehillan appears to have been as early as the later 5th and 6th centuries, and 'the period when the cult of relics led to the construction of formal reliquary shrines' in the 8th century, such as 'A-roofed', or 'gable-shaped', structures.

The ecclesiastical site appears to have fallen out of use by the late eighth century, shortly after the 'corner post' shrine was built. Two Edward I coins from a pit in the centre of the site indicate intermittent medieval activity before its re-use as an early modern *ceallunach* or children's burial ground. The *ceallunach* consisted of a large number of small graves, many producing fragments of human bone and associated with water-rolled quartz pebbles. A number of distinct phases of burial were identified: the earliest contained both stone-lined and earth-cut graves, the second phase featured stone-lined examples, while the third and most recent level of burials contained earth-cut graves with some remains of coffins. The modern road boundary flanking the northern side of the site was found to contain a child's cranium, indicating that the road's construction disturbed the *ceallúnach* in this area. The *ceallunach* fell out of use by the later nineteenth century.

Finds from the site were mainly recovered from the domestic sectors in the central area and particularly within the southwestern quadrant of the enclosure and included fragments of stone spindle whorls, perforated stone discs, whet-, hone- and rubbing-stones, corroded iron objects and fragments, a possible ring-pin fragment, glass beads, flint, large quantities of imported E and B ware pottery, two late thirteenth-century Edward I coins, crucibles, iron slag and animal bone. Shroud pins, nails and buttons were found associated with a number of the early modern *ceallunach* burials and one of these later graves also re-used a fragment of an early medieval cross-slab bearing an encircled cross-of-arcs and a stylised bird.

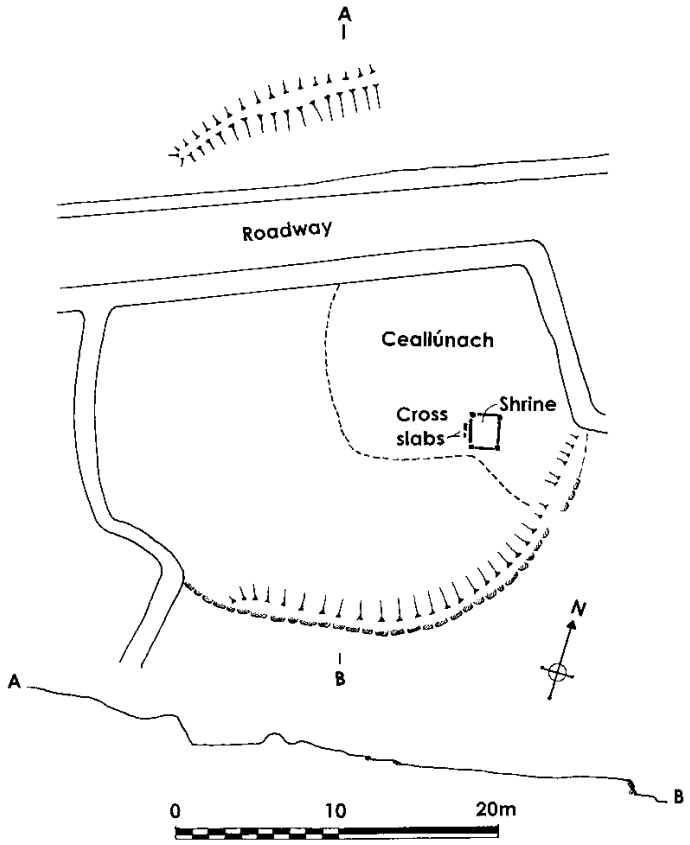


Fig. 166: Plan of Caherlehillan Ecclesiastical Enclosure (After Sheehan 2009)

Radiocarbon Dates

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	14C Date	Cal. 2 Σ
GrA-24462	Sample from one of the primary drainage trenches on the site	1490 ±40 BP	A.D. 436-489; A.D. 513-516; **A.D. 530-648**
GrN-28343	Sample from the site's enclosing element	1445 ±70 BP	**A.D. 431-685**
GrN-28344	Sample from a context overlying the wooden church	1285 ±80 BP	**A.D. 610- 898;** A.D. 921-944
GrN-28342	Sample from contexts overlying the earliest features in the domestic sector	1425 ±35 BP	**A.D. 570-661**
GrN-28341	Sample from contexts overlying the earliest features in the domestic sector	1310 ±40 BP	**A.D. 647-778**

References

Doyle, I. 2009. Mediterranean and Frankish pottery imports in early medieval Ireland, *Journal of Irish Archaeology* 18, 17-62.

Harte, A. 2002. *The Field Systems and Archaeological Landscape at Caherlehillian, Co.Kerry: A* GIS *Approach*, MA thesis, Department of Archaeology, UCC.

Laing, L. 2006. *The archaeology of Celtic Britain and Ireland: c. AD 400 - 1200*. Cambridge: Cambridge University Press, 230.

Monk, M. A. 1998. Early Medieval Secular and Ecclesiastical Settlement in Munster, in M. Monk and J. Sheehan_(eds.) *Early medieval Munster: archaeology, history, and society*. Cork: Cork University Press, 33–52.

O' Brien, E. 2003. Burial practices in Ireland: first to seventh centuries A.D., In J. Downes & A. Ritchie (eds) *Sea Change: Orkney and Northern Europe in the later Iron Age, A.D. 200-800*. Angus: Pinkfoot Press, 63-72.

Ó Carragáin, T. 2003. A Landscape Converted: Archaeology and early Church organisation on Iveragh and Dingle, Ireland', in M. Carver (ed.) *The Cross Goes North. Processes of Conversion in Northern Europe, AD300-1300*. York: Woodbridge, 127-152.

O'Sullivan, A. and Sheehan, J. 1996. *The Iveragh Peninsula: an archaeological survey of south Kerry*. Cork: Cork University Press.

Sheehan, J. 1992. Caherlehillan, Co. Kerry: Interim Report, 1992 Season. Unpublished Report submitted for the DoEHLG.

Sheehan, J. 1993a. 1993:118, Caherlehillan, early ecclesiastical and ceallunach, Co. Kerry. www.excavations.ie.

Sheehan, J. 1993b. Caherlehillan, Co. Kerry: Interim Report, 1993 Season. Unpublished Report for the DoEHLG.

Sheehan, J. 1994. 1994:118, Caherlihillan, early ecclesiastic enclosure and ceallúnach. www.excavations.ie.

Sheehan, J. 1995a. 1995:133, Caherlehillan, early ecclesiastical enclosure, Co. Kerry. www.excavations.ie.

Sheehan, J. 1995b. Caherlehillan, Co. Kerry: Interim Report, 1995 Season. Unpublished Report for the DoEHLG.

Sheehan, J. 1996a. 1996:165, Caherlehillan, early ecclesiastical enclosure and ceallunach. www.excavations.ie.

Sheehan, J. 1996b. Caherlehillan, Co. Kerry: Interim Report, 1996 Season. Unpublished Report for the DoEHLG.

Sheehan, J. 1997. 1997:232, Caherlehillan, early ecclesiastical enclosure. www.excavations.ie.

Sheehan, J. 1998. 1998:268, Caherlehillan, early ecclesiastical enclosure. www.excavations.ie.

Sheehan, J. 1999a. 1999:326, Caherlehillan, early ecclesiastical enclosure. www.excavations.ie.

Sheehan, J. 1999b. 1999 Interim Report on the Archaeological Excavations at Caherlehillan, Co. Kerry. Unpublished Report for the DoEHLG.

Sheehan, J. 2000. Stratigraphic Report on the Archaeological Excavations at Caherlehillan, Co. Kerry. Unpublished Report for the DoEHLG.

Sheehan, J. 2002. 2002:0771, Caherlehillan, early ecclesiastical enclosure. www.excavations.ie.

Sheehan, J. 2003. 2003 Stratigraphic Report on the Archaeological Excavations at Caherlehillan, Co. Kerry. Unpublished Report for the DoEHLG.

Sheehan, J. 2009. A peacock's tale: Excavations at Caherlehillan, Iveragh, Ireland, in N. Edwards (ed.), *The Archaeology of the Early Medieval Celtic Churches*. Leeds: Maney, 191-206.

Church Island (Ballycarbery West td., Valentia Island), Co. Kerry
Early Medieval Ecclesiastical Settlement
Grid Ref: **V43057855 (043050/078550)**
SMR No: **KE079-032**
Excavation Licence: **03E1518**
Excavation Duration/Year: **Summer 1955; Summer 1956; 2004-05.**
Site Director: **M.J. O'Kelly (University College Cork); Alan Hayden (Archaeological Projects Ltd.)**

Church Island is a very small island at the mouth of Valentia harbour on the northern side of the Iveragh peninsula. The site is connected to the nearby island of Beginish by a sandbar at low tide. Excavations were undertaken over the course of two summers in 1955 and 1956 by means of a government grant and funds from University College Cork and revealed a series of early medieval churches, buildings, burials and an enclosing cashel with associated habitation and ironworking evidence (Fig. 167). Further excavations funded by the DoEHLG in 2004-05 exposed an elaborate terraced shrine mound on a high rocky knoll on the island.

Early monastic activity consisted of a wooden church and circular wooden hut; both probably contemporary with each other though there was no archaeological evidence to confirm this. The complete plan of the wooden church was not uncovered as the structure partly underlay the eastern part of the stone oratory. Five rock-cut postholes defined the line of the southern (3) and northern (2) side of a rectangular building (2m by 3m).

The wooden church was aligned with thirty-three burials which lay to the west and northwest. Eleven of the burials partially underlay the foundations of the stone oratory and were therefore clearly earlier than this later structure. Two bodies were placed in cist-like structures of stone with the remainder (31) in simple unlined graves.

Part of a circular wooden hut defined by an arc of stone slabs set on edge was uncovered on the western side of the circular stone house (1). The stones were deliberately set into the ground appear to have marked the limits of a roughly circular hut, approximately 6m in diameter which would have continued inside the area of the later stone house (Fig. 168).

The area within the arc and between it and the round house contained a layer of primary habitation refuse containing charcoal, winkle, limpet shells, animal bone and a large quantity of iron slag. A possible furnace-base inside the area of the subsequent circular stone house belonged to the ironworking activity associated with the primary building. A refuse spread containing iron slag was also uncovered outside the arc and to the west and northwest of it.

The second phase of monastic activity consisted of a rectangular stone oratory and a circular stone house. The stone oratory contained inclined dry-stone walls and a collapsed corbel-vaulted roof whose ridge was probably adorned by two stone finials recovered on the island. The oratory had original internal dimensions of 5.79m by 3.78m, and survived to a height of 3.3m. It contained a western doorway and two windows in the eastern and southern walls.

The inner side of the western paved doorway was fitted with a 'hinged' door defined by a heel-stone and a posthole on its northern and southern sides respectively. A thin spread of charcoal with a small quantity of periwinkle and limpet shells around its edge was uncovered in the interior's centre and may represent the remains of a single meal cooked at the time when the oratory was built. The stone oratory was aligned with a group of six burials outside its east end and two burials mid-way along the external base of its north walls.

The circular house (1) - internal diameter of 4.5m- contained stone walls surviving to a height of 3.1m and had a thatched roof supported by twelve postholes evenly spaced around the floor area just inside the base of the wall. An arc of stonework, two to three courses high

almost completely surrounded the stone house at a distance of 0.5m and was probably built to retain insulating sod for the building. An internal spread of habitation refuse, e.g. shells, carbonized grain and animal and fish bone, as well as a hearth of burnt material just inside the door were revealed in the interior of the house. Nine postholes in the area directly opposite the door were interpreted as supports for some sort of wooden bed. An internal stone-flagged drain ran out under the entrance passage and contained habitation refuse in its upper fills, e.g. shells and fragments of bone.

A partially stone-lined well was excavated just south of the stone house. This feature could be of relatively recent date and from its fill were recovered fragments of hide, probably cattle and several quartz pebbles. The inhabitants appear to have thrown their food waste- shells and animal bone- out the door of the circular stone house and in time this refuse developed as a large spread down the slope of the island towards the enclosing cashel and rectangular house.

Finds from the circular stone house and its associated habitation refuse included a quernstone, shale axe, net-sinker, whet-stone, three pieces of flint, bronze strip, fourteen large brad-like iron nails, seven iron knives and two perforated bone points.

Other excavated monastic structures comprised a cross-inscribed slab bearing ogham inscription and a significant terraced shrine mound on a rocky knoll forming the highest point of the island. The area of the shrine mound was partly investigated by O'Kelly who suggested that the terraced walls may have functioned as a garden terrace. O'Kelly also identified a stone cist with corner stones in a hollow to the southeast of the terraced area which has been identified as a possible corner post shrine. O'Kelly also observed that the area of the shrine and terraced walls produced a significant collection of quartz pebbles which he suggested was relatively recent in date.

Excavations by Hayden in 2004/5 revealed that the area of the rocky knoll consisted of an elaborate terraced shrine mound, which measured in excess of 26m in length by more than 20m in width. Over 9 terraces were excavated, the edges of which were defined by low stone walls and their surfaces partly paved with Valentia slate and covered with white quartz pebbles. The terraced shrine mound was found to extend beneath the circular stone house (1) to the north.

The uppermost terrace had been removed though may have originally held a tent-shaped gable shrine composed of large slabs of Valentia slate. O'Kelly's possible corner post shrine stood at the south-east corner of Terrace 5. Several burials and a stone-lined charnel pit were excavated across the various terraces. A path was also identified which ran upslope from the south-eastern entrance in the cashel wall up the eastern end of the terraced mound.

The third phase of monastic activity consisted in the construction of a rectangular stone house (Fig. 169) and an enclosing cashel wall. Both this house and the enclosing cashel wall post-dated the circular stone house as they were built upon the deposit of refuse associated with this building, but the circular stone house was still in use after the cashel wall was built since the spread of refuse continued to build up for a height of 1m against the wall's inner face.

The rectangular house (5.15m by 3.8m internally) was situated on the north-eastern edge of the island and also pre-dated the construction of the cashel wall. It contained an internal hearth, externally rounded corners and two doors in each of the building's short sides. Its walls, which survived to a maximum of 1.5m wide and 1m high, consisted of an inner and outer built facing with a rubble and earth core. Along with the substantial walls, fifteen internal postholes, thirteen set close to the wall base, provided supports for a roof structure. The floor was covered with a layer of habitation refuse consisting mainly of limpet and periwinkle shells with some animal and fish bone. Finds associated with the rectangular house

included two hammer-stones, perforated stone, two pieces of flint, bronze strip, eight large brad-like iron nails and a socketed iron spade or mattock,

A water-collecting pit was excavated near the centre of the base of the southwest wall of the rectangular house. One burial was placed outside the south-western wall in a grave made from the refuse belonging to the circular stone house. It directly overlay the end of the water-collecting pit though was truncated - only skull remained intact - when the cashel wall was built.

Excavation revealed three stones that may represent the remains of a possible pathway which led uphill from the western door of the rectangular house directly towards the circular stone house and oratory. This pathway would have necessarily pre-dated the construction of the cashel wall. The rectangular house was also still occupied when the cashel wall was built because another later paved pathway curved around from its western doorway passing through a narrow entrance in the cashel wall and continuing to the western side of the island.

The cashel wall, which survived to a maximum width of 2m and up to 1m high, is still present for about two-thirds (83m) of its original circuit, and may have enclosed almost the whole habitable top of the island. Like the rectangular house, its walls comprised inner and outer stone faces with a rubble and earthen core. The cashel was clearly the last work of improvement done during the monastic occupation as it consists of an inner face only where it passes the rectangular house.

The final occupation phase consisted of post-monastic squatter activity involving the erection of a series of rough shelters or wind-breaks (Structures A-H on Fig. 167) on the northern, eastern and south-eastern tips of the island as well as inside the rectangular stone house. The shelters partly overlay the cashel walls. Sherds of late-thirteenth/fourteenth-century glazed pottery were found associated with the evidence for the shelter inside the rectangular stone house and indicate a possible medieval date for this phase of activity.

Burials were identified across the island with most being of indeterminate date. Some burials appear to have pre-dated the post-monastic enclosures and shelters at the northern and south-eastern end of the island though it is unclear if they were associated with the monastery. One long-cist burial at the north-eastern side of the island was built against the inner face of the cashel and post-dated it. Another burial inside the rectangular stone house appears to post-date the use of the building as a dwelling though pre-date the post-monastic squatter evidence.

Finds with no specific associations or in indeterminate/disturbed contexts from O'Kelly's excavation included a spindle-whorl, limpet-scoop, perforated disc, whet-stone, heel-stone, seven quernstone fragments, bronze bell fragments, bronze crutch-headed pin, three bronze pins, sheet bronze, iron sickle, iron knives, socketed cutting hook and a fragment of cloth from a stone cist underlying the stone oratory. An early Bronze Age tanged flint arrowhead was also recovered in excavations at the site of the terraced shrine mound in 2005.

The faunal assemblage from O'Kelly's excavations included the remains of cattle, pig, sheep, goat, small horse or pony and rabbit as well as the bones of cod, seal, otter, gannet, cormorant, goose, ducks, sparrows and finches. Evidence for oats barley, wheat and rye were recovered from deposits inside the circular stone house and oratory and indicate the importation of cereal grains from the mainland.

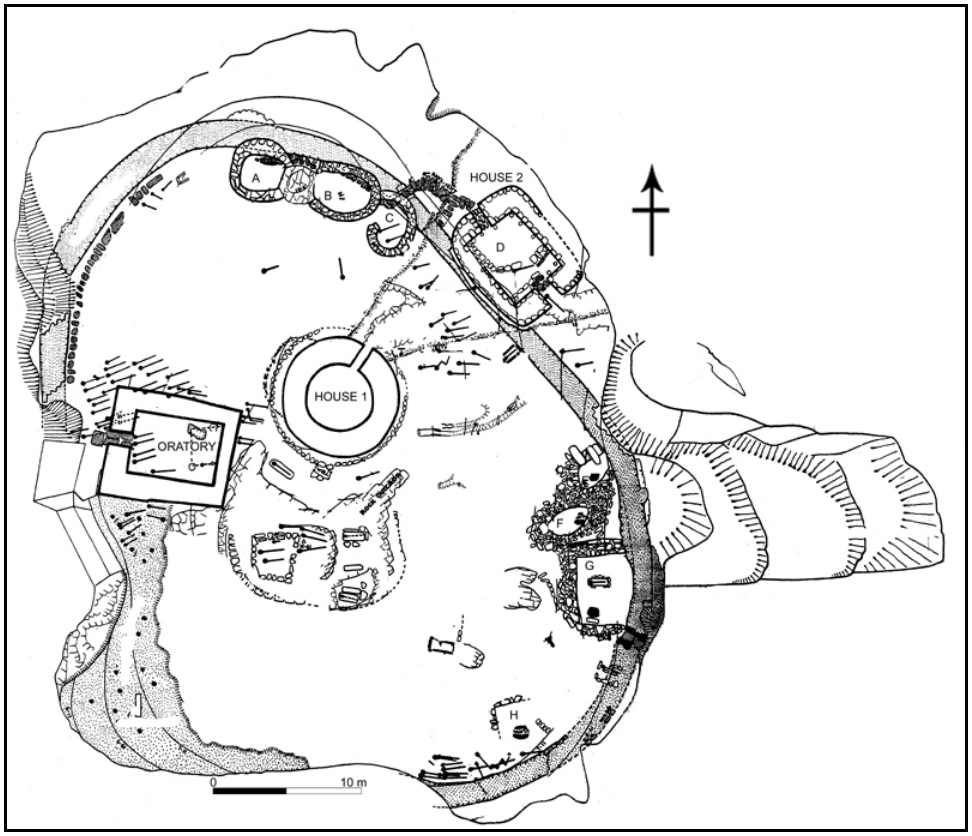


Fig. 167: Plan of Church Island, Co. Kerry (after O'Kelly 1957-59, Plate XVII).

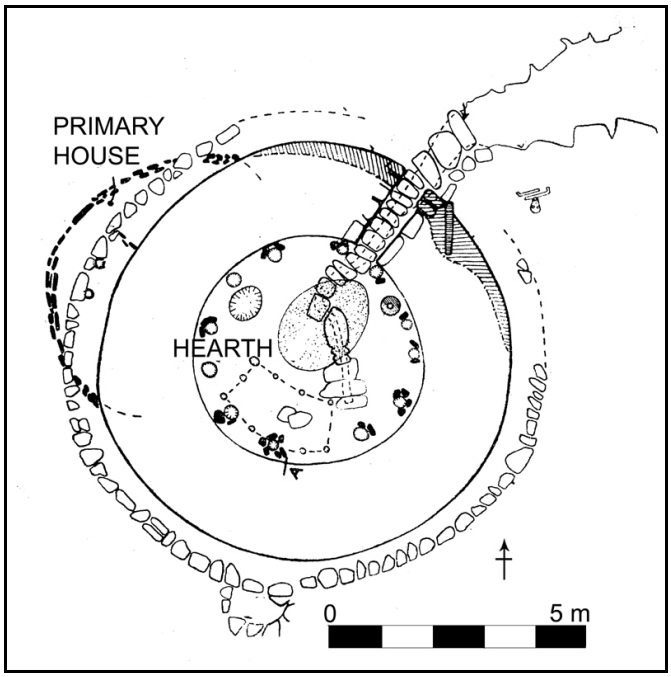


Fig. 168: Plan of House 1, Church Island, Co. Kerry (after O'Kelly 1957-59, 66).

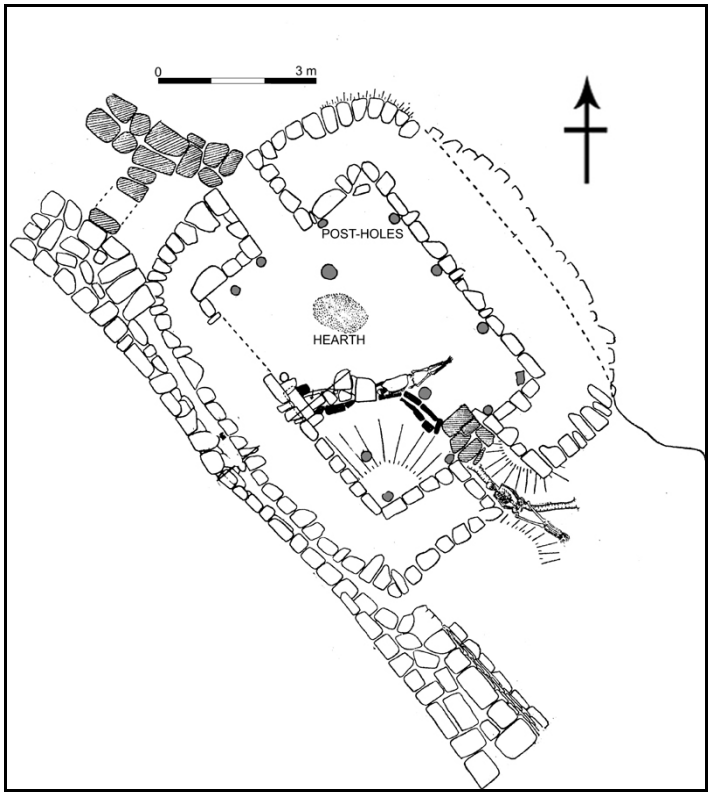


Fig. 169: Plan of House 2, Church Island, Co. Kerry (after O'Kelly 1957-59, 72).

References:

Hayden, A. 2004:0721. Church Island, Ballycarbery West, Valentia. www.excavations.ie

Hayden, A. 2005:664. Church Island, Ballycarbery West, Valentia. www.excavations.ie

O'Kelly, M. J. 1958. Church Island near Valencia, Co. Kerry. *Proceedings of the Royal Irish Academy Section C*, 59C, 57–136.

Clogher, Lixnaw, Co. Kerry
Early Medieval Settlement Enclosure & Burials
Grid Ref: **Q89502940 (08950/12940)**
SMR No: **N/A**
Excavation Licence: **04E0356**
Excavation Duration/year: **March & April 2004**
Site Director: **F. Coyne (Aegis Archaeology Ltd.)**

A previously unrecorded enclosure at Clogher was identified during initial monitoring and testing in advance of a residential development. The site was situated on a low hill surrounded by marsh on its northern and western sides, and revealed evidence for an enclosure with associated burials, a possible metalworking pit, key-hole shaped kiln and a complex of pits and posts-holes.

The excavated portion comprised just over half of the eastern side of the enclosure measuring 40m by 50m, and the original diameter of the enclosure was estimated at about 70m. Few definite archaeological features could be identified in the enclosure interior as the site had been heavily trunctuated by intensive agricultural activity in recent centuries (Fig. 170).

The earliest feature on site consisted of a small circular ditch (1.4m wide and 0.65m deep) which enclosed an area 21m by 10m. The site was subsequently remodelled and an outer ditch (3-4m wide and 1m deep) was constructed. This enclosed a large oval-shaped area (52.5m by 52m), although the full extent of this enclosure was not established. It was assumed that the entrance lay outside of the excavated area to the west, as no entrance was visible on the site. The ditch of this oval-shaped enclosure contained a sequence of fills along its entire length.

A number of pits, postholes and other isolated features were scattered across the site. The majority contained sterile deposits of unknown function and no structures could be identified from the postholes. Several curving features were excavated in the interior of the enclosure and may date to the original occupation of the site.

A small ironworking furnace was uncovered to the northeast of the enclosure and had been trunctuated by a modern drain. A key-hole shaped kiln was also excavated to the northeast of the enclosure.

The skeletal remains of at least 21 individuals with an additional ten possible grave-cuts were concentrated in the south-western quadrant of the enclosure interior. All the grave-cuts were aligned east-west, apart from one north-south example. The human remains were poorly preserved due to the acidic conditions of the soil although men, women and children were all represented.

A large number of cultivation furrows, drains and linear trenches criss-crossed the site and appear to have been associated with later agricultural activity, particularly relating to the use of the site as a domestic garden in recent centuries.

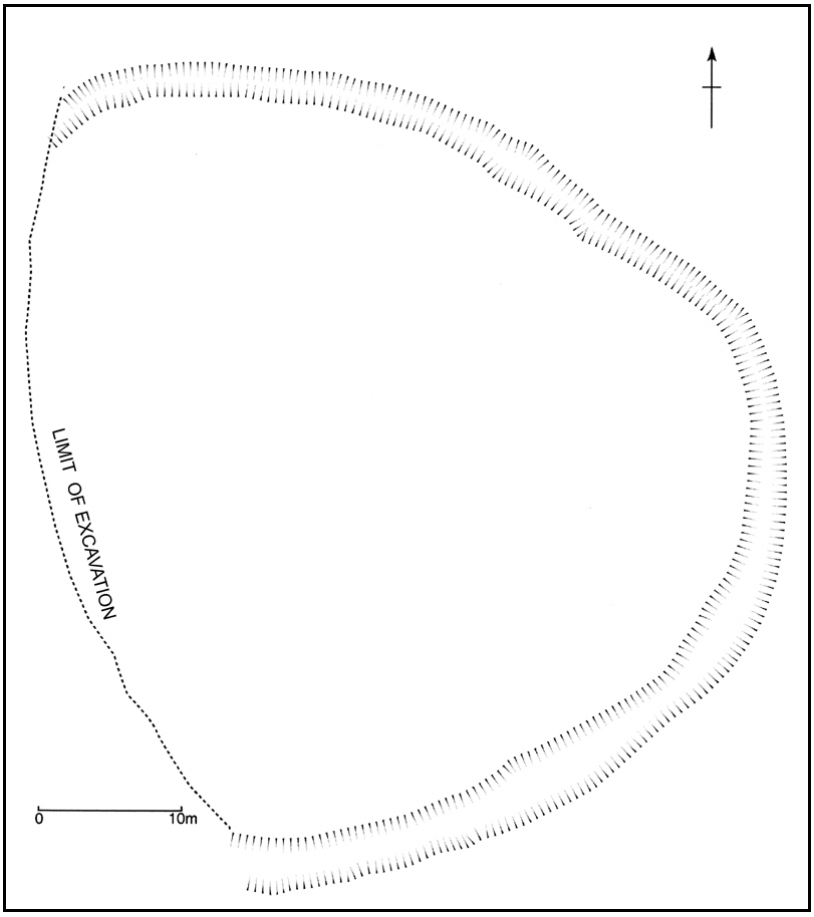


Fig. 170: Plan of Clogher, Co. Kerry (after Collins & Coyne 2007, 28).

References:

Collins, T. & Coyne, F. 2007. Shape-shifting: enclosures in the archaeological landscape, in C. Manning (ed.) *From ringforts to fortified houses: Studies on castles and other monuments in honour of David Sweetman*. Bray: Wordwell, 21–32.

Coyne, F 2004:0774 Clogher, Lixnaw, www.excavations.ie

Cloghermore, Co. Kerry
Cave
Grid Ref: **Q906128 (09060/11280)**
SMR No: **KE030-068; KE030-069**
Excavation Licence: **99E0431**
Excavation Duration/year: **August 1999; April-June 2000**
Site Director: **M. Connolly (Kerry County Museum); F. Coyne (Aegis Archaeology Ltd.)**

A cave and D-shaped enclosure at Cloghermore revealed considerable early medieval funerary and burial activity associated with an eighth/ninth-century pagan Irish community and a late-ninth/tenth-century Scandinavian family. The excavations were undertaken in 1999 and 2000 following the discovery of human remains inside the cave. The main excavated areas comprised trenches across the enclosure and around the cave entrance shaft as well as a series of excavated areas within the entrance passages and the two internal chambers (Figs. 171; 172).

The cave consists of 375m of fossil passages situated under a large limestone reef (located now at 51m OD). The main entrance is through a narrow cleft on the northern side of the reef with two recorded chambers to the south- 'Two-Star Temple' and the 'Graveyard'. A second unrecorded entrance was discovered at the southern terminal inside a D-shaped enclosure on the south-facing side of the reef. This enclosure consisted of a broad bank scarped out of the side of the reef which measured 16.8m by 28m internally, and 34.8m by 44.80m externally.

There was no clear stratigraphy within the cave which precluded the possibility of a detailed sequence of deposition within the cave. Both the 'Graveyard' and the 'Two-Star Temple' chambers appear to have originally contained little or no sediment. A clay deposit was introduced into the cave (possibly in the second phase of activity) though minimal amounts were found in the deepest chamber ('Two-Star Temple') or the gallery connecting it to the 'Graveyard'. Two phases of burial were advanced though there was evidently a short span of time between both with the possibility existing that the site was in continuous use in the period.

The first phase of burial activity may date to the fifth century, but centres on the eighth/ninth centuries and was associated with the use of the use of the 'Two-Star Temple' and 'Graveyard' chambers as ossuaries of a small pagan Irish population. The phase was characterised by the disarticulation and deposition of selected de-fleshed skeletal remains without artefacts upon the floor of the cave. The skeletal material were left exposed on the cave floor and spanned the early-fifth century to the ninth century (see below), and the earliest date stands alone and could possibly represent a very early usage of the cave. The early burials from the 'Graveyard' were subsequently mixed together with the later burials from the 'Two-Star Temple' and produced radiocarbon dates from the seventh/ninth century.

The second phase centres on the later-ninth/mid-tenth century, and is indicative of the use of the cave by a small pagan community- possibly Scandinavian- consisting of at least four adults and three sub-adults with grave-goods as well as a possible cremation burial. It is characterised by the internment of complete bodies with artefacts and complex burial rites involving the cremation of animals and the internment of parts of horses. The clay appears to have been introduced in the second phase either to cover the burials inserted in the final phase of activity or to cover the earlier burials and provide a clean surface; all of the artefacts and most of the skeletal material were recovered from this deposit. It appears that the burials were disturbed or possibly intentionally desecrated at a later date, perhaps by the native population.

A number of finds possibly associated with the second phase of activity of the cave were recovered from the minimal clay deposit inside the 'Two-Star Temple' and the passage linking it to the 'Graveyard'. Finds from the passage linking the two chambers included bone comb fragments, iron fragments and a perforated bone plaque, probably a strap-end; and finds from the 'Two-Star Temple' included a stone spindle-whorl, iron arrowhead and iron fragments. Artefacts from a narrow curving offshoot passage at the north end of the graveyard included fragments of a bone comb, a disc bead or spacer, two small spherical glass beads and a well-preserved copper-alloyed ringed-pin.

The richest deposits and features were uncovered inside the 'Graveyard' chamber nearest to the enclosure entrance. Artefacts from the 'Graveyard' included bone beads, broken decorated bone comb, bone gaming-piece, a decorated and perforated ivory bead, numerous iron/copper-alloy fragments, iron axe-head, iron spearhead ferrule, iron barrel padlock mechanism and copper-alloy pin fragment. A Viking silver hoard (*c.* A.D. 910-940), consisting of two ingots and four pieces of hack silver, was discovered in a small cleft in the rock floor covered by 0.65m of soil and stones.

A sub-circular setting of stones covered by a number of larger slabs and containing a black deposit of cremated animal bone, charcoal and ash was excavated inside the 'Graveyard'. The black deposit appears to have derived from a funerary pyre outside the entrance shaft. Although no human bone was recovered, it was suggested that the feature could have possibly been the site of a human cremation burial. And amber beads were recovered from the deposit. Un-burnt horse bone and a horse tooth were also found around and within the stone setting.

The entrance gallery and its related alcoves were also used for burial during the second phase, producing large amounts of animal and human bone. Artefacts from the entrance gallery included an amber bead, pendant whetstone, stone bead, stone spindle-whorl, stone disc bead, rotary quern fragment, bone bead, decorated bone handle, decorated bone gaming-piece, bone comb fragments, antler pin-beater, iron rings, iron knives, iron shears, iron bucket-handle, shaft of a bronze pin, metal stud with textile attached and a blue glass bead with yellow paste decoration. The two principle features comprised a sub-rectangular pit and a fully articulated skeleton.

A sub-rectangular pit was uncovered inside the cave entrance. It contained a quantity of animal bone as well as the remains of one adult- bones from the foot- and three sub-adults- torso of a young child and the metatarsals of two children. The pit also produced a large number of finds including an antler spindle-whorl, fragments of double-sided comb teeth-plates, a bone-point, bone-pin, bone gaming-piece, decorated double-sided antler comb, part of iron shears, iron knives and a red jasper fragment. Charcoal from the base of the pit produced a radiocarbon date of 1140±60 BP (see below). The deposits in the pit were sealed and appear to have had a ritualistic function.

A fully articulated skeleton was uncovered inside and to the east of the cave entrance. Two stones were uncovered on the north-eastern side of the torso and either formed part of a setting or were used to prevent the body from rolling down-slope. Charcoal from the fragmentary remains of a second adult from soil over the articulated burial produced a radiocarbon date of 1180±40 BP (see below). Charcoal from the base of the shallow grave-cut of the articulated skeleton produced a radiocarbon date of 1150±60 BP (see below) which could indicate that bone from an earlier burial was either disturbed or mixed in with the soil covering the burial during the internment or was deliberately included as part of the burial ritual.

Artefacts associated with the articulated skeleton included a small carved stone vessel or crucible, a boat-shaped whetstone, two copper-alloy pins, a copper-alloyed ringed-pin, a small copper-alloy button, an iron knife and a fragment of an iron shield boss. Fragments of a copper-alloy buckle tang were found in the soil immediately above the articulated skeleton.

Many of the latest burials from within the cave were from areas immediately inside the entrance with the latest from Area T producing a date of 1020±40 BP (see below). It appears that the burials near the mouth of the cave entrance may have been associated with the ritual sealing of the entrance shaft. Artefacts from the fill of the entrance shaft included two bone pins, a whetstone, a copper-alloy fragment and decorated bone comb fragments.

The later-ninth/tenth-century cave burials were associated with a complex series of funerary activities outside the cave opening involving the cremation of animal bone in a funerary pyre and the construction and closure of the dry-stone-walled entrance shaft. The remains of a substantial walled structure defined by a slot-trench were uncovered on the south-eastern side of the entrance shaft. It appears to have been deliberately dismantled - it was cut by the fire pyre flue and its material re-used in the construction of a pyre situated inside a sub-circular depression.

A second shorter slot-trench together with a number of post and stakeholes were possibly contemporary with the pyre and may have supported a platform over the fire or formed the corners of a wooden pyre structure. The side-plate of a decorated bone comb was uncovered from inside the fill of the shorter slot-trench. Fragments of cremated bone, burnt iron fragments and part of a bone spindle whorl were recovered from the pyre remains. Excavated finds to the east of the entrance shaft also included an iron anvil and a quern stone. Charcoal from the pyre remains (1160±60 BP) indicate it is broadly contemporary with the latest cave burials (see below).

A circular depression appears to have then been excavated at roughly the same time around the opening of the cave to facilitate the construction of a dry-stone walled entrance shaft (1.77m in maximum height, 1.3m wide at the top and 0.6m wide at the base). The depression was then backfilled with the black deposit from the pyre containing charcoal and cremated animal bone. The dry-stone walled entrance shaft was finally sealed by three capstones and was overlaid by the black deposit from the pyre containing two perforated bone needles and a struck flint pebble.

The construction of the D-shaped enclosure also appears to have been roughly contemporary with the funerary activity outside the entrance shaft and the latest burials inside the cave. The enclosure consisted of two banks of earth and stone divided by a rock-cut ditch; and a shallow drain-like feature was uncovered outside the bank which may have been used to divert water downs-lope away from the enclosure. Three shallow postholes were uncovered between the outer bank and the external drain, charcoal from which produced a ninth/tenth century date (see below). The central location of the entrance shaft in the enclosure, and the recovery of a whetstone from the make-up of the inner bank, support this *c.* tenth century date for the enclosure. Similarly, the recovery of fragments of cremated bone in the fills of the postholes as well as in the ditch between the two banks suggests that this evidence was roughly contemporary with the funerary activity outside the entrance shaft.

The cremated and un-cremated animal bone from Cloghermore is distinct from other animal bone assemblages of the period as it showed sheep as the most common animal. It also showed that that the slaughter of young animals- mainly lambs and piglets- were common practice and is perhaps indicative of ritual activity and feasting. The considerable quantity and diversity of the grave-goods indicate the richly furnished burials of possibly Scandinavian craft-workers, warriors, females and children.

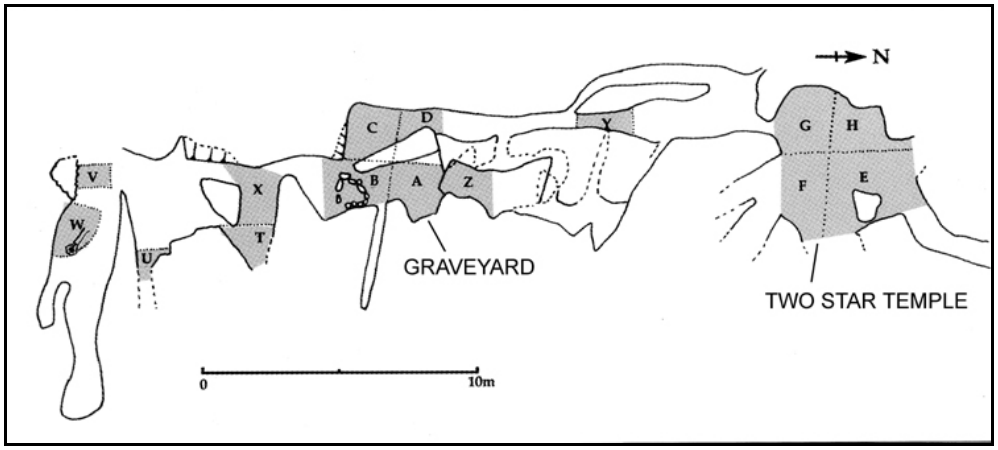


Fig. 171: Plan of cave at Cloghermore, Co. Kerry showing excavated areas (after Connolly et al. 2005, 10).

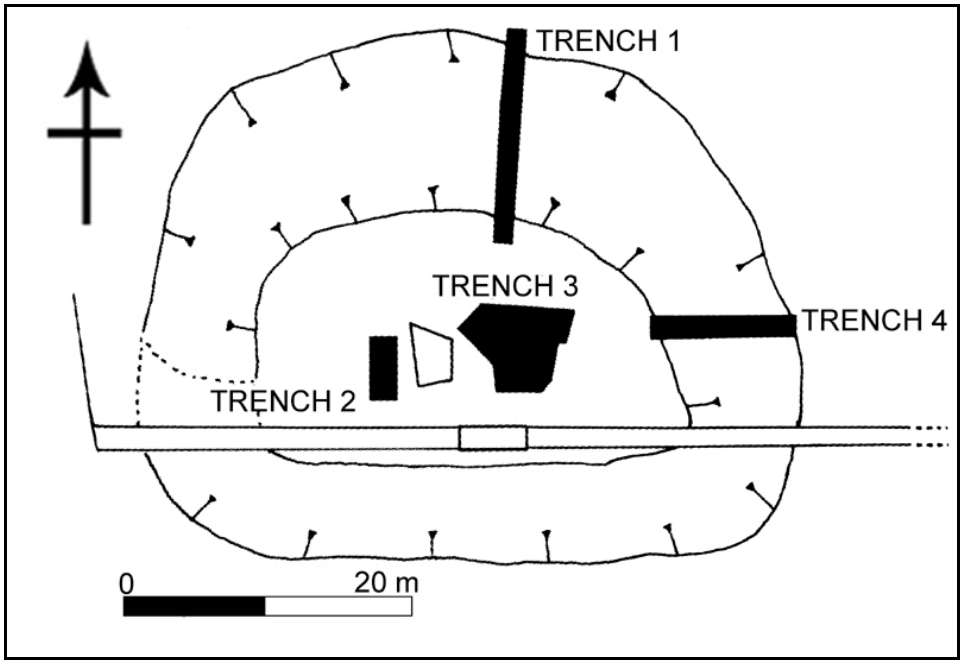


Fig. 172: Plan of D-shaped enclosure and entrance shaft showing areas excavated at Cloghermore, Co. Kerry (after Connolly et al. 2005, 6).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-132903	Human bone from Area X	1150±40 BP	**A.D. 778-980**
Beta-137044	Human bone from the Graveyard-Area A	1270±40 BP	**A.D. 662-828** A.D. 838-866
Beta-137045	Human bone from the Graveyard-Area B	1190±50 BP	**A.D. 690-751** **A.D. 762-905**

			A.D. 912-970
Beta-137046	Human bone from the Graveyard- Area C/D	1140±40 BP	A.D. 779-794 **A.D. 800-987**
Beta-137047	Human bone from the Graveyard- Area B	1210±40 BP	**A.D. 687-895** A.D. 925-936
Beta-137048	Human bone from entrance shaft	1190±40 BP	A.D. 694-700 **A.D. 708-747** **A.D. 765-902** A.D. 916-967
Beta-137049	Human bone from Two-Star Temple- Area E	1260±50 BP	**A.D. 665-878**
Beta-137051	Human bone from Two-Star Temple- Area G	1220±40 BP	**A.D. 685-892**
Beta-137052	Human bone from the Graveyard- Area B	1550±50 BP	**A.D. 410-609**
Beta-137053	Human bone from the Graveyard- Area B	1330±50 BP	**A.D. 608-780** A.D. 792-805
Beta-137054	Charcoal from Trench I, posthole	1130±60 BP	A.D. 729-735 **A.D. 772-1020**
Beta-137055	Charcoal from the Graveyard- Area A	1240±50 BP	**A.D. 669-889**
Beta-137056	Animal bone from cremation deposit	1170±60 BP	A.D. 692-749 **A.D. 763-989**
Beta-137057	Human bone from the Graveyard- Area A	1360±40 BP	**A.D. 606-717** A.D. 743-769
Beta-150535	Charcoal from Trench 3, pyre site	1160±60 BP	A.D. 694-748 **A.D. 765-994**
Beta-150536	Charcoal from Area W	1150±60 BP	A.D. 716-744 **A.D. 768-1015**
Beta-150537	Charcoal from Area V	1140±60 BP	A.D. 722-740 **A.D. 770-1018**
Beta-150538	Human bone from Area W	1180±40 BP	A.D. 717-743 **A.D. 768-907** **A.D. 911-971**
Beta-150539	Human bone from Area T	1020±40 BP	A.D. 898-920 **A.D. 944-1052** **A.D. 1081-1128** A.D. 1135-1152

References:

Connolly, M. & F. Coyne 2000a. The underworld of the Lee Valley. *Archaeology Ireland,* 14(2), 8–12.

Connolly, M. 2000b. Cloghermore cave: the Lee Valhalla. *Archaeology Ireland,* 14(4), 16–9.

Connolly, M. & F. Coyne with L.G. Lynch 2005. *Underworld: Death and burial at Cloghermore Cave, Co. Kerry,* Bray: Wordwell.

Editor 1999. Report from the Underworld. *Archaeology Ireland,* 13(3), 5.

Coarhabeg, Valentia Island
Early Medieval Unenclosed Settlement
Grid Ref: **V349758 (03490/07580)**
SMR No: **N/A**
Excavation Licence: **94E0120**
Excavation Duration/year: **September 1994**
Site Director: **Alan Hayden (Archaeological Projects Ltd.)**

A small unenclosed early medieval *clochán* was excavated in Coarhabeg townland on Valentia Island just off the southern tip of the Iveragh peninsula. The excavation was undertaken on behalf of and in conjunction with research by G.F. Mitchell of Trinity College Dublin in Valentia Island. The site was situated 500m from the coast in an area of cut-away bog in the vicinity of a late prehistoric landscape of field boundaries, huts and track-ways. St. Brendan's Well and its stone crosses were also situated 500m to the north.

The stone building survived as a 0.5m high rectangular mound with stones protruding through its capping of peat. Excavation opened an area measuring a maximum of 11.2m by 10.2m, revealing a stone building consisting of three conjoined cells (Fig. 173). The walls of two of the cells (1 and 2) were still visible in the northern half of the site though those of cell (3) in the southern half had completely collapsed. The interior and entrances of cells (1) and (2) were completely excavated; Cell 3 was cleared of peat but not further excavated.

The dry-stone walls of the trapezoidal central cell (Cell 1) (maximum internal dimensions of 3.4m by 2.8m) survived to a maximum 2m wide and 1m high. A stone-lined hearth was revealed in the northwest corner of the cell. Large vertically set flat slabs faced the interior of the wall in places and the entrance passage (2.6m by 1.2m). The entrance passage and the area immediately outside the entrance were paved with flat slabs. Spreads of ash occurred throughout the cell and to some extent in the entrance passage and on the paving outside the cell on its south and west sides. Fragmentary calcified animal and fish bones were found in the ash adjacent to the hearth with another small patch of animal bone recovered near where the entrance passage met the cell. The burnt material yielded a 2Σ calibrated date of A.D. 562 to A.D. 758 (see below).

Finds from the interior of Cell 1 consisted of an unfinished stone spindle-whorl and three struck fragments of flint. A blue glass bead, a fragment of blue glass and a small flint blade were found in the ash in the entrance passage. A number of water-worn pebbles (possible rubbing stones?) were found in the ash and overlying silt. These deposits had been subsequently buried by stone collapse and peat.

Cell 2 (1.5m by 1.4m) adjoined Cell 1 at its northwest end. Its walls survived to a maximum height of 0.80m, and would appear to have been built at the same time as the north wall of Cell 1. The 0.8m wide entrance to this cell was located in the northeast corner and was defined by an *in situ* jamb stone at its western side. The cell had a roughly paved internal surface, and a stone spindle-whorl and a number of water-worn stones were recovered from a 120mm thick deposit overlying the paving. As with Cell 1, the occupation layer was buried under collapsed stone and a deposit of peat.

The fragmentary remains of a third sub-rectangular or oval-shaped structure (Cell 3) were uncovered to the west of the southwest corner of Cell 1. This cell is likely to have measured 3.4m x 2.7m internally, and the entrance was probably in the south wall where a large pillar-like stone was uncovered.

The large amount of stone collapse within the interior and exterior of the buildings suggests that the cells originally contained corbelled roofs. The dark blue glass bead and the available radiocarbon date indicate an early medieval date for the building.

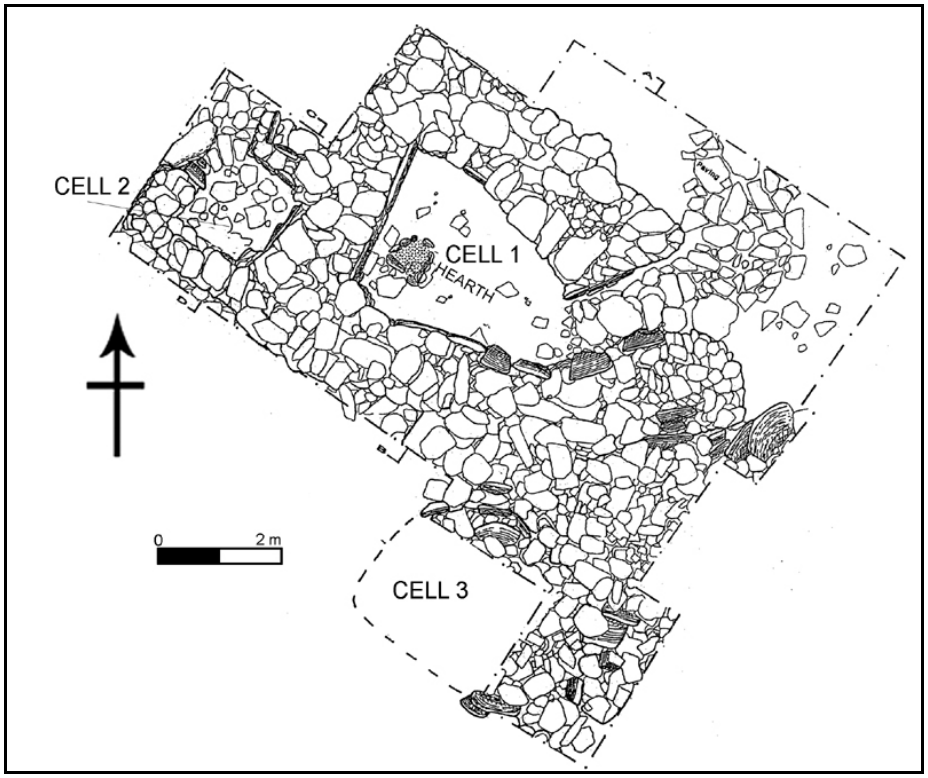


Fig. 173: Plan of Coarhabeg clochán, Co. Kerry (after Hayden 1994, 24).

Radiocarbon Dates:

Sample No.	Context	^{14}C Date	Cal. 2 Σ
GrN21031	Burnt deposit adjacent to hearth	**N/A**	A.D. 562-758

References:

Hayden, A. 1994:119. Coarhabeg, Valentia Island, www.excavations.ie

Hayden, A. 1994. Interim report on the archaeological excavation of two sites (94E119 and 94E120) on Valentia Island, Co. Kerry, Dublin Archaeological Projects Ltd.

Mitchell, G. F. 1989. *Man and Environment in Valentia Island*, Dublin Royal Irish Academy.

Dromthacker, Co. Kerry
Early Medieval Settlement Enclosure
Grid Ref: **Q85911623 (085917/116236)**
SMR No: **KE029-095**
Excavation Licence: **97E0022**
Excavation Duration/Year: **1997**
Site Director: **R.M. Cleary (University College, Cork)**

An excavation at Dromthacker in advance of a new university campus at Tralee revealed a univallate enclosure with two internal buildings preceded by an unenclosed settlement associated with a small structure and gully. The site was situated on the south-westerly face of a gradually rising ridge (58m OD) between the Big River and a tributary of the River Lee.

Pre-enclosure activity was indicated by a series of postholes, stakeholes and pits on the eastern side of the site. The post and stakes defined a structure 3.8m by 3m. An internal pit and a paved surface, which extended from the interior of the building to the east, were also located. This paved area was cut by a gully (14.6m long by 0.9m wide and 0.4m deep) and was interpreted as a drain for keeping the environs of the building dry. A hone-stone was recovered from the paved surface, while two others were also identified within the fill of the gully. Charcoal from the gully produced a radiocarbon date range in the fifth/sixth century (see below).

The Phase 1 unenclosed settlement (Fig. 174) was overlain by an introduced clay layer which was interpreted as a levelling-up of part of the site prior to the construction of the Phase 2 oval enclosure (19m by 24m internally). The enclosure bank survived to a maximum height of 0.75m and maximum width of 2.25m. The ditch associated with it was U-shaped with a surface width of 2.7m. There was no indication of basal silting, indicating that the ditch was either cleaned out periodically or in-filled shortly after excavation; excavation revealed that it had been partially in-filled in antiquity.

The original entrance was not located, and a south-eastern entrance blocked in the 1980s was associated with modern paving. Two pits and a posthole - supporting a possible gate-post - were excavated in this area, and were interpreted as a possible original entrance, however the ditch was however continuous in this area and these features may represent pre-enclosure activity. The pits were bowl-shaped and contained iron slag, charcoal and fire-shattered stones. One also contained partly vitrified clay, possibly belonging to the clay surrounding a *tuyère*.

Phase 2 occupation was mainly confined to the eastern and southern sections of the enclosure interior and had surviving remains of at least two post-built buildings with internal stakeholes (Fig. 175). Structure 1 was located in the south-east and had an estimated internal diameter of 7.5m. A stone-spread on the south-western side was interpreted as marking the building's entrance. Structure 2 was recorded 2m north-east of Structure 1. It was an oval-shaped building with an estimated long axis of 8.5m and contained an internal hearth.

A series of external stakeholes and pits were excavated within the enclosure interior. One pit between the two structures (but on the same stratigraphic level) contained dumped ironworking material and charred plant remains. Charcoal from this pit produced a radiocarbon date range in the sixth/seventh century (see below). A pit in the northern area had evidence for *in situ* burning and contained burnt bone, saddle quern fragments, charcoal, iron slag, a bi-chrome glass bead and a blue glass bead.

The radiocarbon dates from the two phases suggest that there was not any significant time interval between the initial unenclosed settlement and the subsequent construction of the enclosure and associated structures.



Fig. 174: Plan of Phase 1 house at Dromthacker, Co. Kerry (after Cleary 2008, 24).

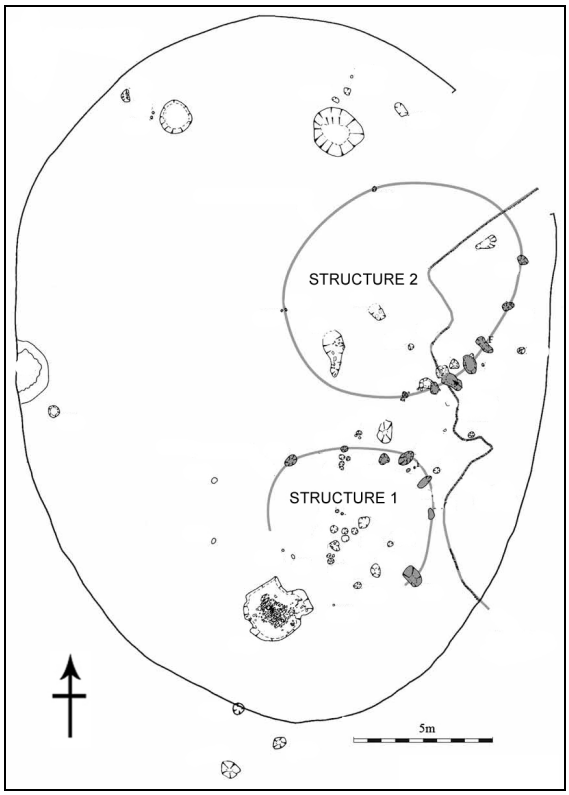


Fig. 175: Phase 2 structures at Dromthacker, Co. Kerry (after Cleary 2008, 32).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
GrN23798	Charcoal from Phase I gully fill	1520±30 BP	**A.D. 433-495** **A.D. 504-609**
GrN23797	Charcoal from fill of pit between Phase 2 Buildings	1480±25 BP	**AD 545-637**

Reference:

Cleary, R. M. 2008. Excavation of an early medieval settlement and other sites at Dromthacker, Tralee, Co. Kerry. *Proceedings of the Royal Irish Academy Section C*, 108C, 19–64.

'Dunbeg Fort' (Fahan td.), Co. Kerry
Early Medieval Promontory Fort
Grid Ref: **V35219726 (035219/097269)**
SMR No: **KE052-270001**
Excavation Licence: **E000161**
Excavation Duration/Year: **June - September 1977**
Site Director: **T. Barry (National Monuments Division, Office of Public Works)**

Dunbeg promontory fort, situated in Fahan townland on a sheer cliff promontory, was excavated in 1977 because of coastal erosion. Excavations revealed that the site's defensive ditches and banks and it's internal stone building were mostly likely occupied between the eighth and eleventh centuries with some earlier evidence for activity in the late Bronze Age.

The fort itself consists of a *clochán* defended by an inner stone rampart and an outer line of five ditches and four banks (Fig. 176). A souterrain leads from the rampart entrance under part of the causeway through the earthen defences. The fort's interior was almost completely excavated and trenches were cut across the earthen defences, rampart, causewayed entrance and souterrain.

The earliest phase of activity on the site consisted of a shallow U-shaped ditch (0.9m deep and 2.2m maximum width) which partly underlay the inner stone rampart (Fig. 177). The ditch ran for 19m from inside the line (southern side) of the rampart entrance to its termination point at the eastern curved end of the rampart. Associated with the ditch were a possible dry-stone wall and wattle fence, indicated by a collapse of stone and a layer of charcoal along the length of the ditch. One copper nail was recovered from the topmost layer of the ditch, and a sample from the charcoal layer of the ditch produced a Late Bronze Age/early Iron Age date.

The four lines of banks survived to a maximum height of 1m above the old ground level and were up to 3m wide. Tentative traces of palisade trenches (maximum of 0.5m deep and 1m wide) were identified on the north-facing (external) crest of Banks 1 and 2. Several of the sections through the banks revealed that they had been constructed in two or three distinct phases which took place fairly close together as indicated by the lack of any intervening old sod horizons between them.

The angle of most of the tip-lines of the banks appears to suggest that each bank was constructed with the up-cast from the (internal) ditch to its immediate south. A series of boulders in Ditch 2 at the base of Bank 1 appear to have slipped off an outer (northern) stone-facing of this bank. Indications of a possible outer stone facing was also identified on Bank 2.

The four ditches north of Ditch 1 all had a similar shallow U-shaped profile measuring from between 0.98m and 1.55m deep and from 5.60m to 12.0m wide. Most of the fill of these ditches was the result of the normal denudation of the defensive banks, with evidence also for narrow layers of windblown sand/silt. Ditch 1 was deeper and more steeply sloping than the other defensive ditches. The original fill of the ditch appears to have been cleared out in recent times and backfilled with an extensive deposit of stone- up to 1.6m deep- which were probably deliberately thrown off the stone rampart or off the entrance-complex of Bank 1. Charcoal from the base of Ditch 1 indicated that it was in use in the eighth/ninth centuries A.D.

The inner stone rampart had a maximum thickness of 6.35m and width of 3.08m and survived for 29m, about half of its recorded length in the mid-nineteenth century. The rampart was depicted by George Du Noyer in 1856 as completely cutting off the promontory in one straight line. Two cuttings were opened across the space between the surviving curving eastern end of the rampart and the cliff edge but no trace of an original stone rampart was located. Various accounts report the removal of stone from the site in the

nineteenth century and it is possible that this part of the rampart had been removed in the late-nineteenth century.

The rampart itself was constructed in two phases. Phase 1 involved the construction of the inner half of the wall which averaged 4.8m wide and 2.76m maximum height. Two corbelled chambers were incorporated into the walls on either side of the stone-lintelled entrance which measured 2m wide and 2.3m high. Phase 2 involved the addition of further supports to the entrance, the deepening of Ditch 1, and the construction of a dry-stone wall (up to 2.25m wide and 1.9m high) against the outer face of the Phase 1 rampart. The additional pressure of the Phase 2 exterior wall required the construction of a retaining wall along the internal (southern) side of the Phase 1 rampart, which was partially excavated and measured 2.3m deep and 2m wide.

The remains of a central causeway partially survived between the defensive banks and ditches and were defined by upright orthostats at the edges of the banks and possible cobbled areas. Similar sized stones were recovered in the fill of the Ditch 1 terminus and it was suggested that these orthostats formed part of a complete series of pillars flanking the edges of the causeway.

The dry-stone-built souterrain extends for some 16.5m in a south-west to north-east direction from within the stone rampart entrance out under the line of the entrance causeway and terminating 2m south of the outer face of Bank 2. Several section of the souterrain was excavated though no original earthen floor level or artefacts were recovered.

A large dry-stone building (internal diameter of 7.5m) was excavated in the interior of the fort. Its walls were circular shaped externally and rectangular internally and are unlikely to have supported a corbelled roof. Its northwest lintelled doorway was linked with the rampart entrance by a flagged pathway, and the floor of the entrance was lined with several flagstones which extended for 1.40m into the interior of the building.

Two phases of activity were identified within the stone building (Fig. 178). The Phase 1 features consisted of a hearth, scatters of stakeholes, areas of burning, a shallow trench and a possible foundation trench for the southern wall. The hearth contained charcoal, animal bone and ash and was associated with a series of stakeholes, indicative of structural supports. The shallow trench (1m long and 0.2m wide) was located beside one of the areas of burning in the north-west quadrant and was full of charcoal. It was interpreted as the remains of an internal wattle-and-fence. Charcoal from the first period of activity produced a radiocarbon date range in the tenth/eleventh centuries (see below). It is possible that the first phase coincided with the construction of the building as there was no evidence for internal structural supports and it is unlikely that such a structure of such size supported a corbelled roof.

The Phase 2 activity was more extensive and prolonged than Phase 1 and consisted of a habitation layer (indicated by charcoal, animal bone, and flints) concentrated around two central hearths as well as a pit along the southern wall, an area of flagstones inside the northern door and scatters of stakeholes and six-postholes across the interior, except for the north-eastern quadrant. The radiocarbon date from the charcoal from the habitation deposit suggests that both Phase 1 and 2 occupation layers were of short duration and occurred around the tenth century (see below). Finds from the second occupation comprised a possible quern stone and rough pestle and an undecorated stone spindle-whorl. A possible cleat nail was also located in the topsoil of a cutting inside the building.

It was suggested that the building in Phase 2 was never completely roofed and that wooden lean-to structures were erected in the northwest, southeast and southwest corners of the building with two sides being supported by the top of the stone walls while the other sides were supported by wooden posts. Some of the stakeholes appear to have lined up with each other and could indicate the presence of wattle walls in the interior of these structures.

A stone flagged path linked the northwest entrance of the building with the stone rampart. It overlay part of a stone-lined drain which extended 4.4m east of the eastern door jamb of the building to the cliff-face to the southwest. A triangular area of stone cobbling of recent date was excavated to the east of the building and sealed a nineteenth century brass button. Finds from the fort's interior included two small honing-stones.

The finds at Dunbeg were very few in number and comprised a small collection of possible early medieval objects mentioned above as well as a number of post-medieval artefacts- thirteen sherds of post-medieval pottery, brass button, brass medal of the Catholic Total Abstinence League and clay pipe fragments- found mostly in the topsoil in the forts interior. The animal bone- sheep/goats, pig and cattle as well as deer and birds- was fragmentary and recovered mostly from within the occupation layers inside the building.

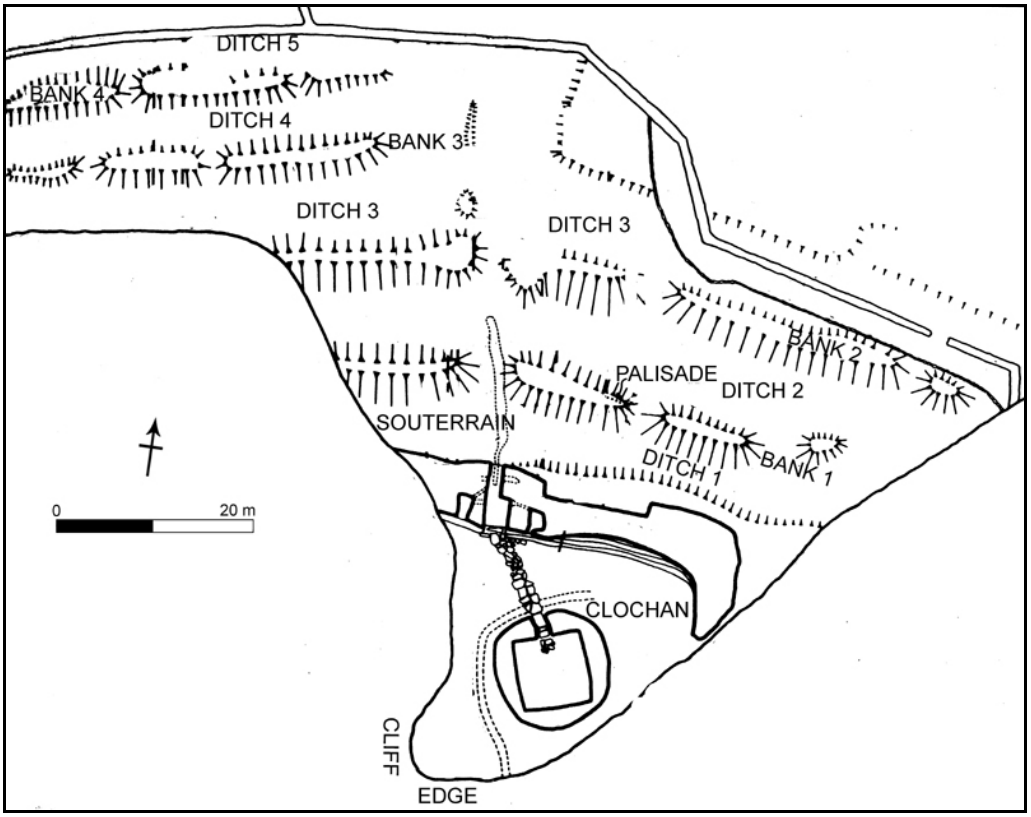


Fig. 176: Plan of Dunbeg promontory fort, Co. Kerry (after Barry 1981, 301).

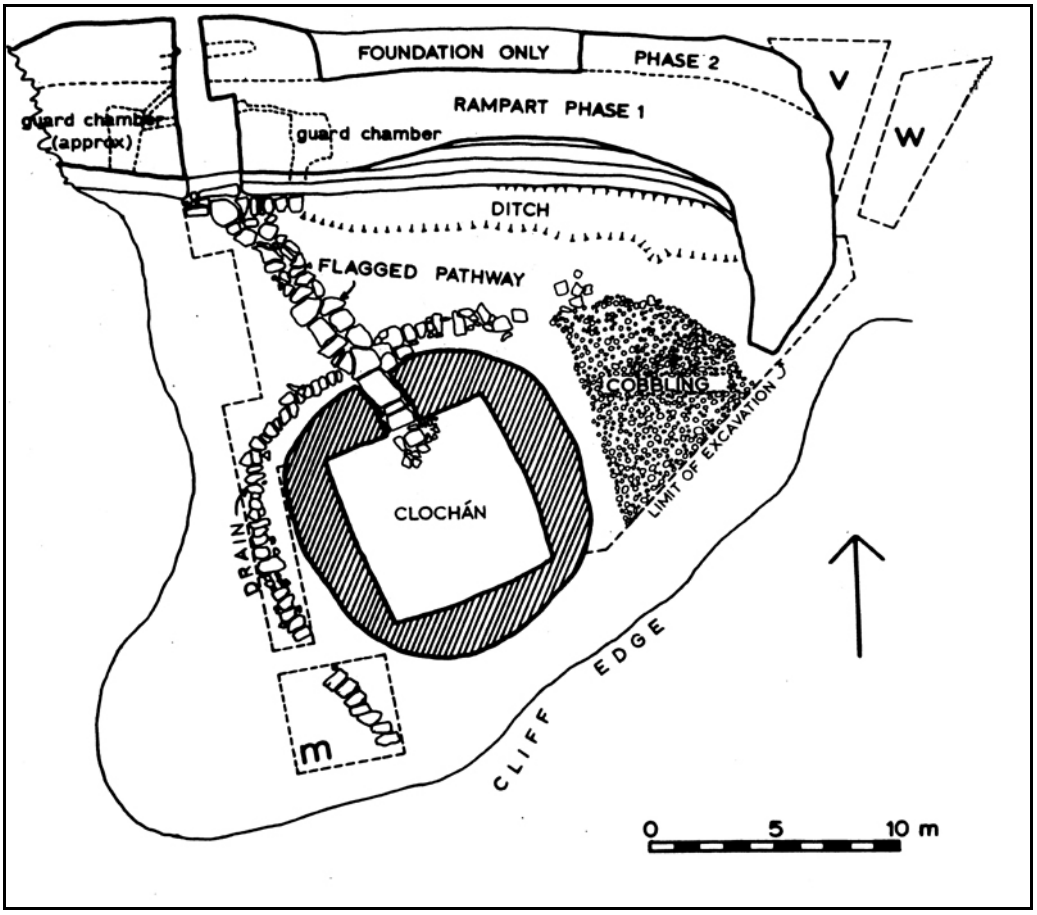


Fig. 177: Plan of rampart and fort interior at Dunbeg, Co. Kerry (after Barry 1981, 302).

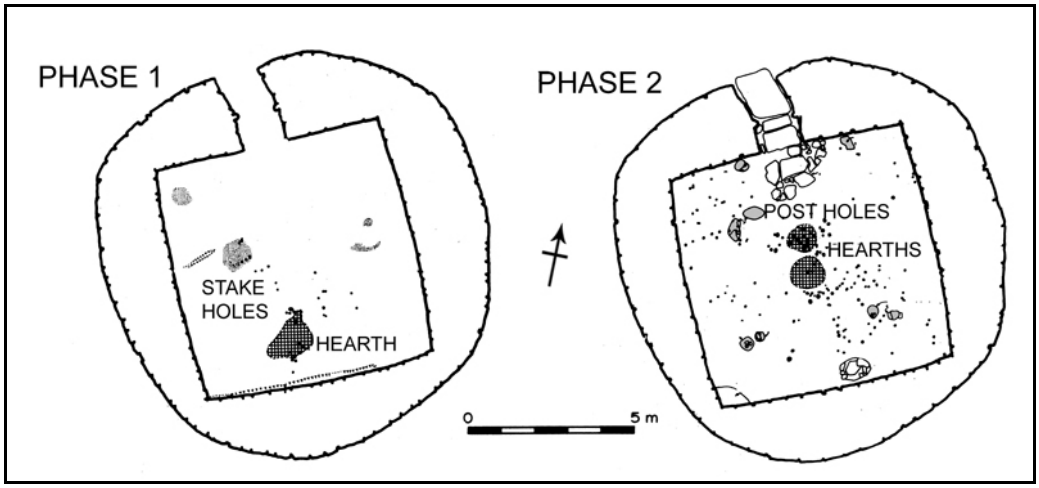


Fig. 178: Plan of clochán at Dunbeg, Co. Kerry (after Barry 1981, 313).

Radiocarbon Dates:

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-2215	Wood charcoal from base of Ditch 1	1150±75 BP	**A.D. 691-749**; A.D. 763-1018.
UB-2216	Charcoal from inside shallow ditch, partly underlying the inner stone rampart	2535±35 BP	**799 – 721 B.C.**; **694-540 B.C**.
UB-2217	Charcoal from Phase 1 of clochán	960±100 BP	**A.D. 891-1263**.
UB-2218	Charcoal from habitation deposit from Phase 2 of clochán	1050±35 BP	A.D. 895-925; **A.D. 937-1030**.
UB-2219	N/A	1150±75 BP	A.D. 691-749; **A.D. 763-1018**.

References:

Barry, T. B. 1981. Archaeological excavations at Dunbeg promontory fort, County Kerry, 1977. *Proceedings of the Royal Irish Academy Section C*, 81C, 295–329.

Illaunloughan, Co. Kerry
Early Medieval Ecclesiastical Settlement
Grid Ref: **V362733 (03620/07330)**
SMR No: **KE087-036**
Excavation Licence: **92E0087**
Excavation Duration/year: **1992-1995**
Site Director: **C. Walsh & J.W. Marshall (University of California, Berkeley)**

Illaunloughan is a small island (0.1 hectares at high tide) in the Portmagee Channel between Valentia Island and the Kerry mainland. The site was occupied by a monastic community between the mid-/late-seventh century and mid-ninth century, and approximately 70% of the island was excavated as part of a research program from 1992-95. Four phases of occupation were evident.

Phase 1 dated to the mid-seventh/mid-eighth centuries and comprised three sod-walled domestic huts, an oratory, a diminutive structure, a shrine and burials (Fig. 179). Two contemporary conjoined sod-walled huts (A and B) were exposed in the western section of the island. Hut A was 3.7m in internal diameter and contained a central stone-lined hearth. The narrow sod walls were contained within two concentric trenches, revetted by orthostats and dry-stone masonry.

Hut B had the same approximate internal diameter of Hut A though its external diameter (6.7m) was considerably greater because of its thicker walls. It sod walls were contained within two shallow trenches cut into bedrock. Postholes around the inner trench indicate that the inner sod fill was revetted by post-and-wattle instead of stone. Charcoal from the central stone-lined hearth produced seventh/eighth century date (see below).

Hut C was revealed on the southern edge of the island beneath a midden belonging to a nearby hut (D) from Phase 2. It was heavily eroded and consisted only of a semi-circular trench with a single posthole at the eastern end, presumably part of an entrance. An external layer of rubble stone aligned with the arc of the trench may have been used to retain blocks of sod.

A regularly flagged path extended for a distance of 2.5m from the entrance of Hut B. The two huts (A and B) were built up against the inner face of a section of the island's western enclosing stone wall (0.5m high) which buffered the community from the western winds and sea. A deep organic artificial garden soil covered much of the western 'domestic' half of the island and suggests the growing of vegetables during the first phase of the monastic settlement.

Hut C was interpreted as the earliest structure on the site and being in the most exposed location appears to have been used primarily for industrial purposed contemporary with Huts A and B. A localized area of metalworking debris covering Hut C revealed evidence for the designing and casting of copper-/bronze-alloy brooches and pins. Over 80 fragments of clay moulds (two-piece moulds, crucibles and part of a tuyère), as well as carved bone motif, were recovered from the debris. Four copper/bronze alloy artefacts (a penannular ring brooch, an annular brooch-pin, ring-brooch fragment, and a belt end/buckle plate) were recovered in a nearby midden close to Hut D.

A sod-walled oratory, succeeded by a small oratory/shrine structure was excavated partly beneath and to the east of the Phase 2 dry-stone oratory. A number of closely-spaced graves were placed behind the eastern wall of the primary sod oratory and appear to have been associated with this structure.

Two stone cists containing the remains of two adults and one infant were sealed beneath the gable shaped shrine on the northern side of the island and were dated to the late-seventh/late- eighth centuries (see below). Scallop shells and quartz pebbles were found

inside and on top of the cists and. One shell produced a date range from the eighth to the eleventh century (see below).

Phase 2 dated to the eighth and ninth centuries and comprised a dry-stone hut (D), dry-stone oratory, a stone reliquary shrine and burials (Fig. 180). Hut D was situated on the south-western edge of the island and built up against rock ridge traversing the western end of the island. It was a sunken-floored circular structure, 4.3-4.4m diameter with corbelled walls intact to a maximum height of 2.3m on its western side and a possible internal hearth. Cattle bone recovered from under the base of the north-western side of the hut gave a construction date in the eighth/ninth century (see below), though a date later than the early-ninth century was viewed as improbable by the excavators from associated burial evidence.

An extensive refuse midden was associated with Hut D. It was considerably greater than those from Phase 1 huts and indicates a long period of occupation. A succession of rough paved pathways or small yards outside the eastern entrance of Hut D sealed intervening deposits of the midden. A small undated well consisting of seven dry-stone steps leading down to a pool of water, was excavated between Hut D and the dry-stone oratory though yielded nothing of significance.

The principal phase 2 ecclesiastical structures consisted of a dry-stone oratory, an integrated stone *leacht* and a gable shaped shrine surrounded by a raised rectangular mound. Phase 2 burial appears to have moved away from the dry-stone oratory to the eastern quadrant of the gable shrine.

Phase 3 dated to the late medieval period and consisted of the re-use of the dry-stone oratory and Hut D and approximately 25 burials in the space between both buildings. In this period, the western oratory doorway was blocked and a door cut in the eastern wall. Two stone-lined pits at the oratory's eastern end had ironworking evidence. Ash and charcoal deposits from Hut D interior also confirmed fifteenth-seventeenth-century post-monastic occupation (see below).

Phase 4 dated to the post-medieval period and consisted of the use of the western end of the island around Hut D as a *ceallunach* ('infant burial ground'). Over 100 discrete burials were identified. The interior of the dry-stone hut was also used for four burials in this period.

The majority of the early medieval finds from the site consisted of typical domestic artefacts, with many recovered from midden deposits associated with Hut D. Finds from the site included iron knives, barrel-padlock keys, shears, awls and punches, twenty six circular bone beads, bone comb fragments, bone pins, three glass beads, a quernstone (or possible cross shaft), spindle-whorls, polished stone bracelets, perforated stones and a large number of whet-stones. A number of Hiberno-Scandinavian artefacts (e.g. a silver Viking coin (*c*. 1020-35), a perforated whet-stone, a hollow bone cylinder and a suspension mechanism for a balance) were also recovered.

The monastic settlement may have lasted for only 150-200 years from the mid/late-seventh century to the mid-ninth century. The community was engaged in fine metalworking and had a mixed arable/dairying/maritime economy with evidence for domesticated cereals (mainly oats followed by wheat), cattle, sheep and pig and wild deer, shellfish, seal, fish and birds. After the monastery fell out of use, the island was then primarily used as a cemetery in the late- and post-medieval periods with some evidence for the re-use of the two dry-stone buildings.

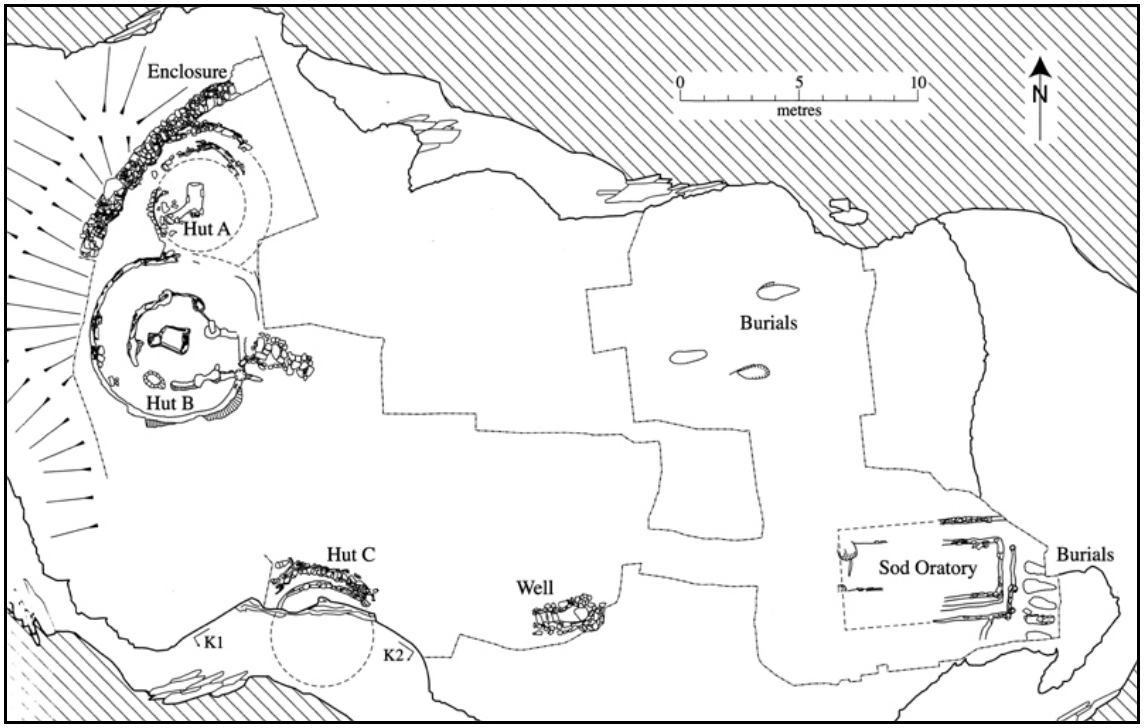


Fig. 179: Plan of the Phase 1 settlement at Illaunlaughan, Co. Kerry (after Marshall & Walsh 2005, 12).

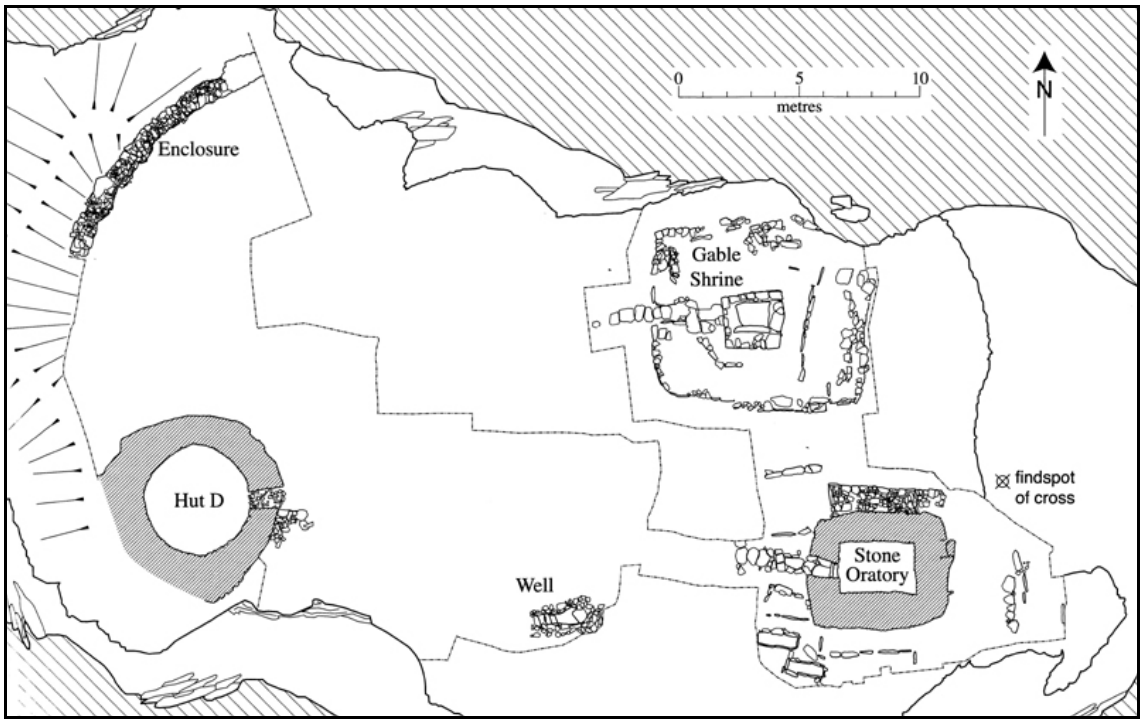


Fig. 180: Plan of the Period 2 settlement at Illaunlaughan, Co. Kerry (after Marshall & Walsh 2005, 38).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

(* - calibrated with marine reservoir effect: KA Hughen, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, PJ Reimer, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1059-1086.)

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-4106	Scallop shell associated with stone cists (Phase 1)	1508±45 BP	***A.D. 742-1049**
UB-4357	Charcoal from fill of hearth inside Hut B (Phase 1)	1346±32 BP	**A.D. 638-719** A.D. 742-769
UB-4104	Bone from adult human skeleton in cist beneath gable shrine (Phase 1)	1245±18 BP	**A.D. 685-783** A.D. 788-823 A.D. 841-860
OxA-10132	Bone from infant skeleton inside cist) beneath gable shrine (Phase 1)	1308±33 BP	**A.D. 657-730** **A.D. 735-772**
UB-4107	Bone from adult human skeleton (Sk. 188) in a cist beneath gable shrine (Phase 1)	1290±22 BP	**A.D. 667-730** **A.D. 735-772**
UB-4103	?	1191±22 BP	**AD 775-891**
UB-3860	Cattle bone from under the base of the NW side of the drystone hut D (Phase 2)	1172±34 BP	**A.D. 773-905** **A.D. 912-970**
OxA-10133	Burnt seeds (*Avena Strigosa*) from ash deposit near western and northern walls of drystone oratory (Post-monastic)	698±29 BP	**A.D. 1263-1308** **A.D. 1361-1386**
UCLA-2874A	Charcoal from refuse beneath a stone blockage in western doorway of drystone oratory (Post-monastic)	520±45 BP	**A.D. 1309-1360** **A.D. 1386-1449**
UCLA-2873H	Charcoal from fill of stone-lined pit at east end of interior of drystone oratory (Post-monastic). Sample contained ironworking residues.	365±55 BP	**A.D. 1445-1641**
UCLA-2873E	Carbonised material from occupation deposits inside the drystone hut D (Post-monastic)	315±45 BP	**A.D. 1464-1654**

References:

Marshall, J. W. & Walsh, C. 1994. Illaunloughan: Life and death on a small early monastic site. *Archaeology Ireland*, 8(4), 25–8.

Marshall, J. W. 2003. *Illaunloughan Island: an early medieval monastic site in County Kerry*. Bray: Wordwell.

Marshall, J. W. & Walsh, C. 2005. *Illaunloughan Island: An early medieval monastery in County Kerry*. Bray: Wordwell.

'Leacanabuaile' (Kimego West td.), Co. Kerry
Early Medieval Settlement Enclosure & Souterrain
Grid Ref: **V44578079 (044571/080797)**
SMR No: **KE079-016**
Excavation Licence: **N/A**
Excavation Duration/year: **Summers 1939 & 1940**
Site Director: **S.P. Ó Ríordáin & J.B. Foy (University College Cork)**

A collapsed stone enclosure known as Leacanabuaile in Kimego West townland, Iveragh Peninsula was excavated over the course of two summers in 1939 and 1940. The site was situated on a massive rock-eminence commanding excellent views across to Valentia Harbour to the northwest and Dingle Bay and Cooscrom Harbour to the northwest. The excavation cleared the enclosure interior of collapsed stone and debris exposing evidence for six buildings, a souterrain and a wall chamber (Fig. 181).

The surrounding wall was completely exposed and the enclosure was found to have an internal diameter of between 18m and 21m. The walls were 3.05m thick at the base before narrowing towards the top, and were faced with well-laid thin shale slabs on the outside and inner surfaces, with a rubble filling. A batter was evident on both the inner and outside surfaces while two ledges were found to extend around the wall tops at various points thus providing parapets from which onlookers could look out beyond the settlement. The entrance passage-way was situated along the eastern side and was defined by upright stones which may have supported a lintel.

Four houses and the partial remains of another two structures were identified within the interior of the stone enclosure. House A was a round stone building erected against the western side of the enclosing wall and had an internal diameter of 4.5m. Though House A formed part of a large conjoined building with House B in the centre of the enclosure opposite the eastern entrance, it was evidently earlier than the latter structure as the walls of House B were built against and not bonded into the walls of House A. The walls of House A were over 1.5m thick and reached a height of 1.67m above floor level with evidence for the corbelling of the walls from a height of 1.20m. The excavation of seven postholes in its interior suggested that the structure may have been narrowed by corbelling to a certain distance before being roofed by means of thatch or other material, supported on posts set in the floor.

The collapsed walls of two other stone circular buildings were discovered beneath the walls of House B. One very definite structure was identified south of House B and had walls approximately 0.8m thick. The other structure was not as distinct but appeared under the northern side of House B. The three round stone houses (House A and the two structures beneath House B) were evidently the earliest buildings on the site.

House B was a rectangular structure (7.1m by 6.15m) which covered the centre of the enclosure and allowed entrance to House A. It had rounded external corners and its walls were preserved to a height of 1.5m. The walls were on average 1.8m thick which would have enabled the structure to be corbelled to a certain point. The excavation of four large postholes in the interior supports the idea that the roof was completed by means of some form of a timber or thatched construction. Seven stakeholes were also excavated in the interior and were probably used to 'support pot-hangers or for some other domestic purpose'. A large irregular slab (0.83m by 0.68m, and 0.2m thick) with a hole in the centre (0.2m) was revealed near the centre of House B overlying the habitation layer. Its function is uncertain though it was interpreted as a primitive chimney which may have been originally set in the roof to allow the egress of smoke from the fire. The entrance to House B was opposite the enclosure entrance and was 0.94m. A covered drain (0.38m in width and 0.1m in depth) lined with stone flags was exposed running out from House A entrance through the main enclosure entrance and would have been used to carry off water to outside the enclosure.

House C was a rectangular building (4m by 3.35m) situated in the north-eastern side of the enclosure and utilizing the enclosure wall as one of its side walls. Its walls were 0.83m thick and remained to a height of nearly 0.60m with no evidence of battering, and the corners were rounded externally. House D was situated between the south-eastern corner of House B and the enclosure wall. Its entrance was 0.60m from the enclosure wall and 0.91m. This building post-dated the construction of the central House B structure as its walls had to be narrowed from 1.2m to 0.3m thick beside House B to leave a passage between both buildings. House D and House C because of their similarity to each other were evidently the latest structures on the site.

A souterrain was exposed running from under the western enclosure wall to an aperture in the interior of House A. Evidence for an intermural chamber within the enclosure wall was also revealed immediately outside House C entrance. This had an opening (0.45m by 0.38m) which lead into a flagged chamber (3.05m by 1.2m and 0.7m high) with a lintelled roof. Both the souterrain and wall chamber were evidently built when the enclosure was constructed as the stonework showed no indication that these structures had been incorporated as secondary structures.

A plough sock found in a habitation deposit in House A, a sickle inserted into the wall of House D, and five fragments of rotary quernstones were uncovered and indicate a community engaged in cereal cultivation. A spindle whorl and loom weight also suggests evidence for spinning on the site. Iron slag was also recovered indicating the practice of ironworking. Domestic finds include three iron knives, two iron nails, seven whetstones, flint and quartz fragments, a stone disc, a stone mortar, four bone combs, an iron pin, a bronze ring-headed pin. Cattle bone constituted almost 90% of the bulk of the bones recovered on the site. A relatively large quantity of sheep (or goat) bones were identified, as well as those belonging to pig, red deer, grey seal, horse, dog, badger, and various different birds. Periwinkle (75%), limpet (20%) and oyster limpet (5%) comprised the remains of marine molluscs on the site.

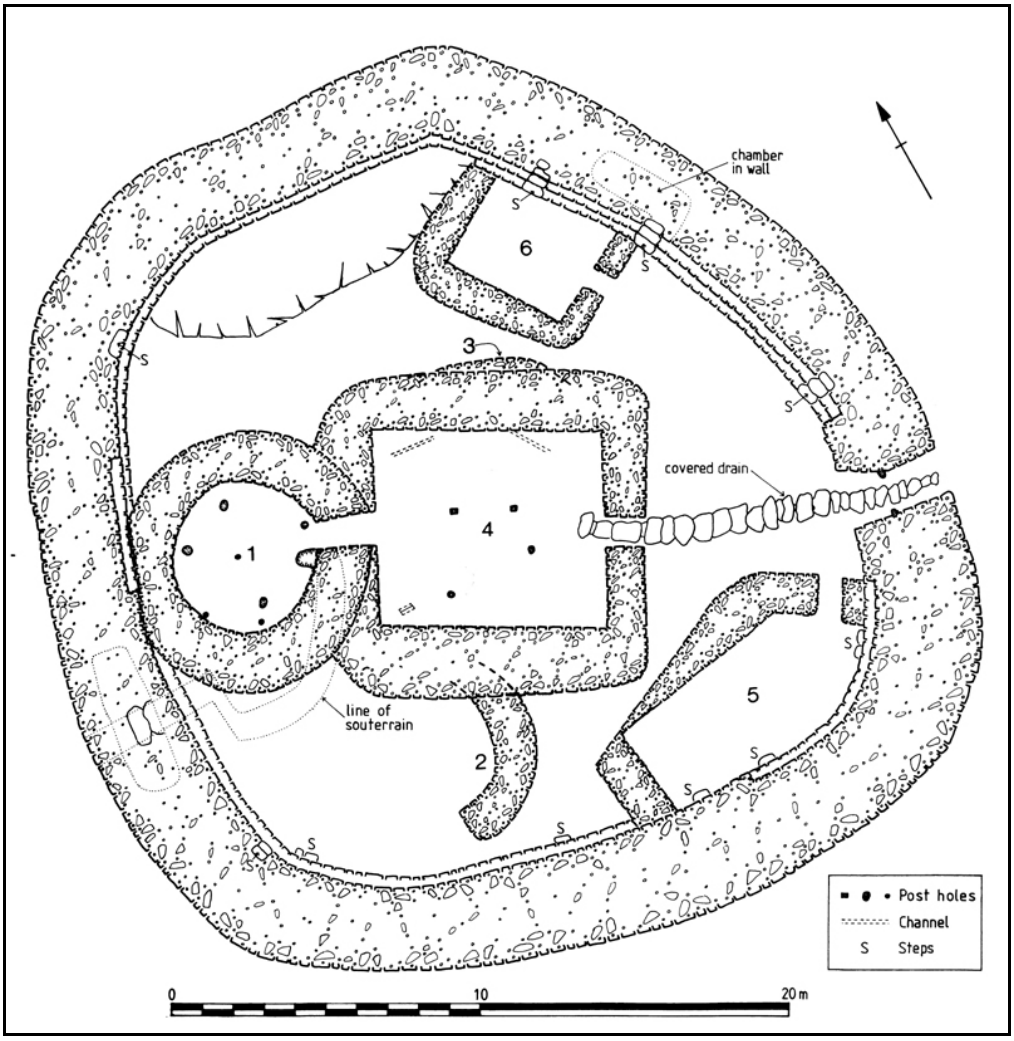


Fig. 181: Plan of Leacanabuile Stone Fort, Co. Kerry (after O'Sullivan & Sheehan 1996).

Reference:

Ó Ríordáin, S. P. & Foy, J. B. 1941. The excavation of Leacanabuile Stone Fort, near Cahirciveen, Co. Kerry. *Journal of the Cork Historical and Archaeological Society,* 46, 85–91.

Loher, Co. Kerry
Early Medieval Settlement Enclosure
Grid Ref: **V51526193 (051529/061931)**
SMR No: **KE106-003001**
Excavation Licence: **E000840**
Excavation Duration/year: **Early 1980s**
Site Director: **B. O'Flaherty (University College Cork)**

A stone fort at Loher, situated on the lower western slopes of Farraniaragh Mountain, was excavated in the early 1980s. A network of old field walls, some of which are curvilinear, occurs in the vicinity of the site and are overlain by a modern field pattern (Fig. 182). Excavation revealed a sequence of wooden and stone-built circular and rectangular structures within the interior.

The stone fort measured 18.4m by 19.8m internally. The enclosing walls (4m thick and up to 3.3m high) contained a rubble core faced internally and externally with random courses of well-built dry-stone masonry. Traces of two terraces furnished with steps were uncovered along the internal face of the wall, and a lintel-covered paved entrance passage (4m by 1.35m, and 1.7m high) led into the interior from the south-south-east.

The interior was covered with stone-fill to a depth of 2.0m prior to excavation. Two dry-stone built structures (one circular (I) and one rectangular (II)) were exposed within the stone-fill and their interiors excavated. Though no great depth of occupation deposit was uncovered within the buildings, the excavation did reveal a good stratigraphic sequence of houses.

House I (6.6m internal diameter) was uncovered in the north-eastern quadrant of the enclosure abutting the enclosing wall. Its walls survived to an average height of 1.3m and an entrance 0.8m wide was located at the south. Excavation revealed an earlier stone-built circular structure in the area of House I, which was in turn pre-dated by a wooden structure constructed of driven-stakes. The entrance of a souterrain was located in the western half of the interior of House I, which gave access to a dry-stone-built lintelled passage, 1m high which runs east-west for 3m. Excavations established that the construction of the souterrain post-dated House I.

House II (7.75m by 6.3m internally) occupied much of the western half of the interior of the enclosure. The walls of the building survived to an average height of 1.2m and consisted of a rubble core faced internally and externally with coursed dry-stone masonry, and a 1m wide entrance was located on the south wall and contained a paved pathway which leads towards the *caher* entrance. The northeast angle of the building abutted the external face of the circular dry-stone house, thus post-dating House I, but House II was also preceded by a circular wooden structure constructed of driven stakes. Another possible post-built structure was also identified in this area.

Finds from the site included glass beads and a tanged knife. Organic material included shell, carbonised seed remains, fish scales and fish bones.



Fig. 182: Aerial photograph of Loher, Co. Kerry (after O'Sullivan & Sheehan 1996).

References:

O'Flaherty, B. 1985:34 Loher, www.excavations.ie

O'Sullivan, A. & Sheehan, J. 1996. *The Iveragh Peninsula: an archaeological survey of south Kerry = Suirbhé seandálaíochta iíbh Ráthaigh,* Cork: Cork University Press.

Reask, Co. Kerry
Early Medieval Ecclesiastical Settlement
Grid Ref: **Q36740437 (036749/104370)**
SMR No: **KE042-060001**
Excavation Licence: **N/A**
Excavation Duration/year: **Summers 1972-75**
Site Director: **T. Fanning (National Parks and Monuments Branch, Office of Public Works)**

An excavation at the site of a recorded *ceallúnach* at Reask revealed considerable evidence for a sequence of early medieval monastic buildings, burial, habitation and industry. The site was truncated by a roadway and excavations were undertaken to divert the roadway around the enclosure and conserve the internal monuments. Excavations involved the complete investigation of the enclosure interior as well as areas immediately outside to the east and north.

The site was located on roughly the highest point of a rather low-lying area of land with good view of Smerwick harbour to the north and Mount Brandon to the northeast. The site consists of an enclosing cashel, internal dividing wall, stone oratory, slab-shrine, seven stone buildings, decorated early cross-slabs, early medieval graveyard and *ceallúnach* (Fig. 183). Fanning advanced a general sequence for the various excavated structures and features across the site though stressed that the relationships between structures within the settlement area and between them and the cemetery area could not always be established with complete certainty.

Phase 1 was associated with the habitation remains in the central area and the construction of Structure G and possibly Structure F. The settlement was enclosed by the cashel wall which also defined a primary lintel grave cemetery demarcated by inscribed pillar-stones and partly grouped close to a small slab-shrine and perhaps a wooden oratory. It was suggested that this phase of activity belonged to a Christian community of between the fifth and seventh century.

The primary enclosure wall was roughly sub-circular in shape (45m by 43m). Only the foundations of the wall survived, though excavations in the best preserved sections in the northeast indicate that it had substantial cashel-type walls over 2.0m thick and closer to 3.0m in some instances. A number of stones laid at right angles to the line of the enclosure wall were uncovered at two points along the west side and could possibly have belonged to a system of small fields or gardens attached to the enclosure. A base sherd of medieval pottery was found overlying the collapse directly south of the oratory but underlying the late *ceallúnach* graves. Other finds from amongst the enclosure collapse included a base sherd of early wheel-made pottery and an iron ring, possibly part of a ring-pin.

The primary cemetery contained forty-two east-west aligned graves, the vast majority constructed with their sides and ends lined with small slabs and covered by lintels. The lintel grave cemetery respected the curve of the enclosure wall and was set in rows in the eastern side of the site extending from the pillar stone as far as Structure F. No skeletal remains were recovered from any of the graves. A sherd of Late Roman Amphora (B ware - late-fifth/mid-sixth century A.D) and a portion of a blue glass bead were found in disturbed soil from the general level of the lintel graves.

The burials which pre-date or were contemporary with the stone oratory had roughly the same alignment and were therefore difficult to distinguish between. A number of the lintel graves underlay and clearly pre-dated the Phase 2 stone oratory and its stone paved entrance. At the same lower levels, were the lintel graves to the north of the stone oratory and beside the cross-inscribed pillar stone. A slab-shrine appears to have provided a focus for the early lintel cemetery. Its remains were excavated 2m in front of the oratory and consisted of a small paved area, enclosed on the south and east by two erect slabs with two pillar

stones in the southeast and southwest corners. The shrine was located at the same lower level as the primary lintel burials, 0.4m below the stone oratory and associated entrance paving. An abraded sherd of Late Roman Amphora was found in the shrine's upper fill. Other finds from the fill of the shrine included a few corroded iron fragments. A number of burials to the south of the oratory had a similar orientation to the above burials and could be roughly contemporary with them.

Two postholes were excavated about 2.0m to the south of the slab-shrine at a similar level and might indicate a wooden church but the evidence was insufficient to be sure. If taken to represent one side of a building, the postholes did not strictly align east-west or have a similar orientation with that of the other primary burials. A cross-inscribed pillar stone dating roughly to the sixth/seventh century A.D. appears to have been excavated *in situ* and may have marked the northern edge of the cemetery. It was surrounded by a group of packing stones located at the same level as a nearby early lintel grave.

An extensive black habitation deposit was uncovered in the centre of the enclosure underlying the Phase 2 dividing wall. A series of postholes were uncovered within the occupation layer and may have defined a possible circular wooden structure. The structure was associated with a hearth which contained a small perforated stone object within its lowest fill. The hearth lay directly beneath the internal dividing wall and produced a date range from the fourth to the seventh century (see below). It has been proposed that this early date could indicate a preceding secular phase of activity.

Finds from the black occupation layer included a portion of a blue glass bead, a small glass bead, a thin bronze rod and a possible portion of a stone mould for casting small rings. A large quantity of coarse ware sherds were recovered mainly from the lower levels of the occupation layer with sherds of imported Late Roman Amphora from the upper levels. One possible E ware sherd was recovered from the top of the black occupation layer. There was no trace of the black habitation deposit in the burial area and it appears that both the primary occupation and the primary lintel cemetery were mutually exclusive and roughly contemporary.

A shallow curving stone-lined drain was also overlain by the internal dividing wall and was associated with the hearth and postholes. A number of roughly circular pits possibly associated with ironworking were excavated to the west and south and contained sherds of coarse ware pottery, calcined bone and small lumps of iron slag. Further pits were excavated to the east and one produced a tiny blue glass bead at its base.

The basal foundations of a small single-celled sub-circular clochán (Structure G) with an internal diameter of 2.75m and wall thickness of 0.80-1.0m were excavated in the northwest sector of the site. The basal courses of the primary enclosure wall were tied in with the surviving courses of this building and indicate that both structures were roughly contemporary. The interior of Structure G revealed a series of pits, and a shallow drain associated with both smelting and smithing of iron and possibly bronze or glass. Finds from these features included a substantial quantity of slag, clay lining, tuyères pieces and crucible fragments. Radiocarbon determinations from samples from the furnace area and pit are unreliable as the measurements were derived from the peat used in the furnace, thus producing a substantially earlier date (see below).

Structure F comprised a small single-celled circular clochán (3.50m internal diameter) with walls measuring 0.90m thick and surviving to a height of 0.70m. The basal course of an annulus (i.e. an arc of stones) surrounded the hut on its west side at a distance of 0.60m from the outer face of the clochán and was used to contain blocks of sod for the insulation of the walls.
The fact that the outer wall of the clochán was traceable on its east side also suggests that the primary enclosure wall and this hut were built at roughly the same time. A small hearth

was excavated within the interior of the structure. Bone fragments and a little iron slag were recovered to the north of the structure below the stone collapse.

The smaller pair of conjoined huts (C and D) (Fig. 184) appears to be structurally earlier than the conjoined huts (A and B) (Fig. 185) and may also precede Phase 2. They however post-date the enclosure wall as they are built into its fabric. The structures (C) - 3.6m-4m internally- and (D) – 4.5m internally- contained dry-stone walls measuring 1.15m wide and 0.6m high. Though there was no inward inclination in the walls, their size suggests that their roofs were completed by corbelling.

A large fire-pit was uncovered underlying the rubble in Structure C and contained a considerable amount of peat charcoal, slate-like stones as well as a small flint scraper in its upper levels. A portion of an iron knife was recovered on the floor of structure C beside the fire-pit. No small finds, apart from shell dumps, survived within Structure D.

A number of smelting furnaces were excavated on the floor level of Structure D and contained iron slag, fired clay fragments, furnace bottoms and charcoal. A spread of peat-charcoal, iron slag, furnace bottoms, a shallow burnt pit and postholes were also excavated to the east of Structure D- overlying a series of drains- and were related to the various ironworking processes.

The peat layer was probably associated with the furnace pits inside Structure D which are likely to date to the final use of this building. The recovery of a sherd of eighth to eleventh century wheel-made pottery in the peat deposit could be significant because it could provide a very broad *terminus ante quem* for the use of these clocháns. It also indicates that this industrial activity, particularly within Structures D and possibly Structure G could have been undertaken by the occupants of Structures A and B in Phase 2 (*c*. eighth to twelfth century).

Phase 2 involved various structures and featured dating from the seventh/eighth century to as late as the twelfth century A.D. The stone oratory (3.5m by 2.7m internally) was built over a number of primary lintel graves. Its walls survived to a height of some four to five courses at the eastern end (0.45m) and may have originally supported a corbelled dome-shaped roof. Traces of the original oratory floor- trampled clay or daub- was revealed beneath the late burials. A deposit of peat charcoal lay close to its level while charcoal and iron slag was recovered at a higher level. Two heel-stones were discovered from among the basal course at the western end and beside the southern wall and may have originally supported a hinged door for the oratory.

The cemetery continued in use after the oratory was built and a group of burials to the southwest and extreme south of the oratory appear to post date the oratory. Those to the southwest have an orientation close to east-west and either lack lintels or were poorly made - possibly indicative of the degeneration of a lintel tradition. A small green glass bead was recovered from one of these burials. The burials to the extreme south have the greatest deviation from an east-west orientation and could represent a relatively late group of burials.

An internal dividing wall (1m-1.4m wide) was built which separated the burial area from the site's western half. It overlay the early habitation evidence and its foundations were at a higher level than the three burials beside the cross inscribed stone. The partial remains of a paved way was uncovered and appears to have lead from the threshold slab of the oratory doorway through an entrance in the dividing wall and linking up with the conjoined Structures A and B. The two conjoined huts (A) - 5.5m internally- and (B) - 6.1m internally- were built upon the line of the primary enclosure wall indicating that it had either fallen into disrepair or been demolished prior to their construction. An extension of the enclosing wall was then subsequently added to incorporate these huts into the enclosure. The structures contained dry-stone walls (1.3m wide) which survived to maximum height of 1.2m. Both structures had evidence for inward battering though their large size, lack of stones amongst the collapse and internal postholes in structure B might indicate roofs of thatch or sod. An arc of stones

surviving to a height of 0.90m surrounded the two huts and was used to anchor blocks of sod for the insulation of the walls.

The primary floor level of Structure A yielded a flint flake, a corroded iron knife and a decorated glass bead. A partially stone-lined hearth and two postholes were uncovered in the interior of Structure B. The upper stone of a rotary quern was found lying directly on top of a burnt deposit associated with the hearth. Other finds from Structure B included four dumps of shells. As mentioned above, the ironworking evidence from structures D and possible structure G may be associated with the occupants of Structures A and B during Phase 2.

Structure E consisted of a small poorly-built rectangular building (5.5m by 2.8m internally) erected as a kind of lean-to against the inner face of the enclosure wall. Although the walls were poorly-built, its foundations were broad and this coupled with its small plan might indicate that it had a corbelled roof originally. The structure clearly post-dated the enclosure wall though no other archaeological evidence was uncovered to indicate its period of construction or use.

Phase 3 is associated with the desertion of the monastic community and the re-use of a portion of the site mainly as a *ceallúnach* burial ground from the late medieval period. The burials- roughly-built cist graves associated with deposits of quartz and sea pebbles and occasionally re-using early cross-slabs- were located mainly within a small rectilinear enclosure (10m by 6.4m) to the north of the oratory as well as inside this building and to its immediate south.

The western sector of the site was divided into small plots for grazing and tillage while the site was being re-used as a *ceallúnach*. Some of the structures, notably A, B and probably E, were altered and used in more recent times probably as animal shelters. Finds from these upper levels- modern crockery and clay pipe stems-indicate a date in the eighteenth/nineteenth centuries.

A corn-drying kiln was excavated outside the enclosure in the southwest corner and consisted of a tapering stone-lined roofed flue (1.75m by 0.7m and 0.6m high) leading into a stone-lined bowl, 1.2m in diameter. Evidence for firing was identified at the outer end of the flu and may indicate the location of a hearth. The excavator was conscious that this feature could be early medieval though advanced a post-medieval date since it was located outside the enclosure and was possibly associated with the re-use of Structures A and B as animal shelters.

Along with the considerable evidence for iron and possibly bronze-working, the recovery of spindle-whorls, loom-weights, net-sinkers, polishers, hammer-stones, rubbing-stones, hone-stones, quernstones and flint and chert flakes indicates a range of other domestic activities including spinning and weaving, leather-working, cereal cultivation and fishing. Other finds from the site included heel-stones, perforated stone discs and a possible stone lamp and pot cover.

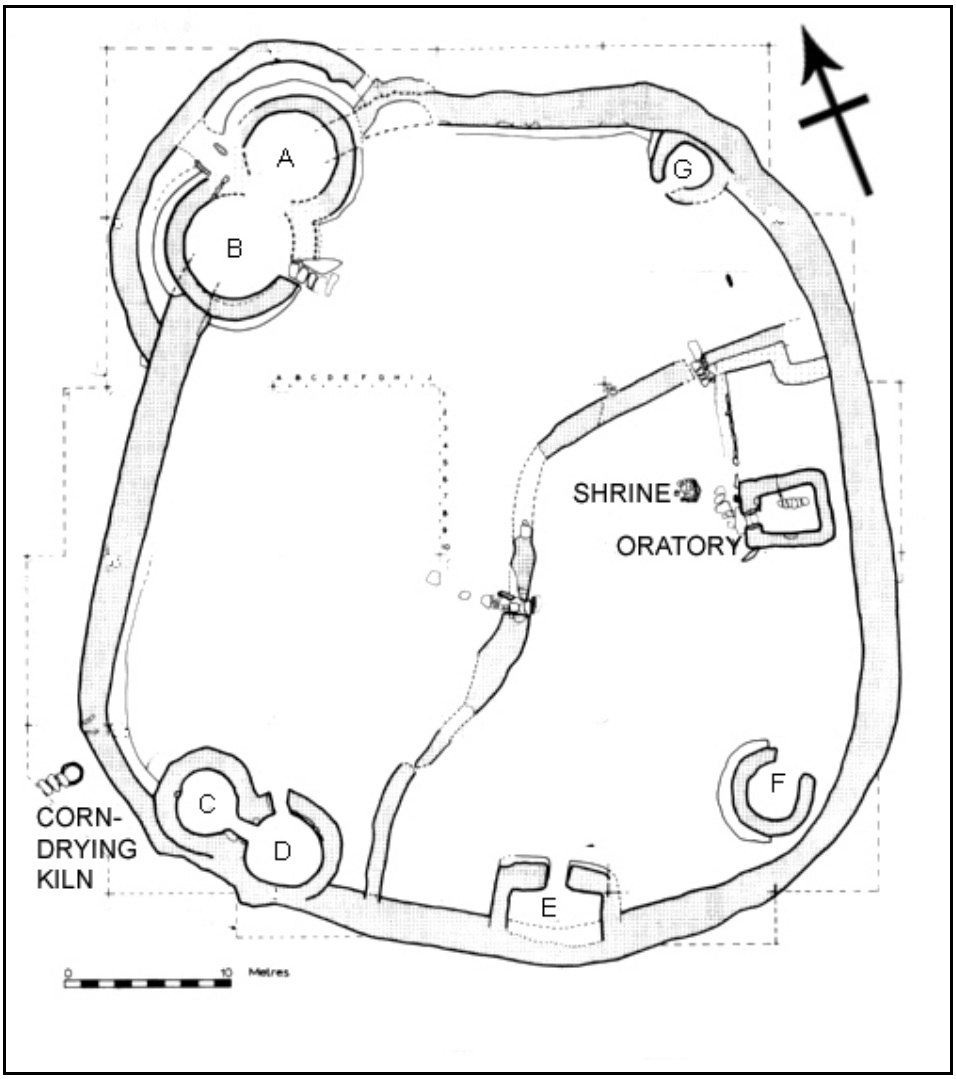


Fig. 183: Plan of Reask, Co. Kerry showing areas excavated (after Fanning 1981, 71).

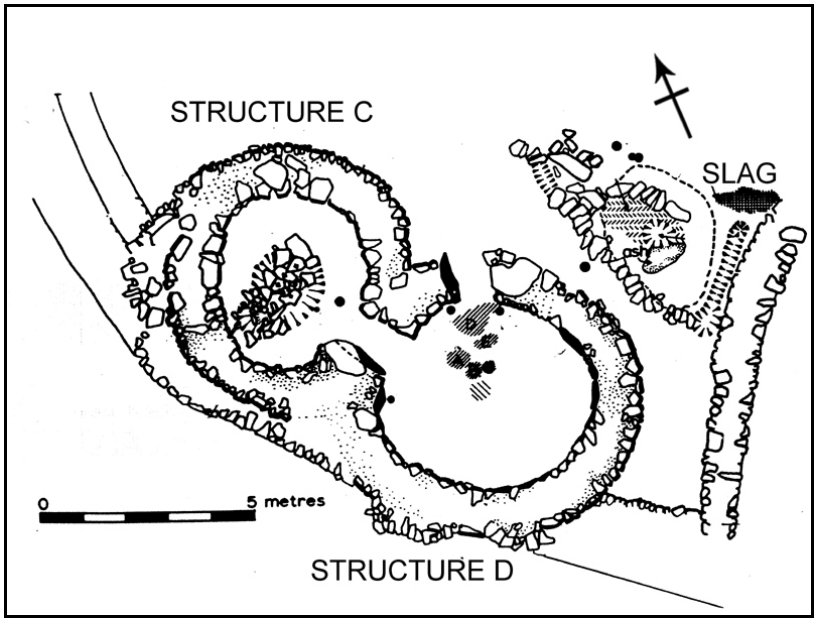


Fig. 184: Plan of Structures C and D at Reask, Co. Kerry (after Fanning 1981, 91).

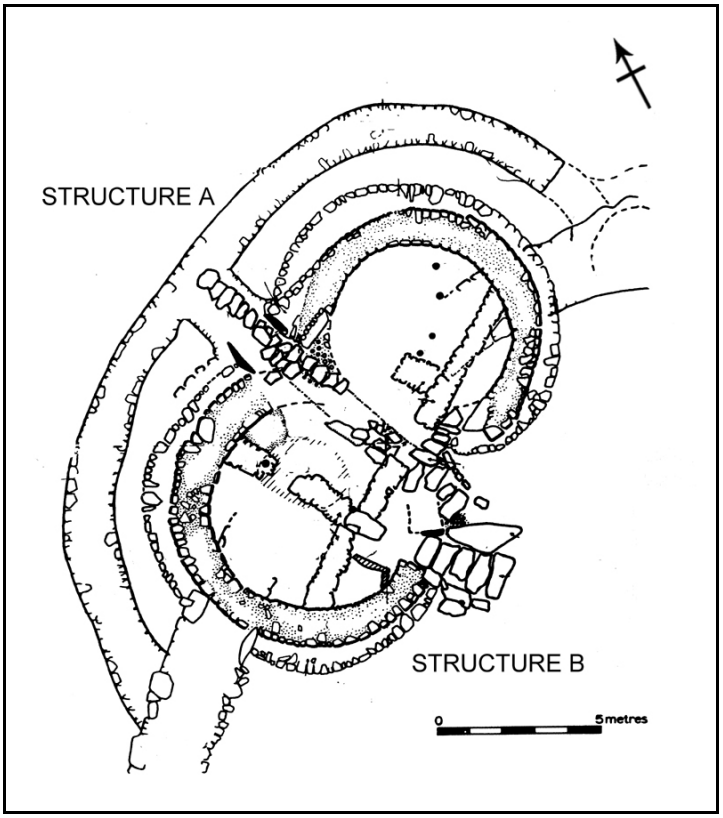


Fig. 185: Plan of Structures A and B at Reask, Co. Kerry (after Fanning 1981, 87).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB- 2167	Wood charcoal from the hearth site associated with the primary black occupation layer, underlying the internal dividing wall	1565±90 BP	A.D. 259-284 **A.D. 322-651**
UB- 2168	Charcoal from layer of charcoal mix overlying orange/white ash layers in furnace pit within Structure G	1815±105 BP	**B.C. 44- A.D. 433** A.D. 499-501
UB- 2169	Charcoal sample from furnace pit within Structure G	2440±55 BP	**B.C. 758-683** **B.C. 670-404**
UB- 2170	Wood charcoal sample from furnace pit within Structure G	2220±80 BP	**B.C. 404-54**

References:

Fanning, T. 1973. Excavations at Reask, Co. Kerry. Preliminary report. *Journal of the Kerry Archaeological and Historical Society*, 6, 5–8.

Fanning, T. 1975. Excavations at Reask. Preliminary report, seasons 1973-5. *Journal of the Kerry Archaeological and Historical Society*, 8, 5–10.

Fanning, T. 1981. Excavation of an Early Christian cemetery and settlement at Reask, County Kerry. *Proceedings of the Royal Irish Academy Section C*, 81C, 67–172.

County Kildare

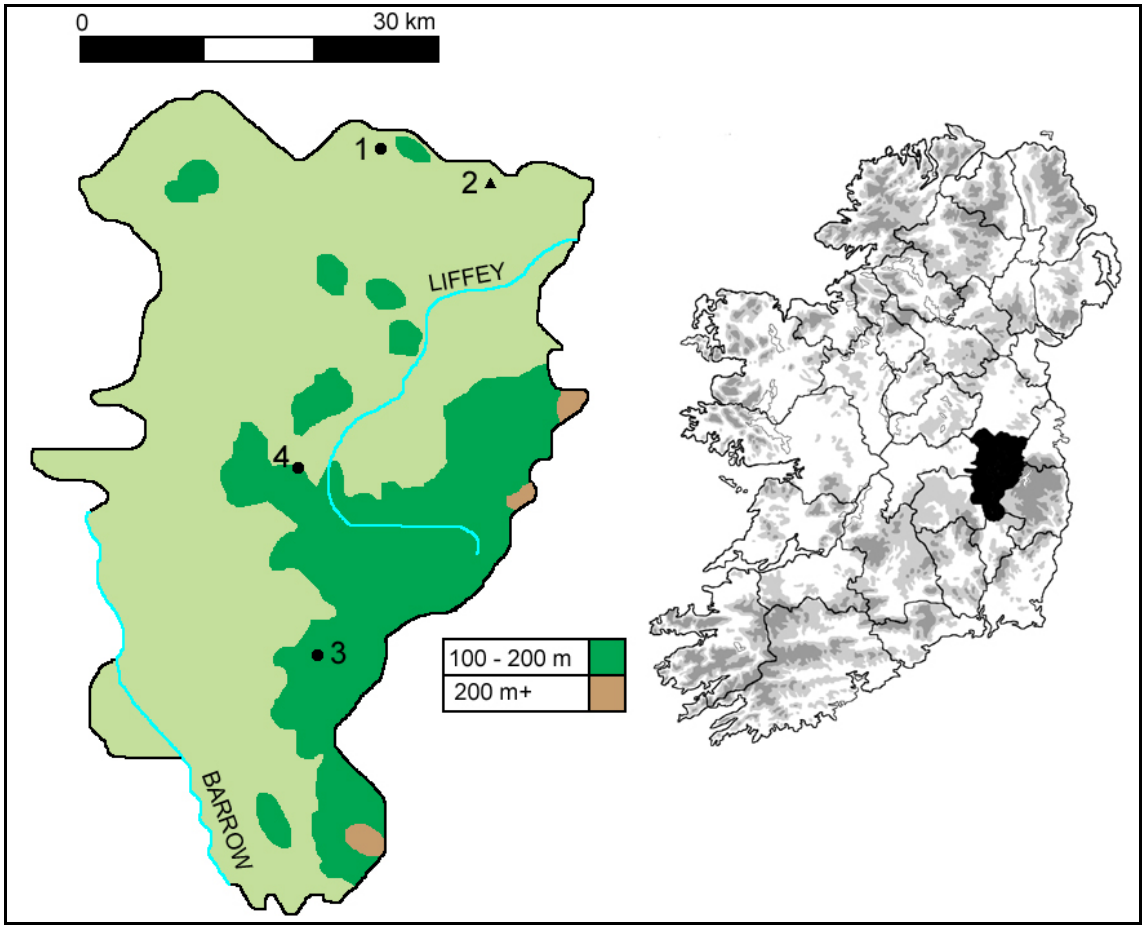


Fig. 186: Significant early medieval excavations in Co. Kildare.

1	Killickaweeny	**3**	Narraghmore
2	Maynooth	**4**	Pollardstown

Killickaweeny, Co. Kildare
Early Medieval Settlement Enclosure
Grid Ref: **N83854067 (283859/240679)**
SMR No: **N/A**
Excavation Licence: **02E1002**
Excavation Duration/Year: **July – November 2002.**
Site Director: **F. Walsh (Irish Archaeological Consultancy Ltd.)**

Killickaweeny – excavated in advance of a road scheme – was a large early medieval D-shaped settlement enclosure which dated between the eighth and tenth centuries. Four early medieval buildings, with associated structures, pits, hearths and a well, were identified within the enclosure, while a smaller enclosure slightly pre-dated it to the north (Fig. 187). The settlement was situated on a north-facing slope, at 120m OD, with a relatively sharp incline. It was also located close to the border between counties' Kildare and Meath which probably collates to the former boundary between the kingdoms of Brega and Leinster during the early middle-ages.

The farmstead at Killickaweeny 1 was defined within a large enclosure (Ditch A). Two earlier ditches (B and C) were associated with the primary stages of the site's development, preceding the main occupation phase. These ditches were located towards the northeastern side of the site. Ditch B represented an earlier phase of the enclosure, forming a precursor to Ditch A, while Ditch C formed an annex to Ditch B. Little evidence of occupation was revealed, either within the fills of this ditch or within the annex that it defined, and it is unlikely that much domestic activity took place here. This 'annex' may have been a designated enclosure for cattle in the early phases of the site's development. Both of these ditches were stratigraphically earlier than Ditch A, which cut through the fills of both Ditch B and Ditch C. Charcoal from an upper fill of Ditch B returned a date of A.D. 569–782. Finds within it included two iron knives.

The main enclosing ditch (Ditch A) measured 60m by 80m. The ditch was approximately 2.5m wide and 1.2m deep. The eastern section of the ditch was disturbed by a later boundary ditch and it is possible the entrance was located in this area. Finds within the ditch included a possible awl, two red deer antler picks, two wooden staves and a lid or base. A lack of features internally within 3m of the ditch suggests the former presence of a bank.

Features within the settlement enclosure included four buildings (Structures 1-4), an ironworking area, an internal linear gully which formed a division within the enclosure, and a number of pits, hearths and gullies.

Structure I was a circular house and was defined by an arc of packed postholes to the north and south of a central hearth. If continuous, the structure would have measured 6m north-south by 5m east-west. Stake-holes were evident around the hearth and may have supported a series of spits used for cooking. Pits, containing refuse such as hearth clearance deposits and animal bone, were situated beside the house. These were dated between the mid seventh and late ninth centuries and it is likely that they were contemporary with the use of the house. Artefacts from the pits included four scroll-headed pins, which likely date between the seventh and tenth centuries, iron knives, possible weaving tensioners, a copper alloy wire pin, a nail-type object, a glass bead, a stone and a bone spindle-whorl, a whetstone, and fragments of bone combs.

Another building, this time sub-rectangular in plan, was situated to the west of the round house. Structure II measured 9m southwest–northeast by 7m southeast–northwest and was defined by a gully that would have supported a wall. It was entered at the southeast and a hearth was centrally placed. Three stone-packed postholes within the interior formerly supported roof supports. Charcoal from one of the postholes was dated to A.D. 673-897. An iron slotted-and-pointed object was retrieved from the structure's abandonment fill. A series

of gullies were identified outside the building and may represent the foundations of ancillary structures or shelters. It is uncertain if this was a house, potentially later than the round house, or a building used for industrial activity. There was a higher presence of industrial waste in pits close to the building whereas, conversely, the pits close to the round house contained less industrial waste and higher charred cereal remains indicative of food refuse. Two glass beads were retrieved from features close to Structure II.

The ironworking area (Metalworking Area A) was located immediately north of Structures' II and III. Both furnaces and smithing hearths were identified in this area as the heat-scorched bowl depressions contained both smelting and smithing slags. The presence of hammer-scale within the hearths and the gully surrounding Structure II further attests to iron smithing at Killickaweeny. Another find, indicative of ironworking, was a *tuyère*, which was recovered from an abandonment fill of the well, close to the bowl furnaces. A number of gullies in this area probably supported shelters around the ironworking features. Eighty six kilograms of iron slag were retrieved from the site and the majority came from features in the immediate vicinity of the ironworking area including the well and enclosure ditch. Most of the slag was related to smelting activities but smithing slag was also identified in lower quantities.

Immediately to the north of Structure II was a square-shaped building defined by four evenly spaced stone-packed postholes. Structure IV measured approximately 2m southwest-northeast and 2.7m southeast-northwest. The poles may have supported an elevated grain store but its location within the area utilised for ironworking suggests it could have been a hut or shelter related to industrial activities.

Structure III survived as a shallow penannular-shaped gully to the immediate west of Structure II. It measured 5m in diameter and would also have been situated beside the enclosure bank. It may have been another structure related to industrial activity or was perhaps a barn or another farm out-building.

Other features within the settlement enclosure included a funnelled pit in the south-western area. It was located close to the round house and may have collected and stored water for domestic use. A large iron possible candlestick holder was retrieved from the upper fill of this pit. The well was located close to the ironworking area and naturally filled with water. The water could have been used for both industrial and domestic use. Its upper fill contained metallurgical waste which demonstrates that it had gone out of use while the occupants continued to forge and mend iron objects. Other finds from the well included a grindstone and a wooden rod. The well, along with another pit in the enclosure, were dated between the mid seventh and late ninth centuries.

It was noteworthy that archaeological features were mostly absent north of the linear internal division and this area was probably used for livestock management. This shallow linear gully may have supported a fence which divided the living and livestock areas within the settlement.

Another industrial area (Metalworking Area B) was located outside the enclosure within the confines of the earliest enclosure to the north of the site. A large figure-of-eight shaped smithing hearth was identified in this area.

Artefacts, other than those mentioned discovered during excavation, included two further glass beads, a possible shears blade, an iron needle, iron nails, fragments of copper alloy tubing, a small quantity of lithics, and bone needles.

Animal bone was discovered from all pits within the enclosure. Cattle dominated the assemblage and the minimum number of individuals (MNI) was 27. Cut and crush marks were visible on the bone. The number of sheep/goat and pigs were similar. The MNI for the former was 18 and it was 14 for the latter. The bones of horses, dogs, a cat and birds were also identified. The richest assemblage of charred seeds at Killickaweeny 1 came from a pit

close to Structure 1. It contained roughly equal amounts of wheat, barley and oats, in addition to a possible grain of rye. The best-represented cereal from the settlement was barley.

Killickaweeny was a large enclosed early medieval farmstead that revealed defined areas within the settlement related to domestic and craft activities, metalworking and animal management. The family that resided here, over a couple of generations, lived a relatively comfortable lifestyle although the lack of exotic items or evidence for non-ferrous metallurgy suggests they did not belong to the noble social grades. Killickaweeny is an informative example of what may have been a typical early medieval enclosed farmstead including a dwelling surrounded by farm buildings. Animals were kept in the northern part of the enclosure and the family and their retainers were engaged in a range of subsistence agricultural and industrial activities probably divided according to gender and status within the kin group.

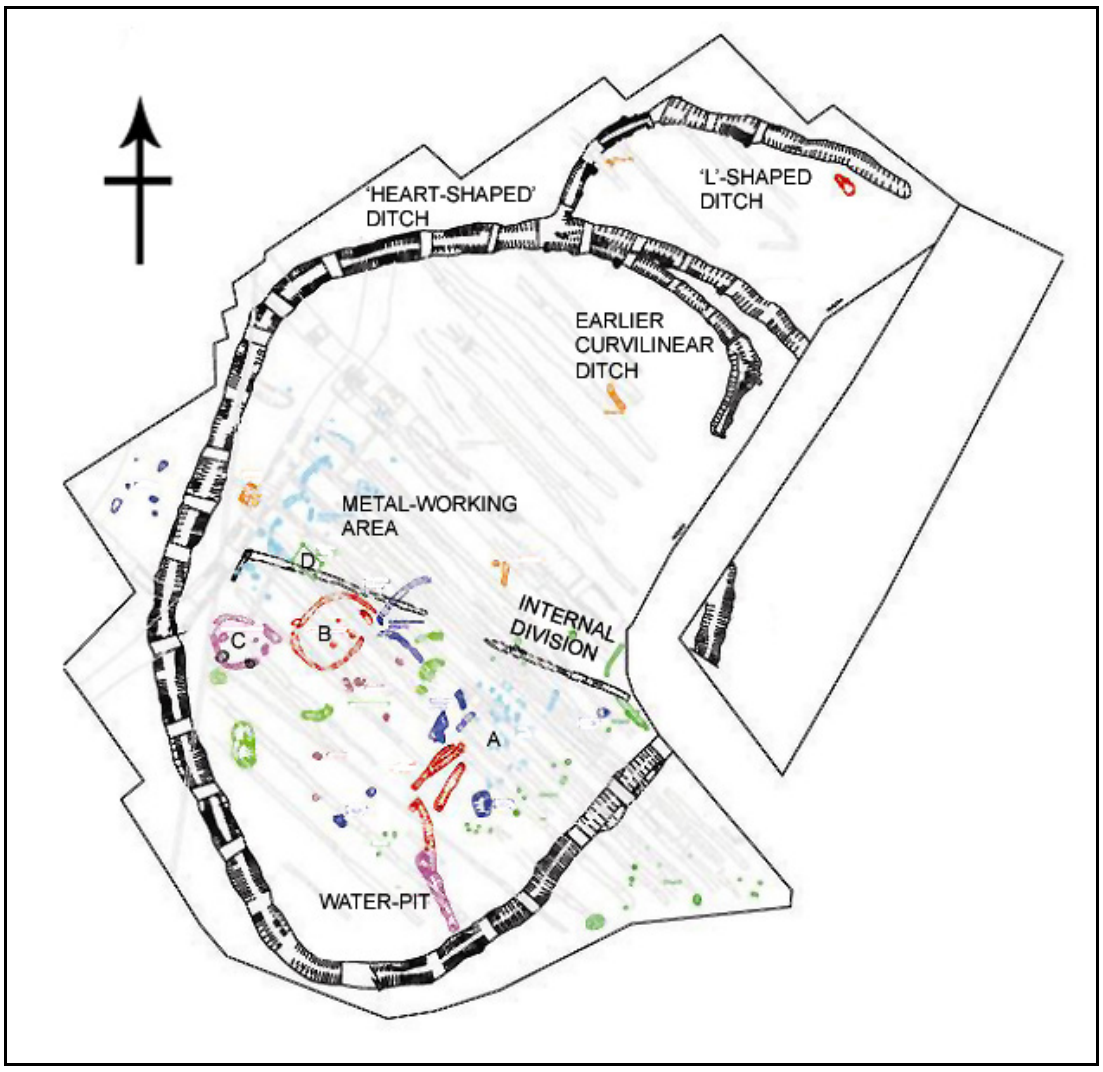


Fig. 187: Plan of Killickaweeny, Co. Kildare (after Walsh 2008, 28).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-185557	Upper fill of Ditch B (Earlier enclosure at northeast of site)	1350±60 BP	**A.D. 569-782**; A.D. 790-809.
Beta-185555	Charcoal from upper fill of settlement enclosure ditch	1010±70 BP	**A.D. 888-1186**; A.D. 1200-1205.
Beta-185549	Charcoal from pit in proximity to Structure I	1270±60 BP	**A.D. 656-886**.
Beta-185550	Charcoal from pit in proximity to Structure I	1280±60 BP	**A.D. 653-881.**
Beta-185553	Charcoal from posthole in Structure II	1220±50 BP	**A.D. 673-897**; A.D. 922-942.
Beta-185551	Charcoal from pit in proximity to Structure II	1300±60 BP	**A.D. 644-876.**
Beta-185556	Charcoal from gully in Metalworking Area A	1260±50 BP	**A.D. 665-878**
Beta-185552	Charcoal from well	1260±60 BP	**A.D. 656-890**
Beta-185554	Charcoal from pit	1250±60 BP	**A.D. 657-894**; A.D. 928-934
GU-11625	Charcoal from smithing hearth in Metalworking Area B	1320±50 BP	**A.D. 618-782;** A.D. 789-812; A.D. 845-856.
Beta-185558	Charcoal from smithing hearth in Metalworking Area B	1090±60 BP	**A.D. 778-1032**

References

Walsh, F. 2008. Killickaweeny 1: high-class early medieval living. In N. Carlin, L. Clarke, & F. Walsh. (eds). *The Archaeology of Life and Death in the Boyne Floodplain: the linear landscape of the M4*, 27–54. National Roads Authority Scheme Monographs 2. Bray. Wordwell.

Walsh, F. forthcoming. An early medieval enclosed farmstead at Killickaweeny 1, Co. Kildare. In C. Corlett & M Potterton (eds). *Settlement in Early Medieval Ireland in the Light of Recent Archaeological Excavations*, 170–81. Bray. Wordwell.

'Maynooth Castle' (Maynooth td.), Co. Kildare
Early Medieval Unenclosed House.
Grid Ref: **N92683867 (292687/238678)**
SMR No: **KD005-015**
Excavation Licence: **96E391**
Excavation Duration/Year: **1996; 1997; 1998; 1999.**
Site Director: **A. Hayden (Archaeological Projects Ltd.)**

Excavations were undertaken for a number of seasons at the keep of Maynooth Castle. During this a number of archaeological features were discovered under the sub-floor level of the keep, relating to early medieval occupation. Four main structures were identified from this period – a rectangular building; a roundhouse; a corn-drying kiln; and a roundhouse with attached palisade.

A rectangular structure was identified, outlined by a series of postholes, stakeholes and slot trenches (Fig. 188). The east wall measured 4.8m, with a 0.8m gap in the centre, flanked by large postholes, which represents the doorway. The remaining walls of this structure are not so clearly recognisable.

A couple of roundhouses were also identified beneath the keep. These are not synchronous, and the later roundhouse appears to have been associated with an attached palisade trench. This is the clearest pre-keep structure, and consists of a single arc of stakeholes for a wattle-walled house, 5m in internal diameter. A double series of stakeholes at the east of the house has been interpreted as a replaced section of walling. A central posthole, and a set of four internal postholes, was interpreted as holding roof supports; and a series of stakeholes, inside the building, were interpreted as the remains of an internal division. Both of these roundhouses had associated central hearths.

A keyhole-shaped corn-drying kiln was also discovered beneath the keep. Carbonised grains of oat and barley were recovered from its fill.

The final phase of the pre-keep activity appears to have been agricultural, with a number of cultivation ridges visible. These appear to avoid the last roundhouse, and may therefore be associated with this phase of occupation. The roundhouse associated with the palisade is stratigraphically the most recent sub-keep structure, therefore it must be assumed that the rectangular house is prehistoric, probably Neolithic. The corn-drying kiln is also overlain by cultivation ridges, and it may be assumed that it is contemporary with the last roundhouse.

Finds from the cultivation layer include prehistoric material (waste flint; half a stone axe head; a stone mace head), and early medieval material (a bead of jet/lignite, and a few corroded objects of bronze and iron).

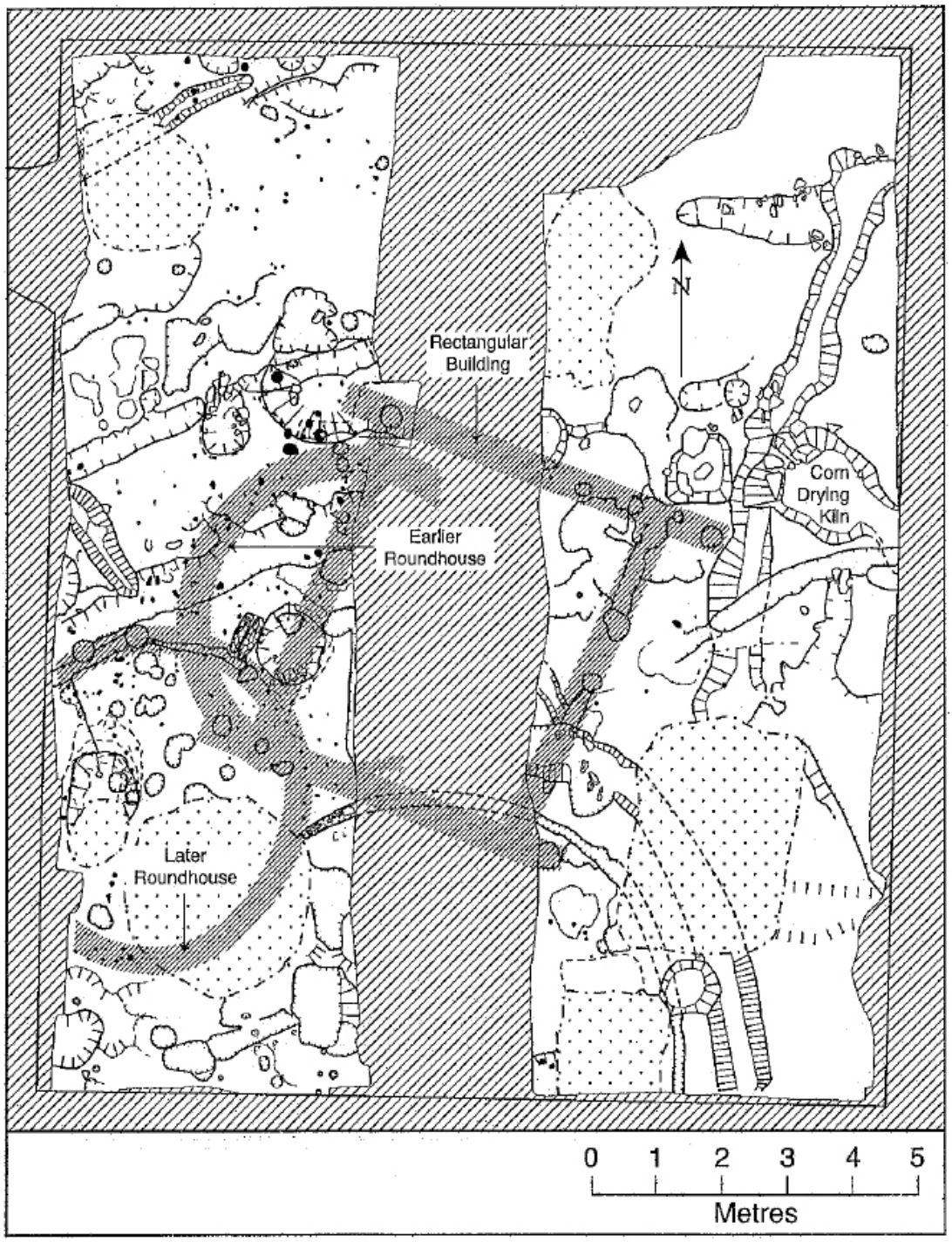


Fig. 188: Prehistoric and early medieval structures beneath the keep at Maynooth Castle, Co. Kildare (after Hayden 2000).

Reference:

Hayden, A. 2000. Archaeological Excavations of the Keep, Maynooth Castle, Co. Kildare. Unpub'd Report.

Narraghmore, Co. Kildare
Early Medieval Settlement Enclosure.
Grid Ref: **N788001 (27880/20010)**
SMR No: **N/A**
Excavation Licence: **E000097**
Excavation Duration/Year: **Spring 1971.**
Site Director: **T. Fanning (Office of Public Works)**

The site consisted of a triple-banked enclosure, with two intervening ditches, which enclosed an area 55m by 70m (Fig. 189). The enclosure was set on top of a ridge, and had been largely destroyed by gravel extraction. Excavation was required as future quarrying threatened to destroy the entire site.

Excavation through the banks and ditches revealed that the cores of the banks were constructed from the up-cast from the ditches. The outer bank appeared to have had an internal stone revetment, and a palisade trench was identified along the top of the inner bank. There was some evidence of pre-enclosure activity in the form of two fire-pits which were discovered beneath these banks.

Only a small portion of the interior survived to be excavated. A number of small pits were discovered in the occupation layer, but these appear to have been rubbish pits, filled with animal bones and charcoal, rather than structural postholes. Very few finds were recovered from the interior. These consisted of a stone spindle-whorl; an iron object; a piece of iron slag; and a flint flake.

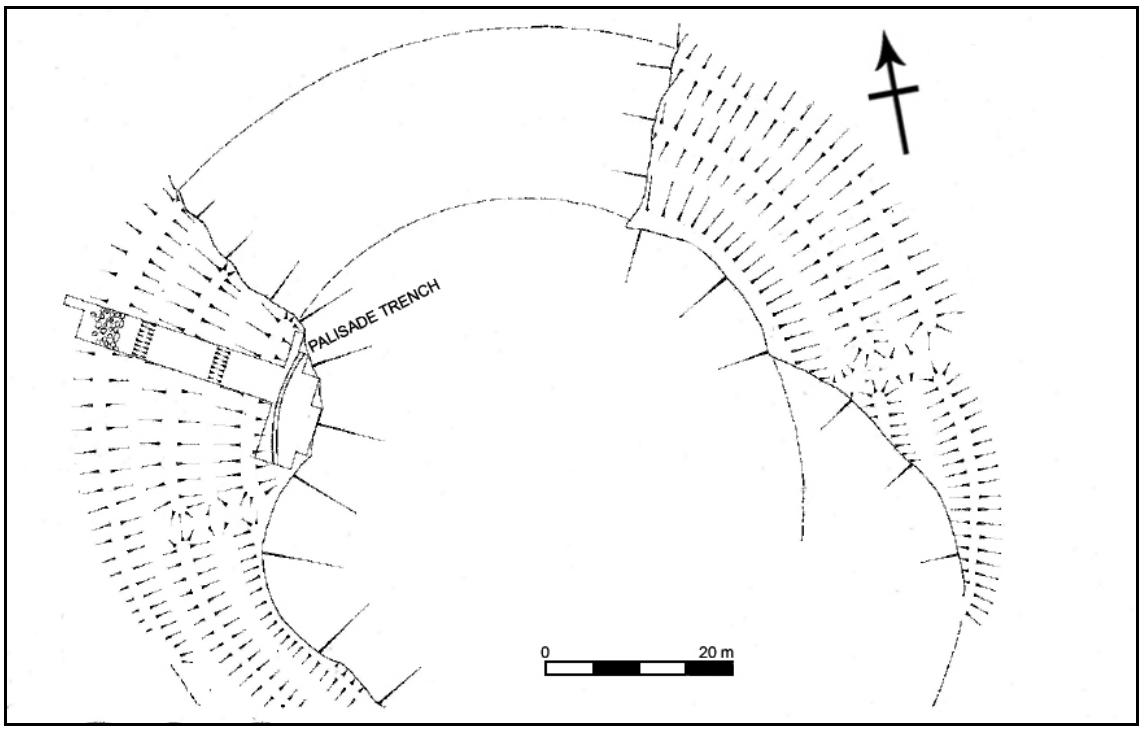


Fig. 189: Plan of Narraghmore, Co. Kildare (after Fanning 1972, 170).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
P2412	Sod layer buried by bank	1580±170 BP	**A.D. 68-777.**
P2413	Sod layer buried by bank	1945±60 BP	89 B.C. -74 B.C.; **57 B.C. – A.D. 225.**

Reference:

Fanning, T. 1972. Excavations of a ringfort at Narraghmore, Co. Kildare. *Journal of the Kildare Archaeological and Historical Society*, 15(2), 171–7.

Pollardstown, Co. Kildare
Early Medieval Settlement Enclosure.
Grid Ref: **N775151 (27750/21510)**
SMR No: **N/A**
Excavation Licence: **E000098**
Excavation Duration/Year: **1972**.
Site Director: **T. Fanning (Office of Public Works)**

The site consisted of a double-banked enclosure, with an intervening ditch, set on an esker ridge. Gravel quarrying had destroyed a portion of the site, but from earlier maps it was estimated to have measured 70m by 80m (Fig. 190). Future quarrying threatened to destroy the entire site, thus occasioning a large-scale excavation of the remaining features.

The nature of the destruction meant that no structural features were discovered in the interior. An occupation layer (0.2m deep), abutting the enclosure bank however, was excavated. This was found to include animal bone, charcoal, and a couple of fragments of iron slag. A number of iron artefacts were also recovered including two stirrups, an arrowhead, a buckle, three iron rods, and six nails. The potentially militaristic nature of parts of this assemblage, and its potential late date (the stirrups and arrowhead were dated by the excavator to the twelfth/thirteenth centuries) would suggest that this site may have either been re-occupied during these centuries, or may have been constructed at this time as an Anglo-Norman ringwork.

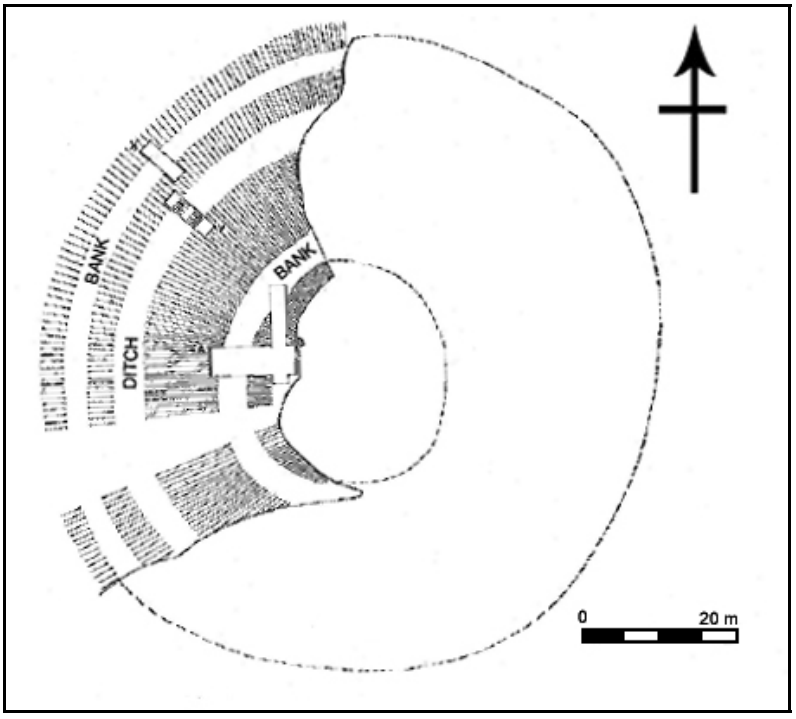


Fig. 190: Plan of Pollardstown, Co. Kildare (after Fanning 1973-4, 252).

Reference:

Fanning, T. 1973–1974. Excavation of a ringfort at Pollardstown, Co. Kildare. *Journal of the Kildare Archaeological and Historical Society*, 15(3), 251–61.

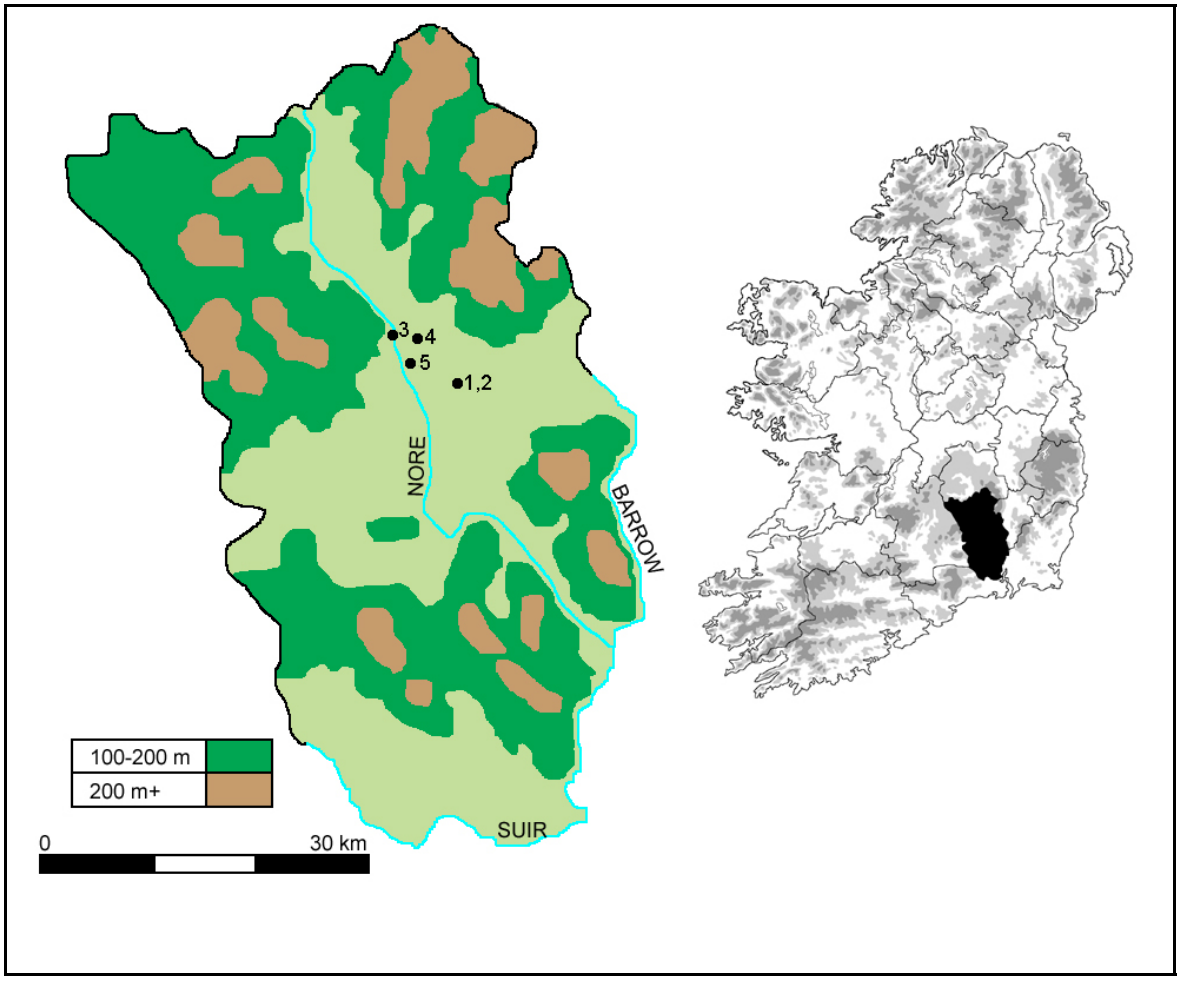


Fig. 191: Significant early medieval excavations in Co. Kilkenny.

1	Dunbell Big (5)	**4**	Leggetsrath
2	Dunbell Big (6)	**5**	Loughboy
3	Kilkenny		

Dunbell Big (5), Co. Kilkenny
Early Medieval Settlement Enclosure.
Grid Ref: **S55705210 (25570/15210)**
SMR No: **KK024-01?--**
Excavation Licence: **E000571**
Excavation Duration/Year: **September – November 1990**.
Site Director: **B. Cassidy (Archaeological Development Services)**

Dunbell Big (5) is one of a cluster of enclosures found in this townland. In 1850 the land owner began quarrying the enclosure for fertilizer, and this resulted in a number of surveys and excavations of the sites by local antiquarians. As was typical of such digs, the excavators were largely interested in material culture remains, rather than structural or stratigraphical features. Finds from these excavations included bronze ring pins; an iron bell; silvered bronze wire; and lignite bracelets.

By the time of the excavation in 1990, Dunbell Big (5) had been completely levelled, however antiquarian reports that it may have contained a souterrain meant that some features may have survived. The site was now threatened by the expansion of a local limestone quarry.

An oval ditch was uncovered during these excavations, with a maximum external diameter of 50m. The upper width of the ditch was 4m and it survived to a depth of 2m. The only finds recovered from the ditch in the earlier excavation were animal bones, and one sherd of coarse pottery. When the ditch was further excavated later in 1990, however an iron barrel-lock key was recovered from the lower fill of the ditch.

Further excavation in the interior of the site recovered evidence for a square wicker-walled house, with central hearth and internal roof supports. A 6m roundhouse, also of wicker-walled construction, was identified south of the square house (Fig. 177). This structure had a small porch (indicated by four postholes), and the door-step into the house had survived *in situ*. A third structure, described as being 'slightly horse-shoe-shaped', was also identified in the late-1990 excavations. The floor of this structure was full of iron slag, and it seems highly probable that this was a workshop. A furnace was also located within the interior of the enclosure.

In the course of excavation a number of Bronze Age burials were also found underlying the early medieval structures and occupation layers.

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-3389	Charcoal- ditch fill	1430±54 BP	A.D. 466-481; **A.D. 534-686**.
UB-3390	Charcoal- post-hole square house	1193±33 BP	A.D. 712-745; **A.D. 767-898**; A.D. 920-947.
UB-3391	Charcoal- post-hole square house wall	1233±39 BP	**A.D. 684-885**.
UB-3392	Charcoal- Roundhouse	1314±28 BP	**A.D. 655-725**; **A.D. 738-771**.
UB-3410	Charcoal- gully	1309±70 BP	**A.D. 614-883.**
UB-3412	Charcoal	1141±32 BP	A.D. 781-790; **A.D. 807-982**.

Reference:

Cassidy, B. 1990:072. Dunbell Big, No. 5, Co. Kilkenny. www.excavations.ie

Cassidy, B. 1991. Digging at Dunbell Big. *Archaeology Ireland*, 5(2), 18–20.

Prim, J. G. A. 1852-3. Notes of the Excavation of a Rath at Dunbel, County of Kilkenny. *Journal of the Royal Society of Antiquaries of Ireland*, II, 119–27.

Prim, J. G. A. 1861. Donated several antiquities, excavated at Dunbel Rath, discovered in trenching the small rath lying south of the great rath of Dunbel (note). *Journal of the Royal Society of Antiquaries of Ireland*, VI.2, 307–8.

Dunbell Big (6), Co. Kilkenny
Early Medieval Settlement Enclosure.
Grid Ref: **S55705210 (25570/15210)**
SMR No: **KK024-01?--**
Excavation Licence: **E000108**
Excavation Duration/Year: **1972**.
Site Director: **C. Foley (National Monuments Branch, Office of Public Works)**

Dunbell Big (6) is one of a cluster of enclosures found in this townland. In 1850 the land owner began quarrying the enclosure for fertilizer, and this resulted in a number of surveys and excavations of the sites by local antiquarians. As was typical of such digs, the excavators were largely interested in material culture remains, rather than structural or stratigraphical features. Finds from these excavations included bronze ring pins; an iron bell; silvered bronze wire; and lignite bracelets.

Prior to excavation, Dunbell Big (6) was only visible as a faint embankment. The site was excavated due to the encroachment of a neighbouring quarry. Trial excavations to locate the original ditches identified an enclosure with an internal diameter of 56m. The eastern ditch cutting was V-shaped - 5m wide at the top, and 2m deep. Two amber beads, two fragments of lignite bracelet, and a bone-pin were found in occupation debris in the top 0.3m of this. The western ditch cutting was slightly shallower, and was sealed by a habitation layer containing five sherds of thirteenth-century pottery.

Excavations in the interior of the enclosure revealed the presence of a roundhouse, indicating by arcs of postholes, which was subsequently replaced by a structure of indeterminate shape, associated with a central hearth. A bone awl and iron slag were recovered from these structures. Other finds from the site include a number of iron objects and a fragment of a blue-glass bead.

(No plans were available for this site).

Reference:

Foley, C. 1972. Excavation of a ringfort at Dunbell Big, Co. Kilkenny. OPW report.

'Kilkenny Castle' (Dukesmeadow td.), Co. Kilkenny
Early Medieval House.
Grid Ref: **S508557 (25080/15570)**
SMR No: **KK019-026078**
Excavation Licence: **E627**
Excavation Duration/Year: **July 1991– January 1993**
Site Directors: **B. Murtagh (Freelance)**

Excavations were undertaken at Kilkenny Castle to facilitate on-going restoration work. A pre-castle occupation horizon was discovered at a depth of 3.6m beneath the modern ground surface. A sod-built structure was associated with this twelfth-century horizon. Three walls survived, creating a roughly square structure (4.2m by 4.6m internally), with rounded corners (Fig. 192). The west wall of this structure had been destroyed by the construction of the curtain wall of the castle in the thirteenth century. A series of postholes were found associated with this structure; the discovery of hazel wands suggests that these postholes may have formed the uprights of a wattle wall. A sunken hearth appears to have functioned as an industrial hearth, and contained pieces of iron (3) and bronze (1). An extension, or flu, to this hearth, contained four small pieces of bronze; two small pieces of iron; and three small pieces of vitrified material. Similar finds were also recovered from a second and third hearth.

Sherds of coarse pottery, including a possible complete vessel of Leinster Cooking Ware, were found during the excavation. A fragment of a quernstone and a leather shoe were also found embedded in the ground surface.

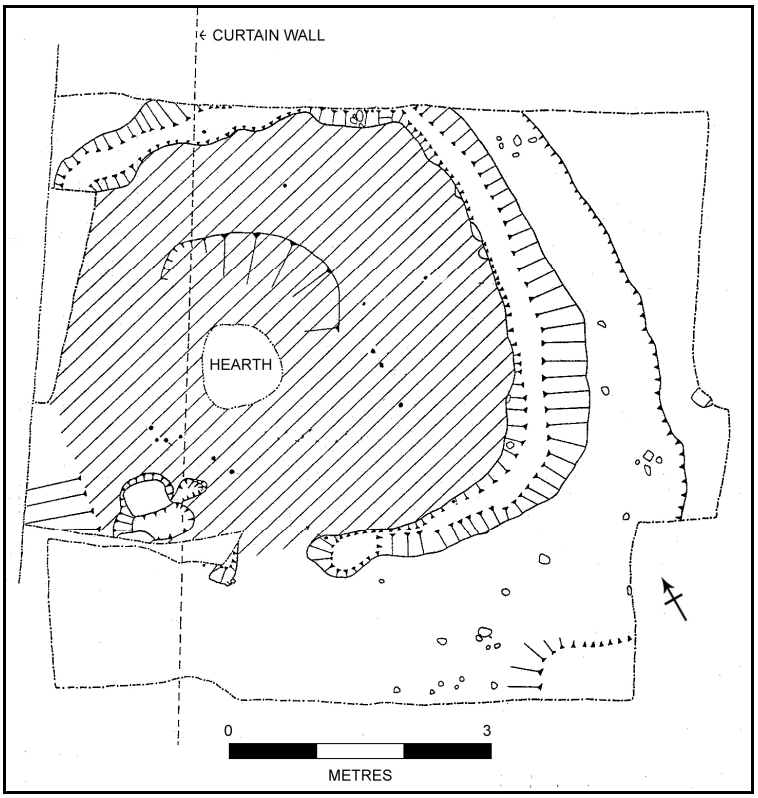


Fig. 192: Plan of sod-house under Kilkenny Castle (after Murtagh 1992).

Reference:

Murthagh, B. 1992. Archaeological Investigations at Kilkenny Castle: Volume 1: July 1991 – September 1992.

Murtagh, B. 1993. The Kilkenny Castle archaeological project, 1990–1993: Interim Report. *Old Kilkenny Review*, 45, 1101–17.

Murtagh, B. 1994. A Summary Report Concerning Archaeological Excavation at Kilkenny Castle.

'Leggetsrath' (Blanchfieldsland td.), Co. Kilkenny
Early Medieval Settlement Enclosure.
Grid Ref: **S52385596 (252377/155958)**
SMR No: **N/A.**
Excavation Licence: **04E0659; 04E0661**
Excavation Duration/Year: **May 2004**.
Site Directors: **A.M. Lennon (Archaeological Consultancy Services)**

Large scale topsoil stripping was conducted under archaeological supervision prior to road works. In this process an enclosure defined by concentric ditches was uncovered (Fig. 193). The inner ditch enclosed an area of 34m by 32m, with a 3m wide entrance to the northeast. Slot trenches were found either side of the entrance in the inner ditch, and it is possible that these held upright timbers which were then removed or rotted *in situ*. These timbers may have acted as a defensive feature, or to retain the earthen bank. A possible palisade trench may also have existed on the east side of the site. The ditch was broadly U-shaped in profile, ranging in width from 1.1m -1.7m, and in depth from 0.8m-1.1m. On the western side the ditch was V-shaped and measured 2.3m wide and 1.4m deep. The ditch appears to have been in-filled over a short time period since there was no formation of silt layers between the fill deposits.

Animal bone was recovered from the ditch fills, and a radiocarbon date of A.D. 569-809 was obtained (see below). Two sherds of late Roman Amphora (B*ii*) pottery, dating from the late fifth-mid sixth centuries, were recovered from the middle of the ditch; the excavator suggests that the inner ditch had gone out of use by the seventh/eighth century.

The outer ditch measured 54m in diameter, although it was missing on the northern side. The east section was U-shaped in profile, measuring 1.5m wide and 1m deep. A re-cut section of the ditch has a V-shaped profile and measures 5m wide and 2.3m deep. Unlike the inner ditch, the outer ditch appears to have in-filled slowly, with layers of silts and fine gravels making up the bulk of the fill. A rudimentary stone revetment was uncovered on the outer edge of the southeast part of the ditch.

Animal bone was also recovered from this ditch, and a radiocarbon date of A.D. 689-983 was recovered from a fill of the re-cut ditch (see below). The upper ditch fill disclosed a number of metal objects (two iron blades, iron rod and copper alloy rod) and sherds of Saintonge pottery.

A portion of a third curving ditch which respected the enclosure was also discovered further down slope. Several shallow linear ditches ran off this feature, and it is suggested that these may represent early field boundaries. A blue-glass bead recovered from one of these would place these in the early medieval period. Two corn-drying kilns were later superimposed over these boundaries, but may also belong to the early medieval period.

The only feature excavated in the centre of the enclosure was an enigmatic pit (3m long by 1.2m deep). Two postholes were cut into the north and southwest corners of the pit, and it is possible that these originally supported a roof; four courses of rudimentary stonework were uncovered in the northern face of the pit. Environmental remains included pig bone, fish bone (trout, eel and salmon) and small bird bone. A bone comb, a gaming piece and a perforated stone were also recovered from this pit, while an iron blade was found in the upper fill. Another shallow pit was cut into the upper fills of the large pit. Bones of sheep, bird and fish were recovered from this pit, as well as grains of barley and wheat, and pieces of iron slag.

There was no evidence of an enclosing bank. The excavator suggests that the ditches are contemporary, but also raises the possibility that the outer ditch represents an expansion of the site.

A series of linear features outside the northeast of the site may represent field boundaries contemporary with the occupation of the enclosure. A corn-drying kiln (radiocarbon-dated to A.D. 1020-1258) was built over one of these ditches, and a blue glass bead was recovered from the ditch fill. The upper fill of this kiln contained oat, barley and wheat grains. An earlier corn-drying kiln (radiocarbon-dated to A.D. 778-1025) was built over another ditch, and upper fill layers of this kiln contained grains of oat, wheat, barley and rye.

There was no evidence of domestic settlement uncovered in the interior of the enclosure.

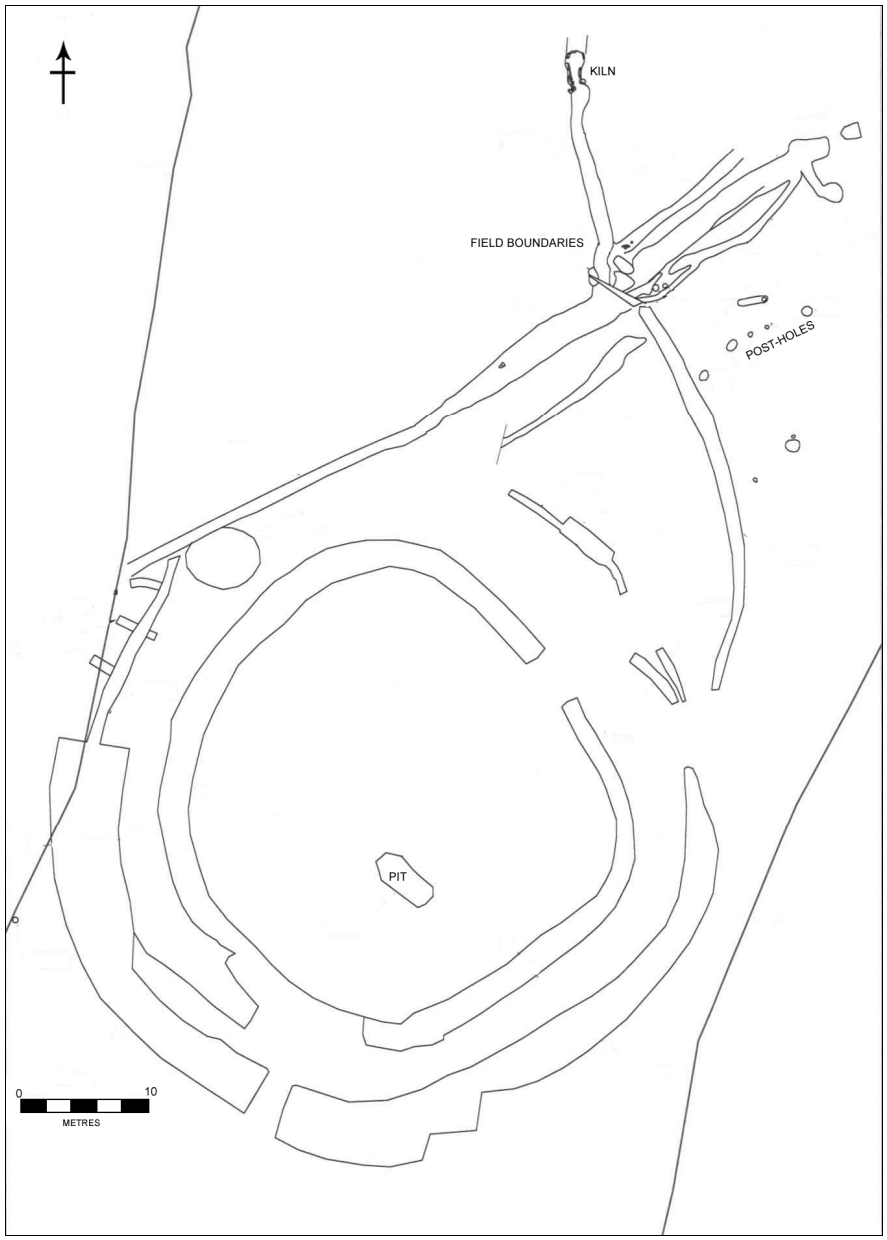


Fig. 193: Plan of Leggetsrath, Blanchfieldsland, Co. Kilkenny (after Lennon 2005).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-205166	Fill of inner ditch.	1350±60 BP	**A.D. 569-782**; A.D. 790-809
Beta-205167	Corn-drying kiln	900±70 BP	A.D. 1020-1258
Beta-205168	Basal fill of outer ditch (re-cut)	1180±60 BP	A.D. 689-752; **A.D. 761-983**.
Beta-205169	Corn-drying kiln	1100±60 BP	A.D. 778-1025

Reference:

Lennon, A. M. 2005. Preliminary Report February 2005. Archaeological Excavation and Monitoring. N77 Kilkenny Ring Road Extension, Blanchfieldsland, Kilkenny. ACS Report.

Lennon, A. M. 2006a. Archaeological Excavation and Monitoring at Leggetsrath West, Kilkenny. Unpub'd Report.

Lennon, A. M. 2006b. Excavation of a ringfort at Leggetsrath West, Co. Kilkenny, in J. O'Sullivan & M. Stanley (eds.) *Settlement, Industry and Ritual*, 43-52. NRA Monograph Series No. 3, Dublin. Wordwell.

Loughboy, Co. Kilkenny
Early Medieval Settlement-Cemetery.
Grid Ref: **S51445382 (25144/15382)**
SMR No: **KK019-040; KK019-041**
Excavation Licence: **98E0219**
Excavation Duration/Year: **November 1998 – 1999.**
Site Directors: **E. Cotter (Freelance)**

Excavations were undertaken on the site of two circular enclosures recorded in the early editions of the Ordnance Survey maps, but no longer visible on the ground. The sites were located on the top of two small knolls. Excavation revealed little evidence for the enclosure KK019-041, and work was focused on KK019-040, although it also turned out to have been substantially destroyed by agricultural improvements in the 1930s.

Top-soil stripping here uncovered a sub-rectangular enclosure (41m by 35m), which was later expanded by the addition of a secondary ditch, thus enclosing an oval-shaped area of 52m by 39m (Fig. 194). Two charcoal spreads were uncovered in the interior of the site, from which fragments of iron slag and a fragment of a bone comb were found. An ironworking hearth was also located within the interior, from which 35 pieces of iron slag was recovered.

A cemetery of at least 20 individuals was discovered in the south-east of the interior. The animal bones recovered from the ditch were dominated by cattle (370 fragments). Sheep (64 fragments) and pig (46 fragments) were also present, as was dog (4 fragments) and red deer (1 fragment).

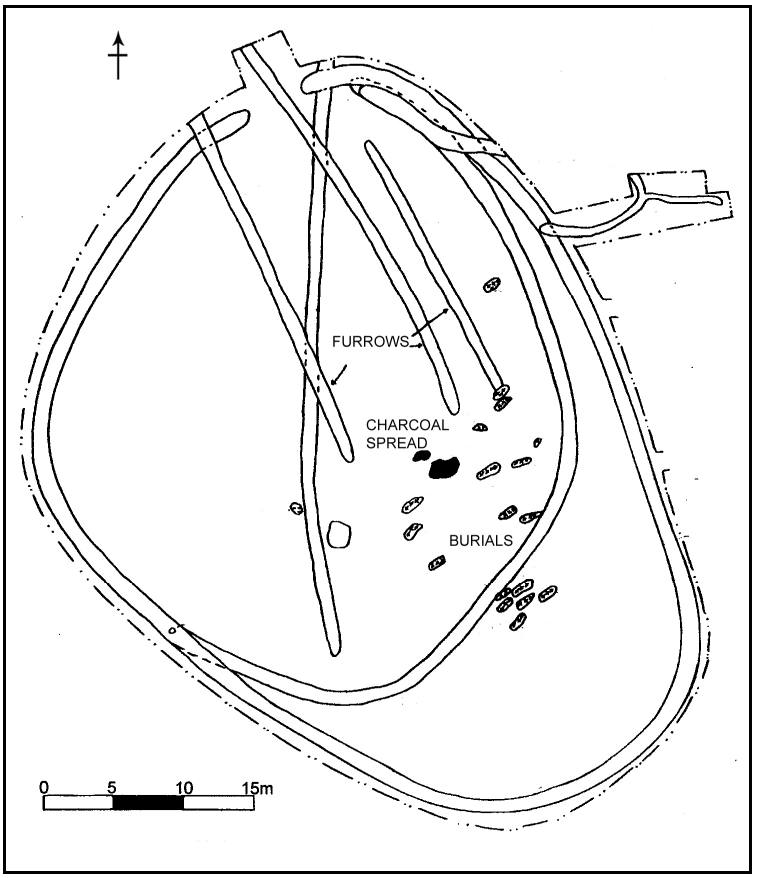


Fig. 194: Plan of enclosure KK019-040 at Loughboy, Co. Kilkenny (after Cotter 1999).

Radiocarbon Dates

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-4465	Animal Bone	1408±42 BP	**A.D. 565-674**.
UB-4466	Charcoal	1589±55 BP	A.D. 346-371; **A.D. 377-596**.
UB-4467	Human Bone	1345±42 BP	**A.D. 618-729**; **A.D. 735-772**.

Reference:

Cotter, E. 1999. Archaeological Excavations at Loughboy, Co. Kilkenny. Unpub'd report.

McCutcheon, S. 1999. Excavations at Loughboy, Co. Kilkenny. Unpub'd report.

County Laois

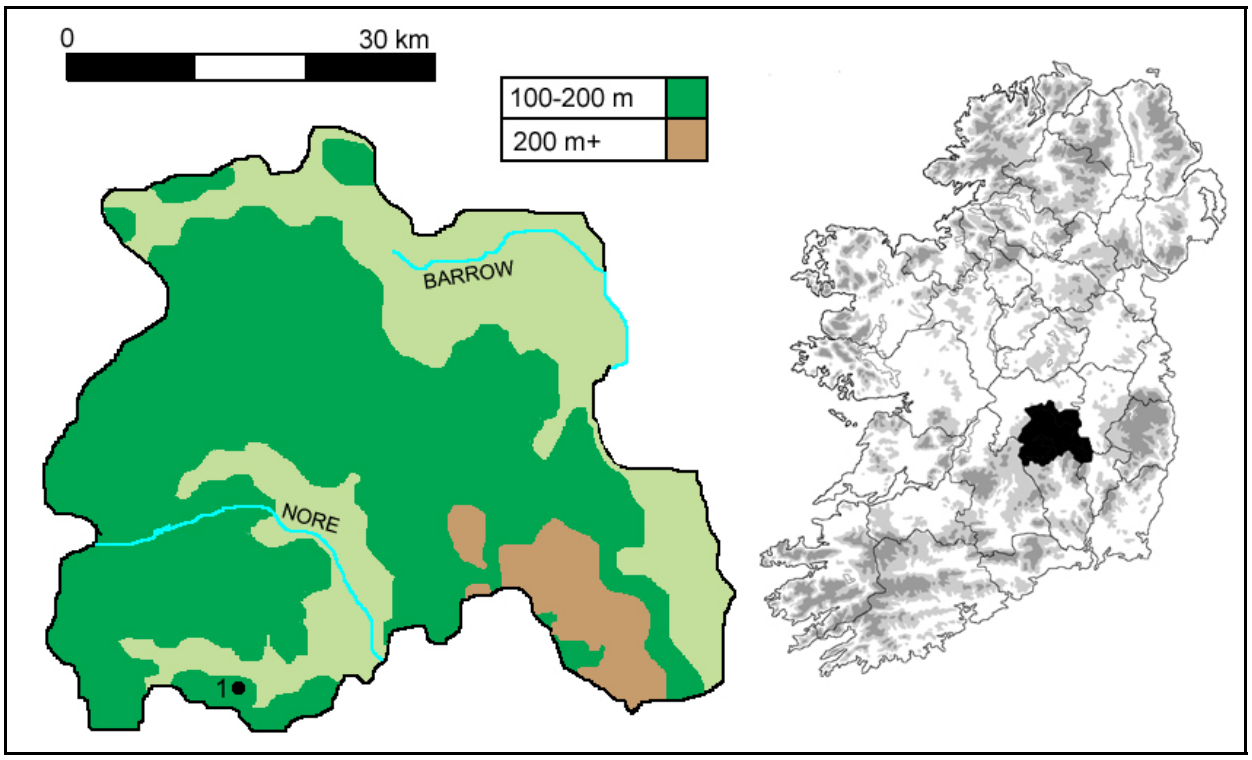


Fig. 195: Significant early medieval excavations in Co. Laois.

1	Parknahown		

Parknahown, Co. Laois
Early Medieval Settlement-Cemetery.
Grid Ref: **S34227419 (234223/174191)**
SMR No: **N/A**
Excavation Licence: **06E2170**
Excavation Duration/Year: **March 2005 - 2006**
Site Director: **T. O'Neill (ACS)**

Topsoil stripping prior to road construction uncovered a series of archaeological features set on a low plateau overlooking the River Goul. These consisted of an enclosure ditch, a later double-ditched enclosure, and an enclosed cemetery (Fig. 196).

The earliest ditched enclosure measured 54m in diameter, and was defined by a ditch 2.25m wide and 1.2m deep. It appears to have been a domestic site, and fragments of bone needles and a bone comb were recovered from the ditch fill. Some corroded iron knife blades were also recovered from this phase. A radiocarbon date from this enclosure places it to the fifth to seventh century (see below). This enclosure ditch was deliberately in-filled during the construction of the double-ditched enclosure.

The internal diameter of the later double-ditched enclosure was 60m, and dimensions for the larger ditch are recorded as 4m wide and 2.2m deep. An external linear feature discovered by geophysics would appear to be contemporary with this enclosure, and may represent a field boundary. The enclosure ditches were allowed to silt-up naturally, but there is also evidence for re-cutting. Radiocarbon dates from the double-ditched enclosure suggest it was constructed in the fifth or sixth century (which suggests that construction of the single enclosure ditch must fall in the early part of the radiocarbon-derived date range), and dating from the re-cut suggests this was done in the eleventh or twelfth century (see below). A large quantity of animal bone was recovered from the ditch (cattle, horse, pig, sheep and deer), but this had not been fully analysed at time of writing.

The most impressive find from this phase was a penannular copper-alloy brooch with bird-head terminals. This is Anglo-Saxon in style (and probably in origin) and is dated to the seventh century.

A possible circular structure defined by slot-trenches and postholes may belong to either of these enclosure phases. Radiocarbon dates from the gully associated with this structure, however, make it more likely to belong to the earlier phase.

The cemetery enclosure is placed within the double-ditched enclosure. Almost five hundred burials were uncovered (472), most of which were east-west aligned after the Christian fashion. Some of these burials were associated with 'ear muffs' (i.e. stones places on either side of the head to prevent rolling), and a number of decorative items were also found associated with the burials. These included glass beads, bone beads, copper-alloy pins, bone pins, a fragmented jet bracelet, and a copper-alloy mount with inset enamel.

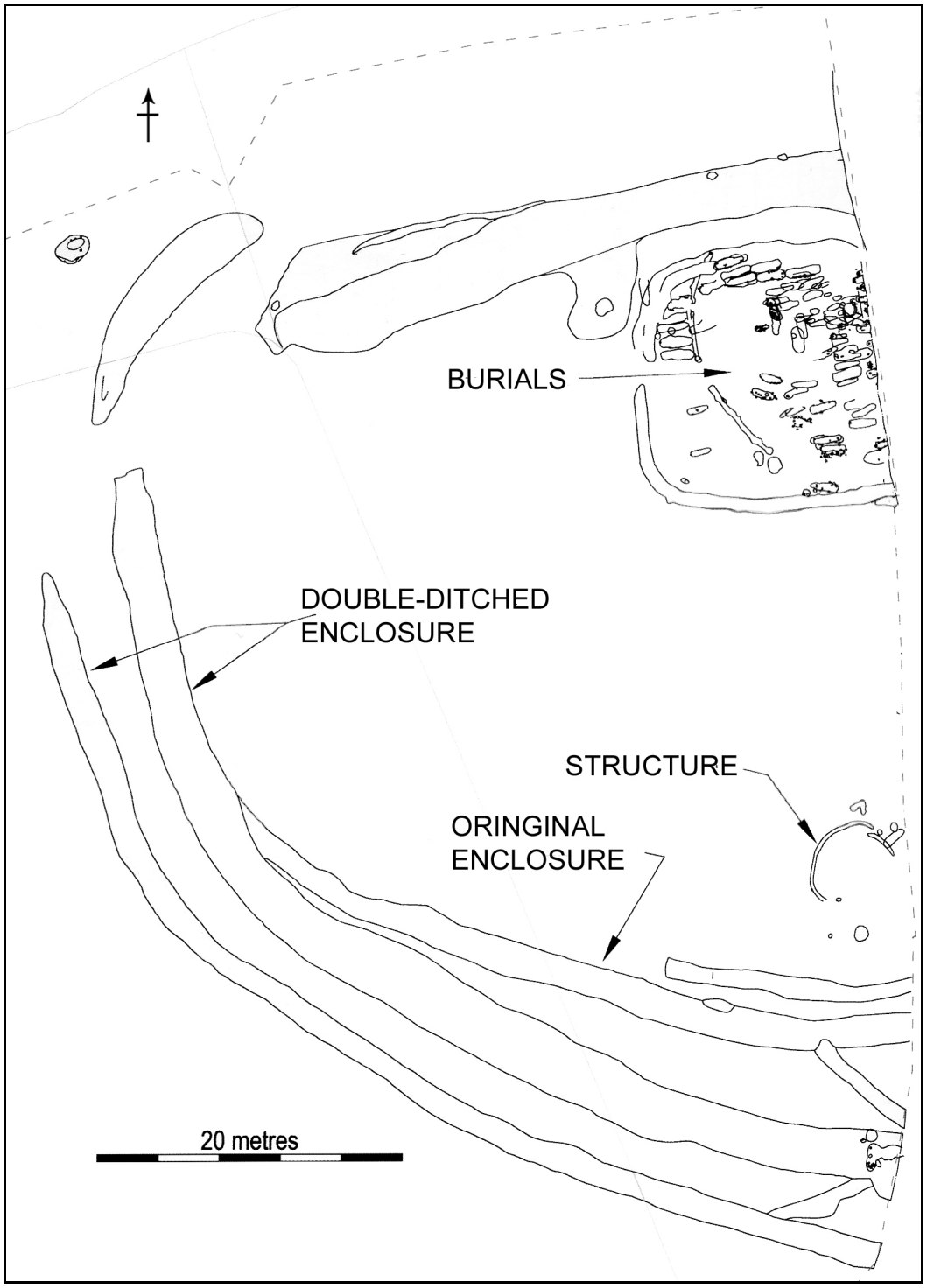


Fig. 196: Features at Parknahown, Co. Laois (after O'Neill 2007, 134).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
Beta-218638	Charcoal from early ditch enclosure	1530±50 BP	**A.D. 422-624**; A.D. 629-630
Beta-218647	Charcoal from base of double-ditched enclosure	1560±40 BP	**A.D. 415-584**; A.D. 590.
Beta-218648	Charcoal from re-cut double-ditched enclosure	970±70 BP	A.D. 899-919; A.D. 952-957; **A.D. 961-1218**.
N/A	Charcoal from gully of house	N/A	**A.D. 530-660.**
N/A	Charcoal from gully that cuts house gully	N/A	**A.D. 760-980**.

Reference:

O'Neill, T. 2007. The hidden past of Parknahown, Co. Laois, in J. O'Sullivan & M. Stanley (eds.), *New Routes to the Past*, 133–40. National Roads Authority Monograph Series 4. Dublin. National Roads Authority. Wordwell.

O'Neill, T. 2008. Unearthing the past: discoveries at Parknahown, Co. Laois. *Ossory, Laois & Leinster*, 3, 1–24.

County Limerick

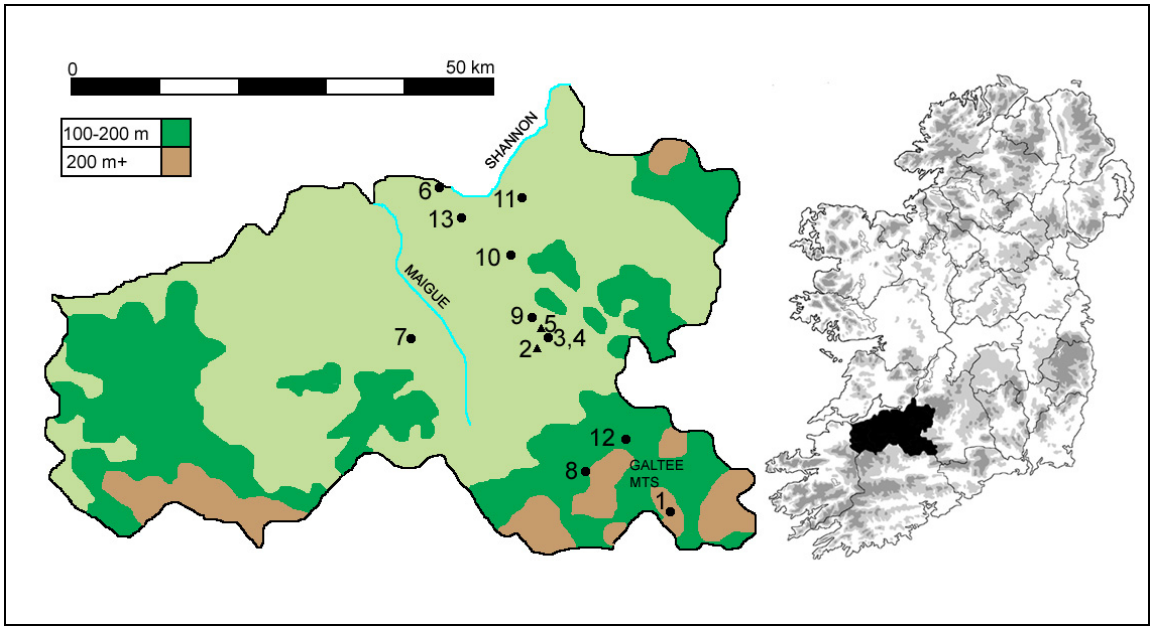


Fig. 197: Significant early medieval excavations in Co. Limerick.

1	Ballyduff	**8**	Cush
2	Ballynagallagh	**9**	Grange
3	Carraig Aille I	**10**	Knockea
4	Carraig Aille II	**11**	Newtown
5	The Spectacles	**12**	Raheennamadra
6	Coonagh West	**13**	Slugarry
7	Croom East		

Ballyduff, Co. Limerick
Early Medieval Settlement Enclosure
Grid Ref: **R210795 (12100/17950)**
SMR No: **LI057-006**
Excavation Licence: **E000815**
Excavation Duration/Year: **July & August 1979**
Site Director: **Rose Cleary & Vincent Hurley (University College Cork)**

A counterscarp enclosure at Ballyduff revealed evidence for the occupation of the site in the form of a possible house foundation trench, hearths, postholes, paved surfaces and gravel spreads. No finds were recovered and there was no indication of a date for the features. The site (175m OD) was partially excavated over the course of seven weeks in July and August 1979 in advance of improvements along the Mitchelstown-Ballylanders Road. Three quadrants (1a, 1b & 2a) were excavated in the western section as well as a trench cut across the enclosing banks and ditches (Fig. 198). None of the three quadrants were investigated down to sterile levels as the excavation was unable to be completed due to lack of funds.

Prior to excavation the earthwork appeared as a univallate enclosure, oval in plan and measuring 43m by 48m. Excavation uncovered traces of a second outer bank. The inner bank- 1.5m maximum height- measured 1.1m high and 4.2m wide in the trench and consisted primarily of re-deposited boulder clay. The inner ditch was flat-bottomed, measuring 2.60m wide at its base and 1.50m deep below the original ground level. The ditch appears to have silted-up in five distinct stages. The external counterscarp bank- 2.5m wide- appears to have been leveled on top and only survived as a 0.2m-0.3m thick layer of re-deposited boulder clay, similar to that uncovered in the inner bank. There was no obvious evidence for an outer ditch. A possible entranceway was located in the northwest side of the enclosure but local information indicated that it may have been constructed in the early-1950s.

A possible house foundation trench (0.5m-2m wide) filled with humus and small boulders was uncovered (Fig. 183). The trenches defined the south, west and north sides of a possible building, 5.6m north-south and at least 5m east-west. A circular spread of oxidized clay- 0.8m in diameter- was uncovered within the area of the foundation trench and was interpreted as a hearth. Five postholes and fifteen stakeholes were recorded in and around the hearth. An introduced gravel spread- 1.7m by 2.3m- was uncovered on the southern edge of the hearth lying over the original floor surface. Six postholes were also recorded within the area enclosed by the house trenches. Running for 4m adjacent to the south bank of the enclosure outside the possible house foundation trench was the remains of a drain (0.7m-0.8m wide by 0.2m maximum depth). Its fill contained a mixture of humus and charcoal and it appears that this feature may have been dug to catch run-off water from the bank.

The main feature within quadrant 1a comprised the site of a hearth (0.3m in diameter) which was apparent as a spread of oxidized soil surrounded by a large spread of charcoal-flecked humus. Two amorphous gravel spreads were also recorded and almost surrounded the hearth.

A roughly-set paved surface composed of small flat boulders was uncovered within the southern part of quadrant 2a. Two closely-set cobbled areas were recovered on the north-western and south-western sides of this paving. These areas of paving and cobbling were identifiable prior to excavation as a low ridge. Similar low ridges and banks were visible in the south-eastern area of the enclosure and may perhaps represent the remains of other unexcavated paved areas or even stone-built structures. A further gravel spread was excavated in the south-western corner of the quadrant and like the similar examples in quadrants 1a and 1 b was also introduced to the site.

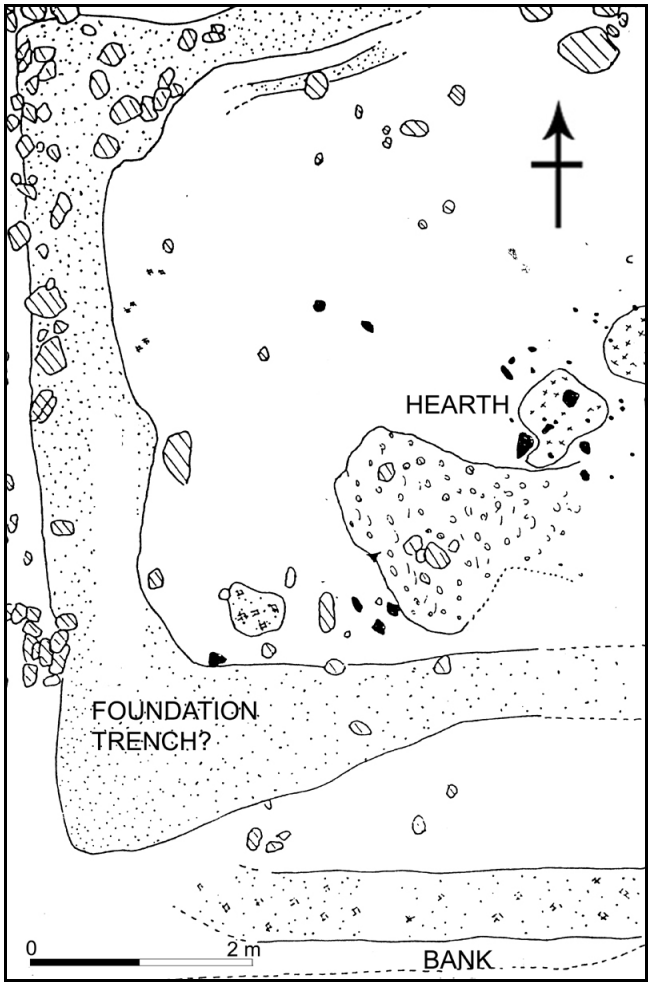


Fig. 198: Plan of house foundation trench at Ballyduff, Co. Limerick (after Cleary 1986, 6).

References:

Cleary, R.M. 1980. Final report on the excavation of an earthwork at Ballyduff, County Limerick. Unpublished Report.

Cleary, R. M. 1985. Archaeological investigation of a ringfort at Ballyduff, Co. Limerick. *North Munster Antiquarian Journal*, 27, 3–7.

Ballynagallagh, Co. Limerick

1. **Unenclosed Settlement**
2. **Early Medieval Settlement Enclosure**

Grid Ref: **R644392 (16440/13920)**
SMR No: **N/A**
Excavation Licence: **94E0101; 96E0249**
Excavation Duration/year: **1994; 1996-1997**
Site Director: **R.M. Cleary (University College Cork)**

A large oval crop-mark enclosure was partially excavated at Ballynagallagh as part of a University College Cork research project and revealed occupational activity from the late sixth to twelfth century A.D. The site consisted of an initial late sixth/seventh-century unenclosed settlement of circular houses, followed slightly later by a late seventh/eighth-century fence and track-way which preceded a late-eighth/ninth century double palisaded enclosure and part of an eleventh-twelfth century enclosing ditch and track-way.

A relatively small area was excavated (Fig. 199) and comprised two trenches across the western and south-western enclosing elements, and a section of the enclosure interior. The site is situated south of Lough Gur on level space of ground on a ridge at the western edge of a former lake, now known as the Red Bog.

The earliest feature on the site consisted of a post-built circular houses (I) with an estimated diameter of 8m. This returned a 2Σ calibrated date of A.D. 570-674 from animal bone inside a post-hole. The northern arc of a second post-built circular house (II) was excavated to its west and had an estimated diameter of 4.5-5m. Its proximity to the other houses might suggest that both are roughly contemporary.

A north-south linear trench was excavated beside the large circular house and may have supported a light fence-like structure set in a stony bedding trench. A post-hole from House I pre-dated the trench which returned a 2Σ calibrated date of A.D. 649-781 (highest probability), confirming that it was slightly later than the houses. Finds from this feature included chert, flint, a whetstone, stone axe fragment and a large quantity of animal bone (mostly cattle) interpreted as dump material from a nearby butchery site.

A north-south stony track-way (2m wide) containing animal bone fragments, as well as chert and flint debitage, extended across the western end of trench 3. It was subsequently covered by another stony layer and may represent a re-metalling of the surface. The track pre-dated the phase II enclosure and produced a 2Σ calibrated date of A.D. 661-772 which indicates that it was roughly contemporary with the linear feature.

A number of pits (0.25m deep) containing quantities of animal bone and charcoal fragments were recorded to the east of the linear trench and may have also been used as refuse dumps. Two were stone-lined and may have been used initially as storage areas. Animal bone from one pit produced a 2Σ calibrated date of A.D. 682-905, indicating that it was roughly contemporary or slightly later than the linear trench and north-south track-way.

A large double palisaded enclosure with an extrapolated perimeter of 380m post-dated the circular houses and north-south linear fence and track-way. The double palisade was identified as two parallel north-south linear slot trenches (1.4m apart) with a number of large postholes cut into their base. Both palisades appear to have been contemporary and radiocarbon dates from the innermost places its construction between A.D. 765 and 897 (Fig. 200).

The final early medieval phase consisted of two track-ways, a shallow ditch and pits. A north-south shallow ditch and an adjacent eastern metalled track-way were excavated at the southern end of the western perimeter enclosure. The ditch was U-shaped in profile and was 1.75m wide and 0.75m deep. Animal bone fragments were recovered from the lowest

backfilled deposit. The metalled track-way was identified as a linear stony band (maximum of 3.30m by 9.25m) and animal bone from its upper level produced a 2Σ calibrated date of A.D. 1016-1179.

Another stone track-way (2.80m wide) defined on its western edge by a stone setting (0.5-0.8m wide) was identified inside the enclosure. This stone spread post-dated a partially excavated ditch feature (2.1m wide and over 0.75m deep). Animal bone from the fill of the pit/ditch produced a 2Σ calibrated date of A.D. 1032-1210 indicating that it was roughly contemporary with the stone spread. Another large undated pit (over 1m deep) contained a large quantity of animal bone suggesting that it was used as a dump in its final stages.

The artefacts from the site were limited to stone and metal and included whet-, rubber- and hone-stones, a clay bead, curved lignite bracelet, possible lignite pendant, iron rods, copper-alloy tube and a copper-alloy clip as well as a large flint and chert lithic assemblage. Evidence for iron/metalworking was indicated by a small quantity of iron slag (65g), a furnace bottom, a possible clay mould and two small fragments of fired clay, possibly from furnace lining.

Cattle dominated the large faunal assemblage at the site and were followed by sheep, pig, wild bird, dog, frog, cat, horse and woodmouse in descending order. Butchery marks and the evidence for complete carcasses from the three main livestock animals indicate that slaughtering and butchery were carried out within the confines of the enclosure. Barley was the preferred cereal crop followed by oats and wheat.

The large palisaded enclosure at Ballynagallagh is quite unique in the Irish archaeological record as early medieval 'ringforts' or 'ráths' are generally much smaller (Stout 1997, 15). A partially excavated oval-ditched enclosure (70m by 52m) at Killederdadrum, Co. Tipperary had evidence for internal circular structures, a deliberately backfilled ditch and a possible bank palisade; similar features which are also found at Ballynagallagh.

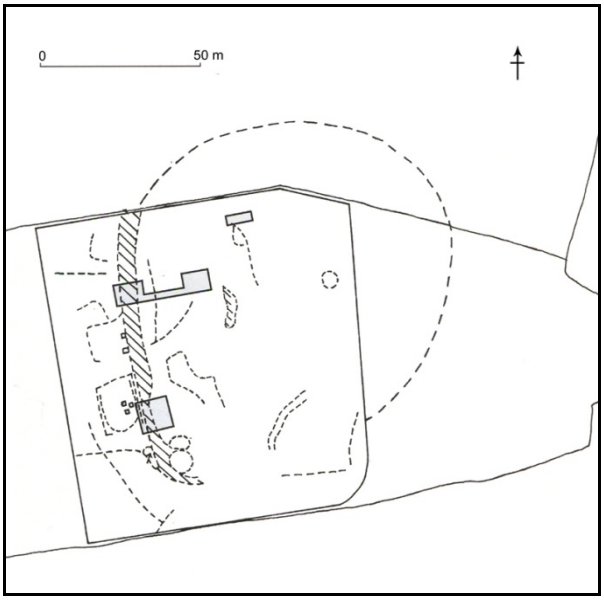


Fig. 199: Plan of areas of excavation and magnetometry survey (after Cleary 2006, 4).

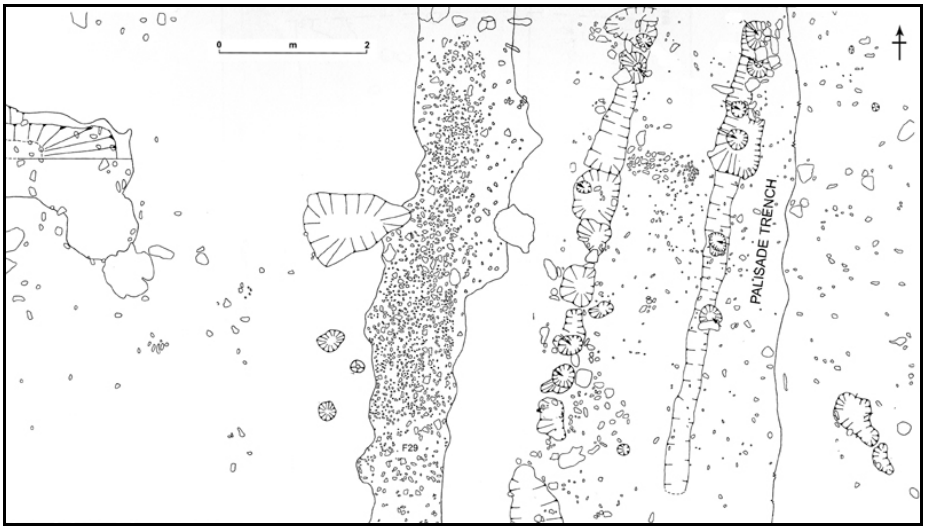


Fig. 200: Ditch and palisade trench at Ballynagallagh, Co. Limerick (after Cleary 2006, 12).

Radiocarbon Dates.

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
GrN-28572	Animal bone from post-hole from circular house inside trench 3	1405±40 BP	**A.D. 570-674**
GrN-28574	Animal bone from a north-south linear trench inside trench 3	1300±40 BP	**A.D. 649-781** A.D. 791-807
GrN-23169	Animal bone from first stone track-way inside trench 3	1300±30 BP	**A.D. 661-730** **A.D. 735-772**
GrN-28573	Animal bone from oval pit inside trench 3	1200±60 BP	**A.D. 682-905** A.D. 912-970
GrN-23170	Animal bone from slot-trench of enclosing inner palisade inside trench 3	1200±35 BP	A.D. 693-748 **A.D. 765-897** A.D. 922- 941
GrN-28570	Animal bone from upper level of track-way in trench 1.	950±40 BP	**A.D. 1016-1179**
GrN-28571	Animal bone from partially excavated pit/ditch in trench 2	910±40 BP	**A.D. 1032-1210**

References:

Cleary, R. M. 2006. Excavations of an Early-Medieval period enclosure at Ballynagallagh, Lough Gur, Co. Limerick. *Proceedings of the Royal Irish Academy Section C*, 106C, 1–66.

Doody, M. G. 1993. The Bruff aerial photographic survey. *Tipperary Historical Journal,* 6, 173–80.

Doody, M. G. 2001. Medium altitude aerial photographic survey in East Limerick and West Tipperary. *Journal of Irish Archaeology,* 10, 13–24.

'Carraig Aille I' (Lough Gur td.), Co. Limerick
Early Medieval Settlement Enclosure
Grid Ref: **R65284070 (165285/140703)**
SMR No: **LI032-053001**
Excavation Licence: **N/A**
Excavation Duration/year: **1936-1940?**
Site Director: **S.P. Ó Ríordáin (University College Cork)**

Carraig Aille I, excavated as part of a University College Cork research dig, is a stone cashel with evidence for early medieval internal structures, hearths and finds as well as a considerable quantity of animal bone (Fig. 201). The site was situated 40m from Carraig Aille II, on the most northern and highest point (120m 0D) of a northwest-southeast ridge of land overlooking the marsh of Knockadoon.

Pre-cashel activity was indicated by a black habitation layer which ran under the western end of the enclosing wall. A series of rock hollows, utilized for habitation sites, were revealed in the west of the interior. The lowest occupation deposits in a number of these rock hollows overlay the black habitation layer but appear to also pre-date the enclosure. This habitation activity was interpreted as temporary shelters built just before and during the construction of the enclosure.

The site enclosed an oval area approximately 43m in diameter. The stone walls vary in thickness from 3.3m to 4.2m, and appear to be faced with larger stone slabs, with a rubble core. The eastern entrance contained a possible wooden gate defined by a trench extending between two recesses on either side of the entrance passage. A post-hole at the outer corner of the northern side of the entrance was interpreted as a possible gate-post of a light temporary outer gate.

Portions of paving were identified mainly inside the enclosure walls on the south and south-east sides and immediately inside the trench in the entrance passage. A series of hearths and traces of rectangular houses were associated with these paved areas. A small structure (less than 1.2m square internally) was revealed just 2.1m inside the south-western corner of the entrance and was interpreted as a shelter for a single person- perhaps a sentry.

Several hearths were also identified in the western interior where no formal buildings survived. Here, the natural topography of rock hollows appear to have continued to been used to form the walls of buildings for the enclosure occupants. These rock hollows appear to have been allowed to become filled in over time and were utilized as dumping places for refuse and large stones.

Nine pieces of bronze were found on site (four pins and two rings); iron finds included four pins and nine rings, as well as ten knives, two three-pronged implements, two nails, a saw, a hook and a punch. Twenty five combs, three bone pins, one bone point, twelve bone spindle whorls, twelve fragments of rotary quern stones, fifty-five whetstones, ten stone spindle whorls and six polished stone axes were other finds recovered. Pieces of two jet bracelets were found; as was three glass beads - one pink, the other two blue; and two small fragments of poor quality amber.

Two tons of animal bone was recovered from Carraig Aille I. Cattle bone comprised 90% of the total. The remainder of the bulk was largely divided between sheep and pig though small numbers of red deer, cat, dog and other wild animals were also identified. Iron slag was also recovered and indicates on site ironworking.

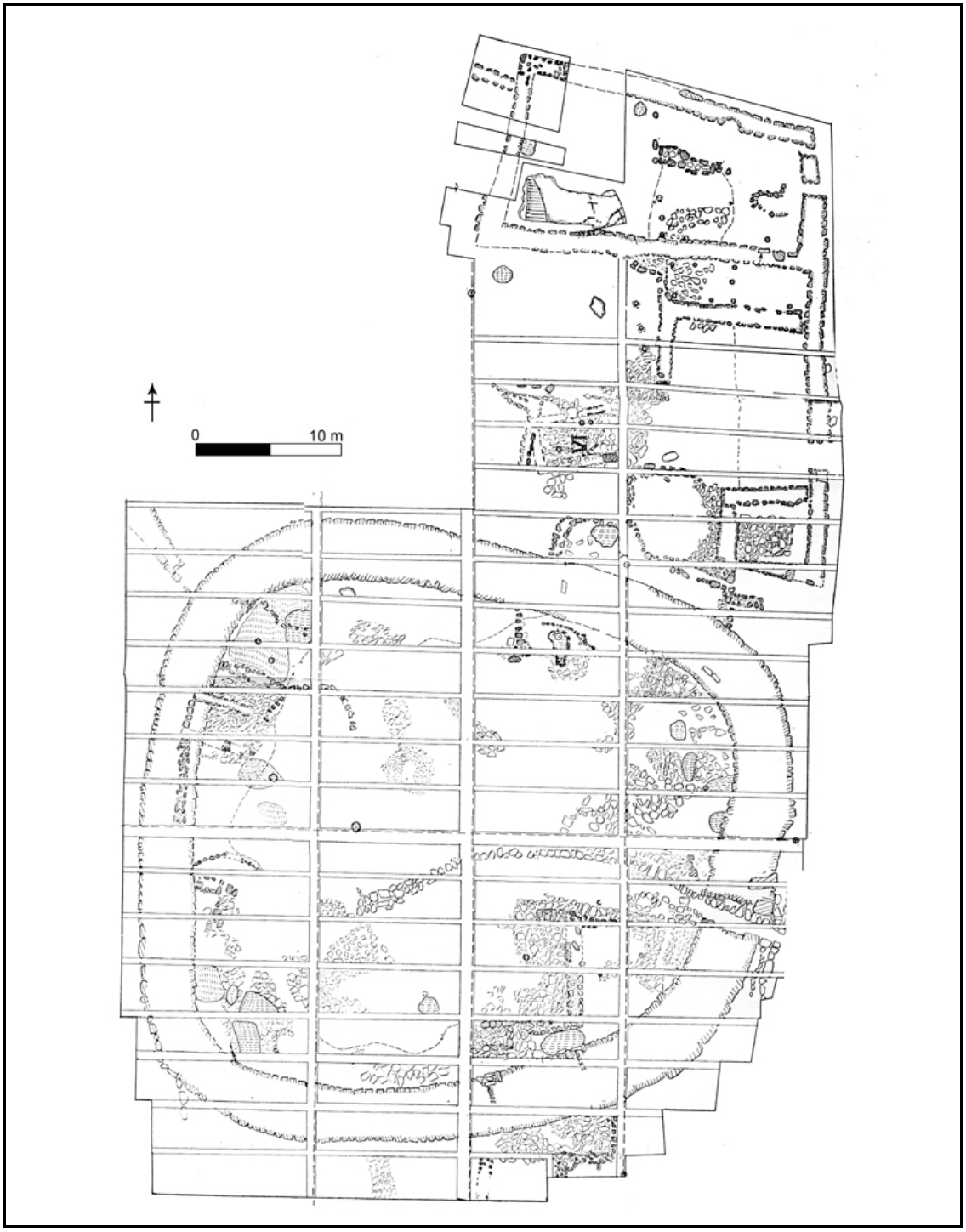


Fig. 201: Plan of Carraig Aille I, Co. Limerick (after Ó Ríordáin 1948-50, plate I).

Reference:

Ó Ríordáin, S. P. 1948–1950. Lough Gur excavations: Carraig Aille and the 'Spectacles'. *Proceedings of the Royal Irish Academy Section C,* 52, 39–111.

'Carraig Aille II' (Lough Gur td.), Co. Limerick
Early Medieval Settlement Enclosure & Field Pattern
Grid Ref: **R65344064 (165345/140643)**
SMR No: **LI032-053003**
Excavation Licence: **N/A**
Excavation Duration/year: **1936-1940?**
Site Director: **S.P. Ó Ríordáin (University College Cork)**

Carraig Aille II, excavated as part of a University College Cork research dig, is a stone cashel with evidence for intensive internal habitation (e.g. successive layers of structures, hearths and paved surfaces), as well as associated external houses and enclosures. The site was situated 40m from Carraig Aille I, on a ridge of land overlooking the marsh of Knockadoon with ground sloping rapidly to the east, gradually to the south and precipitously to the west.

The site enclosed an area approximately 47m in diameter (Fig. 202). The stone walls vary in thickness from 3.6m to 4.2m, and appear to be faced with larger stone slabs, with a rubble core. Steps were built into the inner wall face to allow access, presumably to a platform or terrace no longer extant. A black habitation refuse covered with a gravel floor was discovered at one point beneath the enclosure wall and was interpreted as temporary dwelling during the cashel's construction.

The eastern entrance was defined by areas of paving and cobbling and contained a recess on either side of the entrance which may have supported a gate-structure. The area of paving began outside the entrance, continuing as a narrow causeway into the enclosure interior and was evidently a very early feature as it lay directly on the original rock surface.

Successive layers of occupation debris, clay floors, hearths and multiple-phases of metalling were uncovered in the interior. The early houses on site appear to have been round or curvilinear in form, and were probably wooden framed. One of the round houses was evidently a very early feature as it pre-dated the paved causeway lying directly on the old ground surface. The later houses were stone built - using similar techniques to those used to create the cashel wall and were also associated with hearths as well as large areas of stone paving. The best preserved house was paved inside and measured 6m internally, with walls 0.75m thick.

A number of rectangular houses, built in a similar fashion to the cashel's walls, were associated with rectangular stone yards and enclosures in the level ground to the north of the cashel. One house with a paved surface measured 9.3m by 2.8m internally and was associated with eight postholes supporting the superstructure. Butting onto the cashel's southern perimeter was another stone structure with a paved surface, associated with a possible ancient field bank.

A considerable collection of early medieval finds was recovered inside the cashel. Unfortunately, few could be confidently correlated with any of the successive occupation layers and only gave a general dating for the site. A hoard of silver objects was found secreted into the inner face of the cashel wall, and a silver ingot was found in the rubble fill. Both have been interpreted as being Viking. A number of bronze objects were also found including the terminal mount for a drinking-horn (also interpreted as Viking) as well as a collection of pins and a toilet implement.

Sixteen iron pins and fifty-four iron knives were found on site, as well as a plough-sock, shears, two chisels, two saws and two awls. Iron weapons were also recovered from the site - an axe-head; a javelin-head; one (possibly two) arrow-heads; three pointed sockets from spear shafts; and four objects with three- or four-prongs. Portions of twenty-two bone combs were found as was thirty-four bone pins and thirty-one bone and stone spindle whorls. Thirty-five portions of rotary quernstones, thirty three whet-stones, twenty glass beads (varying in

shade from light to dark-blue), and fragments of jet and stone bracelets were some other finds recovered.

Finds from the house sites outside the cashel included two bronze rings, a bronze imitation Roman coin, eight knives, two iron pins, four bone combs, six portions of rotary quernstones, eleven whet-stones, five bone and stone spindle whorls, a possible stone lamp, fragments of jet and blue glass bracelets and five glass beads.

Three complete crucibles and almost fifty fragments were found inside the cashel- several of which had green stains, presumably from copper working (perhaps bronze-making). A quantity of iron slag was also recovered inside one of the external rectangular structures indicating that both iron and metalworking were most likely practiced on the site. Almost four tons of animal bone was recovered from Carraig Aille II, of which cattle accounted for 90% of the bulk followed by sheep, pig and to lesser extent red deer, cat, dog and other wild animals.

It was suggested from the finds that Carraig Aille II was occupied for a relatively long period of time between the eighth and late-tenth/eleventh centuries. The possible Viking hoard placed into the inner face of the cashel wall has been dated to the tenth century, though there appears to have been a reasonable interval between its deposition and the final desertion of the site.

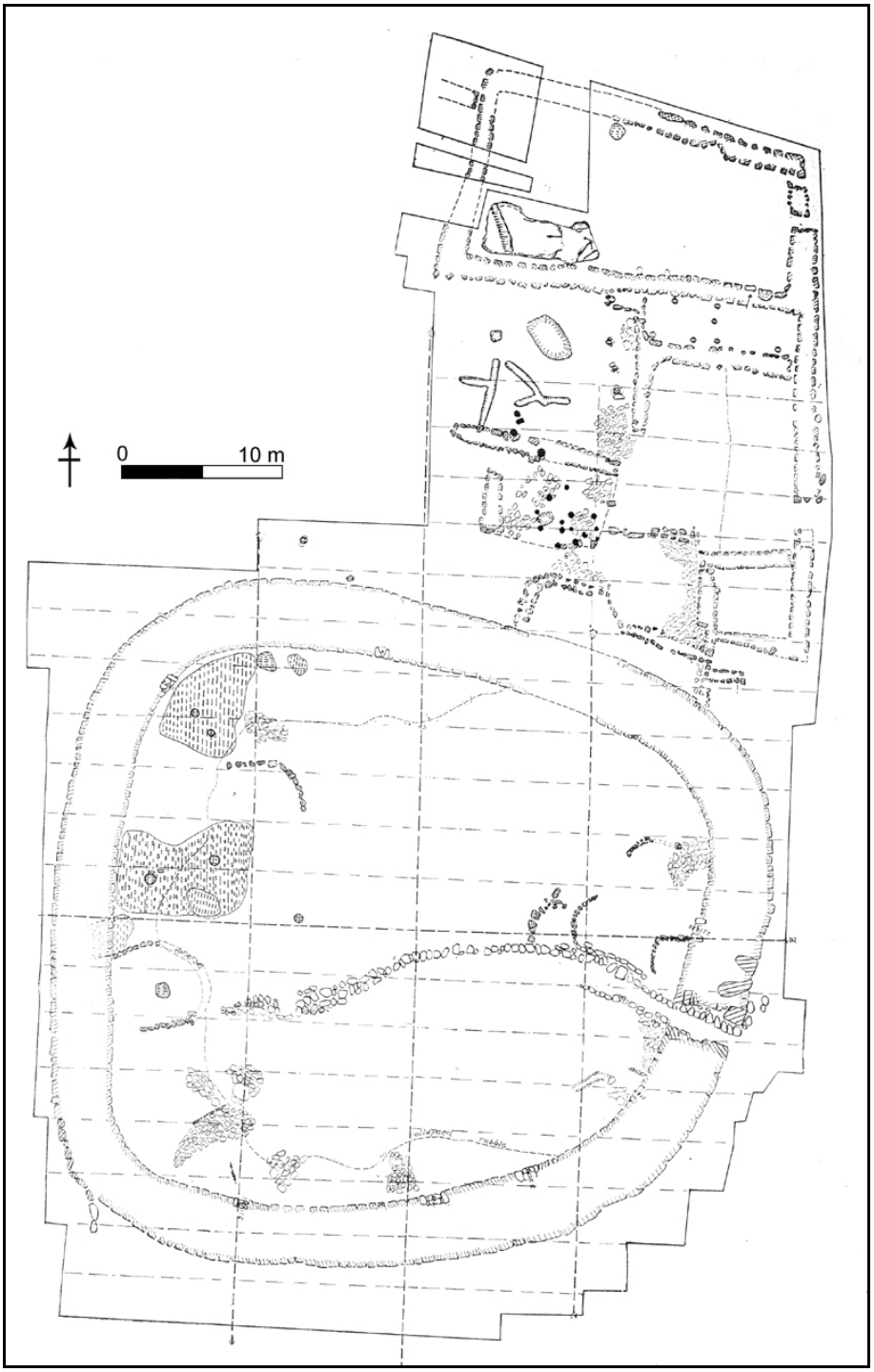


Fig. 202: Plan of Carraig Aille II, Co. Limerick (after Ó Ríordáin 1948-50, plate II).

References:

Ó Ríordáin, S. P. 1948–1950. Lough Gur excavations: Carraig Aille and the 'Spectacles'. *Proceedings of the Royal Irish Academy Section C,* 52C, 39–111.

The 'Spectacles' (Lough Gur td.), Co. Limerick
Early Medieval Unenclosed Settlement
Grid Ref: **R64654149 (164653/141497)**
SMR No: **LI032-014012**
Excavation Licence: **N/A**
Excavation Duration/year: **1936-1940?**
Site Director: **S.P. Ó Ríordáin (University College Cork)**

The 'Spectacles', excavated as part of a University College Cork research dig, is an unenclosed early medieval settlement containing one rectangular and two circular houses as well as an animal shelter and other structures within an arrangement of small and large early medieval field systems (Fig. 203). The site was situated on a shelf of land (91m by 32m) which slopes gradually to the lake of Knockadoon to the west and is bounded on the east by a hill-side rock face.

House A was situated in the most northerly of the ancient fields and was approximately circular in plan with an internal diameter of 4.5m. The walls were over 0.9m thick and were faced with large upright stone slabs containing an earthen and stone rubble core. The western entrance was marked by two in-turned stones and was defined by two large postholes which evidently formed part of a wide eave or entrance porch. Twelve internal postholes- mostly close to the walls- as well as a further six- close to the outside of the walls- may have supported a roof. Two well-defined hearths were also excavated within in the eastern and northern sides of the interior.

The House A entrance was paved with large flat stones which continued outside to the west, forming a paved approach edged by upright stones, (1.5m wide). To the west, the paving ended at and butted against the upright stones of the terminal of a field wall which formed one of the boundaries of the field containing House A. Excavation of this pre-existing field wall showed that its wall was originally 0.9m wide with an entrance directly south of the House A door.

House B was built against the facing of this pre-existing field wall and partially used this structure as one side of a circular building. A double-line of postholes extended out from the stone-built portion of the wall suggesting that the remainder of the structure was built using wood or turves. A hearth defined by stones and burnt material was found in the southern interior of the house.

Structure C was situated to the west of House B and was interpreted as an animal shelter. It was about 4.25m in length and 0.9m in width internally and used the surrounding rock outcrops as part of the walls of this structure. A number of postholes associated with an area of cobbling were excavated between House B and C though none formed any coherent structural pattern.

House D was situated in the next ancient field south of that containing Houses B and C. The house was rectangular in plan measuring 4.25m by 3.65m with its walls faced with stones and containing a clay rubble fill. A paved area and a hearth were uncovered in the interior. Several postholes and cobbled areas suggest possible outhouses between House D and the cliff edge.

The fields containing the houses were enclosed by parallel fences. Four were built of a double stone facing with a stone rubble core while the fifth and most southerly was an earthen bank. These enclosed fields were very small (average area $^{1}/_{7}$ of an acre) and may have contained the tillage patches belonging to the houses. Larger enclosed spaces further away from the houses on the upper hill-side were interpreted as field systems for cattle.

Finds from these houses and structures included two bronze pins, six iron knives, an iron pin, iron slag, bone comb fragments, bone and stone spindle whorls, a fragment of rotary quern, eight whetstones; four fragments of jet bracelets; and two glass beads - one light-blue, one dark-blue. Ten pieces of flint and one of chert as well as some sherds of Neolithic pottery were also recovered. A quarter of a ton of animal bone was recovered from the site with cattle accounting for the bulk followed by pig and sheep (goat) and to a lesser extent horse and dog.

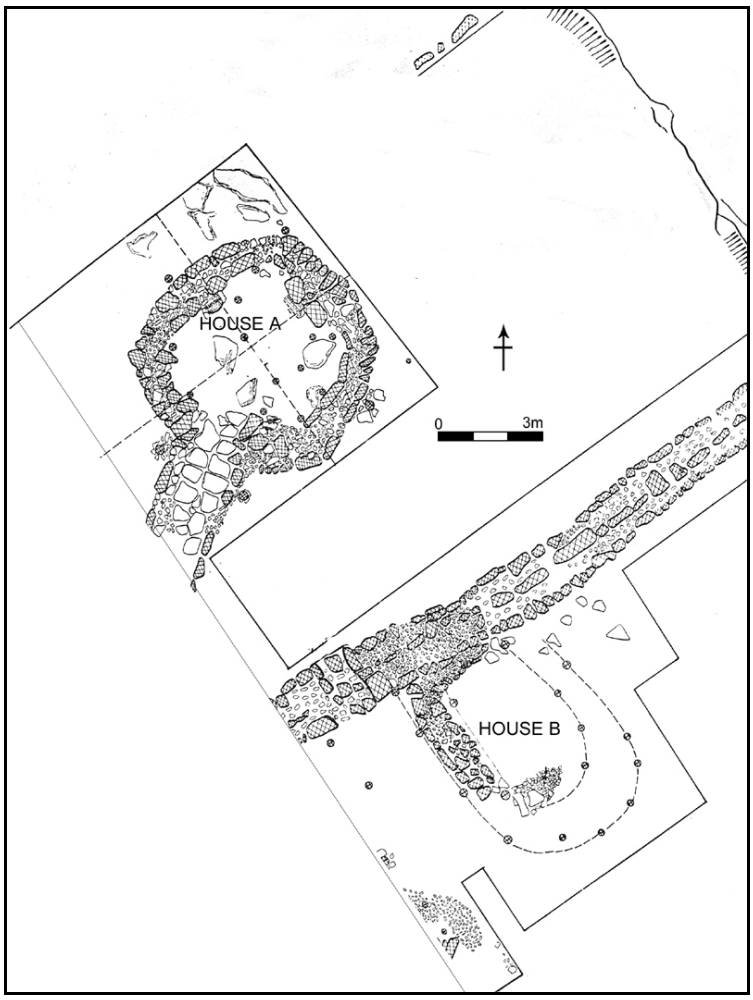


Fig. 203: Plan of The Spectacles, Co. Limerick (after Ó Ríordáin 1948-50, plate XII).

Reference:

Ó Ríordáin, S. P. 1948–1950. Lough Gur excavations: Carraig Aille and the 'Spectacles'. *Proceedings of the Royal Irish Academy Section C,* 52C, 39–111.

Coonagh West, Co. Limerick
Early Medieval Settlement Enclosure
Grid Ref: **R53305687 (153300/156876)**
SMR No: **N/A**
Excavation Licence: **A005/2019**
Excavation Duration/year: **2004-2005**
Site Director: **K. Taylor & G. Hull (TVAS Ltd.)**

A gravel island at Coonagh West revealed an early medieval ditched enclosure with an internal rectangular building as well as associated pits and a stone causeway (Fig. 204). Prehistoric activity, two small buildings, two *fulachta fiadh* and a trackway, was identified at the western edge of the drumlin. The site was completely excavated in 2004-05 in advance of the proposed Limerick Southern Ring Road (Phase II). The dry gravel ridge was bounded on its western, southern and south-western sides by the River Shannon and situated on the margins of its estuarine alluvial zone (0-3m OD) at the edge of Coonagh village, west of Limerick city.

The ditched enclosure was situated at the eastern end of the gravel ridge and had a diameter of 36m with an entrance, defined by a series of gullies along the north-west side (the dry-land side). The ditch was typically 2.5m wide and 1m deep with no evidence for an associated internal bank. A series of smaller curvilinear ditches were identified along its western perimeter and suggest that the enclosure was redefined on at least one occasion.

Though the interior of the enclosure had suffered from erosion of loose gravel, the remains of at least one building (a rectangular post-built structure, 4m by 1.6m) was identified in the south-east quadrant. A number of pits and postholes were also identified in the interior and exterior of the enclosure.

A number of external pits were excavated. One pit to the east of the enclosure produced a quantity of animal bone and a pin-sharpening stone which appears to have been deliberately deposited. Pits to the west of the enclosure had evidence for intense burning and one produced a small crucible fragment indicating that fine metalworking was taking place at the site. Iron slag from across the enclosure indicates that iron-smithing was also being undertaken.

A rough stone causeway extended southwards from the dry ridge- on which the enclosure was located- through marshy ground towards the river Shannon. The causeway was discontinuous and extended for a distance of 67m. In contrast to the prehistoric track-way, the causeway was positioned on top of the estuarine alluvium demonstrating a later date.

A pair of sixth/seventh century copper-alloy penannular ring-brooches (typologically similar to a pair found at Ballinderry Crannóg II, Co. Offaly), several copper-alloy pins, a small stone disc, a pin-sharpener stone and two quern stones was recovered from the fills of the enclosing ditch. Other items recovered included a worked antler handle and a lathe-turned bone spindle-whorl.

The excellent preservation conditions also produced a very large animal bone assemblage (including antler and horn cores) and a quantity of fish-bone was also recovered.

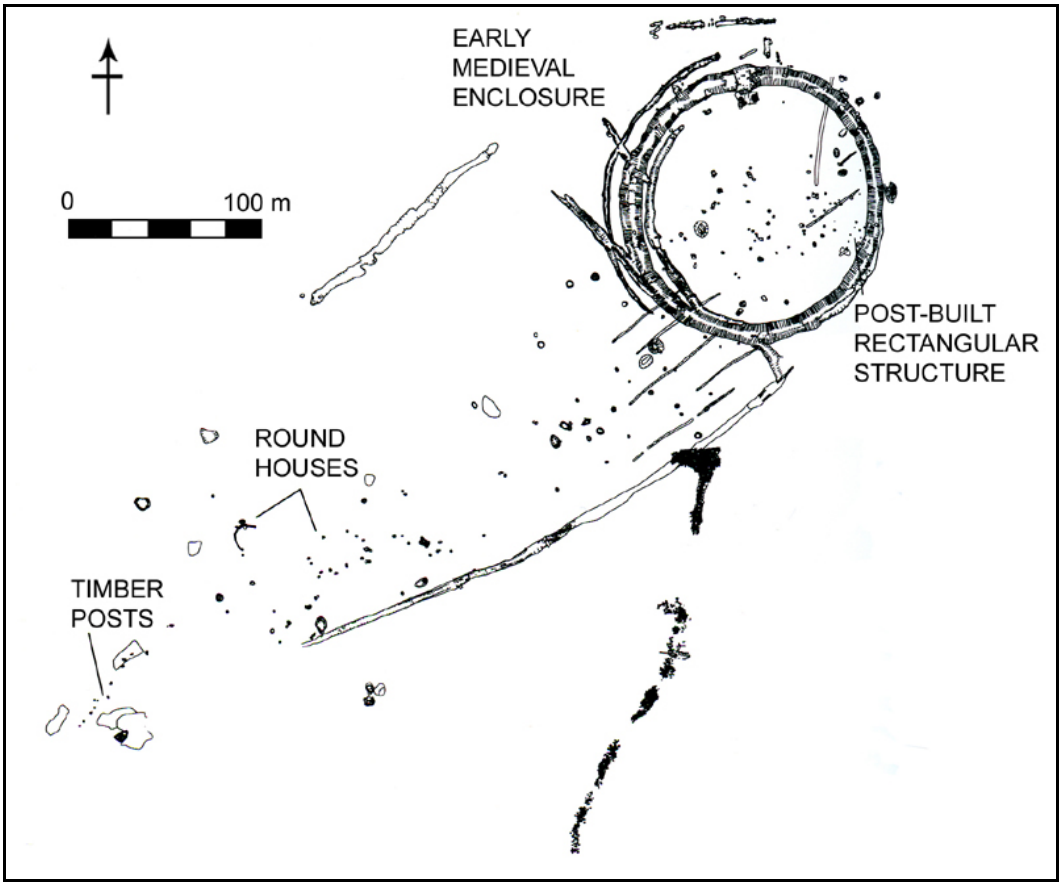


Fig. 204: Excavated features from Coonagh West (after Taylor 2007, 76).

References:

Hull, G. 2004:0999. Coonagh West, Co. Limerick. www.excavations.ie

Taylor, K & Ruttle, E. 2005:975. Coonagh West, Co. Limerick. www.excavations.ie

Taylor, K. 2007. Prehistoric features and an early medieval enclosure at Coonagh West, Co. Limerick, in J. O'Sullivan & M. Stanley (eds.) *New Routes to the Past: Proceedings of a public seminar on archaeological discoveries on National Road Schemes, August 2006*. Bray: Wordwell, 73–9.

Croom East, Co. Limerick
Early Medieval Settlement Enclosure
Grid Ref: **R505590 (15050/15900)**
SMR No: **LI030-022**
Excavation Licence: **E000129**
Excavation Duration/year: **March 1974**
Site Director: **E. Shee-Twohig (Office of Public Works)**

A univallate enclosure at Croom East revealed a possible internal structure as well as other pits, postholes and features. The site was one of two enclosures levelled in 1972/73 in advance of a residential development. The excavation was undertaken in March 1974 and financed by a state grant administered through the Office of Public Works. Two trenches (1m wide) were excavated across the enclosing banks and ditches and a large area (80 m^2.) was investigated in its interior (Fig. 205).

The southern side of the enclosure (42m OD) was truncated by the Croom-Rathkeale Road while the western side had been taken into the garden of the next door house. The site was one of a group of three enclosures situated on well-drained soil, 1.6 km from Croom.

The enclosure had a diameter of 30m externally and 16m internally. The enclosing ditch was U-shaped in profile. It measured a maximum of 3m in width and 1.80m in depth. The natural silting of the ditch was easily identifiable from the more recent deliberate backfill which contained pieces of wood and tree roots.

The levelled internal bank survived to a height of 0.25-0.30m and had a maximum basal width of 4.15m. The bank had an estimated original height of 1.20-1.40m on the basis of the basal width of the bank and the size and depth of the enclosing ditch.

A possibly recent secondary ditch/pit had been cut parallel with the defences at the lip of the ditch and bank. It was filled with loose dark earth, stones and animal bone. At this point the ditch had a marked shoulder which deepened sharply about half-way down.

The stratigraphy of the central area of the site had been seriously disturbed to a depth of 0.3-0.4m deep by recent bulldozing. The top-layer comprised a deposit of humus and yellow clay 0.1-0.15m deep which had been spread over the enclosure interior during the construction of the nearby house in 1973. A disturbed dark homogenous habitation deposit- 0.2-0.3m deep- containing animal bone was recovered beneath the top-layer.

A large number of disturbed pits, postholes and trenches were uncovered dug into the boulder clay beneath this habitation deposit. The postholes did form any recognizable plan of a structure, except in the northeast quadrant where a shallow trench about 5m long ran parallel with a line of five shallow pits/postholes.

A number of irregularly shaped pits up to 0.45m deep were located in the southwest. Near the centre of the site was a symmetrical pair of postholes each with a deep posthole cut into the side of a shallower pit. The postholes from the site contained dark soil intermixed with charcoal. There was no evidence for hearths or palisade/revetment on either side of the enclosing bank.

A large quantity of animal bone (99 fragments) and human bone (30 bones) was recovered from the enclosing ditch and central area. The animal bone comprised that of cattle, sheep/goat, pig, horse and dog. Two femur bones belonging to two separate humans (one less than seventeen years, and the other more than 20 years old) were identified in the northwest quadrant of the site.

An iron knife with traces of a riveted bone handle was recovered from a pit in the northwest quadrant of the site. A corroded iron loop or link was found in a hollow in the north-eastern

corner of the excavated area. Found amongst animal bone, also in the northwest quadrant, was part of a plano-convex side-plate from a bone comb decorated with dot-and-circle motifs.

A bronze penannular ring and a fragment of iron slag or possible furnace bottom were also found on site. Surface inspection of the adjacent levelled enclosure to the west yielded animal bone and a whetstone of red sandstone.



Fig. 205: Excavated features in Croom East 1, Co. Limerick (after Shee-Twohig 1977, 31).

References:

Shee-Twohig, E, 1974:0030. Croom East, Co. Limerick. www.excavations.ie/

Shee-Twohig, E. 1977. Excavation of a ringfort at Croom, Co. Limerick. *North Munster Antiquarian Journal*, 19, 27–37.

Cush, Co. Limerick
Early Medieval Enclosure Complex.
Grid Ref: **R69802580 (169800/125800)**
SMR No: **LI048-034---**
Excavation Licence: **E000010**
Excavation Duration/year: **August-October 1934; July-September 1935**
Site Director: **S.P. Ó Ríordáin (University College Cork)**

A significant early medieval landscape containing a large number of settlement enclosures, with internal occupation evidence, structures and souterrains, together with a complex pattern of rectangular field systems was excavated at Cush. The research excavations were undertaken between August-October 1934 and July-September 1935 and were financed under a state scheme for the relief of employment. The site (210-240m OD) was situated on the border of good agricultural land along the foothills of a northward extension of the Ballyhoura Hills (Slieve Reagh), commanding considerable views across the Limerick plain to the north. The site consisted of a southern group of enclosures, a northern group of enclosures, the western field, the related field systems and three prehistoric tumuli.

The greater part of the interior of the enclosures was excavated as well as various sections through their ramparts and entrances. Also excavated were the three tumuli, various portions of the rectangular 'enclosure', a small area of the 'western field' and trial-trenches along the field boundaries. The enclosures generally produced relatively thin occupation deposits and this lack of stratigraphy hindered any detailed reconstruction of the sequence of and relationship between the various different internal features and structures- buildings and souterrains.

Considerable evidence for Bronze Age burial activity was uncovered and comprised five cremation urn burials within the northwest sector of Cush 5 in the southern group, Tumulus I (to the south of Cush 7), and a small cist burial with two food vessels, just inside a section of the modern field fence dividing the 'western field' from that containing the tumuli. Ó Riordáin claimed that the burials inside Enclosure 5 were later than the occupation of the enclosure though the stratigraphic evidence to substantiate such a claim is neither completely clear nor detailed. Most recent commentators (e.g. Edwards 1996, 17) now believe that the enclosure is early medieval and was simply built in an area of prehistoric burial activity. Tumulus I revealed a primary long cist burial (1.9m by 0.6m internally) with a food vessel type pot beneath its original ground level. A kerbed mound (0.9m high and 11m in maximum diameter) was erected over this burial. Following this, an encrusted urn was placed near the centre of the mound and a ditch dug around the site. The mound was covered with a paving of small stones after the ditches had silted up, on which at least one cremated burial was placed.

Iron Age burial activity was uncovered at the sites of Tumulus II and possibly Tumulus III. These bowl barrows each measured about 1.8m high and 13.7m and 16.46m respectively in diameter with enclosing ditch. Spreads of charcoal mixed with fragments of cremated bone were uncovered on the old ground surface of tumulus II and was interpreted by the excavator as the site of a cremation fire. A small pit was found in one of the spreads filled with cremated bone and charcoal and contained near its top a small bone plaque with early Iron Age La Tène decoration (O'Kelly, 1989, 329-330). Tumulus II revealed a scatter of cremated bone on the old ground surface where a possible cremation pyre had been lit and over which the mound had been built.

The early medieval activity comprised ten excavated 'ringfort' type enclosures, an adjoining rectangular 'enclosure' and a system of field boundaries. The southern group of enclosures cover three acres and consist of a six conjoined enclosures (1-6) associated with a sub-rectangular area 'the enclosure' delimited by a ditch and bank to the west (Fig. 206). The excavations revealed that Cush 2, 3 and 4 were roughly contemporary but were preceded by Cush 1, while Cush 5 was built at a later stage, followed finally by Cush 6. The site known as

the ‘enclosure’ is the latest feature and was erected after all the other enclosures and a number of the field systems were built.

Cush 1 consists of a counterscarp enclosure on the northwest side of the southern group with a diameter of 17.7m internally and 39.6m externally. The ditch of the surrounding enclosure was continuous and access to the fort may have been by means of a wooden gangway defined on the western perimeter by two pairs of flanking postholes and an internal causeway. Numerous postholes were uncovered and these divided into two main groups, mainly in the southeast and the northwest of the interior. No definite plan of any structure was identified though a group of postholes in the southeast had a roughly semi-circular outline. Three hearths were uncovered - two associated with the northwest cluster of postholes, and one with the southeast. A silted-up stone-lined souterrain- 8.2m long- was found in the southwest of the interior. Finds from the enclosure included a possible flint scraper and one loom weight. One particular quernstone also appears to have been possibly re-used as a pivot stone for the structure in the southeast.

Cush 2 consists of a counterscarp enclosure at the northern side of the southern group. The remains of a small timber and clay house- defined by two postholes and an irregular setting of stones in a clay bank- were located just inside and on the south side of the western entrance. A stone-lined hearth was located in the centre of the site and was associated with a small number of burnt bones, and many postholes (presumably representing a structure or a sequence of structures, the form of which could not be identified). Two shallow storage pits and a souterrain- 4.3m long- were also uncovered in the centre of the interior. Finds from the site included a greenish-yellow glass bead and part of a blade of an iron sickle.

Cush 3 consists of a bivallate enclosure to the south of Cush 2. The western entrance was 5.2m wide and was flanked by a facing of dry-stone masonry at its ditch terminals. Immediately within the enclosure, the entrance appears to have been defined by two pairs of postholes and the remains of a stone kerb set on the inner side of the bank. Several postholes were identified in the southern and south-eastern side of the interior and appear to have formed rectangular houses- the best defined having dimensions of 4.9m by 3.7m. On top of the inner bank a small cist-like feature- 0.50 by 0.38m- with a small amount of calcined bone was discovered, which the excavator interpreted as a hearth. A silted-up stone-lined C-shaped souterrain was discovered in the northern half of the interior. A series of postholes in a hollow outside its southern opening were interpreted as a possible timber structure associated with the souterrain entrance. Finds from the site included half a greenish-yellow glass bead, iron spear-head, stone axe fragment, un-bored disc of a spindle-whorl, one loom weight, two stone-discs and a stone bracelet.

Cush 4 consists of a univallate enclosure to the south of Cush 2. A hearth was located in the centre of the interior and a series of flat stones forming the base of a wall of a possible structure were uncovered to its north and east. A large, complex stone-lined souterrain was uncovered south of the hearth and the approach to its opening was defined by a series of postholes, interpreted as belonging to some form of entrance structure. Several postholes were uncovered between the hearth and the souterrain- as was further portions of walls- but no complete building plan could be identified. Finds from the souterrain included a light blue glass bead, three beads of dark blue glass and a bead of light blue glass. Other finds included bronze button or stud, bronze pin, three stone spindle-whorls, one stone bracelet and a stone pendant.

Cush 5 consists of a bivallate enclosure- with preceding prehistoric burial activity- at the south end of the southern group. The western entrance of the enclosure was flanked on either side by two large postholes which probably formed part of an entrance gateway. Evidence for a kerb of stones at the external base of the inner bank- north of the entrance- as well as the recovery of similar boulders in the fill of the inner ditch indicates some form of stone-facing along the external side of the inner bank. Successive phases of occupation were uncovered in the interior. The earliest house appears to have been a dry-stone-walled circular

house which utilized the topography of the interior of the site. There were traces of other houses- one circular and one rectangular- which were wooden-framed. Other postholes were found in the interior, but the form and chronological relationship of these structures was not known. Portions of paving were identified across the site with one area in the centre of the interior possibly contemporary with one of the wooden houses. A souterrain-type structure comprising two long compartments connected by a narrow passage was also uncovered on the northeast of the enclosure. Finds from the site included one thin bronze plate, one spherical bronze object and a bone comb.

Cush 6 was formed by the area bounded within the outer banks-and-ditches of Cush 4 and 5. The burnt remains of a rectangular wattle-and-daub building (6.7m by 4.3m) were uncovered near the northern side of the enclosure. A considerable amount of iron slag was found on this site.

The site of the rectangular 'enclosure' has its own bank-and-ditch on three sides, with the fourth side formed by enclosures 1-6. The ditch of this site was cut into the underlying rock and was larger than the ditches of the enclosures. A line of twelve postholes were identified inside the bank on the south side and appear to have formed part of a structure, built possibly to strengthen the defences at this point. A number of structures were discovered in this area. A possible stone-and-timber roundhouse (A) - defined by a sub-rectangular row of postholes and stones around a compact clay floor with two internal hearths- was excavated to the west of enclosure 1 just inside and partly covered by the collapse of the banks of the 'enclosure'.

A rectangular house (B) (7m by 3m) with a stone-paved floor and of stone-and-turf construction was excavated in the southern interior of the 'enclosure'. Four postholes were uncovered in the interior of the structure and probably held timber roof supports. Immediately south of House B were uncovered a further two structures designated (C). The main building was rectangular (5.5m x 4.3m) and its walls were constructed in part directly over House B. The other house was identified by a light band of charcoal which formed no coherent structural plan. House D was excavated to the north of House B and consisted of a post-built rectangular sunken structure with an irregular partition running through its centre. House E was excavated in the south-eastern area of the 'enclosure' and was identified by bands of charcoal which formed no definite plan. A possible unfinished spindle-whorl was found at this house.

One further house (F) was uncovered in the area of the 'western field' adjacent to the 'enclosure'. It was similarly built to House A, and comprised a roughly circular structure (4m diameter) with stone-and-organic walls and a compact internal clay floor. Associated with this building were numerous small postholes to its west which may represent the remains of other successive houses on the site. Three flint barbed-and-tanged arrow-heads were recovered from one of these postholes while another yielded a single flint arrow-head and a fragment of flint. The recovery of these prehistoric finds to the west of this building and the proximity of the building to the small cist grave containing two food vessels could indicate that this structure- and perhaps some structures within the rectangular enclosure- are also potentially prehistoric in date.

The earthworks of the northern group consisted of four enclosures (7-10) within a modern field of over three acres with a further unexcavated site (11) situated in the next field. The enclosures of the northern group were connected with each other through a bank between Cush 7 and Cush 8, and a section of arcing bank and ditch between Cush 8 and Cush 10. Some strengthening of the defences of Cush 8 and Cush 10 may have occurred but all the enclosures appear to have been roughly coeval with each other.

Cush 7 consists of a bivallate enclosure (43m overall diameter) at the most southerly end of the northern group. The site had a western entrance and the inner face of the inner bank

was faced with stone. There were partial traces of occupation deposits, but these were substantially destroyed by later agriculture.

Cush 8 consists of the partial surviving remains of a trivallate enclosure to the north of Cush 7. Two stone-lined souterrains were located at the south and north end of the site. The southern souterrain was 10m long with a ventilation passage, 4.9m long, at its southern end. The northern souterrain consisted of a straight stone-lined structure 7m long with a timber-built entrance approach defined by four postholes. Two groups of postholes in the interior give evidence for structures. One group east of the northern souterrain defined a roughly rectangular structure with an associated hearth. Another group of postholes west of the northern end of the southern souterrain defined a structure of unidentified shape. The partial remains of a circular wattle-built structure defined by arcs of stakeholes were also excavated to the east of the southern souterrain. The remainder of the structure was not located-possibly due to disturbance caused either by the construction of the rectangular post-built house or the southern souterrain. Two postholes, about 1.5m apart, were revealed along the southern side of the enclosure and were interpreted as part of an entranceway. Finds from the site included two bronze ring-headed pins.

Cush 9 consists of a small section of bank and ditch in the form of an arc extending between Cush 8 and Cush 10. The arc may possibly form part of an enclosure though alternatively it may instead have been built to connect up the two enclosures for defensive or agricultural purposes. Accepting the later interpretation, the connecting arc of this site may have been built perhaps at the same time as the defences of Cush 8 and Cush 10 were strengthened. Except for a few postholes, there were no structural remains associated with the site.

Cush 10 consists of a trivallate enclosure, north of Cush 9. Part of the enclosing defences was removed by a modern field fence. A series of wall-trenches within the interior outlined a number of rectilinear features. Another curved wall-trench was excavated at the east side of the end a souterrain and appears to have formed part of a protecting structure. At least one of these structures appears to have been in use after the souterrain had silted-up.

A series of elongated rectangular field systems were identified at Cush running west-east down the hillside to the enclosures. The field boundaries were delineated by U-shaped ditches, 0.90m deep and a low bank surviving to a height of 0.45m. In contrast to the modern field systems, these field boundaries respected the outlines of the early medieval enclosures and appear to be roughly contemporary with or at least date to the later stages of the occupation of the enclosures. Test excavations identified that the field boundary trenches either cut into or stopped immediately short of the enclosures ditches, leading Ó Riordáin to suggest that the field boundaries had been dug while the enclosure ditches were still un-silted and in use.

Excavations within the area of the ‘western field’ identified further east-west silted-up ditches, interpreted as field boundaries which pre-dated the ditches and banks of the rectangular ‘enclosure’ site to their east. This evidence suggests that the bank and ditch of the rectangular ‘enclosure’ was built after the enclosures and a number of the field systems were laid out. The boundaries of the rectangular enclosure do appear to have been integrated into this system of ancient fields as its ditch and bank were aligned with two field boundaries on the eastern side of the southern group of enclosures as well as one of the early ditches in the ‘western’ field. A block of ridge and furrow made by a heavy plough with a fixed mouldboard was also identified running roughly east-west across part of the rectangular enclosure. Its age could not be determined but it could also be possibly associated with these field systems.

General finds from the site included around thirty fragments of jet bracelets, four iron knives, iron nails and over fifty whet-stones- the greatest number from Cush 4. Three possible rubbers of saddle querns and a considerable quantity of rotary querns fragments- Cush10 (26), Cush 1 (12), Cush 5 (9), Cush 3 and Cush 4 (7 each), House B (6), Cush 9 (3) and Cush 6 (3) were also recovered. Sixteen pounds of iron slag was also recovered mainly from Cush

4, Cush 6 and Cush 7 with some pieces also found on Cush 3 and Cush 10. The pieces of slag from Cush 7 were particularly large with some weighing over two pounds. A sample of slag from Cush 4 was examined by Oliver Davies, QUB who identified one possible furnace bottoms and suggested that the collection was derived from bog ore. A very small fragmentary collection of animal bones was recovered and consisted primarily of cattle followed by minute amounts of pig (5), sheep (3), and dog, hare, corncrake and horse (1 each).

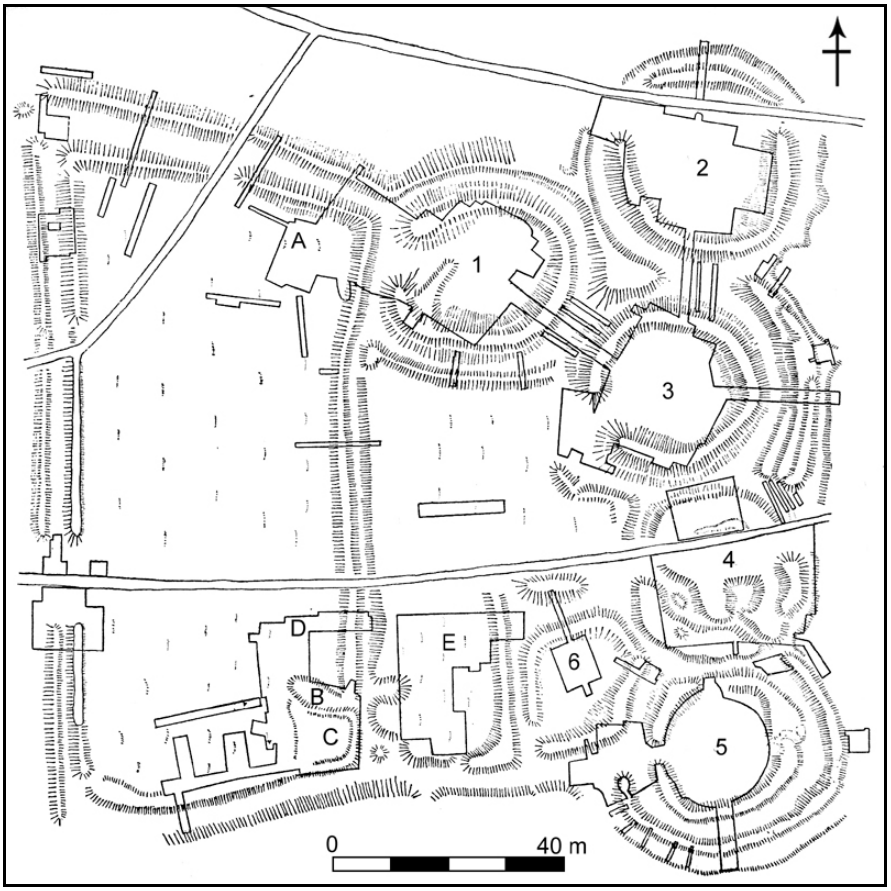


Fig. 206: Southern Group of enclosures at Cush, Co. Limerick (after Ó Ríordáin 1939–1940, plate XIV). Numbers indicate enclosures; Letters indicate houses.

References:

O'Kelly, M.J. 1989. Early Ireland: An Introduction to Irish Prehistory. Cambridge University Press, Cambridge.

Ó Ríordáin, S. P. 1939–1940. Excavations at Cush, Co. Limerick. *Proceedings of the Royal Irish Academy Section C,* 45, 83–181.

Grange, Co. Limerick
Early Medieval Raised Enclosure
Grid Ref: **R63734263 (163737/142633)**
SMR No: **LI023-068**
Excavation Licence: **N/A**
Excavation Duration/Year: **Summer 1948; Summer 1949**
Site Director: **S.P. Ó Ríordáin (University College Cork)**

A raised enclosure at Grange revealed an internal early medieval hut and associated hearths pre-dated by hearths of uncertain date. Also excavated during this excavation season were five sites (I-V) in the adjacent Ballingoola townland comprising two prehistoric ring-barrows (I & II) and three possible ring-ditches of uncertain date (III-V). The sites were situated in a marshy valley of the Camoge north of Lough Gur and were divided by a deep stream forming the boundary of the two townlands.

The sites were excavated in the summer of 1948 (Grange and Ballingoola I-IV), and 1949 (Ballingoola V) as part of continuing research into the Lough Gur area. The area of these sites excavated comprised the entrance (if present), considerable portions of the interior as well as sections through the enclosing features- banks and ditches.

Two phases of activity were identified at the enclosure at Grange (Fig. 207). Prior to the construction of the enclosure, the site was covered by a deposit of peat which overly a layer of alluvial clay. A pre-enclosure phase consisted of a number of hearths associated with small burnt stones deep in the peat. The largest hearth overlay a hollow containing many roots and some hazel nuts. It was suggested that this area may have formed a small hummock in ancient times on which hearths connected with temporary occupation were built.

This hummock may have attracted the builders of the enclosure to this site. Its enclosing ditch was cut through the peat into the alluvial clay to a depth of approximately 0.50m with the material obtained from it- peat and clay- being used to form a low bank. The slight outer bank was very irregular and did not exist everywhere.

The enclosure at Grange was 32m in diameter and was marked by a bank, ditch and slight traces of outer bank. The enclosing bank was contemporary with a spread of clay overlying the peat that extended from the banks on the east towards the centre of the site. On the dry clay surface was a circular deposit of charcoal, fragments of charred wood and burnt clay, interpreted as the remains of a burnt structure, 5m in diameter with wattle and clay walls. No trace of any postholes was found. A patch of burning in the centre of the huts interior was identified as a hearth. Evidence for other firing hearths in the open was also uncovered on the clay surface near the hut. Fragments of burnt bone and pieces of iron slag were recovered from these features.

The entrance was along the western perimeter of the enclosure. There was no evidence for a gate at the entrance, except for one doubtful post-hole half-way between the two stone-lined ditch terminals. A considerable spread of charcoal and remains of brushwood was uncovered in the entrance and immediately outside. This was very tentatively interpreted as the remains of some simple, makeshift method of closing the entrance such as placing bushes in the opening.

Finds from the peat included a chert arrow-head, stone spindle-whorl, two hammer-stones, whet-stones and seven flint-flakes. Iron slag was recovered from various places in the peat as well as on the clay floor where six flint flakes, one bone point, and one whetstone were recovered. The finds from the peat indicate a long chronological period and were not all necessarily contemporary with each other. The stone spindle-whorl, one whetstone and some iron slag from beneath the clay floor could indicate an earlier phase of early medieval activity on the site.

The sites at Ballingoola (I-V) comprised two prehistoric ring barrows (I & II) and three possible ring-ditches (III-V) of probable prehistoric date. The finds from all these sites were exclusively prehistoric in date.

Ballingoola III comprised a low mound with a broad shallow ditch prior to excavation. An irregular band of charcoal and areas of burning defined the outline of a possible circular house, c. 6m in diameter in the interior. It contained a central hearth and its walls appear to have been formed of wattle and clay walls like the example at Grange. It had evidence for a number of rebuilding phases with stones forming a footing for the walls in its later phases. Two ditches could be traced around this building though the outer ditch may not have completely enclosed the structure. The entrance of the ditches was to the east and appears to have been originally paved and possibly defined by a series of posts- identified as black circular areas at the ends of the inner ditch. Finds from the site comprised two pieces of polished stone axes and a crude chipped flint from the northeast quadrant inside the inner ditch. A large quantity of animal bone and charcoal were recovered from the fills of the ditches on either side of the entrance.

Ballingoola IV had the appearance of a low mound with a flat top prior to excavation. There was no indication of an entrance on the site. Excavation uncovered a further wattle and clay walled house, c. 6m in diameter indicated by another circular band of charcoal. A spread of charcoal in the centre indicated the location of a hearth. There was no evidence for any form of rebuilding. The building was enclosed by a ditch. The area between the ditch entrance and the house contained evidence for a paved surface. Two pieces of flint were recovered in the south-eastern quadrant of the site outside the house though were possibly not associated with this structure.

Ballingoola V was excavated in 1949 (O.S. 6"- 23 S. 10.3cm W. 19.5cm). It is situated on low marshy ground like the other sites and appeared as a low mound prior to excavation with a saucer-like central depression surrounded by a shallow ditch. The site had a diameter of 11m and was similar in appearance to Ballingoola IV. A slight flecking of charcoal was identified at the centre of the site and it was suggested that it may represent evidence for a building, perhaps of the same type excavated at Ballingoola III and IV.

Ballingoola I and II were nearby prehistoric ring-barrows- c. 6m in diameter- consisting of a level space enclosed by a shallow ditch and a very slight outer bank. Over two hundred sherds of Neolithic and Beaker pottery, c. 70 flints- waste fragments, flakes, scrapers, blades and two barbed-and-tanged arrowheads-, eight axe-chips and a small quantity of animal bone were uncovered during excavations at these two sites.

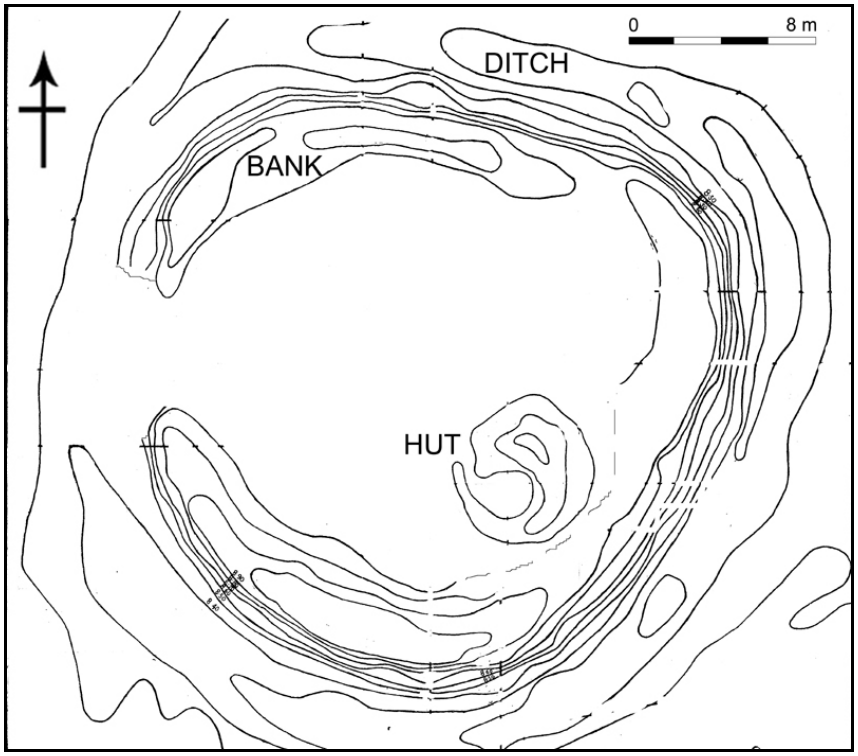


Fig. 207: Excavated areas of Grange enclosure (after Ó Ríordáin 1949, fig. 2).

References:

Ó Ríordáin, S. P. 1949. Lough Gur excavations: three marshland habitation sites. *Journal of the Royal Society of Antiquaries of Ireland,* 79, 126–39.

Ó Ríordáin, S. P. 1950. Lough Gur excavations: Ballingoola V (note). *Journal of the Royal Society of Antiquaries of Ireland,* 80, 262–3.

Knockea, Co. Limerick
Early Medieval Raised Enclosure
Grid Ref: **R61294945 (161299/149455)**
SMR No: **LI013-111002**
Excavation Licence: **E000744**
Excavation Duration/year: **1960**
Site Director: **M.J. O'Kelly (University College Cork)**

An early medieval platform enclosure with internal structures and an adjacent burial enclosure with association habitation evidence were excavated on a hill at Knockea over the course of eight weeks in 1960. The excavations were financed by a state grant administered through the Special employments Scheme and the Royal Irish Academy. A complex of earthworks and enclosures covered an area of ten acres running from the highest point of the hill southward. The excavation comprised full investigation of a small enclosure (Site I) and a trial-trench across an adjacent platform enclosure (Site II).

Site I consisted of a burial enclosure (18m by 18m) with its sides orientated to the cardinal points. Three curving trenches pre-dated the burial enclosure. Two were identified on the eastern side with one running north-south having cut the other east-west trench. The east-west trench was cut by the ditch of the burial enclosure but continued intact under the bank. Another curving trench was also cut by the southern ditch of the burial enclosure. These trenches contained no wattle or postholes though were interpreted as either foundation trenches of huts or possible drains for structures. A few animal bones were recovered from the trenches.

The enclosing ditch of the burial enclosure was square in plan with rounded corners and displayed a U-shaped profile, approximately 2m wide at the top and 0.8m deep on average. The spoil from the ditch was placed on the inside to create a broad low bank faced internally with a vertical dry-stone-built revetment which survived to a maximum height of 0.7m. The bank had an average thickness of 3m and enclosed an area 8.3m by 8.3m.

There was no entrance opening and the original ditch was continuous throughout. However, a causeway of stones was built across the ditch on the western side to create an entrance passage, 1.5m wide. It led on to a gravel cobbled path on the top of the bank, defined by two sets of postholes on the spine of the bank and on the ditch. A line of large postholes spaced 1m apart were uncovered all the way around the spine of the enclosing bank, 1m from the inner facing.

An inhumation cemetery of at least 66 burials was uncovered within the enclosing bank beneath a scatter of stones which appeared to have been deliberately spread across the interior. The burials were extended and mostly orientated east-west. Most were interred within simple unlined pits though the heads of a small number were partly protected by a few stones. A strike-a-light stone was uncovered beside the skeleton of child in a pit in the northwest quadrant. 111 water-rolled pebbles- 83 of them white quartz- were found in the fill directly over the child's skeleton.

There were no associated grave-goods except the possible strike-a-light. Most of the other finds were from disturbed contexts inside the enclosure and none could be said to have belonged to any particular burial horizon. Finds comprised a bone comb fragment, four strike-a-lights, ornamented pebble, all from disturbed contexts as well as a flint scraper and stone disc.

The burial enclosure was post-dated by two parallel trenches which extended over its northern silted-up ditch. The fill of the trenches and the area between them was much flecked with charcoal. An irregular-shaped pit extended from the centre of the area to the southeast corner and produced animal bones and a blue glass bead. The trenches contained

no wattle- or postholes and were interpreted as foundation trenches or possible drainage features for a structure.

The adjacent Site II consisted of the partial remains of an early medieval platform enclosure (Fig. 208). The eastern half of the enclosure was still visible though the western half had been almost completely ploughed out. Two phases of activity were uncovered in the excavated trial-trench.

In the early phase the site appears to have been enclosed by a primary ditch. No evidence for an internal bank was uncovered and suggests that the soil may have been spread across the interior of the site. An excavated section of the ditch at the northern end measured 1m wide and 0.50m deep, and contained habitation refuse which had gradually accumulated and spread outward into the ditch from the interior. The entrance was through an uncut causeway at the southern end and was defined by one post-hole which may have supported a gate.

The partial remains of twelve huts were identified in the interior were in the trial-trench - these appeared to be of wattle construction, although a number also had wall-trenches and postholes. The buildings were not all of the same date with many of the structures clearly cutting each other or displaying some evidence for repair. The remains of two of these huts (J and K) were excavated in the environs of the southern entrance and possibly pre-dated the primary enclosure. Two of the houses were described rectangular or sub-rectangular in shape and two as circular. Two of the structures contained internal hearths. A thick spread of soil rich in habitation refuse containing a number of finds and animal bone overlay all the excavated structures.

In the later phase, a new ditch was dug outside the earlier ditch (which may have filled up by this stage), and a bank was built. The bank was revetted internally and externally by a wooden palisade identified as two concentric trenches with postholes. The ditch was broad and deep and contained quantities of animal bone, charcoal. The partial remains of an angular wattle house with a roughly circular pit inside it were identified partly overlying the filled-up secondary ditch at the northern end. The sides of the internal pit were oxidized indicating *in situ* firing.

A number of domestic finds were recovered from the primary phase structures and habitation refuse and included an iron pin or needle, two iron knives, five hones, one bone ‘scoop’, and a bone handle. There was also evidence for industrial activity in the first phase in the form of two furnace bottoms and fragments of a tuyère. A blue glass bead, one iron awl, two bone pins, one bone point, a fragment of a jet bracelet and fragments of four quern stones comprised the finds from the later phase. The faunal remains from the site included cattle, sheep, pig, horse, dog, fox, red deer (antler tines) and rook as well as the fragmentary remains of at least four adult humans as well as some children and infants.

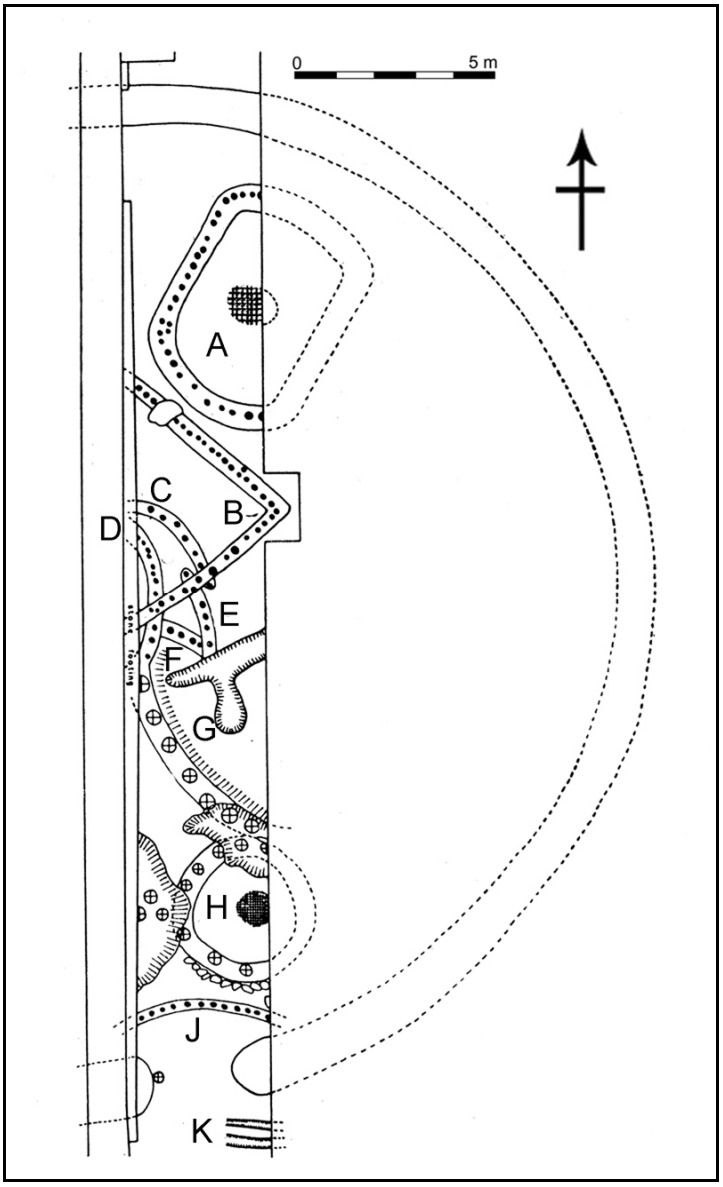


Fig. 208: Plan of Phase 1 at Site II, Knockea, Co. Limerick showing sequences of huts (A-K) (after O'Kelly 1967, 85).

Reference:

O'Kelly, M. J. 1967. Knockea, Co. Limerick, in *North Munster Studies: Essays in commemoration of Monsignor Michael Moloney*, ed. E. Rynne Limerick: Thomond Archaeological Society 72–101.

Newtown, Co. Limerick
Early Medieval Settlement Enclosure
Grid Ref: **R62555585 (162550/155850)**
SMR No: **N/A**
Excavation Licence: **01E0214**
Excavation Duration/year: **2001**
Site Director: **F. Coyne (Aegis Archaeology Ltd.)**

Newtown A, excavated in advance of the proposed Limerick Southern Ring Road, revealed an eighth/eleventh-century sub-triangular enclosure with internal buildings, pits and other features (Fig. 209). Prior Bronze Age activity was represented by two houses situated to the north of the enclosure as well as a flat cremation cemetery while the ditch of another undated possible enclosure (Newtown E) was excavated 25m to the west. Newtown A was previously unrecorded and discovered during test-trenching on a crest of a hill (30m OD) in an otherwise generally low-lying landscape, east of Limerick city.

The first phase of activity appears to have centred on an early Bronze Age flat cemetery and includes two houses (A and B), large pits and possible burnt mound material. Fragments of at least seven funerary pots (Vase Urn tradition) containing the cremated remains of at least three individuals were uncovered, mostly from a series of inter-cutting pits in the south-western corner of the early medieval enclosure.

Two roughly U-shaped buildings were excavated on the north side of the main enclosure and appear to have been associated with the flat cemetery. They contained internal hearths and were defined by slot-trenches and postholes. Prehistoric pottery were recovered from hearths and pits associated with these structures. Three features- a pit with early Bronze Age pottery, areas of burning with charcoal and cremated bone and a deposit of charcoal and burnt stone- were uncovered to the immediate north of the main enclosure, 10m from the Bronze Age structures.

Newtown A had maximum dimensions of 40m x 50m, and the enclosing ditch was V-shaped in profile and averaged 3m in width. The basal fill of the enclosing ditch produced a calibrated 2Σ date of A.D. 778-1032. Charcoal from an upper fill of the enclosing ditch produced a calibrated 2Σ date of A.D. 1018-1295 and may date the final levelling of the site. The ditch was partly surrounded on its eastern and northern sides by a narrow trench (0.5m in width), interpreted as an external palisade slot-trench. No earthen internal enclosing bank was identified.

The eastern enclosure entrance was formed by a 5m wide un-dug portion of the ditch and was revetted in places by stone facing. A series of postholes and a slot-trench were excavated immediately inside the entrance and were interpreted as the remains of some form of gatehouse. A cobbled area in the entranceway had been repaired or resurfaced on at least one occasion.

A figure-of-eight structure comprising a large semi-circular structure with an attached northern annex was situated in the centre of the enclosure. It was defined by a slot-trench measuring a maximum of 11m by 9m internally. Charcoal from the slot-trench and from the central oak post-hole produced calibrated 2Σ dates of A.D. 765-1017 and A.D. 855-1274.

A large number of pits and postholes were identified in the southern part of the interior of the building which was partly delineated by a shallow east-west linear trench. Very little stratigraphic evidence survived and no distinct occupation layers were identified within its interior. The fill of the linear trench produced a green glass bead with yellow paste herringbone decoration and a shallow pit north of this trench contained a dark blue glass bead. A hone-stone was recovered from the building's central post-hole. The slot-trench of the building produced part of a glass armlet with white decoration, an iron knife, a socketed iron implement, a flint scraper, some horse teeth and the top of an adult human skull (aged

about thirty). The last three finds were tentatively interpreted as a possible foundation deposit during the building's construction.

A circular structure defined by another slot-trench, 5m in diameter, was situated to the north of the figure-of-eight building and had been badly truncated by later drainage activity. No dating evidence was recovered from this structure.

One large pit situated to the south-west of the figure-of-eight building revealed a flint blade and a quantity of charcoal. A possible drain defined by a large linear cut ran across the upper layer of the fill of this pit and appears to have originated in the slot-trench of the central building. A number of pit features were recorded to the west of the figure-of-eight building though none contained any finds or had any stratigraphic relationship with each other.

A cluster of undated pits and postholes were excavated to the east of main enclosure (A) though none of the features had any stratigraphic relationships to each other. A cluster of four other pits to the immediate east of the main enclosure (A) were filled with burnt stone and were identified as pot-boilers or possible roasting pits. No finds were associated with any of these features.

Newtown E was situated 25m to the west of the main enclosure and consisted of a curving ditch feature, possibly forming part of a large sub-rectangular enclosure. No diagnostic finds were recovered from the fill of the ditch, nor was any charcoal retrieved. The ditch cut an area of burnt stones, tentatively identified as the remains of a *fulachta fiadh*. Two sherds of a possible Vase Urn were recovered from a large pit, 15m west of the burnt deposit and were possibly related to it. The eastern side of the curving ditch was in turn cut by a modern field boundary.

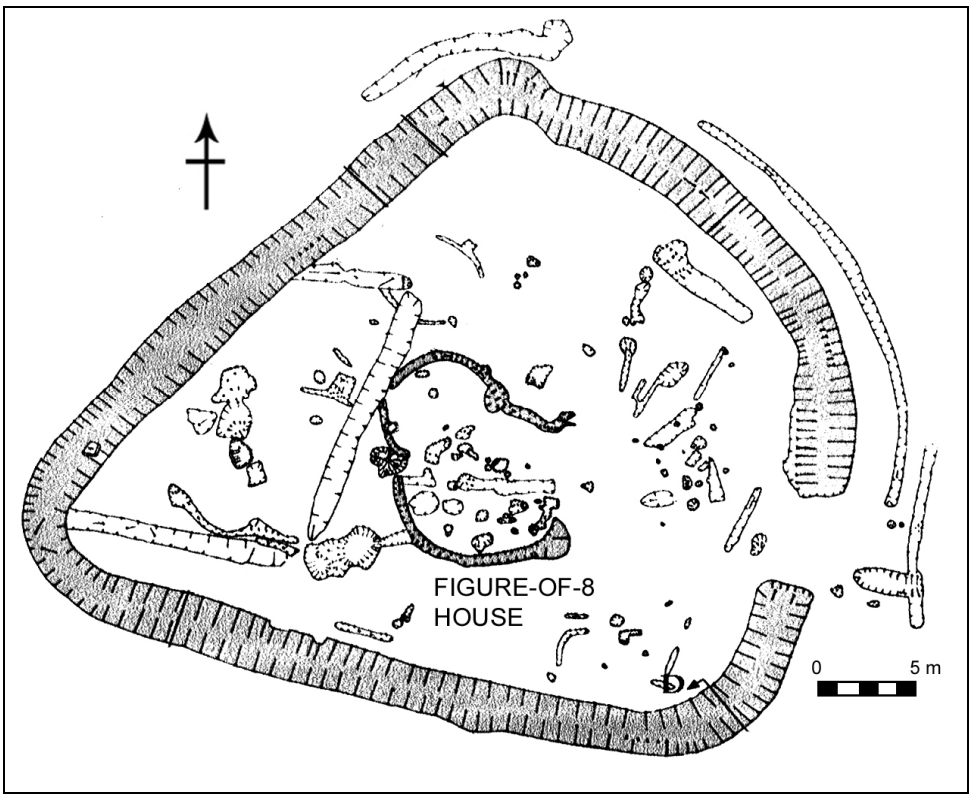


Fig. 209: Plan of excavated features at Newtown A, Co. Limerick (after Coyne 2005, 53).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-182313	Holly (*Ilex*) charcoal from slot-trench of figure-of-eight building	1150±70 BP	A.D. 694-702 A.D. 706-748 **A.D. 765-1017**
Beta-182314	Oak (*Quercus*) charcoal from central post-hole of figure-of-eight building	970±120 BP	A.D. 782-789 A.D. 810-847 **A.D. 855-1274**
Beta-182317	Blackthorn (*Prunus spp*) charcoal from base of enclosure ditch	1090±60 BP	**A.D. 778-1032**
Beta-182323	Blackthorn (*Prunus spp*) from upper fill of enclosure ditch	840±90 BP	**A.D. 1018-1295**

References:

Coyne, F. 2001. Archaeological Report of an Excavation at Newtown (A & E), County Limerick found during the monitoring of the Limerick Southern Ring Road Phase 1. Unpublished Stratigraphic Report for Aegis Archaeology- Autumn 2001.

Coyne, F. & Collins, T. 2003. Plectrum shaped enclosures-a new site type at Newtown, Co. Limerick. *Archaeology Ireland,* 17(4), 17–9.

Coyne, F. 2005. Excavation of an Early Medieval 'Plectrum-Shaped' Enclosure at Newtown, Co. Limerick. *North Munster Antiquarian Journal*, 45, 51-63.

Coyne, F. 2006. Excavation of an early medieval 'plectrum-shaped' enclosure at Newtown, Co. Limerick, in J. O'Sullivan & M. Stanley (eds.) *Settlement, industry and ritual: proceedings of a public seminar on archaeological discoveries on national road schemes, September 2005*. Bray: Wordwell, 63–72.

Raheennamadra, Co. Limerick
Early Medieval Settlement Enclosure
Grid Ref: **R74282932 (174282/129329)**
SMR No: **LI041-013011**
Excavation Licence: **N/A**
Excavation Duration/year: **July - September 1960; July - August 1961**
Site Director: **M. Stenberger (University of Uppsala)**

A univallate platform enclosure at Raheennamadra, excavated in 1960 and 1961 by the University of Uppsala, revealed an early medieval hut, souterrain, paved courtyard and two extended furnished human skeletons (Fig. 210). The site belongs to a group of three enclosures which are situated in open grazing land and delimited by a number of small streams and ditches.

Pre-enclosure habitation phase was suggested by the excavation of an isolated oval-shaped hearth filled with charcoal and burnt clay on top of the original ground surface. The charcoal returned a calibrated 2Σ date of B.C. 60- A.D. 429**.** The hearth was not associated with any other features and may represent the remnants of temporary dwelling pre-dating the enclosure.

The enclosure consisted of a low platform - approximately 0.75m high - surrounded by a bank-and-ditch. The diameter of the site was roughly 38m-40m and the platform inside the bank was some 25m across. The ditch was U-shaped in profile and was cut into the boulder clay. It varied from 1.3m to 1.5m in depth and was approximately 3m wide at the top and 1m at the bottom.

The enclosing bank survived to a height of 0.6m-1.1m above the old ground surface. The bank had a core of boulder clay surrounded on both sides by an extensive humus layer which in turn was covered with boulder clay. Some round shallow depressions were identified between the bank and the edge of the external ditch and may represent postholes for a supporting palisade.

The north-western entrance appears to have been protected by side-posts and an unusual gated palisade (*c.f.* Garryduff II, Co. Cork) filling the gap between the ends of the enclosing banks
A 2m wide metalled surface was excavated in the centre of the entrance passage and formed part of a large early paved courtyard (75m^2) in the northern part of the enclosure.

A partially destroyed circular wall trench in the centre of the site was interpreted as a round house, 6m-7m in diameter. A hearth (II) was found beside and on top of the southern part of this trench and evidently post-dates the possible hut. Charcoal from the hearth returned a 2Σ date between A.D. 537 and A.D. 995. The southern side of the hut trench touched a wall of the souterrain.

The souterrain was revealed in the southern part of the enclosure and contained a number of backfilled clay deposits. A small number of animal bones and fragments of a bone comb were found in its primary fill. The floor in the northern part of the souterrain was covered by a burnt layer which had originated from Hearth II. A hearth and an iron leather-scorer were identified in one of the upper fills and indicate a temporary re-use of the structure when it was already half backfilled. A bronze ring-pin was also recovered on top of the eastern wall of the souterrain.

A number of radiocarbon dates were retrieved from various contexts inside the souterrain. Charcoal samples from the butts of timber roofing props on the floor of the souterrain returned dates of A.D. 555-995 or A.D. 340-890; and A.D. 581-1016 [all 2Σ]. The use of the souterrain was roughly contemporary with Hearth II (A.D. 537- 995) because burnt remains from the functioning hearth had washed down to the open floor of the souterrain.

Two burials were uncovered to the east of the souterrain. These were aligned with heads to the south-south-west. Both skeletons had an iron knife blade placed beside the skull, and one had an iron buckle. The grave goods and alignment could suggest a pre-Christian or transitional date.

The final phase of habitation was associated with a possible stone enclosure or hut close to the bank in the north-western part of the site. This structure appears to have been built much later than the main habitation phase as it was uncovered just below the present ground level.

Other finds from the site included a bronze bucket-handle, a number of bronze and iron objects, three bones 'spearpoints', a crucible, and six whetstones. The animal bone assemblage was very small and consisted mainly of cattle, pig, sheep and horse.

The radiocarbon dates from the sites contain very broad error margins and only narrow the main habitation phase down to the latter half of the first millennium A.D.

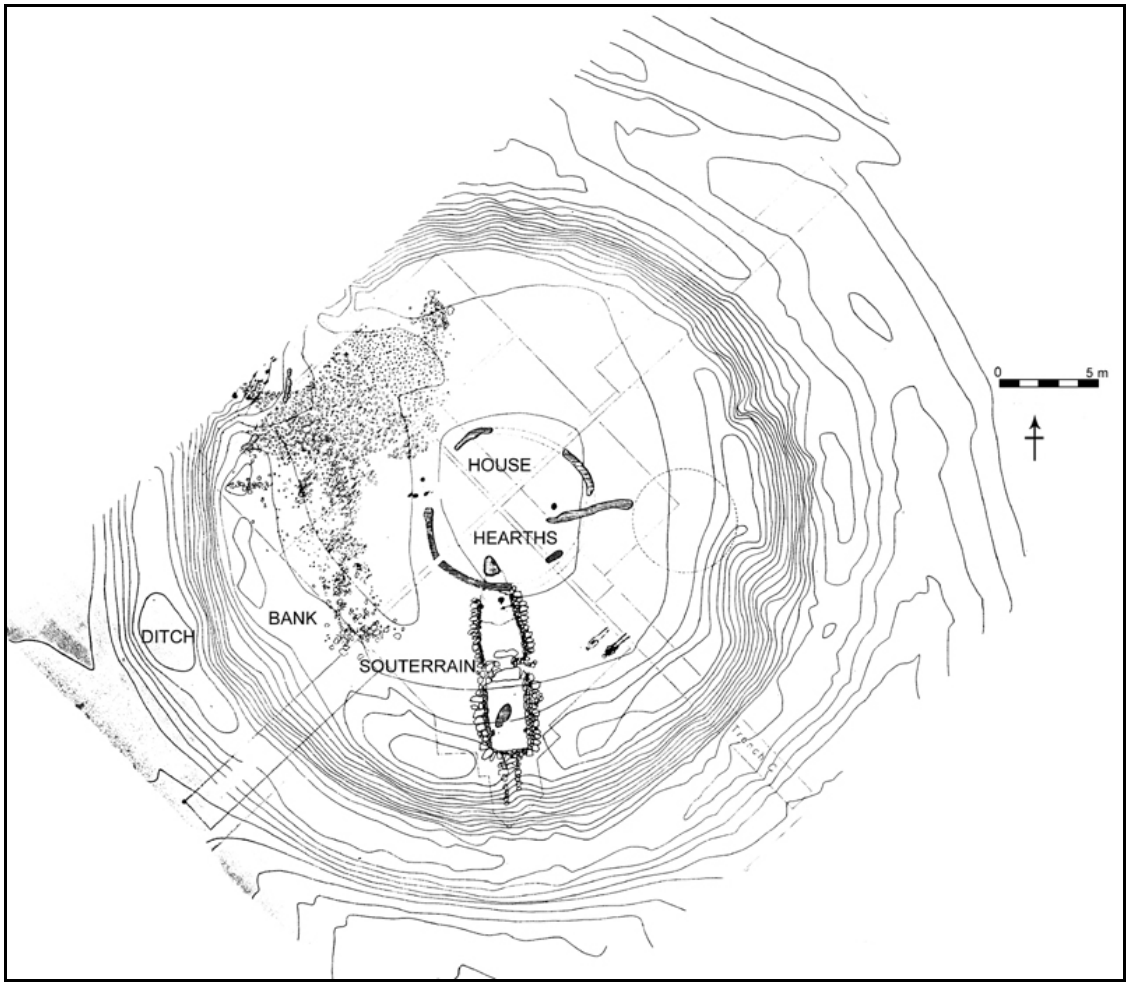


Fig. 210: Plan of excavated areas at Raheennamadra, Co. Limerick (after Stenberger 1966-7, plate II).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
U240	Charcoal from oak post-ends in southern postholes of souterrain	1280±120 BP	**A.D. 555- 995** A.D. 1006-1012
U241	As U240 - retreated	1430±130 BP	**A.D. 340-890**
U242	Charcoal from oak post-ends in southern postholes of souterrain	1220±110 BP	**A.D. 637-1021.**
U243	As U242 - retreated	1260±120 BP	**A.D. 581-1016**
U244	Charcoal from Hearth II	1330±120 BP	A.D. 439-486; **A.D. 532-977**.
U245	As U244 - retreated	1300±120 BP	**A.D. 537-995** A.D. 1009-1011
U246	Charcoal from Hearth III in souterrain	1200±110 BP	**A.D. 643-1027**
U247	As U246 - retreated	1360±100 BP	A.D. 435-490; A.D. 509-517; **A.D. 529-893**.
U248	Charcoal from Hearth I on original ground surface	1840±110 BP	B.C. 91-69 **B.C. 60- AD 429**

References:

Stenberger, M. 1966-7. A. ring-fort at Raheennamadra, Knocklong, Co. Limerick. *Proceedings of the Royal Irish Academy Section C*, 65C, 37–54.

Sluggary, Co. Limerick
Early Medieval Settlement Enclosure
Grid Ref: **R55905355 (155907/153550)**
SMR No: **LI013-038**
Excavation Licence: **E131**
Excavation Duration/year: **June - July 1973; June – July 1974**
Site Director: **E. Shee Twohig (University College Cork)**

A large trivallate enclosure at Sluggary, partially excavated in 1973 and 1974 in advance of a residential development, revealed internal habitation consisting mainly of a hearth, pits, stakeholes, animal bone and early medieval finds. The site was situated on well drained boulder clay just above 15m OD on the northern edge of Sluggary townland, 5km from Limerick city centre.

Pre-enclosure habitation on the site was minimal except for the presence of animal bone inside the banks and the recovery of some postholes under the middle bank. Another possible early feature consisted of a red clay bank (0.15m thick and 2.0m wide) which ran east-west across the site and appeared to be edged by a line of stones along the south side of its eastern end.

The trivallate enclosure was polygonal in plan and had a diameter of 40m-48m internally and 70m-80m externally (Fig. 211). The inner (0.8m high by 3.8m wide), middle (0.5m high by 2.3m wide) and outer (0.35m high by 2.5m wide) concentric banks were originally revetted with stone. External ditches were excavated outside the inner and middle banks and had maximum measurements of 1.5m deep by 2.6m wide; and 0.8m deep by 2.3m wide respectively. A single edged decorated bone comb and a possible bone handle were recovered inside the fill of the southern perimeter of the inner ditch.

Internal features consisted mainly of stakeholes, post-pits and pits, some rich in animal bone and charcoal and cut into the red clay bank principally in the centre of the enclosure. Attempts to identify the ground plans of individual houses were unsuccessful though a number of stakeholes associated with patches of burnt earth and a hearth may represent the remains of a structure.

The finds were principally recovered on the surface of the red clay banks or within or associated with the pits cut into it. Finds from the site consisted of ten knives, two needles, one saw, one key and bars, awls and nails. A copper-alloy ringed pin, button/stud and thin strip (from a composite object) and two fragments of fired clay, one a possible mould, were also recovered.

Four furnace bottoms and one piece of slag from the interior of the enclosure suggest on-site iron smelting while one possible clay mould could also indicate metalworking. The animal bone assemblage originated mainly from ditch deposits and pit fills and was dominated by cattle bone (60%), followed by pig, sheep and other animals including horse, dog and red deer.

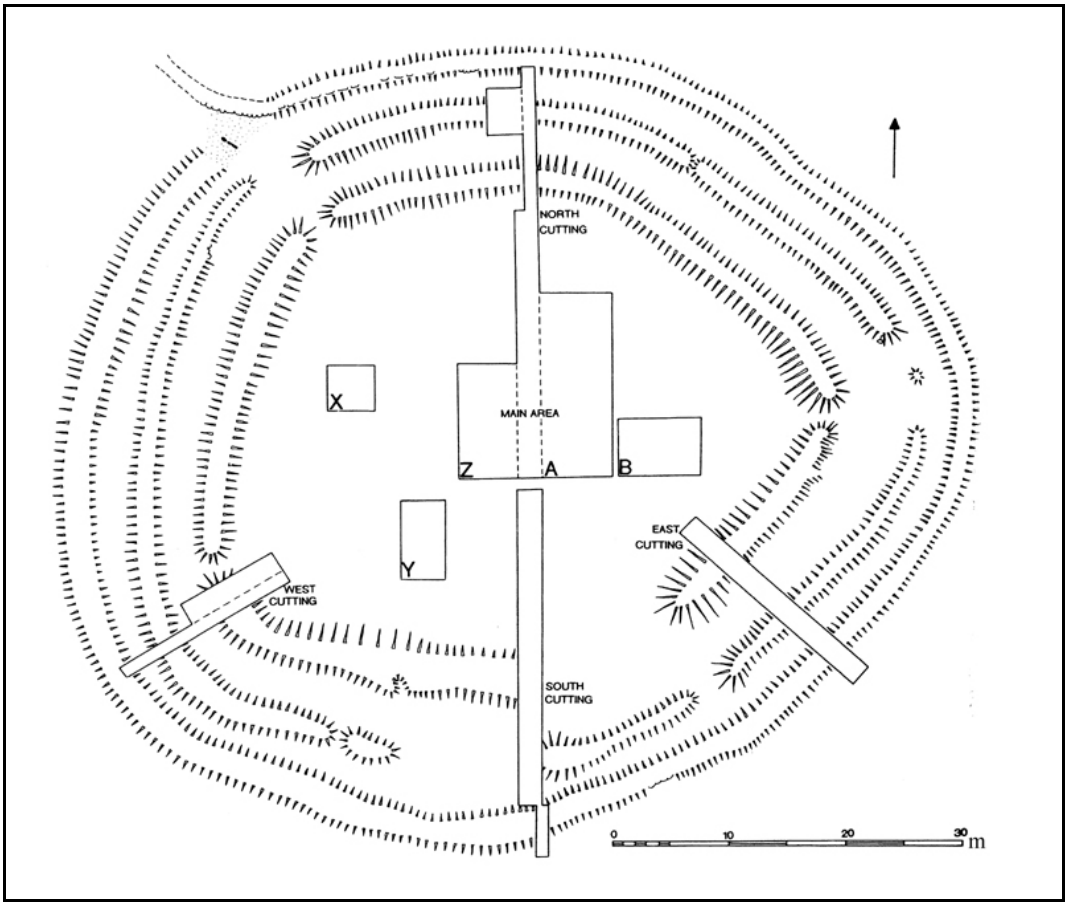


Fig. 211: Plan of Sluggary, Co. Limerick, showing areas excavated (after Shee Twohig 2000, 4).

Reference:

Shee Twohig, E. 2000. Excavation of a ringfort at Sluggary, Co. Limerick. *North Munster Antiquarian Journal*, 40, 1–27.

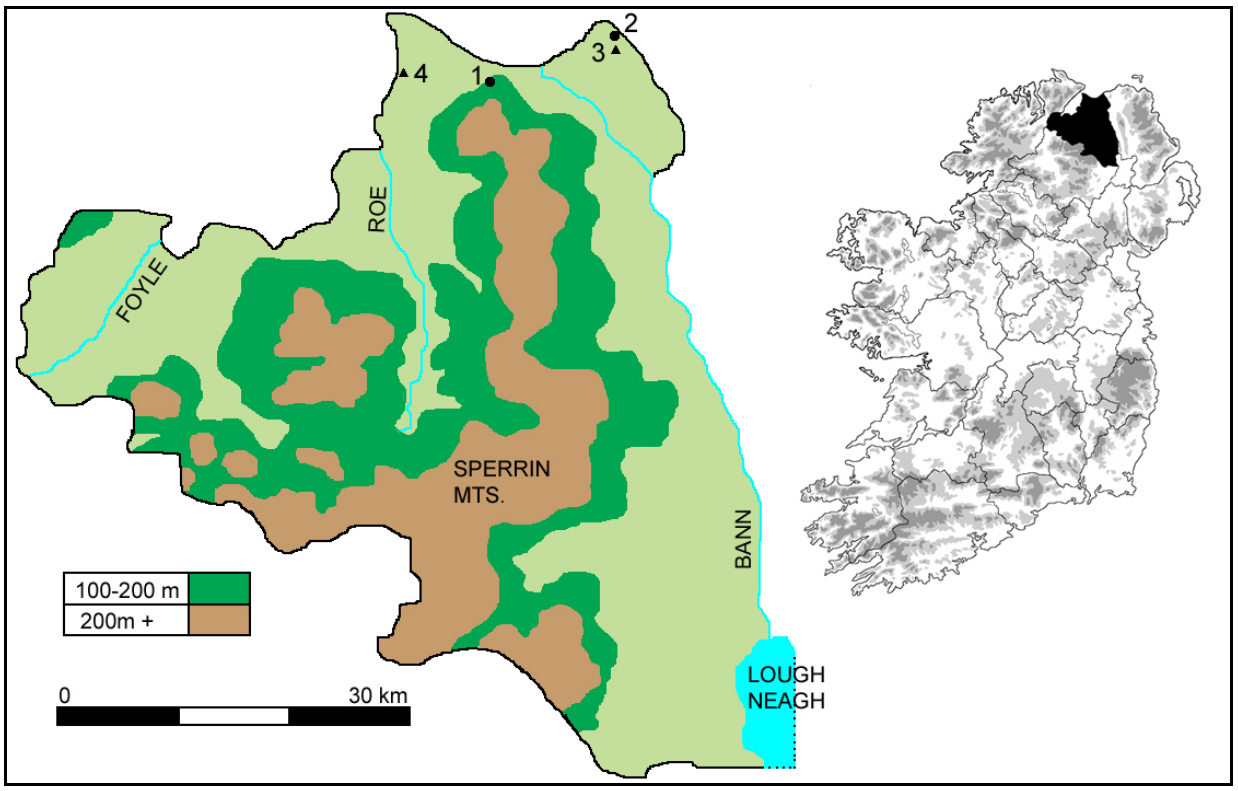


Fig. 212: Significant early medieval excavations in Co. Londonderrry.

1	Big Glebe	**3**	Magheramenagh
2	Corrstown	**4**	Oughtymore

Big Glebe, Co. Londonderry
Early Medieval Raised Enclosure.
Grid Ref: **C76033405 (27603/43405)**
SMR No: **LDY 002:003**
Excavation Licence: **N/A**
Excavation Duration/Year: **1976**.
Site Director: **J.C. Lynn (Historic Monuments Branch, Department of the Environment (N.I.))**.

The site consisted of a mound (20m diameter at the top; and 7m high), set on a low ridge. The mound was enclosed within an oval ditch with a diameter of 70m at its widest point. Complete excavation of the site was required as it was to be destroyed under a farm improvement scheme.

Prior to excavation the mound was assumed to have been an Anglo-Norman motte, however, upon excavation it was found that the site was of an earlier date. Excavation of the site revealed that the lower 5m or 6m of the mound had been constructed in one event. Evidence for this was found in the form of large curving ramp revetted with stone, which was up to 3m in height (Fig. 213).

The original occupation layer was enclosed by a dry-stone wall of boulders around the edge of the mound top. The burnt outline of a wicker-walled roundhouse (7m in diameter) was located in the centre of the mound top (Fig. 214). A smaller structure to the north of this house may have constituted the rear room of a 'figure-of-eight' house, but modern disturbance in the intervening area made this impossible to ascertain. The finds from the main structure consisted of sherds of souterrain ware, two bronze pins and a quernstone. Radiocarbon dates were obtained from the charcoal (see below).

The mound was subsequently heightened again, using the earlier perimeter wall as a revetment. A souterrain was excavated into the mound at this period. The structural remains from this phase were badly damaged by later cultivation, but there appeared to have been at least one sub-rectangular building which was either stone-built, or partially stone-built. Souterrain ware was also recovered from this phase of occupation.



Fig. 213: Stone-revetted ramp at Big Glebe, Co. Londonderry (courtesy T. E. McNeill, QUB).

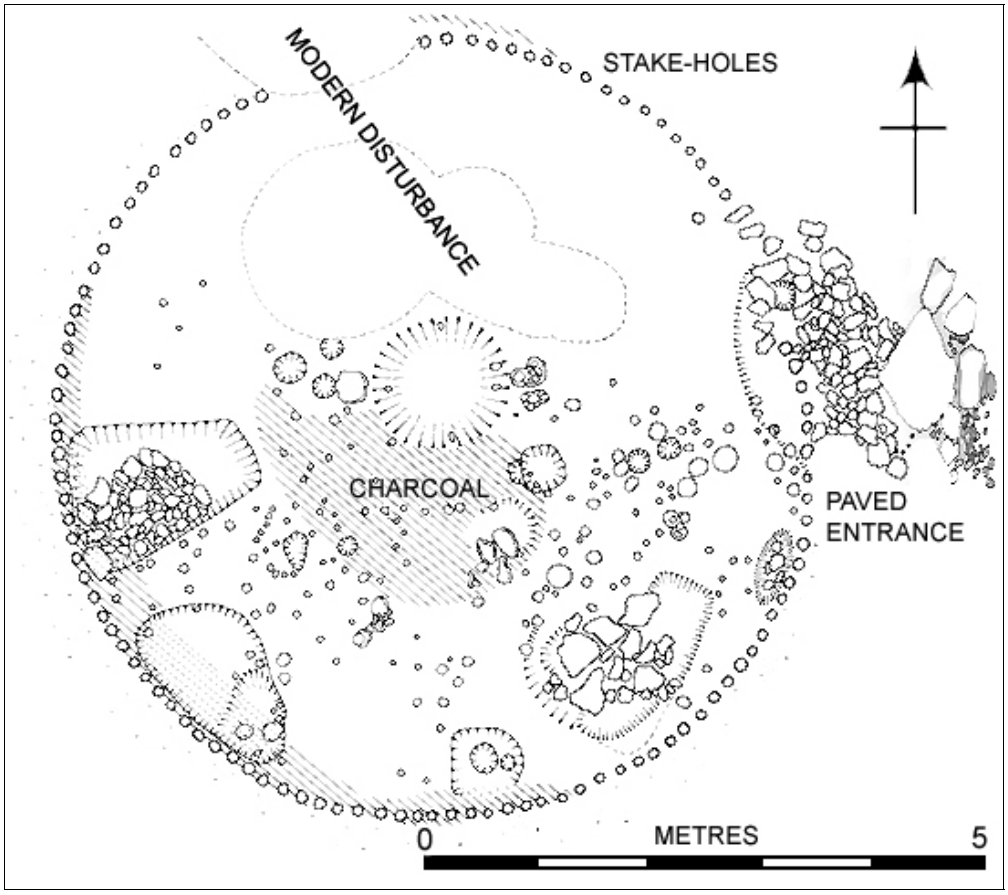


Fig. 214: Plan of house at Big Glebe, Co. Londonderry (after Lynn 1988, 42).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-2151	Charcoal- wicker house	945±30 BP	**A.D. 1024-1157**.
UB-2152	Charcoal- wicker house	1130±45 BP	**A.D. 778-994**; A.D. 1009-1010.
UB-2153	Charcoal-wicker house	1290±40 BP	**A.D. 653-783**; A.D. 788-813; A.D. 844-857.

References:

Bratt, A. D. & Lynn, C. J. 1976:012. Big Glebe. http://www.excavations.ie

Lynn, C. J. 1988. Civil Engineering in the Early Christian Period: Big Glebe, Co. Londonderry, in A. Hamlin & C. J. Lynn (eds.) *Pieces of the Past: Archaeological excavations by the Department of the Environment for Northern Ireland, 1970-1986*. Belfast: HMSO, 41–4.

Corrstown, Co. Londonderry
Early Medieval Settlement Enclosure.
Grid Ref: **C86093914 (28609/43914)**
SMR No: **LDY 003:026?**
Excavation Licence: **AE/02/100**
Excavation Duration/Year: **2002; 2003**.
Site Director: **M. Conway & A. Gahan (Archaeological Consultancy Services)**.

The site was indicated in SMRNI as an 'enclosure' which was set in an area of level pasture. The area was fully excavated prior to the construction of a private housing estate. This excavation revealed two main phases of non-continuous occupation. The discovery of 76 structures site showed that the site had been a major settlement during the Bronze Age, but there was also occupation through the early medieval period (Fig. 215).

Half an enclosure (approximately 25m in diameter), defined by a U-shaped ditch (2.5m wide and 1.09m deep) was uncovered during top-soil stripping. The ditch cut through earlier occupation layers, and Bronze Age pottery and flint tools were found in the lower fill. Internal structural features had been severely truncated by later agricultural activities, but the remains of a possible rectangular house, represented by a linear gully and a line of postholes, were discovered near the centre of the enclosure. This house was most likely associated with a dry-stone wall built souterrain. This was radiocarbon dated to a rather early date of mid-sixth/mid-seventh century (see below). A kiln, dated to the same time as the souterrain (see below), was also found within the enclosure.

Another structure, external to the enclosure, was indicated by two sections of wall-slot ditches (0.3m in depth). The ditches appear to have been too inadequate to support walls, and the absence of any associated postholes suggests that this 'structure' was not roofed either; there was no evidence for a formal entrance. Two alternative possibilities have been suggested: it was a possible corral / animal pen; or it represents a system of drains that defined an area which could have been used as an open-air threshing floor. A quantity of charred cereal grains (mostly oats, but also some barley as well as remains of wild radish) was retrieved from the fill of one of the ditch sections of this 'structure' and was radiocarbon dated to the ninth/tenth century.

The only early medieval find recovered from these structures was an iron knife found in the souterrain.

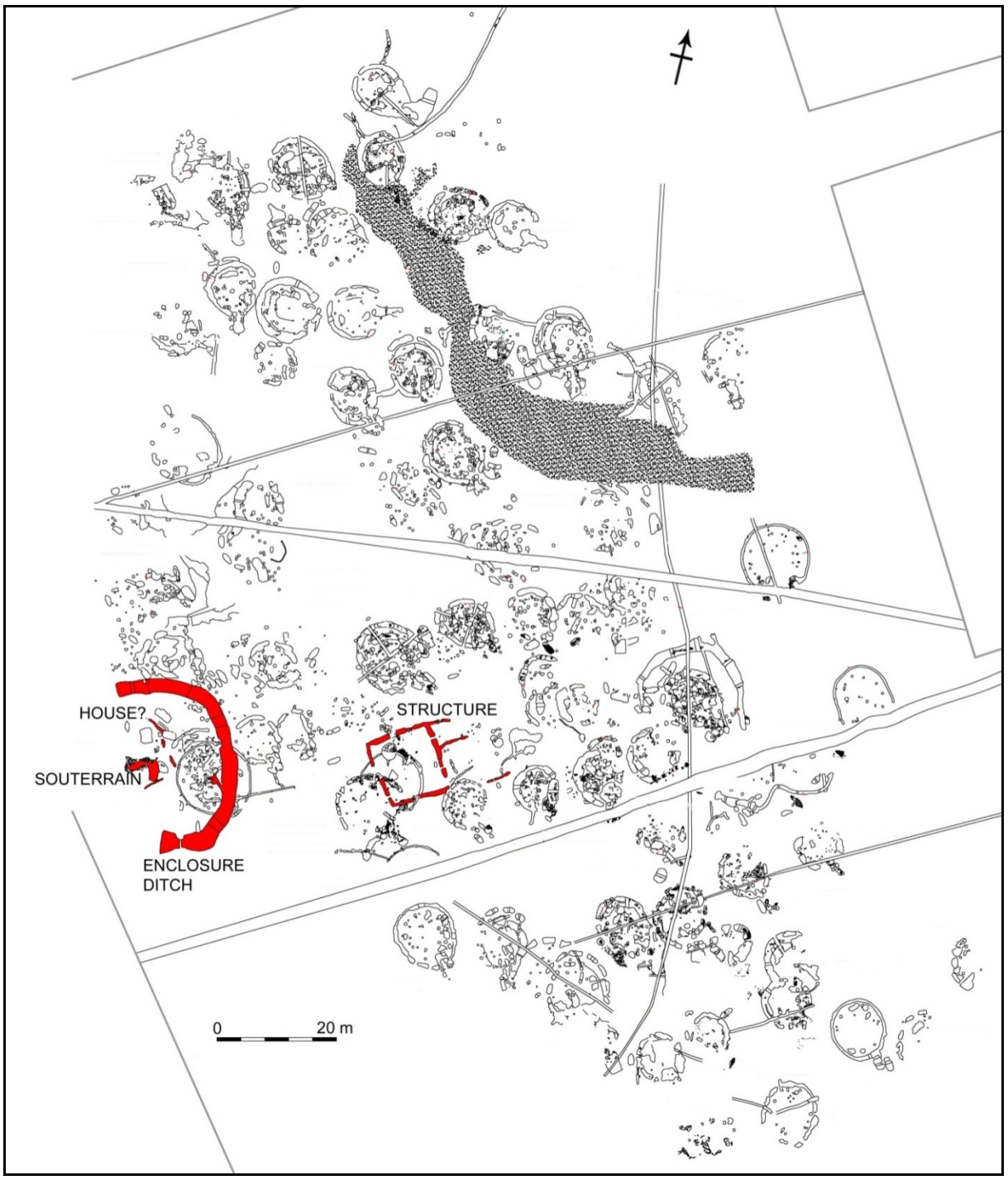


Fig. 215: Early medieval structures (marked in red) at Corrstown, Co. Londonderry. Other structures are Bronze Age (after Conway forthcoming).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-6232	Souterrain wall	**N/A**	**A.D. 552-654**.
UB-6237	Kiln	**N/A**	**A.D. 552-654**.
UB-6377	Ditch of unresolved structure	**N/A**	**A.D. 772-941**.

Reference:

Conway, M., Gahan, A., Rathbone, S., Lear, M., & Ginn, V. 2007. Final Report for Corrstown. Unpublished report prepared for Archaeological Consultancy Services Ltd.

Conway, M. forthcoming. A Bronze Age Village at Corrstown, Co. Londonderry, in E. Murray (ed.) *Boats, Battles and Bones: excavations in Northern Ireland*.

Magheramenagh, Co. Londonderry
Early Medieval Unenclosed House and Souterrain.
Grid Ref: **C86103890 (28610/43890)**
SMR No: **LDY 003:023 (N/A?)**
Excavation Licence: **N/A**
Excavation Duration/Year: **1999**.
Site Directors: **A. Reilly (Northern Archaeological Consultancy)**

The site was discovered during development work on a gently sloping field outside Portrush, Co. Antrim. The development occurred in the general area of an un-located souterrain recorded in the NISMR, and it is likely that the souterrain uncovered during this excavation represents that feature. Topsoil stripping of the site revealed two structures – a circular building (8m in diameter); and a rectangular building (8m by 5m) – within five metres of each other. Both of these structures were interpreted as being of Neolithic date, largely based on the cultural material recovered. This was dominated by coarse pottery and crudely-struck flint. Later radiocarbon dating, however, showed that the roundhouse was of Bronze Age date, and the rectangular house was early medieval (see below). A second rectangular house (8m by 6m) was identified built on the remains of the Bronze Age roundhouse. The chronology of this house was not established, and it may potentially be contemporary with the early medieval rectangular house. This structure appears to have been associated with quantities of burnt material, and it is suggested that it may have burnt down. The date from charcoal taken from the central fire-pit within the early medieval rectangular house suggests that this feature was contemporary with the occupation of the house, and presumably represents a domestic hearth. Two stakeholes on the edge of the pit may have been used to support a fire-crane or spit. A curving gully to the west of the main site has been interpreted as either a defensive palisade trench, or merely a windbreak. Again, the chronology of this feature and its relationship with the Bronze Age or early medieval occupation was not established.

The souterrain was discovered on a knoll in the northern part of the field. Most of the sides had dry-stone walling, but in the south end of the entrance area and the east end of the main passage the walls were rock-cut. The nature of debris within the souterrain suggests that it may have been deliberately destroyed by the removal of the upper stonework. Souterrain ware was found in the souterrain, as well as fragments of a bone comb, and iron slag. No certain trace of a surface structure associated with the souterrain was found at Magheramenagh, but the presence of a rock-cut step at the western end hints that there may have been one in that area.

(No plans were available for this site)

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta 186550	Charcoal from house	1160±40 BP	**A.D. 775-979**
Beta 186551	Wall slot	1280±40 BP	**A.D. 658-783**; A.D. 787-824; A.D. 841-861.

Reference:

A. Reilly. 1999:130. Magheramenagh. http://www.excavations.ie.

Oughtymore, Co. Londonderry
Early Medieval Midden.
Grid Ref: **C66163638 (26616/43638)**
SMR No: **LDY 001:002**
Excavation Licence: **N/A**
Excavation Duration/Year: **1979**.
Site Directors: **J. P. Mallory (Queen's University, Belfast) & J.C. Woodman (University College, Cork)**

The site was located in a sand cliff overlooking the Lough Foyle estuary and was in danger of being completely destroyed by coastal erosion. A two day rescue exaction was undertaken to record the midden.

The main archaeological horizon consisted of a substantial occupation deposit (ranging from 0.1m to 0.3m thick) (Fig. 216). Twenty sherds of souterrain ware pottery were found in this layer, as well as fragments of a blue glass bracelet and a lignite bracelet; two bone comb fragments and part of an antler ring. Charred grains of rye (*Secale cereale*) and barley (*Hordeum sp.*) were also recovered from this occupation layer.

The domestic animal bones from the early medieval period showed an MNI % of: Cattle (30.8%); Sheep (38.5%); Pig (23.1%); Horse (7.7%). Fish (eel; cod; haddock; flat fish and salmonid), as well as edible shell fish (dominated by winkles, but also a number of cockles and mussels), were also found in the midden.

It was suggested by the excavators that the early medieval inhabitants of the site at Oughtymore may have represented a social class inferior to those who dwelt in enclosed settlements, and that they may have held their land on tenure from the church.

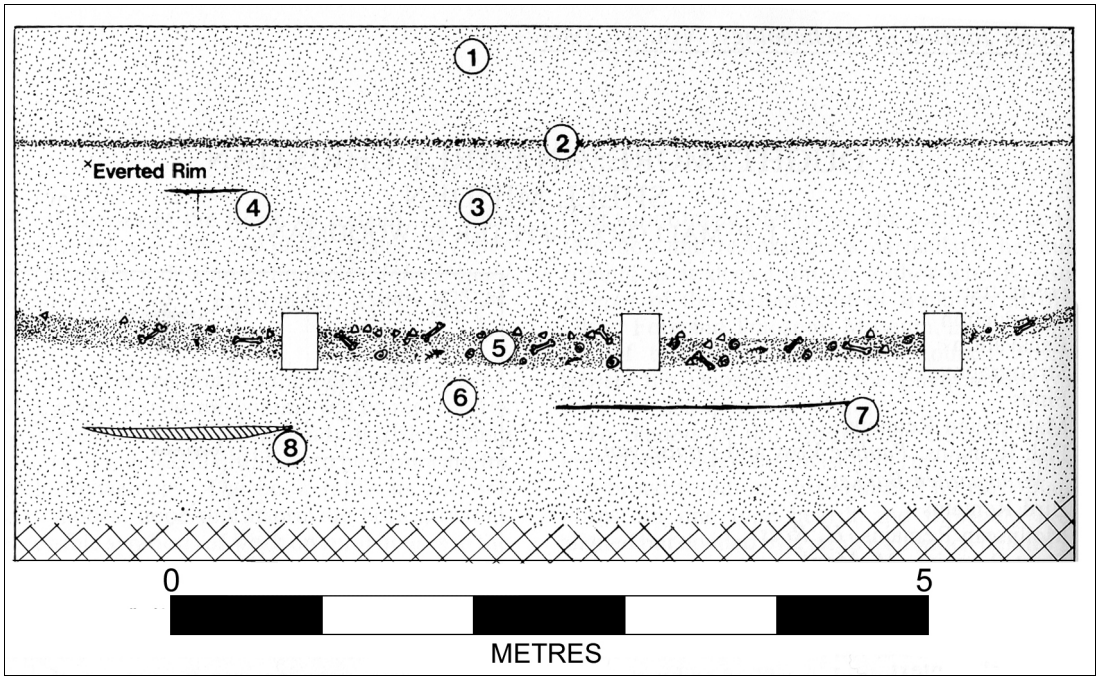


Fig. 216: Section of midden at Oughtymore, Co. Londonderry (after Mallory & Woodman 1984, 52).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-2442	'Carbon sample' from early medieval occupation layer	1295±40 BP	**A.D. 651-782;** A.D. 789-811; A.D. 847-854.
UB-2443	'Carbon sample' from layer of burning underlying occupation layer	1480±30 BP	**A.D. 541-642.**

Reference:

Mallory, J. P. & Woodman, P. C. 1984. Oughtymore: An Early Christian Shell Midden. *Ulster Journal of Archaeology* (Third Series), 47, 51–62.

County Longford

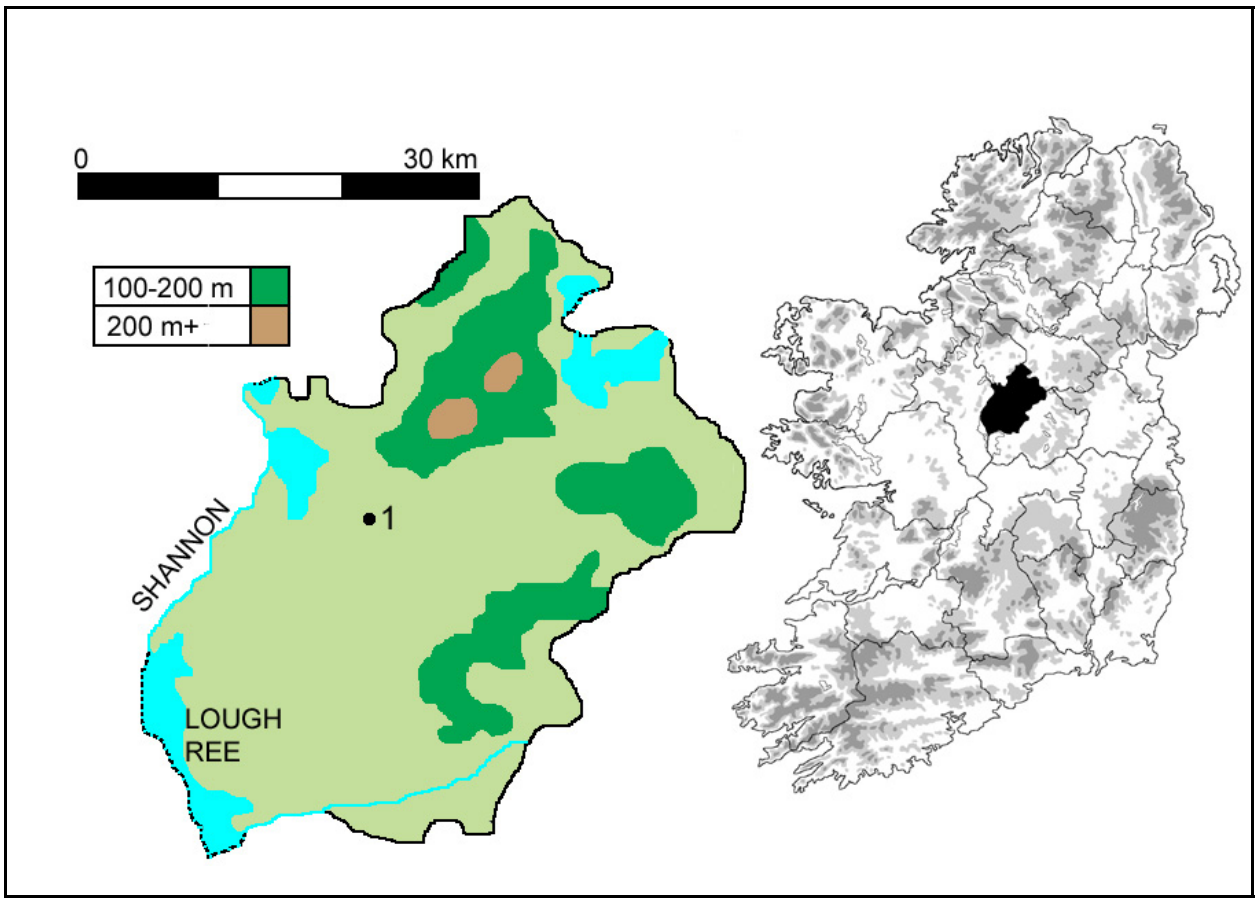


Fig. 217: Significant early medieval excavations in Co. Longford.

1	Aghadegnan		

Aghadegnan, Co. Longford
Early Medieval Settlement Enclosure.
Grid Ref: **N13387688 (21338/27688)**
SMR No: **LF013-013**
Excavation Licence: **91E0055; 93E0048**
Excavation Duration/Year: **February – August 1991; April – June 1993.**
Site Director: **J. Carroll (J. Carroll & Co.)**.

The site consisted of a large earthwork (61m in external diameter) set on a natural hillock in a boggy hinterland. Almost the whole of the area, to be destroyed by the construction of a by-pass, was archaeologically excavated, although the archaeological features in the interior of the enclosure had been severely damaged by later potato cultivation.

Excavation revealed a number of phases of enclosure on the site (Fig. 218). The earliest phase included a roundhouse, defined by a double arc of postholes (although these probably represent consecutive phases of single-post-built roundhouses). This building was cut by a trench, approximately 0.9m in depth. The trench also cut through a clay horizon which sealed a small circular post-built structure, about 2.2m in diameter, which was interpreted as an animal pen. A radiocarbon date from this structure suggests an occupation date in the fourth to sixth century (see below). The trench enclosed an area similar in size to that formed by the earthwork, and stratigraphically pre-dated it. Radiocarbon dates supported this conclusion (see below). Patches of packing stones and re-deposited clays were interpreted as representing the postholes for a wooden palisade associated with this trench.

The palisade-trench was later in-filled, but prior to the construction of the bank-and-ditched enclosure there appears to have been some ironworking activity on site. A series of postholes outlined a circular structure which was associated with charcoal spreads, and may represent a workshop; and charcoal and iron slag were found in the upper fill of the earlier palisade trench. Radiocarbon dates from these contexts (see below) suggest a late-fifth/early-sixth century date for this phase of occupation. There is also evidence, in the form of a possible ‘ore-roasting pit’, charcoal and slag, for ironworking being carried on in the interior of the later banked-and-ditched enclosure.

There are no definite dates for the construction of the banked-and-ditched enclosure, although radiocarbon dates from bone under the bank, and wood from the ditch give some idea of its occupation (see below). Excavation revealed the ditch to be around 6m wide at the top, and, on average 1.6m deep. Although over 500 postholes were discovered on site, no internal structures can be definitively associated with this phase on occupation. There was evidence for a roundhouse in the interior (approximately 5.6m in internal diameter) which may have been rebuilt at least once, but this structure could equally have been associated with the unenclosed settlement which existed pre-palisade trench.

A waterlogged area of the enclosure ditch revealed the evidence for wooden slats (one of which was radiocarbon dated to the seventh/eighth century), which may have functioned as a lining for the ditch, but series of stone-packed post-emplacements found in the ditch suggest that a more substantial feature, such as a revetment or fence may have been present.

Only a few finds were recovered from the site. A fragment of a cross-engraved stone was found in the lower layers of the bank (which would have been obtained from the upper layer of the ditch cut), and a possible iron-headed pin was found in a similar context in another cutting.

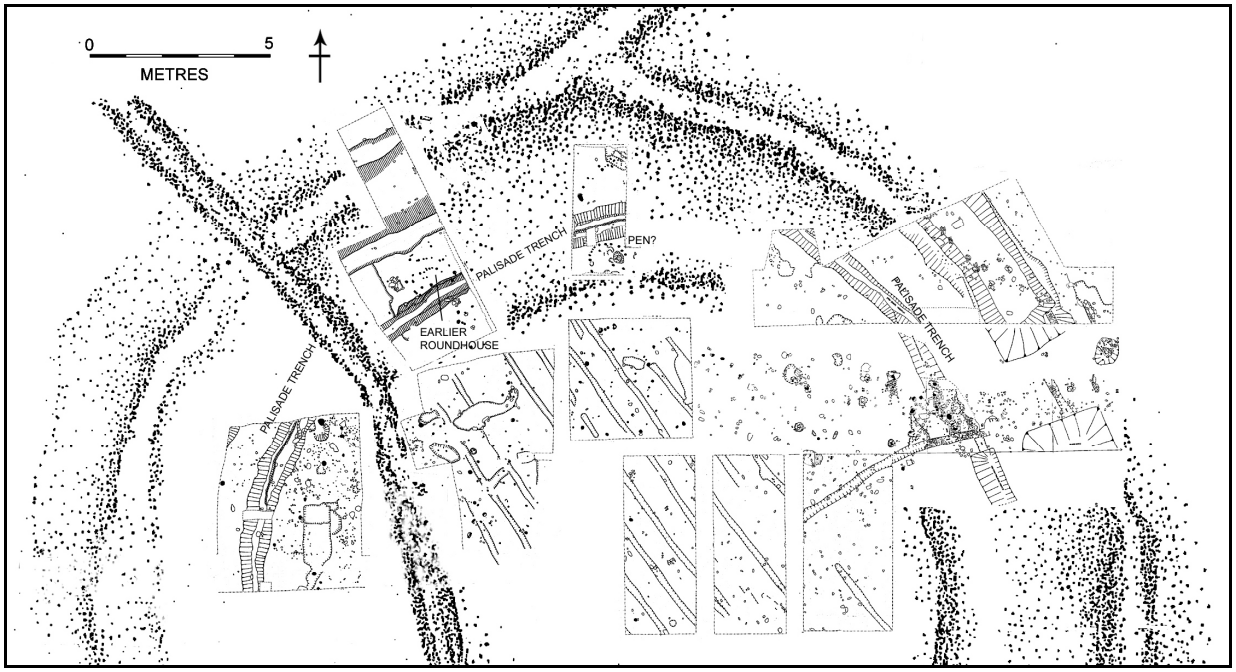


Fig. 218: Excavated areas at Aghadegnan, Co. Longford (after Carroll 1991 & 1993).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-3451	Bone from basal layer of bank	1421±32 BP	**A.D. 577-661**.
UB-3452	Charcoal from iron working in enclosure interior	1073±45 BP	**A.D. 877-1033**.
UB-3453	Charcoal from post-hole in enclosure interior	516±32 BP	A.D. 1324-1345; **A.D. 1393-1444**.
UB-3454	Charcoal from iron-working area on top of palisade trench fill	1551±33 BP	**A.D. 425-580**.
UB-3455	Charcoal from burning near iron-working area on top of palisade trench fill	1475±21 BP	**A.D. 552-637**.
UB-3456	Charcoal at ditch edge	1289±32 BP	**A.D. 659-778**.
UB-3458	Wooden slat from ditch 'revetment'	1270±21 BP	**A.D. 676-776**.
UB-3459	Charcoal from iron-working area on top of palisade trench fill	1552±49 BP	**A.D. 410-606**.
UB-3461	Charcoal from 'pen' cut by palisade trench	1597±71 BP	A.D. 259-285; A.D. 288-292; **A.D. 322-607**.
UB-3468	Bone from base of ditch	1191±30 BP	A.D. 720-741; **A.D. 769-897**; A.D. 922-943.

References:

Carroll, J. 1991. The Archaeological Excavation at Aghadegnan, Co. Longford E599:1. Unpub'd Report.

Carroll, J. 1992. Report on the Archaeological Excavation E599, at Aghadegnan Ringfort, Co. Longford. Unpub'd Report.

Carroll, J. 1993. Report on the 1993 Archaeological Excavation at Aghadegnan Ringfort, Co. Longford. Unpub'd Report.

County Louth

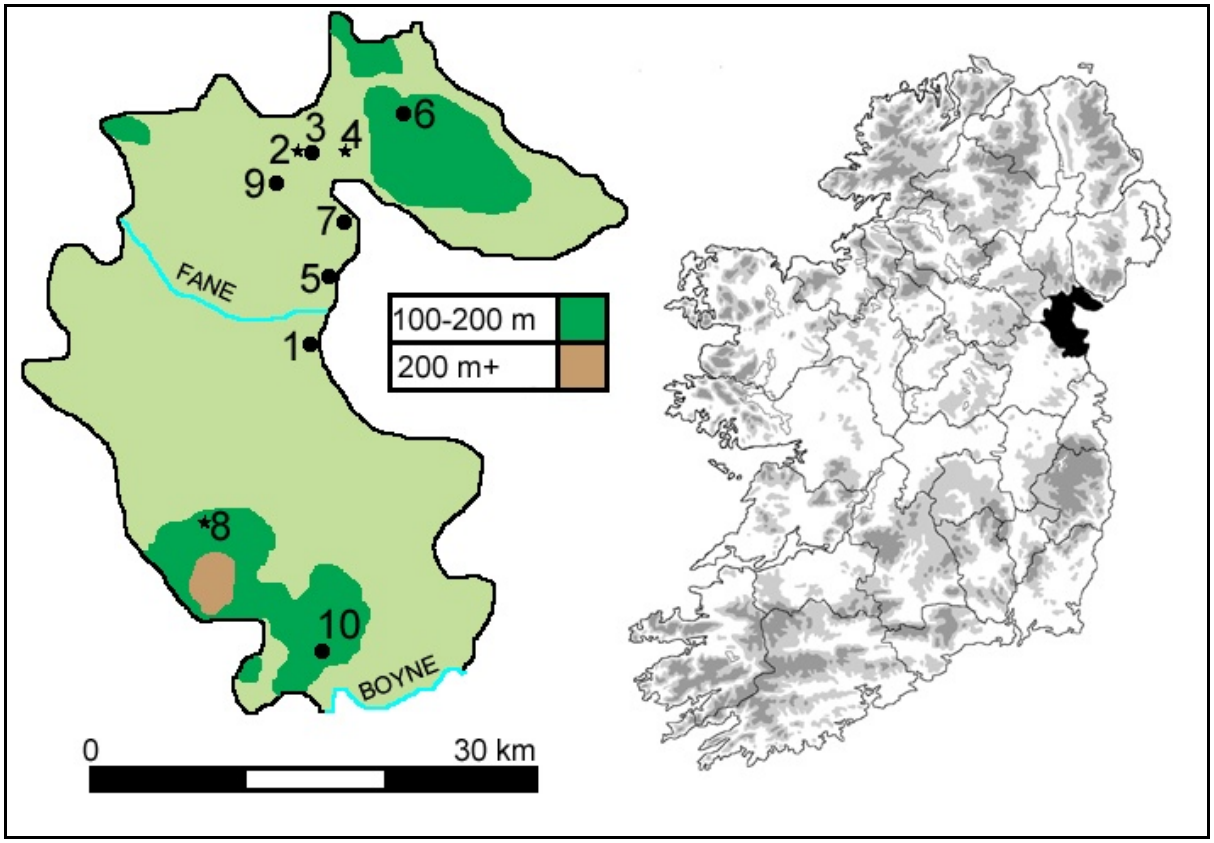


Fig. 219: Significant early medieval excavations in Co. Louth.

1	Balgatheran	**6**	Lissachiggel
2	Balriggan	**7**	Marshes Upper
3	Carn More	**8**	Millockstown
4	Faughart Lower	**9**	Newtownbalregan
5	Haggardstown	**10**	Whiterath

Balgatheran 1, Co. Louth
Early Medieval Enclosure Complex
Grid reference: **O04977886 (304970/278860)**
SMR: **N/A**
Excavation Licence No: **00E0477**
Excavation duration: **July – November 2000**
Site director: **R. Chapple (Valerie J. Keeley Ltd.)**

Balgatheran 1, excavated in advance of the Northern Motorway, north of Drogheda, was a potential early medieval enclosure complex that incorporated an enclosure with large internal ditch and an associated field enclosure. A number of structures and a kiln were also identified. Earlier activity was revealed, including prehistoric pits and postholes, and the late medieval period was represented by a number of possible structures. The site was situated on the southern face of a low hill in open pastureland, at 98m OD, and the surrounding countryside was visible in all directions. The relationship and chronology of the archaeological features will not be fully resolved until radiocarbon dates and the final report are available.

A portion of a curvilinear enclosure ditch was revealed for 40m in the excavated area and averaged 3m in width and 2m in depth. The ditch was re-cut on at least three occasions and the enclosure had a projected diameter of 70m. Only a partial area of the enclosure was excavated but settlement evidence was lacking in terms of artefacts from the ditch and dwellings within the enclosure. Either evidence for habitation is located outside the road-take or this enclosure, more probably, was constructed for industrial or agricultural purposes. The latter is supported by the presence of an industrial building and hut site (see below).

A large L-shaped ditch, which was 3m wide and 1.5m deep, was identified 21m south of the settlement enclosure ditch and ran for 39m across the excavated area. Iron slag, flint fragments and burnt bone were identified in the primary fill and a secondary phase of activity, concentrated at the western terminal, contained large quantities of iron slag as well as residual flints and a single piece of a shattered rotary quern-stone. A small stone-lined hearth was discovered in the ditch, at the eastern end, and it contained charcoal, burnt clay and a blue glass bead fragment. A posthole associated with the hearth also produced burnt bone and a quartz crystal. The chronological relationship between the two ditches is unclear but the L-shaped ditch may have demarcated an internal division within the enclosure possibly to separate industrial and agricultural activities.

A rectangular structure, possibly related to industrial activity, was located centrally within the site and measured 7m by 2m. It was defined by a series of nine postholes, laid out in a rectangular plan, and one of the postholes produced a small quantity of iron slag and a number of worked iron fragments. A series of fifteen stake-holes, to the south-west of the structure, may have formed a potential post-and-wattle wall, possibly over a number of phases, while a gravelled surface was identified on the south-eastern side of the building. Two drip gullies were aligned alongside the building and a number of pits were also associated with the structure.

A possible hut structure was situated to the north of the L-shaped ditch. It consisted of two separate, short, arcing gullies that potentially formed a 4m-diameter structure**.** Two postholes were cut into the base of one of the gullies and this may have been a structure related to agricultural activity. Its small size, the lack of a hearth and domestic items suggests that this was not a dwelling.

A possible field enclosure, which was stratigraphically later than the final re-cut of the L-shaped ditch, was located 5m east of the hut. The curvilinear ditch formed a sub-oval enclosure measuring 21m north-south by 18m east-west. No artefacts were uncovered from the ditch fill so it may have functioned as an animal enclosure.

A stone-lined oval kiln, with a short linear opening to the west, was located approximately 50m north of the main enclosure. Its fills contained high amounts of burnt clay and charcoal and an upper deposit produced a blue glass bead. This may have been a cereal-drying kiln based on its shape and lack of obvious industrial residues such as iron slag.

Balgatheran 1 was a multi-period site with prehistoric, probable early medieval and late medieval activity. Although radiocarbon dates are not available and there are no early medieval diagnostic artefacts from the site, Balgatheran 1 probably represents an early medieval enclosure complex related to industry and agriculture. The hut site and potential cereal-drying kiln may be Iron Age or early medieval in date while the enclosure complex was probably utilised over a number of centuries during the early middle-ages.

(**No plans were available for this site**).

Reference:

Chapple, R. 2000:0638 Balgatheran 1, Co. Louth. www.excavations.ie

Balriggan, Co. Louth
Early Medieval Settlement-Cemetery
Grid reference: **J03651070 (303652/310708)**
SMR: **N/A**
Excavation Licence No: **02E1325**
Excavation duration: **Winter 2002 – Spring 2003**
Site director: **S. Delaney (IAC Ltd.)**

Balriggan, excavated in advance of the M1 motorway, was an extensive settlement-cemetery, agricultural and industrial complex (Fig. 220). The site consisted of an inner enclosure (Enclosure A) with evidence for an outer enclosing ditch (Enclosure B). A small cemetery, two post-built structures and an industrial area were identified within Enclosure A. A number of radiating ditches and enclosures were situated in between the two ditches. Another large enclosure lay to the west (Enclosure C), and agricultural and industrial features were also present external to the enclosures including a cereal-drying kiln, charcoal-production kilns and a metalworking area. The site was situated within a basin-like depression in the landscape between 13m and 15m OD. Due to its location, certain surrounding areas of the site consisted of bog and wetland. The site lay west of Dundalk Bay and close to a number of excavated contemporary settlements including Newtownbalregan (Bayley 2003; Roycroft 2005), Carn More (Delaney 2003; Roycroft 2005), Tateetra (Hayes 2006), and Faughart Lower (Bowen 2008).

Enclosure A was originally approximately 48m in diameter. It may have been C-shaped, and open on its eastern side, or a ditch to the east may represent the eastern part of a discontinuous enclosure that was open at its north-eastern and south-eastern sides. A probable millrace and horizontal watermill were evident at its south-eastern side. The former consisted of a series of raised partitions that created small, regular ponds, while a stone-built feature, which was fed by the millrace, probably represented a horizontal mill undercroft.

Enclosure A was approached by a parallel ditched entrance at its south-western side and these ditches, similarly to the enclosure, were re-cut on at least one occasion. No causeway was present in this area so the enclosure must have been entered by a bridge or temporary structure. The remodelling of the enclosure slightly altered its size as it measured 44m by 49m. Finds from the inner enclosure ditch included copper-alloy pins, glass beads, a spindle whorl and weights. Animal bone, including cattle, sheep/goat, deer, pig and horse, and fish bone were all identified. However, they were not retrieved in large quantities due to the poor preservation of bone at the site.

A number of archaeological features were identified within the inner enclosure. A series of postholes on the southern side formed two structures in plan. The first was a rectangular building, orientated east-west, which measured 5m by 4m. The cemetery was situated alongside and appeared to respect it which suggests the building was built before the burial ground, or at least before a later phase of burial. The second structure was another post-built building that measured approximately 2.7m by 2.6m. A lack of hearths and other domestic evidence suggests that the structures were not dwellings and the four-post structure may potentially have been an elevated granary. However, the presence of personal items, animal bone and other artefacts related to habitation, from the enclosure ditch, indicates that people lived here but their homes did not survive archaeologically.

The cemetery, which measured roughly 15m by 15m, was situated in proximity and just north of the structures. The burial ground contained 47 grave cuts and the minimum number of individuals was 25. The smaller number of skeletons, compared to grave cuts, was due to the poor preservation of bone at the site. The burials were generally extended west-east inhumations and the remains – represented by young children, sub-adults, young adults, adults and middle adults – suggests a family group. No infants or older adults were identified

but this may relate to poor bone survival. The cemetery originally consisted of organised and structured graves, which were later disturbed by more randomly placed burials.

The north-eastern area within Enclosure A was used for industrial activities. This consisted of six large pits, some with related postholes, which were sealed by an extensive spread of dark ash that contained souterrain ware and metallurgical waste. One of the pits, which also contained souterrain ware, was dated to A.D. 430-650. An iron punch, potentially used for metalworking, was also recovered from the spread of industrial debris. The absence of furnaces and iron slag in large quantities suggests that secondary forging rather than smelting activities occurred in this area of the enclosure. This is unsurprising given that the latter would be too dangerous to undertake in the confines of a settlement enclosure whereas it was common for many early medieval farmers to repair and produce domestic and agricultural implements in proximity to their dwellings.

An outer ditch (Enclosure B) was identified approximately 19m west of the inner enclosure and it probably terminated at a former area of wetland to the north. The ditch appears to have silted naturally and few finds were retrieved from its fill including one sherd of souterrain ware. The remains of a small animal, possibly a dog, were revealed in the basal layer although it may be from a re-deposited trample layer related to post medieval activity. However, early medieval-dated dogs have been identified within ditches and pits at Roestown 2 (O'Hara 2009) and Lismullin 1 (O'Connell 2009) respectively, both in County Meath, and the animal at Balriggan may date to this period. A small pit, containing metallurgical waste, was also identified within the ditch fill.

A number of features were identified within the area between the inner and outer enclosing ditches. These included the parallel-ditched entrance way (above), a D-shaped enclosure, a roughly square-shaped enclosure and possible gardens or plots. The first two may represent small animal enclosures or pens while the latter were possibly utilised for the growing of crops and vegetables. Artefacts from the ditches were limited to sherds of souterrain ware and a lignite bracelet.

A large oval enclosure (Enclosure C) was situated to the west of Enclosures A and B. It measured 45m by 58m and had an entrance on its western side. The internal area was devoid of archaeological features and no artefacts are recorded from its ditch fills. Its position meant that it was visible to the occupants of the settlement-cemetery and, if contemporary, probably functioned as a livestock enclosure. A 'figure-of-eight'-shaped cereal-drying kiln was located to the south of the enclosure and was dated to A.D. 60-250. This may date to the earliest activity on the site, and possibly the creation of the cemetery, where many similar settlement-cemetery sites originated as burial grounds in the late Iron Age.

Further evidence for metalworking was present in the form of charcoal-production kilns to the west of Enclosure C and an industrial area, including a smelting furnace, to the north of Enclosure A. Both areas were safely away from the settlement core and represented primary activities related to the production of iron before secondary smithing could be undertaken.

Artefacts indicative of settlement and industry were identified at Balriggan. Dress items were not abundant and included two bronze ringed pin shafts, two lignite bracelet fragments, four blue glass beads, a red glass bead and a bone or ivory flat bead. Functional items were more numerous and consisted of quern-stone fragments, nearly 500 souterrain ware sherds, representing a minimum of 87 vessels, spindle whorls, loom weights and a stone punch or awl.

Artefacts related to industry included stone tools such as hammers, pounders, hone stones and polishing stones. A large number of lithics were also identified and many were probably produced and utilised during the settlement of the site as knives, sharpeners and strike-a-lights. A crucible fragment was found in association with the northern industrial area.

Balriggan was a large multi-phase settlement-cemetery, agricultural and industrial complex that probably originated during the late Iron Age and was utilised until potentially the tenth century based on the presence of souterrain ware. Burial and agricultural activities were probably the precursors for the expansion of the site into a larger settlement with associated fields and enclosures.

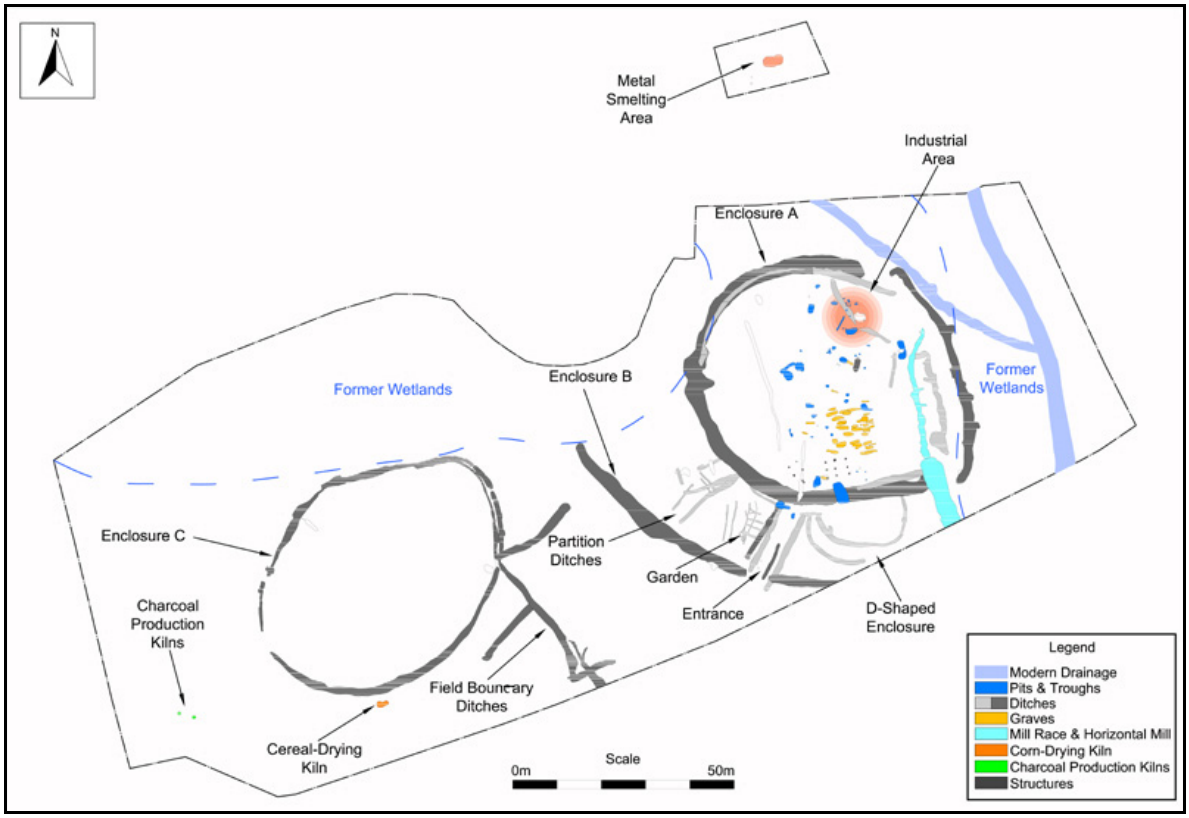


Fig. 220: Plan of enclosures at Balriggan, Co. Louth (after Delaney 2010).

References:

Bayley, D. 2003:1286. Newtownbalregan, Co. Louth. www.excavations.ie.

Bowen, P. 2008 Settlement and burial at Faughart Lower. *Seanda* 3, 9–11. Dublin. National Roads Authority.

Delaney, S. 2003:1272. Carn More, Faughart, Co. Louth. www.excavations.ie.

Delaney, S. 2010 An early medieval landscape at Balriggan, Co. Louth, in C. Corlett and M. Potterton (eds.) *Death and Burial in Early Medieval Ireland, in Light of Recent Archaeological Excavations*, 116–29. Dublin. Wordwell.

Hayes, A. 2006 Archaeological investigation of a souterrain at Tateetra, Dundalk, Co. Louth, in J. O'Sullivan and M. Stanley (eds.) *Settlement, Industry and Ritual*, National Roads Authority Monograph Series 3, 53–62. Dublin. National Roads Authority. Wordwell.

O'Connell, A. 2009. Director's first findings from excavations at Lismullin 1, in M. Deevy & D. Murphy (eds.) Places along the way: first findings on the M3, 21–42. National Roads Authority Scheme Monograph Series 5. Dublin. National Roads Authority/Wordwell.

O'Hara, R. 2009. Early medieval settlement at Roestown 2, in M. Deevy & D. Murphy (eds.) Places along the way: first findings on the M3, 57–82. National Roads Authority Scheme Monograph Series 5. Dublin. National Roads Authority/Wordwell.

Roycroft, N. 2005 Around the bay on the Great North Road: the archaeology of the M1 Dundalk Western Bypass, in J. O'Sullivan and M. Stanley (eds.) *Recent Archaeological Discoveries on National Road Schemes 2004*, National Roads Authority Monograph Series 2, 65–82. Dublin. National Roads Authority. Wordwell.

Carn More, Co. Louth
Early Medieval Settlement Enclosure
Grid reference: **J04351084 (304357/310846)**
SMR: **N/A**
Excavation Licence No: **03E0867**
Excavation duration: **N/A**
Site director: **S. Delaney (IAC Ltd.)**

Excavations at Carn More in advance of the M1 motorway revealed a circular enclosed settlement and an internal souterrain (Fig. 221). The site had commanding views to the north and was only 800m away from the settlement-cemetery at Balriggan (Delaney 2010). It was also close to other contemporary excavated settlements including Tateetra (Hayes 2006), Faughart Lower (Bowen 2008) and Newtownbalregan 6 (Bayley 2003; Roycroft 2005). Approximately half of the enclosure was excavated.

The enclosure measured approximately 30m in diameter and a causewayed entrance was located to the west. The enclosure ditch had a maximum width of 2.7m and was 1m deep. Finds from the ditch included 200 sherds of souterrain ware.

Few internal features were present due to severe truncation of the site. However, a W-shaped dry-stone souterrain, which measured 19m in length, was revealed within the enclosure. The souterrain's gallery was approximately 0.9m wide, 1m high and it did not have any chambers. Redeposited human bone was recovered from the souterrain backfill.



Fig. 221: Photograph of enclosure at Carn More, Co. Louth, showing souterrain (after Roycroft 2005, 79).

References:

Bayley, D. 2003:1286. Newtownbalregan, Co. Louth. www.excavations.ie.

Bowen, P. 2008 Settlement and burial at Faughart Lower. *Seanda* 3, 9–11. Dublin. National Roads Authority.

Delaney, S. 2003:1272. Carn More, Faughart, Co. Louth. www.excavations.ie.

Delaney, S. 2010. An early medieval landscape at Balriggan, Co. Louth, in C. Corlett and M. Potterton (eds.) *Death and Burial in Early Medieval Ireland, in Light of Recent Archaeological Excavations*, 116–29. Dublin. Wordwell.

Hayes, A. 2006. Archaeological investigation of a souterrain at Tateetra, Dundalk, Co. Louth, in J. O'Sullivan and M. Stanley (eds.) *Settlement, Industry and Ritual*, National Roads Authority Monograph Series 3, 53–62. Dublin. National Roads Authority. Wordwell.

Roycroft, N. 2005. Around the bay on the Great North Road: the archaeology of the M1 Dundalk Western Bypass, in J. O'Sullivan and M. Stanley (eds.) *Recent Archaeological Discoveries on National Road Schemes 2004*, National Roads Authority Monograph Series 2, 65–82. Dublin. National Roads Authority. Wordwell.

Faughart Lower, Co. Louth
Early Medieval Settlement-Cemetery
Grid reference: **J06501060 (306500/310600)**
SMR: **N/A**
Excavation Licence No: **N/A**
Excavation duration: **May 2005 – April 2006**
Site director: **P. Bowen (ADS Ltd.)**

Excavations in advance of the A1/N1 Newry-Dundalk link road revealed a multi-phase multivallate enclosed settlement-cemetery (Fig. 222). Evidence for settlement, agriculture and industry was identified through the artefactual assemblage and enclosed features, such as souterrains and furnaces, while the cemetery contained nearly 800 individuals. The latter originated during the late Iron Age/early medieval transitional period and was utilised until potentially the end of the tenth century.

The site was situated close to other excavated contemporary settlements such as Newtownbalregan (Bayley 2003; Roycroft 2005), Carn More (Delaney 2003; Roycroft 2005), Tateetra (Hayes 2006), and Balriggan (Delaney 2010), and lay 3km north of Dundalk. The early medieval ecclesiastical site at Faughart Upper is also located in the neighbouring townland. Approximately three quarters of the site was fully excavated.

Phase I involved the construction of a bivallate enclosure that consisted of an inner earth- and rock-cut ditch which was surrounded by a much larger ditch. The oval inner enclosure measured 29m north-south and an entrance was present to the north. The outer enclosure was positioned between 5m and 6m away from the inner ditch and enclosed an area approximately 40m in internal diameter. No entrance was detected.

During Phase II both enclosures were re-cut and modified slightly after they had in-filled and silted naturally. The inner ditch was re-cut, but not entirely, and its inner edge was lined with stones. The entrance was also modified and narrowed. The outer ditch was also re-cut along the same lines, except to the east where a new ditch was dug 5m beyond the inner ditch. The latter in this area was backfilled with the material from the newly dug ditch.

The morphology of the site was altered again, and substantially, during the third phase. The inner and outer ditches were back-filled and they were replaced by a single enclosure that defined an area 55m in diameter. Two entrances were identified to the north-west and south-west. The western side of the ditch was more substantial than the east or northern sides as evidenced by a large, stone-faced wall that was built into the ditch. The end of a dry-stone-built souterrain was connected to the 'wall'. The main entrance was located within the enclosure and its passage moved northwards until it turned sharply to the west and ended at the enclosure 'wall'. Artefacts from deposits within the souterrain included three deliberately broken millstones, a ploughshare and coulter, a clay crucible, pottery and personal items. Another, fragmentary, souterrain was also recorded at the site.

The cemetery was located between the Phase I and Phase II enclosures, to the north-east, and included 772 burials. The majority of graves were aligned west-east, unless underlying bedrock influenced their position, and were both earth-cut and stone-lined. The graves were compactly placed and lay on top of each other; in some places up to 12 successive levels were recorded. Over time the burial ground expanded to the south and south-west to incorporate further burials. The mixed cemetery contained 530 adults, 150 juveniles and 90 infants. Two burials returned radiocarbon dates of A.D. 390-550 and A.D. 790-1000 which means the cemetery was possibly used for 600 years.

Apart from the souterrains and cemetery, a number of other internal features were identified at Faughart Lower. These included a large well in proximity to the burial ground, several large pits and two ironworking furnaces. The souterrains, pits and well all indicate settlement

although no houses were identified. Other indicators of habitation included a variety of pins made from bronze, iron and bone, blue glass beads, bone combs and belt buckles. Functional domestic items were represented by over 1000 sherds of souterrain ware, iron knives, spindle whorls and the ploughshare and coulter mentioned above. Iron slag and a crucible mould also testify to metalworking at the site.

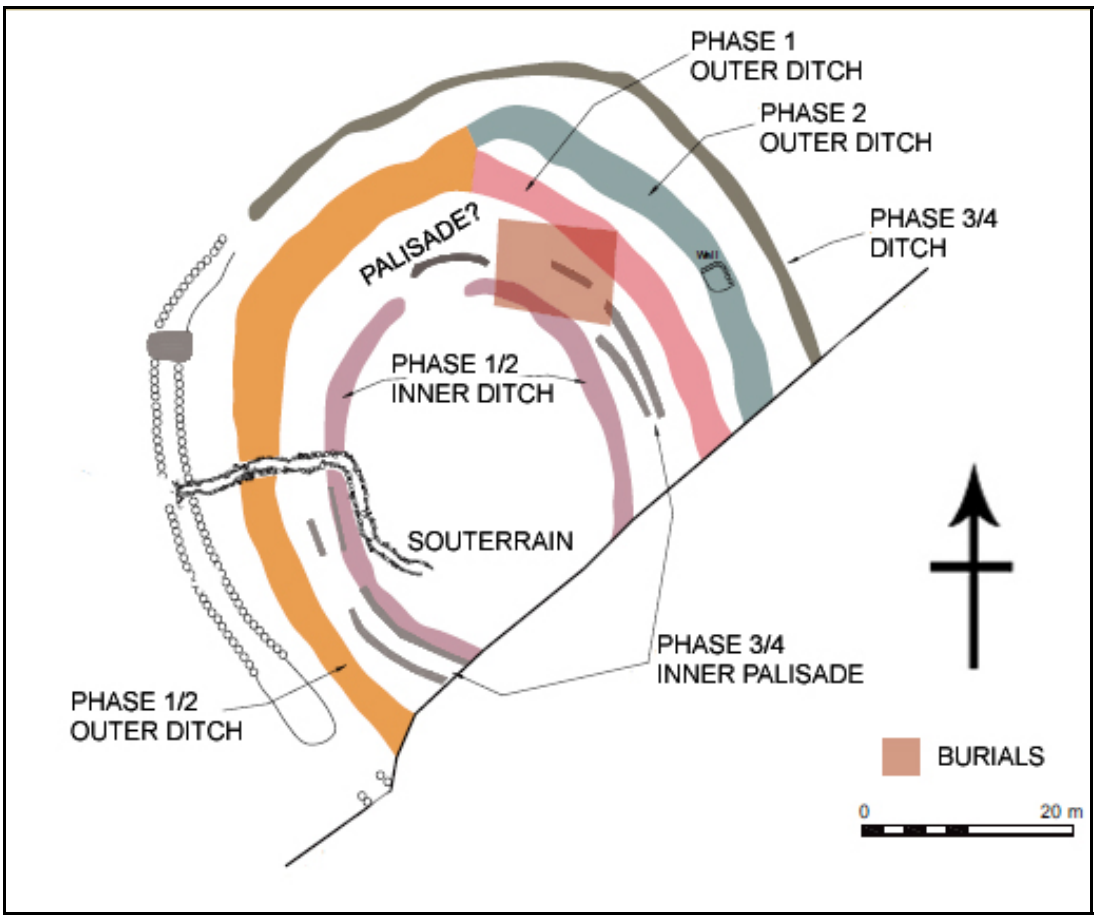


Fig. 222: Plan of phases at Faughart Lower, Co. Louth (after Bowen 2008, 11).

References:

Bayley, D. 2003:1286. Newtownbalregan, Co. Louth. www.excavations.ie.

Bowen, P. 2008 Settlement and burial at Faughart Lower. *Seanda* 3, 9–11. Dublin. National Roads Authority.

Delaney, S. 2003:1272. Carn More, Faughart, Co. Louth. www.excavations.ie.

Delaney, S. 2010. An early medieval landscape at Balriggan, Co. Louth, in C. Corlett and M. Potterton (eds.) *Death and Burial in Early Medieval Ireland, in Light of Recent Archaeological Excavations*, 116–29. Dublin. Wordwell.

Hayes, A. 2006. Archaeological investigation of a souterrain at Tateetra, Dundalk, Co. Louth, in J. O'Sullivan and M. Stanley (eds.) *Settlement, Industry and Ritual*, National Roads Authority Monograph Series 3, 53–62. Dublin. National Roads Authority. Wordwell.

Roycroft, N. 2005. Around the bay on the Great North Road: the archaeology of the M1 Dundalk Western Bypass, in J. O'Sullivan and M. Stanley (eds.) *Recent Archaeological Discoveries on National Road Schemes 2004*, National Roads Authority Monograph Series 2,

65–82. Dublin. National Roads Authority. Wordwell.

Haggardstown, Co. Louth
Early Medieval Settlement Landscape

Settlement enclosure
Grid reference: **J067026 (30670/30260)**
SMR: **LH012-009**
Excavation Licence No: **94E0197**
Excavation duration: **December 1994**
Site director: **K. Campbell (Freelance)**

Settlement enclosure and souterrain
Grid reference: **J068030 (30680/30300)**
SMR: **N/A**
Excavation Licence No: **95E0126**
Excavation duration: **N/A**
Site director: **C. McConway (ADS Ltd.)**

Field boundaries and cereal-drying kiln spreads
Grid reference: **J06780236 (30678/30236) (30586/30405)**
SMR: **LH012-009, LH012-027**
Excavation Licence No: **99E0683**
Excavation duration: **N/A**
Site director: **F. O'Carroll (CRDS Ltd.)**

Enclosure ditches and occupation
Grid reference: **J05860405**
SMR: **LH012-006**
Excavation Licence No: **01E0015**
Excavation duration: **January 2001**
Site director: **D. Moore (Moore Archaeology)**

Souterrain, ditches and cereal-drying kiln
Grid reference: **J05430420 (30543/30420) (30601/30354)**
SMR: **N/A**
Excavation Licence No: **98E0440**
Excavation duration/year: **1999**
Site director: **C. McLoughlin (ADS Ltd.)**

Industrial Activity
Grid reference: **J06010354**
SMR: **LH012-008**
Excavation Licence No: **02E0549**
Excavation duration: **N/A**
Site director: **F. Walsh (IAC Ltd.)**

Haggarstown townland, Co. Louth, has been the focus of intense archaeological investigation, mostly between 1994 and 2002, due to a range of infrastructural developments. Jordan, back in the 1930s, referred to the removal of stones from an underground passage and this is one of the first references to a souterrain in the area. Subsequent excavations have revealed enclosures, souterrains, field boundaries, cereal-drying kilns and industrial areas. Many of these features have been dated, by morphology and artefactual evidence, to the early medieval period. However, certain features such as the cereal-drying kilns and a variety of ditches, may not belong to this period, and radiocarbon dates are needed to resolve this. Undoubtedly though, Haggardstown was an intensively settled and farmed landscape during the early middle-ages as evidenced by the variety and scale of archaeological features discovered to date.

Test excavation, in advance of a housing development, was undertaken by Campbell in 1994 on the south-west corner of a 23-acre field with clear views towards the sea. A previously unrecorded enclosure, with a possible entrance to the east, was discovered that measured 45m east-west by 40m north-south. A section through the ditch determined that it was 5.5m wide and 2.2m deep. Further test trenches across the interior of the enclosure uncovered 11 features including a possible small souterrain. Three ditch-like features were also located immediately north of the enclosure.

In 1995, the remains of a dry-stone souterrain were identified during land reduction at an ongoing housing development. Monitoring and test excavation by McConway determined that the passageway survived for 10m east-west before turning sharply south, for a further 11m, to a single, badly collapsed, chamber. The passage was approximately 1.5m wide and the chamber was sub-rectangular in shape and measured 3.5m by 5m. Test trenches around the perimeter of the souterrain revealed an enclosure ditch that had a diameter of 30m. A section

through the ditch showed that it was 3.4m wide and 1.8m deep and it contained organic-rich deposits of shell and bone.

Archaeological monitoring of two fields in a low-lying area, mostly below 15m OD, was undertaken by O'Carroll in 1999 in advance of a housing development. The proposed development avoided the nearby enclosure, partially excavated by Campbell, to the north-west and its surrounding area. A field boundary, which contained iron slag, and an associated stone-faced bank were revealed to the south-east of the enclosure as well as a narrow gully. Their date is unknown but they may relate to field enclosure activity associated with the enclosure. A dry-stone-constructed keyhole-shaped cereal-drying kiln and rake-out spread, which had been built into an earlier ditch, were also exposed. These tend to date to the latter part of the early medieval period and late middle-ages.

Archaeological testing in 2001 by Moore, on top of a hill and its environs at Haggardstown, revealed a number of north-south and east-west ditches and related features. The ditches may relate to a series of settlement enclosures. One of the ditches included a fragment of souterrain ware and human bone. Substantial areas of burning, including frequent fragments of animal bone and shell, were also revealed on top of the hill which is suggestive of an occupation layer. A possible souterrain was revealed in a field to the east.

Excavations by McLoughlin in 1999 – in advance of the Xerox Technology Park – revealed a souterrain, ditches and cereal-drying kiln. The dry-stone souterrain was located approximately 40m south of a horseshoe-shaped enclosure (LO007-095). Its entrance passage, which contained a slot with two post-holes; probably to hold a previous door, ran east-west for 3m until it turned north-south. It continued for 7m until it widened slightly into an end chamber. Another passage was located that ran at a right angle from the north-south passage. It extended for 5m until it terminated at a chamber. Finds from the souterrain included an amber bead, a probable loom weight, half a lignite bracelet and a quantity of animal bone. Several metal objects were also recovered including an example with traces of enamel.

The souterrain cut through a ditch that was linked to the horseshoe-shaped enclosure. A large, irregular-shaped feature, consisting of a central linear ditch with two crescent-shaped arcs projected at either end was situated approximately 3m north of the souterrain. One of the arcs contained souterrain ware sherds while the partial remains of an articulated skeleton were revealed at the southern end of the other arc. A dry-stone keyhole-shaped cereal-drying kiln was also excavated at the site.

Archaeological testing in 2002 by Walsh – on lands zoned for potential residential use and in proximity to the south-east of McLoughlin's excavations – identified a series of spreads, layers and linear features related to early medieval industrial activity. The archaeological features contained a number of sherds of coarse early medieval pottery – possibly souterrain ware – and considerable quantities of metal slag.

Haggarstown townland has, therefore, revealed a range of archaeological features indicative of early medieval settlement, agriculture and industry. The relationship between the sites is difficult to determine without radiocarbon dates but it is clear that Haggardstown was the focus for continued settlement throughout the early middle-ages.

(**No plans were available for this site**).

References:

Campbell, C. 1994:180. Haggardstown, Co. Louth. www.excavations.ie.

Jordan, J. 1934 Townland survey of County Louth: Haggardstown. *County Louth Archaeological and Historical Journal*, 8, 210-14.

McConway, C. 1995:220. Haggardstown, Co. Louth. www.excavations.ie.

McLoughlin, C. 1999:610. Mullagharlin/Haggardstown, Dundalk, Co. Louth. www.excavations.ie.

Moore, D. 2001:858. Haggardstown, Co. Louth. www.excavations.ie.

O'Carroll, F. 1999:544. Haggardstown, Blackrock, Co. Louth. www.excavations.ie.

Walsh, F. 2002:1348. Haggardstown, Co. Louth. www.excavations.ie.

'Lissachiggel', Doolargy, Co. Louth
Early Medieval Cashel
Grid reference: **J10141302 (310146/313021)**
SMR: **LH004-050**
Excavation Licence No: **N/A**
Excavation duration: **September 1940**
Site director: **Davies, M.A. (OPW)**

Excavation was undertaken at the upland cashel and hut sites at Lissachiggel, in the townland of Doolargy, as part of the unemployment relief scheme in September 1940. Seventeen hut were recorded within, and abutting, the cashel wall. Based on artefactual and construction evidence, the huts were built during the latter part of the early medieval period and the seventeenth or eighteenth centuries. Those belonging to the early medieval period will be discussed here. The cashel is situated on marshland at 244m OD. A number of unenclosed huts and field systems are evident in the cashel's surrounding landscape.

The cashel was roughly circular and measured approximately 58m east-west by 55m north-south (Fig. 223). Its wall was constructed with medium to large stones and a core of gravel. It survived to a height of 1.8m. Evidence for a palisade was suggested by dark patches on the wall, 3.6m apart, which contrasted with the rubble-fill. Posts, 15cm in diameter, may have been positioned along the wall top to form the palisade. Evidence for a surrounding ditch was identified to the north and east of the wall. An entrance, bounded by upright blocks, was noted to the south and was 0.9m wide. Finds around the entrance included charcoal, three flints, half a blue glass bead and two pottery sherds (probably souterrain ware). Pottery sherds are recorded from the majority of structures and are described as coarse wares. It is likely that the majority represent hand-made souterrain ware vessels.

Davies classified the huts under a number of headings –

1. Clustered huts in the interior: A (North and South), B (East and West), C (East and West)
2. Isolated huts in the interior: B (South), D
3. Huts that abutted the cashel wall and yielded no burnt bone: E, K, N, O
4. Huts that abutted the cashel wall and yielded lots of burnt bone: F, G, H, I, L (Fig. 209).

Group 4 will not be discussed as they are probably later and may date to the seventeenth or eighteenth century. Most of group 3, except for E, are also probably later additions. The remaining huts were most likely built during the early medieval period but it is not known if all were contemporary with the construction of the cashel or if they represent a number of occupation phases (Fig. 224).

Hut A North was circular and measured approximately 1.4m in diameter. The walls were two stones thick and the entrance was probably located to the north-east. The south end of the hut was paved with rough slabs and an occupation layer (consisting of charcoal and nine coarse pottery sherds) was concentrated on the lower side probably as a result of the hut's sloping floor. Hut A South, connected to Hut A North, was a little over 3m in diameter. It had a hearth towards the centre and a large boulder bedded in the natural to the west may have functioned as a seat. An area of paving was recorded to the east. Charcoal and artefacts, including pottery fragments and flint chips, were discovered.

Hut B East measured about 3.5m squared and was one of the largest buildings in the cashel. The walls were formed with large uprights and an entrance may have been located to the west. Two hearths were centrally placed and charcoal was evident in large quantities around them. Hazelnut shells, burnt bone and burnt flint chips were found within the fire debris and other finds included possible flint tools and coarse pottery fragments. Hut B West was connected to the eastern hut. It was roughly rectangular and measured 1.8m by 2.4m. The

southern entrance was marked by three upright jambs. Charcoal and some small pottery fragments were discovered in the southern part of the structure.

Hut C East was circular and had a diameter of 3.6m. The door was to the south and was flanked by two small jambs. A hearth was centrally placed and there were internal irregular traces of cobbling. Further indications of occupation included quantities of charcoal, fragments of a lignite bracelet, seven flint tools, an iron object and coarse pottery sherds. Hut C West was smaller and had a diameter of 2.3m. The entrance was similalrly to the south and a hearth was present centrally. Finds included charcoal, hazelnut shells, an iron knife, a flint (possibly a scraper) and small pottery sherds.

Huts' B and D were described by Davies as isolated huts within the cashel. Hut B South was roughly circular and had a diameter of 1.8m. A door, flanked by two jambs, was located to the south-east and it was paved with small stones. Charcoal and pottery sherds were the only finds. Hut D was very small and had a diameter of 1m. Charcoal was present in good quantities and a glass bead was recovered from the burnt earth. No entrance was evident.

Hut E was constructed against the cashel's inner wall. It was irregularly shaped and a small bench may have been situated in the west wall. A hearth was centrally placed and the floor was roughly paved. Finds from the hut included charcoal, two pieces of iron, flint tools (some probable strike-a-lights) and pottery sherds.

Lissachiggel was probably constructed between the seventh and tenth centuries based on dating evidence for early medieval settlement enclosures (both earth and stone) and the presence of possible souterrain ware. Davies had identified two main periods of hut use/construction dating to the early and post medieval periods. It appears, based on the cashel's upland location, above the productive agricultural soils, and the paucity of finds, that Lissachiggel was a low-status transhumance settlement which was utilised during the summer months.

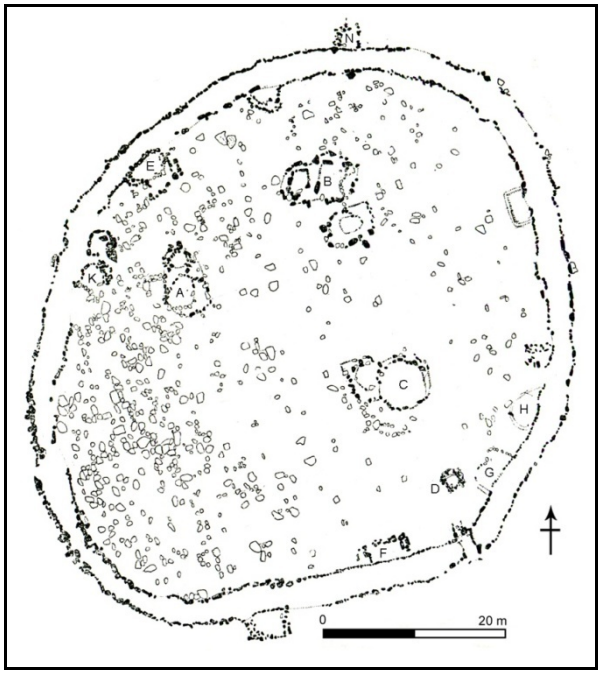


Fig. 223: Plan of interior of Lissachiggel, Co. Louth, showing houses (after Davies 1937-40, 212).

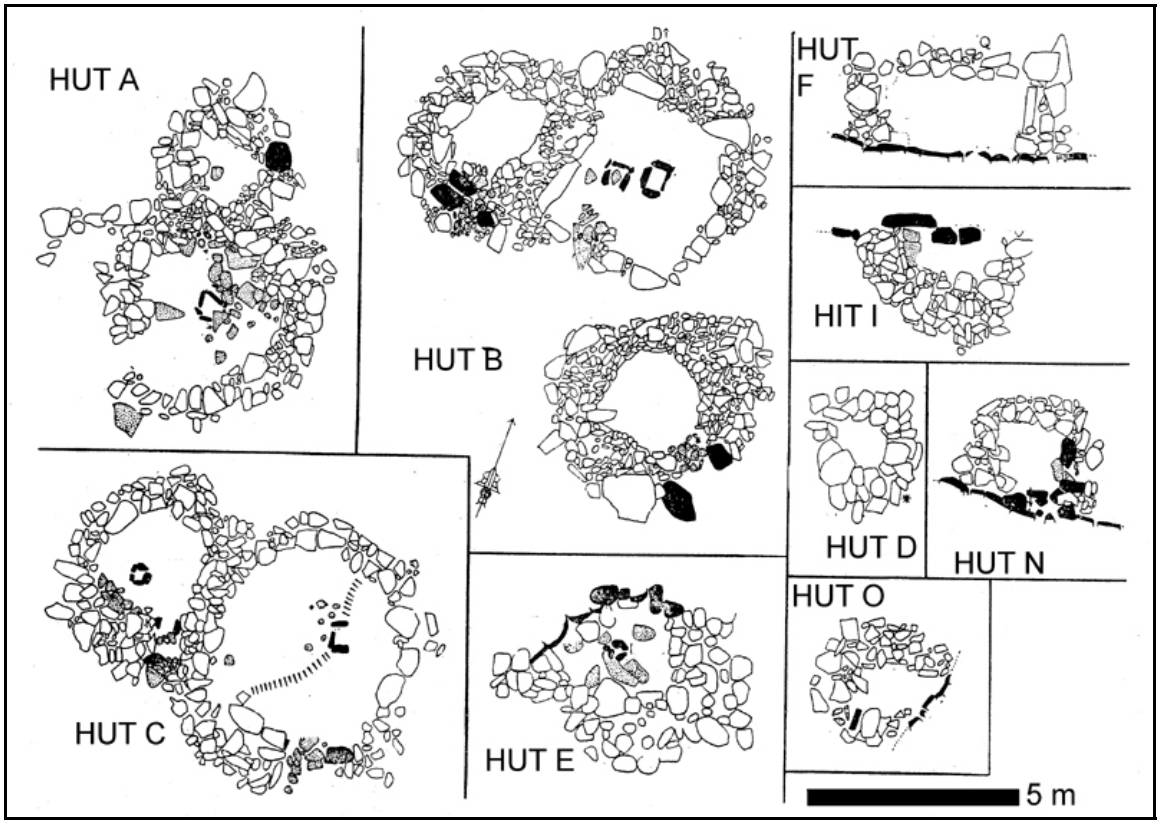


Fig. 224: Detailed plan of houses at Lissachiggel, Co. Louth (after Davies 1937-40, 217).

Reference:

Davies, O. 1937-40. Excavations at Lissachiggel. *Journal of the County Louth Archaeological and Historical Society*, 9, 209–43.

Marshes Upper, Co. Louth

Early Medieval Settlement Landscape

Unenclosed Souterrain and Hut
Grid reference: **J066049 (30660/30490)**
SMR: **LH007-080**
Excavation Licence No: **E000195**
Excavation duration/Year: **1980**
Site director: **P. Gosling (OPW)**

Enclosed Souterrain Complex
Grid reference: **J064065 (30640/30650)**
SMR: **LH007-120**
Excavation Licence No: **N/A**
Excavation duration: **January – April 1982**
Site director: M. Gowen **(Margaret Gowen and Co. Ltd)**

Souterrain
Grid reference: **J06130551 (30613/30551)**
SMR: **LH007-092**
Excavation Licence No: **02E0008**
Excavation duration/Year: **April 1995**
Site director: **K. Campbell (Freelance)**

Early Medieval Field System
Grid reference: **J05850517 (30585/30517)**
SMR: **N/A**
Excavation Licence No: **02E0200**
Excavation duration/year: **March** – **April 2002**
Site director: **M. Mossop (ACS Ltd.)**

Early Medieval Structure
Grid reference: **J05640504 (30564/30504)**
SMR: **N/A**
Excavation Licence No: **02E0233**
Excavation duration/year: **March** – **April 2002**
Site director: **R. O'Hara (ACS Ltd.)**

Unenclosed Souterrain and Hut
Grid reference: **J066049 (30660/30490)**
SMR: **LH007-080**
Excavation Licence No: **E000211**
Excavation duration/year: **1980**
Site director: **P. Gosling (OPW)**

Enclosed Souterrain
Grid reference: **N/A**
SMR: **LH007-107**
Excavation Licence No: **E000233**
Excavation duration/year: **March 1982**
Site directors: **F. McCormick and F. Crone (University College Cork)**

Souterrain
Grid reference: **J058051 (30580/30510)**
SMR: **N/A**
Excavation Licence No: **02E0008**
Excavation duration/year: **Jan. – July 2002**
Site director: **M. Mossop (ACS Ltd.)**

Cereal-drying kiln
Grid reference: **J057050 (30570/30505)**
SMR: **N/A**
Excavation Licence No: **02E0200**
Excavation duration/year: **March – April 2002**
Site director: **M. Mossop (ACS Ltd.)**

Archaeological investigations in the townland of Marshes Upper, in advance of a number of infrastructural developments since the 1980s, have revealed an intensely settled early medieval landscape, and most notably from the latter part of the period as revealed by the excavation of ten souterrains. The souterrains were both enclosed and unenclosed and dating evidence – both radiocarbon and artefactual – suggests they were utilised between the seventh and twelfth centuries. Other features included an extensive field system, a cereal-drying kiln and a structure. The earliest feature was the kiln which dated to the Iron Age/early medieval transitional period. This was followed, from the seventh century, with the large-scale construction of both open and enclosed settlements and related field enclosures.

A souterrain was identified during site clearance work for the Industrial Development Authority in October 1980. Subsequent excavations revealed that it was W-shaped in plan and 21m long. Other features included a mall stone U-shaped hut, some pits and a straight trench, which was 1.25m wide and 0.7m deep. The latter appeared to define the northern boundary of the settlement but no evidence for an enclosure was evident. Artefacts recovered in association with the souterrain, hut and trench included over 50 sherds of souterrain ware, an iron belt-buckle, a plain bronze strap-end, struck flint flakes and a small quantity of animal bone. Eight Hiberno-Scandinavian silver pennies, dating to AD 995-1000, were also recovered from the fill of the souterrain entrance.

In 1981, excavations occurred at another unenclosed souterrain in advance of the construction of an inner by-pass road. The souterrain was S-shaped and measured 20m in length. A doorway, comprised of wooden jambs recessed into the side-walls and mortised into a lintel beam, was present 7m inside the entrance and the outline of a wooden sill was visible on the floor. The majority of artefacts were recovered from an organic fill at the entrance and included approximately 50 sherds of souterrain ware, about twelve whetstones, a chert leaf-shaped arrowhead, a small bronze ring-pin and a bronze cruciform belt-buckle tongue with decorated red glass terminals.

Excavation in 1982 – at the Finnabair Industrial Estate – revealed five dry-stone souterrains and associated enclosures known as Marshes Upper 3 and 4 (Fig. 225). They were situated on two small, but prominent, hillocks less than 60m apart.

Site 3 consisted of two souterrains (A and B) and an enclosure. Souterrain A was Z-shaped and measured 35m in length. It varied in width between 1m and 2m and the roof had a maximum height of 1.9m. Two jamb slots, which probably supported posts for a gate or door, were positioned between the first and second turns in the passage. Primary material from the entrance contained large quantities of charcoal and an iron nail. The former produced an un-calibrated radiocarbon date of A.D. 688±55. A bronze pin and an iron knife were retrieved from the fill above it. The gallery contained two air vents and was devoid of artefacts.

Souterrain B was smaller than Souterrain A. It was L-shaped and measured 24m in length. The passage was between 1m and 1.4m wide and 1.2m high. The chamber was 1.1m high and 1.4m in width. It was rougher, in construction, compared to Souterrain A and also had a number of defensive features such as a drop hole. Finds, in secondary deposits, from the entranceway and passage included fifteen sherds of souterrain ware, fragments from a bone comb and the remains of a neonatal pig.

The enclosure (55m by 60m) completely encircled Souterrain A while it stopped short, on either side, of Souterrain B. A causewayed entrance was present to the north and the ditch varied in width and depth between 1.2m and 2m, and 0.2m and 1.4m respectively. No evidence for a bank survived. Occupation layers, of ash, charcoal, shell and animal bone, were found overlying a primary silt layer within the ditch. Other finds included sherds of souterrain ware and three sherds of E ware. An outer concentric gully was also detected, 3m outside the ditch, and it may have related to the enclosure.

Site 4 at Marshes Upper revealed three souterrains and an enclosure (Fig. 226). One of the Souterrains (Souterrain C) lay outside the enclosure. Souterrain A was T-shaped in plan and was 40m long. An 11m passage led to a junction where it continued for 18m to the northern chamber and 10m to a western chamber. The passage was between 1m and 1.5m in width and the chambers measured between 1.6m and 2m, and 1.3m and 1.7m respectively. A secondary fill at the entrance contained a high charcoal content, a souterrain ware sherd and a quernstone fragment. Artefacts were absent from the northern and western chambers.

Souterrain B was crescent-shaped in plan and 25m long. A primary deposit at the entranceway contained lots of charcoal. An un-calibrated radiocarbon date of A.D. 848±50 was obtained from this fill. A number of finds were also revealed including souterrain ware sherds, a jet bracelet fragment, two hammer stones, a bronze stick pin and a bone comb. The chamber contained a layer of paving slabs and a layer of silt below this produced fragments of souterrain ware and four iron objects.

Souterrain C was L-shaped and measured 16m in length. A 10m-long passage turned west towards a chamber. A deposit at the entrance produced a large volume of iron slag, a furnace bottom, a bronze mount and sherds of souterrain ware. The latter were from the same pot as those found in Souterrain B which suggests a contemporary deposition of the finds at both sites.

The enclosure at Site 4, similarly to Site 3, survived as a very slight feature due to severe truncation of the area. The enclosure completely enclosed Souterrain A while Souterrain B was partially enclosed. Souterrain C lay outside the enclosure to the north. Excavation revealed a 30m length of ditch that averaged 1.5m wide and 0.5m deep. An entrance gap was potentially located to the south. No evidence for a bank survived and the ditch fill was devoid of artefacts except for a bone cylinder fragment. A possible outer ditch was identified 1m outside the enclosure ditch.

A large enclosure and souterrain (Marshes Upper Site 5) – discovered during the construction of a residential development – was excavated in 1982 on a low hill overlooking Dundalk Bay (Fig. 227). The enclosure measured 100m by 80m but much of its upper levels had been destroyed by quarrying. A few fragments of souterrain ware and animal bone were retrieved from the middle ditch fill and there was evidence for some re-cuts to the ditch. No trace of a bank survived. The souterrain was located in the south-eastern area of the enclosure and, similarly to the enclosure ditch, much of it had been destroyed by quarrying. The dry-stone structure consisted of a ramped entrance and the lower courses of a beehive chamber. Fragments of souterrain ware were found in a deposit above the chamber floor and inside the passage entrance.

Another dry-stone souterrain was revealed during the construction of a basketball court at a school in 1995. It may have been unenclosed as an area 35m to the east was archaeologically investigated but nothing was found. However, an enclosure may be present a further distance away so it is impossible to say if this was an open or enclosed souterrain. The portion of the souterrain investigated was 10.1m long and consisted of two passages; one was higher and was connected to the lower passage by a drop hole which lead to a chamber area. The upper passage was 1.9m long, 0.75m high and 0.95m wide and an air vent was present in the end wall. The lower passage was accessed through the drop hole. It measured 9.4m in length, was 1.45m high and had a maximum width of 1m. The passage broadened at the northern area which formed a chamber which was 1.75m wide. No finds were discovered during excavation.

The most recent excavations in Marshes Upper during the first six months of 2002 – in advance of the construction of playing fields at the Dundalk Institute of Technology – have revealed further evidence for early medieval activity including a souterrain, field systems and a structure. The dry-stone souterrain was discovered during archaeological monitoring. Its cut was between 2.5m and 3.25m wide and was traced for approximately 60m. It surrounded a

central, L-shaped island of natural. A small side-chamber was evident to the north. The exposed backfill of the souterrain included occasional charcoal flecks, frequent small greywacke fragments and a lens of ash charcoal. The latter was radiocarbon dated to A.D. 384-694. Two openings enabled access to Passages 1 and 4 but the latter was not recorded as it was unsafe. The portion of Passage 1 measured 7.2m in length, had an average width of 0.95m and was 0.85m high. An opening was revealed that led to the side-chamber. The chamber measured 2.8m east-west by 1.4m north-south and was approximately 1m high. It had rounded corners and corbelled walls. Another passage (Passage 2) was revealed at a higher level. It was 0.95m high and it curved for 8m before terminating at a small beehive chamber. The chamber measured 1.7m in diameter and was 0.7m high. A square opening was revealed in the centre of the floor which formed a drop-hole to Passage 3. This varied in width between 0.8m and 1.1m and height between 0.55m and 1m high. No artefacts were retrieved from the souterrain.

A number of ditches were revealed across the Dundalk Institute of Technology site that comprised a system of rectangular early medieval fields measuring approximately 50m by 80m. Another larger example measured 102.1m north-south by 64.2m east west and was defined by a 2m-wide ditch which had an average depth of 0.5m. The ditch was re-cut at least three times and the presence of bank-slump material indicated that an up-cast bank may have been partially stone-faced. Finds were evident in the final re-cut and included probable fragments of souterrain ware and small quantities of hazel charcoal and worked flint. The charcoal was radiocarbon dated to A.D. 684-887. Small amounts of flint debitage, iron slag, bloom and a small iron object were also retrieved from the surface of the ditch-fill. Earlier agricultural activity was also present in the form of a cereal-drying kiln. The fire chamber was heavily oxidised around the base and a small alder timber was radiocarbon dated to A.D. 311-548.

Excavation also revealed the remains of a post-built oval or U-shaped structure. It was 3.6m wide and was at least 3.6m long. There was no evidence of internal divisions or a hearth but the site was heavily truncated so this was not surprising. A number of external pits containing small amounts of charcoal and cremated animal bone were also uncovered and were probably refuse pits. A sample from one of the pits produced a radiocarbon date of A.D. 946-1214.

In conclusion, the townland of Marshes Upper witnessed extensive early medieval settlement and agricultural activity most notably from the seventh century onwards. A cereal-drying kiln and fields were laid out before there was a considerable increase in the use of the land through the construction of at least ten souterrains which were both enclosed and unenclosed.

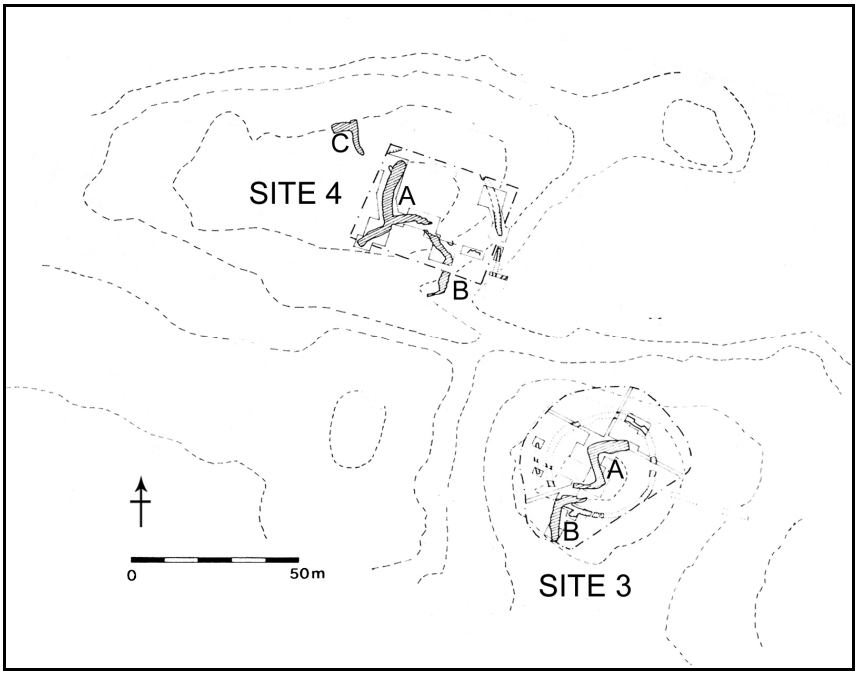


Fig. 225: Plan of Marshes Upper 3 & 4, Co. Louth (after Gowen 1992, 57).

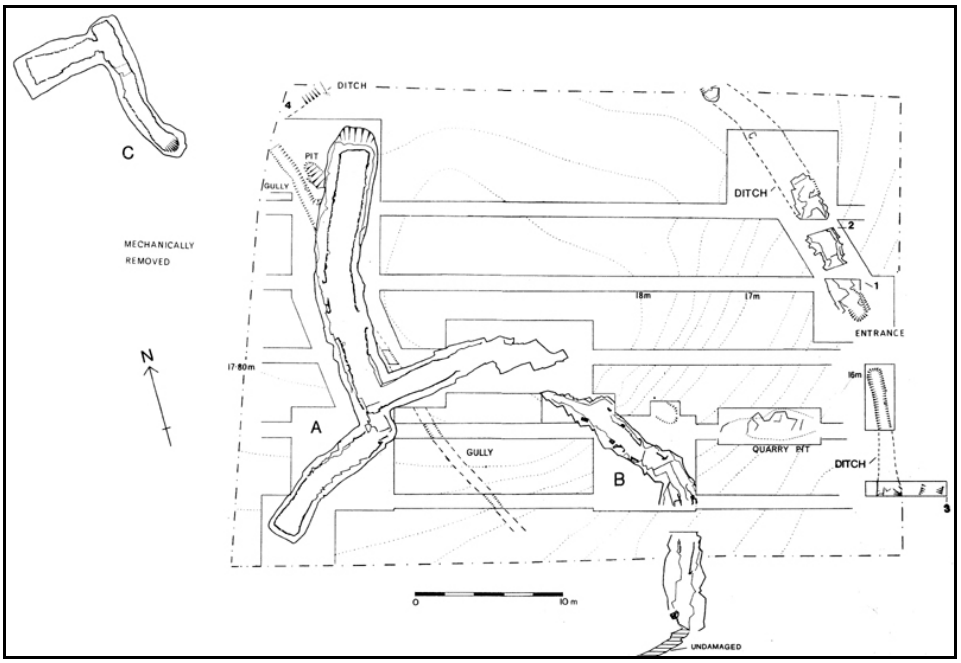


Fig. 226: Plan of Marshes Upper 4, Co. Louth (after Gowen 1992, 76).

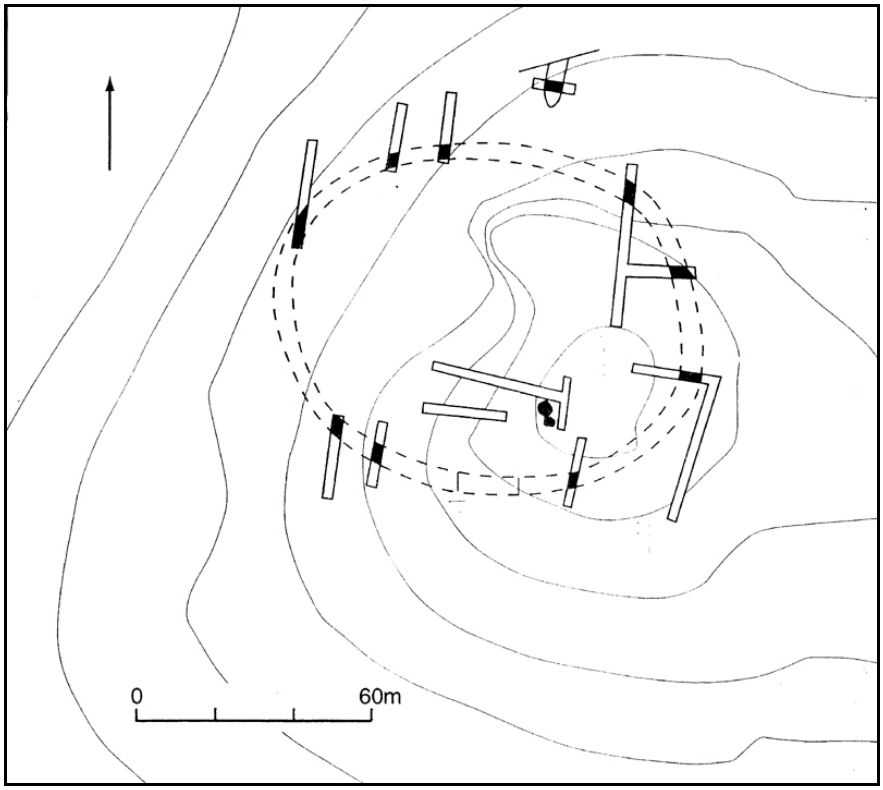


Fig. 227: Plan of Marshes Upper 5 (after McCormick & Crone 2000, 55).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-170297	Charcoal in souterrain	1480±90 BP	**A.D. 384-694**; A.D. 703-706; A.D. 748-765
Beta-170303	Charcoal from field enclosure re-cut	1230±40 BP	**A.D. 684-887**
Beta-170370	Charcoal from alder timber within cereal-drying kiln	1640±60 BP	A.D. 255-306; **A.D. 311-548**
Beta-170305	Charcoal from pit beside structure	980±70 BP	A.D. 898-920; **A.D. 946-1214**

References:

Campbell, K. 2002. Souterrain at Muirhevnamore, Marshes Upper, Dundalk. *Journal of the County Louth Archaeological and Historical Society* 25(2), 202–07.

Gosling, P. 1980-84:0137. Marshes Upper, Co. Louth**.** www.excavations.ie.

Gosling, P. 1980-84:0138. Marshes Upper, Co. Louth**.** www.excavations.ie.

Gowen, M. 1992. Excavation of two souterrain complexes at Marshes Upper, Dundalk, Co. Louth. *Proceedings of the Royal Irish Academy Section C*, 92C, 55–121.

McCormick, F. & Crone, F. 2000. A destroyed enclosure at Site 5, Marshes Upper, County Louth. *Journal of the County Louth Archaeological and Historical Society*, 24(4), 553–62.

Mossop, M. 2002a. Archaeological monitoring and investigations. Dundalk Institute of Technology, Co. Louth. Unpublished report prepared for Archaeological Consultancy Services Ltd.

Mossop, M. 2002b. Archaeological Investigation, Area 16. Dundalk Institute of Technology, Co. Louth. Unpublished report prepared for Archaeological Consultancy Services Ltd.

Mossop, M. 2002c. Archaeological Investigation, Area 17. Dundalk Institute of Technology, Co. Louth. Unpublished report prepared for Archaeological Consultancy Services Ltd.

O'Hara, R. 2002. Archaeological Investigation, Area 6. Dundalk Institute of Technology, Co. Louth. Unpublished report prepared for Archaeological Consultancy Services Ltd.

Millockstown, Co. Louth
Early Medieval Settlement-cemetery
Grid reference: **N977875 (29770/28750)**
SMR: **LH017-054**
Excavation Licence No: **N/A**
Excavation duration: **October – December 1980**
Site director: **C. Manning (OPW)**

An excavation was conducted at Millockstown after work on the land, by the owner, revealed part of a souterrain. The excavation also revealed another souterrain and multi-phase settlement enclosure activity consisting of a D-shaped enclosure, which was replaced by a smaller circular enclosure, and a final and larger, D-shaped enclosure, which replaced the first two enclosures. The latter was associated with the souterrains and a cemetery. The site was situated on a natural terrace, at 121m OD, near the top of a southward-facing slope. The site was not fully excavated and the archaeological features were identified in a number of trenches across the site (Fig. 228).

The Phase I D-shaped enclosure (65m by 56m) was defined by a ditch which averaged 1.4m in width and had a maximum depth of 1.5m. No evidence for a bank survived. It enclosed three spreads of occupation material including a hearth and charcoal. Charcoal from one of the occupation spreads was radiocarbon dated to A.D. 322-609. The only find from this phase, from another habitation spread, was the terminal and part of the ring of a zoomorphic penannular brooch which dates to the third century. Therefore, based on the brooch and radiocarbon date, it appears that the Phase I enclosure was constructed in the third or fourth century A.D.

During Phase II, a smaller circular enclosure replaced, and was constructed centrally within, the earlier D-shaped enclosure. It measured 37m in diameter and enclosed a hearth and a spread of carbonised grain. The ditch averaged 2.7m in width and was 1.5m deep and the remains of the bank were evident. The only finds from the ditch were animal bone and a large iron nail. No radiocarbon dates were available for this phase so all that can be surmised is that the enclosure was constructed in between Phase I and Phase III.

Phase III witnessed the construction of a final, and much bigger, D-shaped enclosure which replaced the first two enclosures. It measured 40m by 100m and was associated with two souterrains, a cemetery and two pits. The ditch measured between 2.8m and 4m in width and had a maximum depth of 2m. The only finds from the ditch were animal bones. Charcoal from the ditch returned a very broad radiocarbon date of A.D. 576-1024.

The cemetery has been ascribed to the third phase because it cut through the Phase I and Phase II occupation layers. It measured 20m by 12m and was roughly centrally-placed within Enclosure III. It was only partially excavated. The majority of graves were stone or slab-lined and many cut into earlier ones. The burials were extended inhumations and aligned with their heads to the west. One of the graves utilised a quern fragment in its construction while objects found in association with the graves, but not deliberate grave-goods, included an iron nail and needle.

A word of caution must be assigned to the dating of the burial ground. Many similar sites have shown that the cemetery represented the first phase of activity and that settlement and agriculture then developed. It may be that the unexcavated part of the cemetery contains the earliest graves which could be contemporary with the construction of the first enclosure. A spread within the Phase I enclosure was dated but the ditch was not. The exact chronology of the site remains difficult to determine without radiocarbon dates from the enclosure ditches and burials.

Two souterrains were associated with Phase III. Souterrain 1 was of dry-stone construction and consisted of a short curving upper passage which led to a lower passage and a circular corbelled chamber. It was situated outside the Phase I and Phase II enclosures, but within the final enclosure, so may be contemporary with the latter. The second souterrain was situated 40m to the north-west of Souterrain 1. It consisted of a long earth-cut passageway, which contained three major bends, before it reached a large round corbelled chamber. Other features included a trap-like feature, a drop-hole and a small side chamber. Three artefacts were retrieved from the first stretch of the passageway and included an iron stick pin, a decorated bronze stick pin and an iron needle. The middle part of the souterrain produced a sharpening stone, flint waster, iron fragments, human bone (probably from disturbed burials) and a decorated bronze toilet implement. Souterrain 2 definitely post-dated the second enclosure because it cut into the backfilled ditch, while it ran parallel with the Enclosure III ditch which suggests the latter was already in existence when the souterrain was constructed.

A fragment of souterrain ware was recovered in a context that post-dated Enclosure II and this pottery generally dates between the eighth and tenth centuries. The presence of two stick pins, one a club-headed type, also shows that Souterrain II was open between the mid eleventh and thirteenth centuries. The lack of late medieval pottery from the site strongly indicates that the earlier date range should be favoured. Therefore, when the artefactual evidence is combined with the Enclosure III radiocarbon date, the final phase at Millockstown probably occurred between the eighth and eleventh centuries.

Other archaeological features on the site included two pits, which have been ascribed to Phase III, and possible cultivation furrows although the latter's date are uncertain.

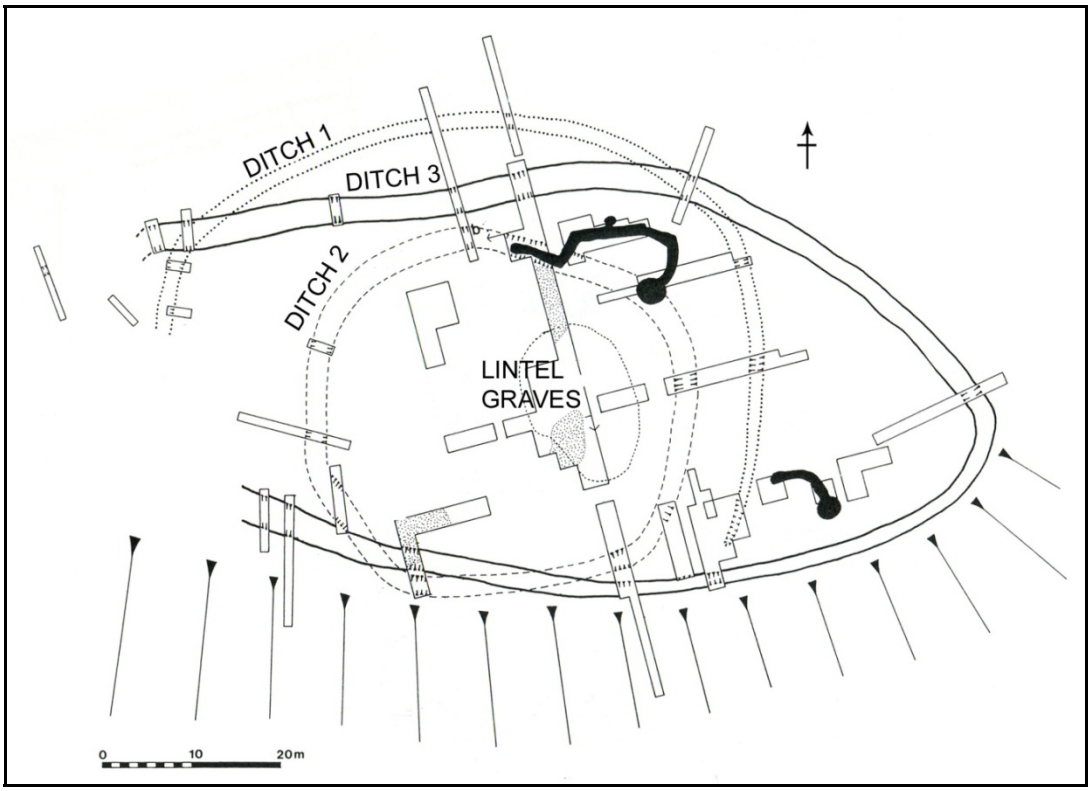


Fig. 228: Plan of Millockstown, Co. Louth (after Manning 1986, 139).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
GU-1781	Charcoal from Phase I occupation layer	1595±70 BP	A.D. 260-284; **A.D. 322-609**
GU-1782	Charcoal from Phase III enclosure ditch	1240±125 BP	**A.D. 576-1024**

Reference:

Manning, C. 1986 Archaeological excavation of a succession of enclosures at Millockstown, Co. Louth. *Proceedings of the Royal Irish Academy Section C*, 86C, 135–81.

Newtownbalregan, Co. Louth
Early Medieval Settlement Enclosure
Grid reference: **J02150892 (302156/308928)**
SMR: **N/A**
Excavation Licence No: **03E0115**
Excavation duration: **N/A**
Site director: **D. Bayley (IAC Ltd.)**

Newtownbalregan 6, excavated in advance of the M1 motorway, consisted of a circular enclosed settlement and an external souterrain which were situated on a high ridge overlooking the Castletown and Kilcurry river valley. Artefacts from the enclosed settlement suggest occupation between the seventh and tenth centuries and the souterrain may be contemporary as they typically date between the eighth and tenth centuries. Contemporary excavated settlements in proximity to Newtownbalregan 6 included Carn More (Delaney 2003; Roycroft 2005), Tateetra (Hayes 2006), Balriggan (Delaney 2010) and Faughart Lower (Bowen 2008).

The enclosure measured 46m in internal diameter and had an overall diameter of approximately 52m. A causewayed entrance, which was 5m wide, was located on its eastern side.

The enclosure ditch measured between 2m and 4m in width and had a maximum depth of 1.5m. It, notably on its southern side, produced a number of artefacts indicative of settlement including a copper alloy penannular brooch, two stick pins, three decorated glass beads and a knife. Animal bone was more plentiful in the western part of the ditch so this may have been close to where butchering and meat processing occurred. Items of a functional nature, within the ditch fills, included 32 fragments of souterrain ware and large numbers of worked flint.

Further evidence for habitation was present within the southern area of the enclosure. This consisted of a series of postholes and pits; some of which were truncated by each other, but no recognisable structural plan could be identified.

The souterrain was located 5m to the south-west of enclosure and it followed the incline of the hill down to the south (Fig. 229). It measured 46m in length and consisted of a number of galleries, rectangular and corbelled chambers, a drop-hole and an entrance way which featured one large internal door with jambs and a locking arrangement. Another interesting component of the souterrain was the reuse of a piece of decorated megalithic art as a capstone near the entrance to Gallery 3.



Fig. 229: Photograph of souterrain at Newtownbalregan, Co. Louth (after Roycroft 2005, 73).

References:

Bayley, D. 2003:1286. Newtownbalregan, Co. Louth. www.excavations.ie.

Bowen, P. 2008 Settlement and burial at Faughart Lower. *Seanda* 3, 9–11. Dublin. National Roads Authority.

Delaney, S. 2003:1272. Carn More, Faughart, Co. Louth. www.excavations.ie.

Delaney, S. 2010 An early medieval landscape at Balriggan, Co. Louth, in C. Corlett and M. Potterton (eds.) *Death and Burial in Early Medieval Ireland, in Light of Recent Archaeological Excavations*, 116–29. Dublin. Wordwell.

Hayes, A. 2006. Archaeological investigation of a souterrain at Tateetra, Dundalk, Co. Louth, in J. O'Sullivan and M. Stanley (eds.) *Settlement, Industry and Ritual*, National Roads Authority Monograph Series 3, 53–62. Dublin. National Roads Authority. Wordwell.

Roycroft, N. 2005. Around the bay on the Great North Road: the archaeology of the M1 Dundalk Western Bypass, in J. O'Sullivan and M. Stanley (eds.) *Recent Archaeological Discoveries on National Road Schemes 2004*, National Roads Authority Monograph Series 2, 65–82. Dublin. National Roads Authority. Wordwell.

Whiterath, Co. Louth
Early Medieval Settlement Enclosure
Grid reference: **O04199852 (304195/298525)**
SMR: **N/A**
Excavation Licence No: **99E0485**
Excavation duration: **August 1999 – April 2000**
Site director: **C. Ó Drisceoil (Valerie J. Keeley Ltd)**

Excavation at Whiterath in advance of the Dunleer–Dundalk Bypass, revealed a settlement enclosure and possible outer enclosure ditch, a souterrain, a large pit and a possible cereal-drying kiln. Artefactual analysis suggests the site was occupied during the ninth and tenth centuries.

Two ditches, 41m apart to the east and west, were revealed and geophysical survey, and later test excavation, demonstrated that they joined to form an enclosure. A third ditch ran parallel to the western ditch and was within 1m of the souterrain (see below). Geophysical prospection failed to reveal the remainder of this ditch. Finds from the ditches indicated settlement and industrial activity and included ringed pins, iron knives, souterrain ware and later medieval pottery, a polished stone axe-head, iron hooks, an iron reaping hook, iron slag and a large quantity of animal bone. The outer ditch may be related to a later occupation phase associated with the souterrain.

The dry-stone souterrain was an irregular U-shape in plan. It measured 28m long and was, on average, 1m wide. Two entrances were revealed which led into a low passage that turned sharply to a stepped feature. A hidden compartment, that contained a large quantity of animal bone, was discovered underneath the step and a bone-bead necklace was found outside it. A passage leading to a chamber formed the lower level. The chamber contained two jambs which were associated with large postholes. Evidence, indicative of occupation, was revealed on the souterrain floor and included a large quantity of animal bone, a bronze panel with an enamel interlace decoration, souterrain ware and iron slag.

Other features at Whiterath included a large pit, which contained a broken blue glass armlet in one of its fills, and a possible keyhole-shaped cereal-drying kiln.

(**No plans were available for this site**).

References:

Ó Drisceoil, C. 2000:0721. Site 2, Whiterath, Co. Louth. www.excavations.ie.

Ó Drisceoil, C. 2005:1095. Site 2, Whiterath, Co. Louth. www.excavations.ie.

County Mayo

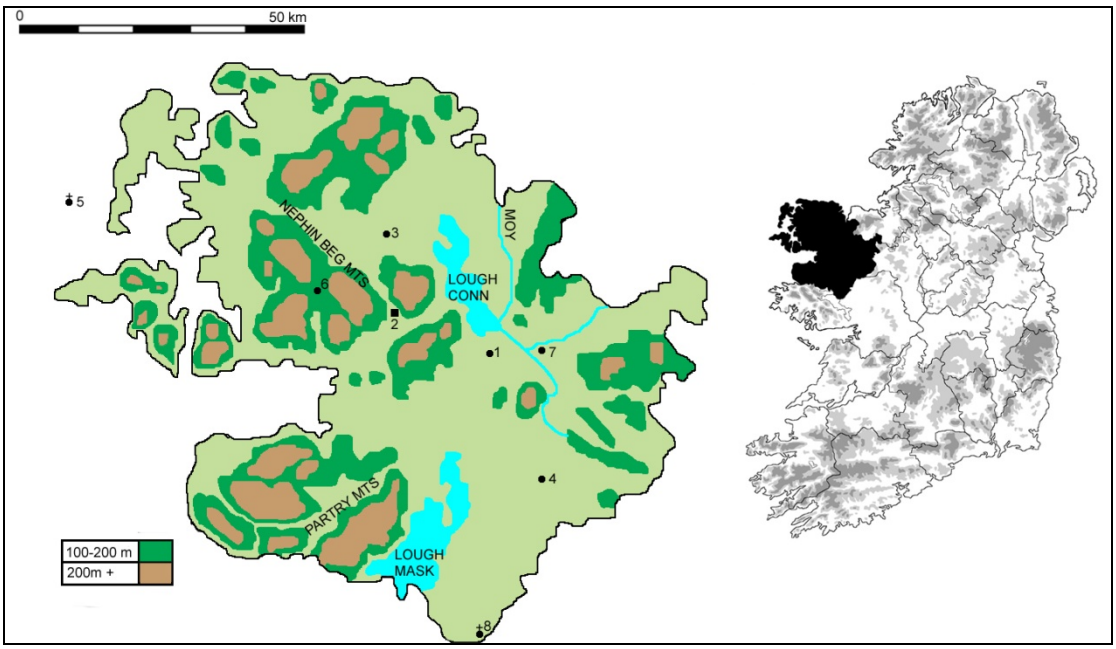


Fig. 230: Significant early medieval excavations in Co. Mayo.

1	Ardcloon	**5**	Inishkea North
2	Bofeenaun	**6**	Letterkeen
3	Carrowkeel	**7**	Lislackagh
4	Castlegar	**8**	Moyne

Ardcloon, Co. Mayo
Early Medieval Settlement Enclosure.
Grid Ref: **M26879737 (126877/297373)**
SMR No: **MA070-072**
Excavation Licence: **N/A**
Excavation Duration/Year: **1954**.
Site Directors: **E. Rynne (University College, Galway)**.

The site consists of a bank-and-ditched enclosure set on the summit of a hill, and was threatened with destruction through a farm improvement scheme. The diameter of the site to the outer edge of the ditch was 58m, enclosing a central area of 40m-45m in diameter (Fig. 231).

Excavation revealed that the lower layers of the bank were constructed from the up-cast of the ditch, and that the remainder of the bank was built up from material from elsewhere. The inner face of the bank was supported by a stone revetment, and a deposit of stones in the bottom of the ditch was interpreted as remains of a revetment for the outer face of the bank. The ditch appears to have been allowed to gradually silt up, although in the western stretch it was used as a dump for material from the interior of the site including animal bone and iron slag. There was little structural evidence in the interior. Two hearths were identified, and a bronze pin found from one of these provided the only diagnostic dating evidence from the site. A number of possible postholes were also identified (including one which contained two sherds of Beaker pottery), but no structural pattern was able to be discerned. The only other finds of significance from this site included an iron knife blade and four pieces of unrefined lead ore.

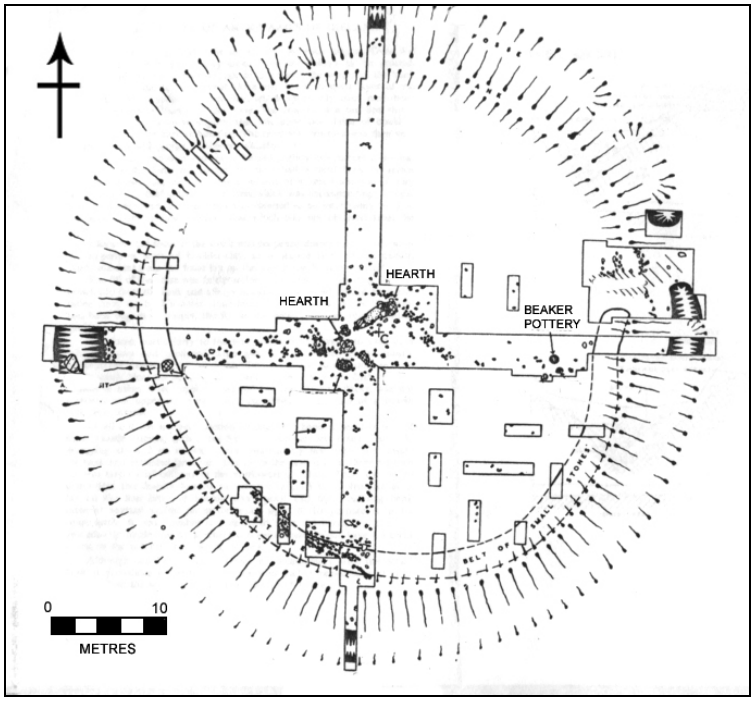


Fig. 231: Plan of excavated area at Ardcloon, Co. Mayo (after Rynne 1956, 203).

Reference:

Rynne, E. 1956. Excavation of a ringfort at Ardcloon, Co. Mayo. *Journal of the Royal Society of Antiquaries of Ireland* , 86, 203–14.

Bofeenaun, Co. Mayo
Early Medieval Crannog.
Grid Ref: **G11290411 (111299/304116)**
SMR No: **MA059-011**
Excavation Licence: **N/A**
Excavation Duration/Year: **October 1992**.
Site Directors: **M. Keane (Irish Archaeological Wetland Unit)**.

The early medieval crannog at Bofeenaun, Lough More, Co. Mayo is an interesting site, being an artificially constructed islet with enclosing wooden palisade, yet its small size, form and on-site activities contrast with other, larger high-status sites. The crannog was located on the east shore of a small lake in a mountainous valley below Glen Nephin, Co, Mayo, an isolated location today which has little other archaeological evidence.

The site was first discovered and recorded by local amateur archaeologists, Michael Flynn and Christy Lawless, and thereafter investigated by the Irish Archaeological Wetland Unit over a two week period in October 1992. The crannog was only one of a number of archaeological sites then exposed on the lakeshore, which included two *fulachta fiadh*, eighteen linear wooden structures (interpreted as deer traps), a submerged pine forest, quarries and a natural spring which emits iron ores. The crannog was situated on a natural knoll or promontory of peat jutting out into the water. There was a substantial depth of peat (over 6m) under the site and it stood only 0.46m above the drained level of the lake. The crannog was situated 29m from the dryland shoreline by a stretch of swampy ground but a possible stone and wooden causeway may have provided access to the site. This causeway was constructed of an irregular, linear arrangement of stakes and slabs and may have been underwater at the time of the site's use.

The crannog was oval in plan, measuring 14.6m by 11.8m. The edges of the site were defined by an enclosing wooden palisade of 82 vertical posts. This palisade was gapped and irregular and was typically constructed of a single row of roundwood oak, birch, hazel and willow posts (typically 0.12-0.18m diam.), but there was a double row of posts facing towards the shoreline. The palisade posts were quite short (0.65m-1m), suggesting that the palisade merely defined or reveted the edge of the mound, not standing to any great height or serving as a defensive feature. There may also have been a low bank of peat along the perimeter of the site, along its southern edge. A dendrochronological date of A.D. 804 ± 9 was obtained from a single oak timber.

The surface of the crannog was defined by a single layer of stone flags, which had been partly washed away. The stones were densest near the palisade at the northeast side. There was no evidence for any house or hearth. There was a small amount of bone on the site, including cattle, horse and pig, along with some shed antler. There was some burnt bone, but this may have been as the result of industrial activity. Finds from the surface of the crannog included two stone mortars, a grinding stone, a hammer stone and two iron objects. The site was covered in a large quantity of iron slag, with at least 1845 pieces identified during the survey. Scientific analysis of a sample (74kg) of iron slag indicated that it had been produced during primary iron production activities with such diagnostic forms as tapped slags and furnace lining fragments. There was evidence for ore processing, the smelting and bloom smithing of iron and the forging of objects.

There was some evidence for the spatial organisation of iron working on the site. Most of the iron slag was concentrated in an arc, just off the peak of the knoll, at the northeast side of the crannog, and it avoided the palisade on the south side. The furnace linings were all found at the northern end, just to the west of the main concentration of slag or waste.

In other words, most of the iron production activity was concentrated at the north and northeast side of the island or to the right as one entered the crannog from the causeway.

This is similar to the metalworking areas at Moynagh Lough crannog, Co. Meath, which appear to have been to the right as a person entered the crannog.

The crannog at Lough More is highly unusual in that it appears to have been entirely an ironworking site. The only structural evidence is the palisade and stone paving while the only finds are related to ironworking. There are no traces of occupation structures or any other forms of domestic or industrial activity. The heavy concentration of slag, the presence of possible furnaces and the hollowed stones used as crushers suggests its inhabitants were smelting iron from the ores found in the nearby bogs. The present lake is coloured rusty red in the spring, and small quarries in the gravel ridge to the west end of the lake may be evidence for early open cast mining. There is little other evidence for contemporary settlement in this immediate setting, although there are large numbers of ringforts and stone cashels in the landscape several miles to the northeast. Bofeenaun provides many contrasts with such larger sites as Moynagh Lough, Lagore and Ballinderry. It was entirely industrial in function, focused only on iron production from local ores. Furthermore, it seems to have been occupied only for a short duration, as there was little evidence for long-term occupation. It is also possible that it was not occupied at all, being only a work-site for people living elsewhere in the wider landscape. It confirms that not all crannogs were domestic occupations, many of the crannog cairns and small sites may also be industrial sites.

Dendrochronological Dates:

Sample	**Date**
Oak Timber	A.D. 804±9

References:

Lawless, C. 1992. Lough More, Bofeenaun, Co. Mayo: crannog, fulachta fiadh, deer traps and associated archaeological sites. *Cathair Na Mart* 12, (1), 13–31.

Keane, M. 1995. Lough More, Co. Mayo: the crannog. *Irish Archaeological Wetland Unit Transactions*, 4, 167–82.

Carrowkeel, Co. Mayo
Early Medieval Settlement Enclosure.
Grid Ref: **M09651705 (109657/317058)**
SMR No: **MA038-004**
Excavation Licence: **02E0598**
Excavation Duration/Year: **June - December 2002; September – October 2003.**
Site Director: **G. Walsh (National Roads Authority) & S. Zajac (Mayo County Council)**.

The site consisted of a sub-circular bank-and-ditched enclosure (26m by 23m) set on gently sloping ground (Fig. 232). Excavation of the site was required in order to facilitate road construction. Evidence of an earlier Bronze Age 'ritual' enclosure and associated burials were also found on site.

Investigation of the bank revealed that it consisted of a number of re-deposited mineral soils laid down in regular layers in a clockwise direction: this material appear to have been sourced from just outside the enclosure. The site was quite degraded, but evidence for a stone revetment was identified on the external face of the bank. The probably entranceway was also associated with stone revetting, and large, possible postholes were discovered underlying these stones, possibly representing gate-posts of an earlier phased entrance.

The ditch was U-shaped with an average width of 4m and depth of 2.2m. A small assemblage of animal bones (including deer bones) were recovered from the lower fills of the ditch, as well as part of a quernstone, the shaft of a bronze ring pin, and a pointed piece of corroded iron.

The interior of the site was greatly disturbed by later re-use of the site, firstly as a *cillín*, and also for agriculture. The remains of a spindle whorl and a blue glass bead were recovered from the disturbed topsoil. A large pit (2m by 1.2m by 0.65m deep) was the major surviving internal feature. Finds from this included animal bone, a bone weaving-tool, iron slag and iron objects. Similar finds were recovered from an adjacent surviving occupation horizon.

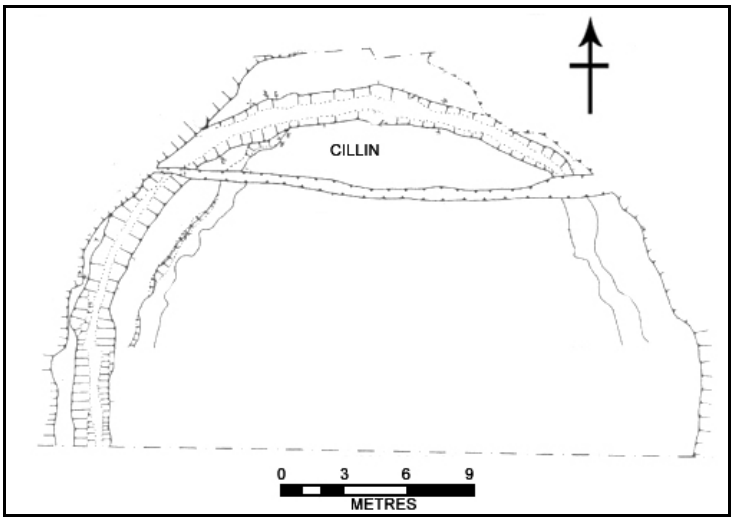


Fig. 232: Plan of enclosure at Carrowkeel, Co. Mayo (after Walsh & Zajac 2004).

References:

Walsh, G. & Zajac, S. 2004. Excavation of an enclosure at Carrowkeel, Crossmolina, Co. Mayo. Unpub'd report for National Roads Authority & Mayo County Council.

Castlegar, Co. Mayo
Early Medieval Settlement Enclosure.
Grid Ref: **M35647631 (135642/276311)**
SMR No: **MA101-026**
Excavation Licence: **99E0037**
Excavation Duration/Year: **1999**.
Site Directors: **S. Zajac (Mayo County Council)**.

The site consists of a sub-circular enclosure set on the end of a gravel ridge. The internal diameter of the site measured 48m by 40m, and was enclosed by a slight bank, and a shallow ditch (2.5m wide by 0.2m deep) (Fig. 233). Excavation revealed that the ditch had been backfilled in three stages. Although the upper fill appeared to be modern, it was possible that the earlier fills may have been done deliberately after the abandonment of the enclosure. Bones extracted from sealed contexts within the lowest ditch fill were used for radiocarbon dating (see below).

The interior of the site was badly degraded and had been largely destroyed by ridge-and-furrow agriculture. A souterrain, however, was discovered within the bounds of the enclosing ditch, along with a narrow cobbled walkway, which presumably linked it to a (now destroyed) above-ground structure. Finds from the site included five blue-glass beads; a fragment of a decorated blue-glass bracelet; whet stones; a bone knife handle; the broken base of a rotary quern; the fragment of a millstone; and a possible loom weight.

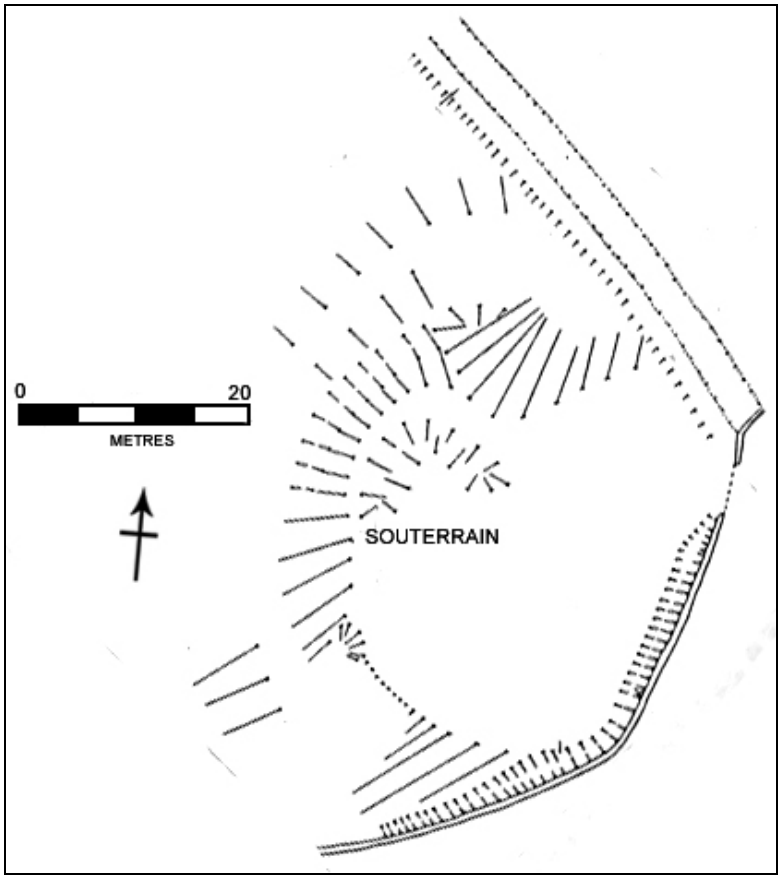


Fig. 233: Plan of enclosure at Castlegar, Co. Mayo (after Zajac & Scully 2004, 25).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-4701	Bone - abandonment fill	1067±43 BP	**A.D. 888-1028**.
UB-4702	Bone - main ditch fill	1186±51 BP	A.D. 692-749; **A.D. 764-972**.
UB-4703	Bone – from gravel in ditch side	1141±44 BP	**A.D. 778-988**.
UB-4704	Animal bone ditch bottom	1182±44 BP	A.D. 710-746; **A.D. 766-973**.

Reference:

Zajac, S. & Scully, F. 2004. Excavations of an enclosure at Castlegar, County Mayo. *Journal of the Galway Archaeological and Historical Society*, 56, 22–36.

Inishkea North, Co. Mayo
Early Medieval Ecclesiastical Settlement.
Grid Ref: **F57002253 (057009/322530)**
SMR No: **MA023-014001-6**
Excavation Licence: **N/A**
Excavation Duration/Year: **June 1938**.
Site Director: **F. Henry (University College Dublin)**.

The site consists of a small ecclesiastical community based around a stone-built church to St. Columkille, to the south-east of the island (Fig. 234). Three mounds (known locally as 'baileys') were located in this area, and these were the subject of investigation over a number of seasons.

St. Columkille's church is located on the highest point of the island. This is a rectangular dry-stone-walled structure, with an interior space 4.8m by 3.6m in area. The lack of corbelling suggests that the structure must have had a timber roof. A number of potential structures, possibly associated with the church, are located in a neighbouring field. A surface search of a raised circular platform uncovered a number of cross-inscribed stone slabs, presumably relating to burials of the monastic community.

Aside from these ecclesiastical features, three corbelled, stone-built houses were excavated (Fig. 235). The foundations for these appear to have been dug into existing sand dunes. A skeleton - aligned east-west - was found buried beneath House C, and a similarly orientated skeleton was found just outside it. Finds included a dagger and several other pieces of iron; a bone bead; a bone comb; a bone spindle-whorl; and fragments of the scapula of an adult whale which appears to have been used as a chopping block. Finds from House B were later and included three silver pennies of Henry II/Richard I (i.e. late-twelfth century).

Unlike Houses B and C, which have a beehive profile, House A was rectangular in shape. It was also more flimsily built that the other two. Finds included an iron knife; a whale-bone disc; three bone pins; and a broken quernstone.

A possible forge was identified, but not fully excavated. Large numbers of iron clinker was recovered from this area. Later excavations uncovered mounds of broken *Nucella (Purpura) lapillus* (dog-whelk) shells, both in rubbish heaps, and also within a structure which must have been used as a dye-house.

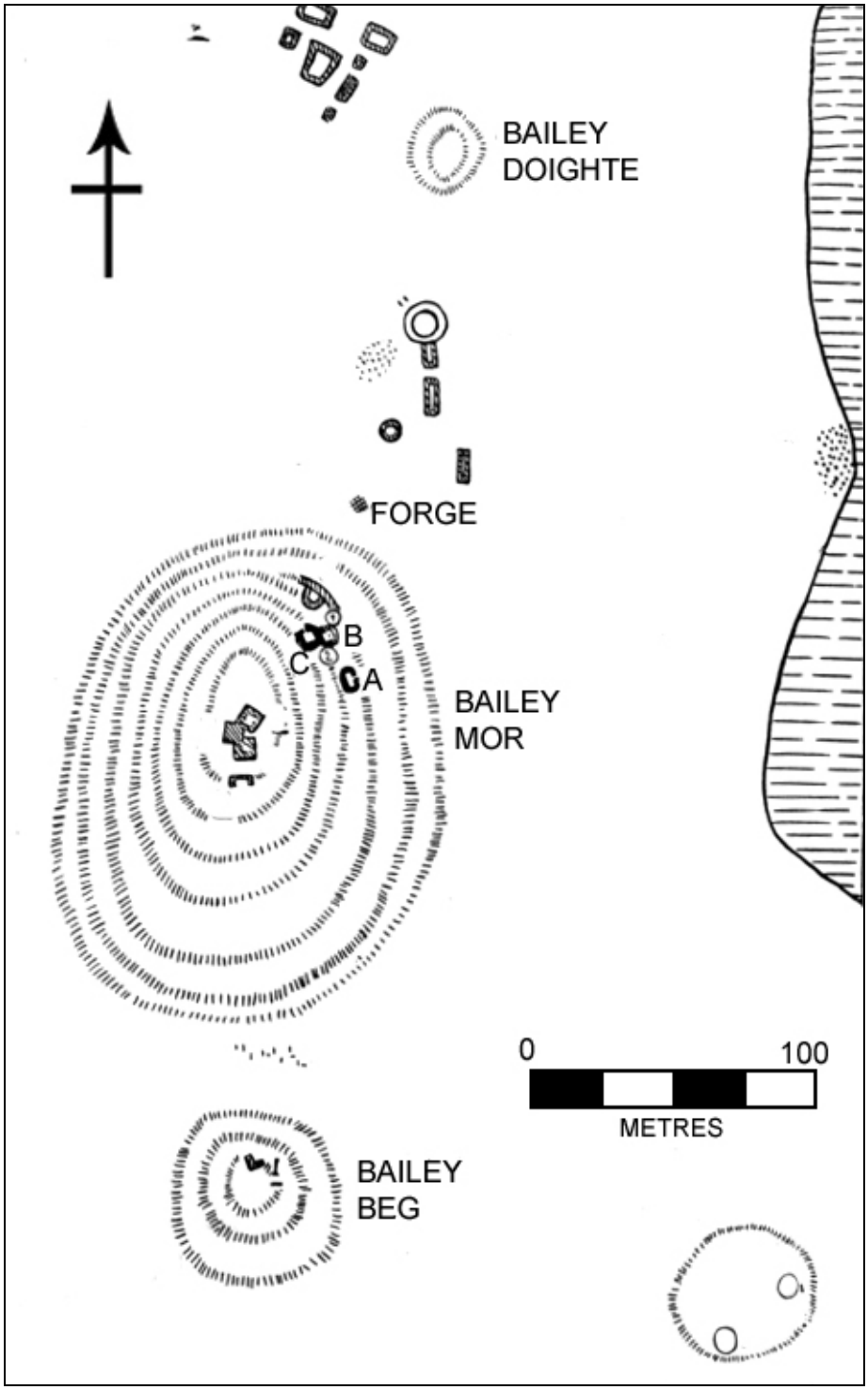


Fig. 234: Plan of ecclesiastical settlement at Inishkea North, Co. Mayo (after Henry 1945, 133).

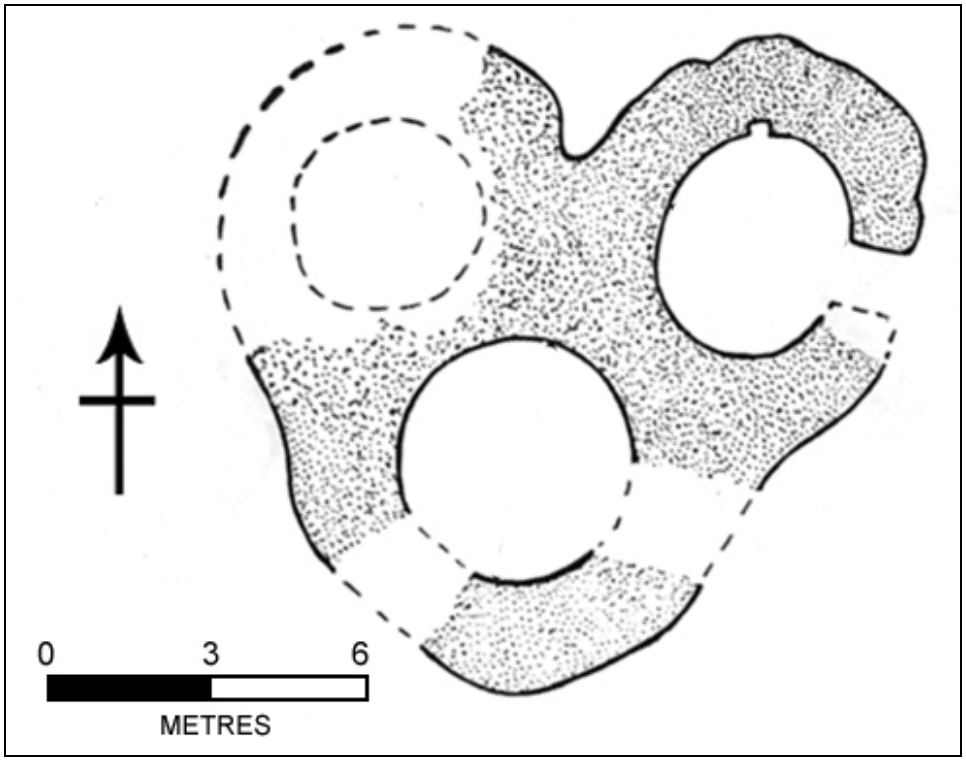


Fig. 235: Plan of House C at Inishkea North, Co. Mayo (after Henry 1945, 149).

References:

Greene, S. A. 2004. Emerging landscapes in Inishkea North. *Archaeology Ireland*, 18(4), 8–11.

Henry, F. 1945. Remains of the Early Christian period on Inishkea North, Co. Mayo. *Journal of the Royal Society of Antiquaries of Ireland*, 75, 127–55.

Henry, F. 1951a. New monuments from Inishkea North, Co. Mayo. *Journal of the Royal Society of Antiquaries of Ireland*, 81, 65–9.

Henry, F. 1951b. Habitation sites on Inishkea North, Co. Mayo. *Journal of the Royal Society of Antiquaries of Ireland,* 81, 75–6.

Henry, F. 1952b. A wooden hut on Inishkea North, Co. Mayo (Site 3, House A). *Journal of the Royal Society of Antiquaries of Ireland*, 82, 163–78.

Letterkeen, Co. Mayo
Early Medieval Settlement Enclosure.
Grid Ref: **F98140759 (098145/307594)**
SMR No: **MA046-004007**
Excavation Licence: **N/A**
Excavation Duration/Year: **1950?**
Site Director: **S.P. Ó Ríordáin (University College, Cork)**.

The site is an enclosure with an internal diameter of 26m surrounded by a bank-and-ditch, with a low external bank beyond the ditch (possibly a bivallate or a counterscarp enclosure) (Fig. 236). The maximum ditch width was 4m and the maximum bank height was 4.5m. In 1935 two Bronze Age 'food vessels' were found on site, which resulted in a number of pits being dug in the interior in search of 'treasure'. The largest hole in the interior, however, resulted from the removal of the souterrain from site, presumably in the nineteenth or twentieth century.

Excavation revealed that the inner face of the inner bank was supported by a stone revetment, and that, on either side of the entrance, a similar stone structure formed the core of the bank (Fig. 237). The low outer bank appears to have included a palisade trench on the outer lip of the ditch. The fence associated with this trench appears not only to have surrounded the site, but also to have framed both sides of the entrance causeway over the ditch and to have ended at the gated entrance into the interior of the enclosure. A series of gate-posts were identified during excavation, suggesting that the gate must have been replaced on a number of occasions. The interconnection between entranceway, ditch, causeway, and palisade trench suggests that they were all contemporary. The souterrain was probably a later addition to the site since it was built into part of the inner bank. Postholes in the floor of the souterrain and grooves in the walls indicate that structural timbers were employed to support the roof, which may also have been of timber.

A timber-posted roundhouse (5.2m in diameter) was located in the interior, which appears to have been linked to the souterrain by a stone pavement. An area of intensive burning just beyond the western wall of this structure appears to have been associated with a trenched feature which was tentatively identified as a kiln. Another setting of stones was identified as a second structure (of indeterminate shape). The associated material – fragments of crucibles and heavily burnt or glazed clays – as well as the intensive burning, suggests that this may have been a workshop.

A bronze pin was found on site associated with the early medieval enclosure; as were three glass beads (two blue; one white); a fragment of a blue-glass bracelet; eight fragments of jet bracelets; a crucible; remains of two quernstones; and a whetstone.

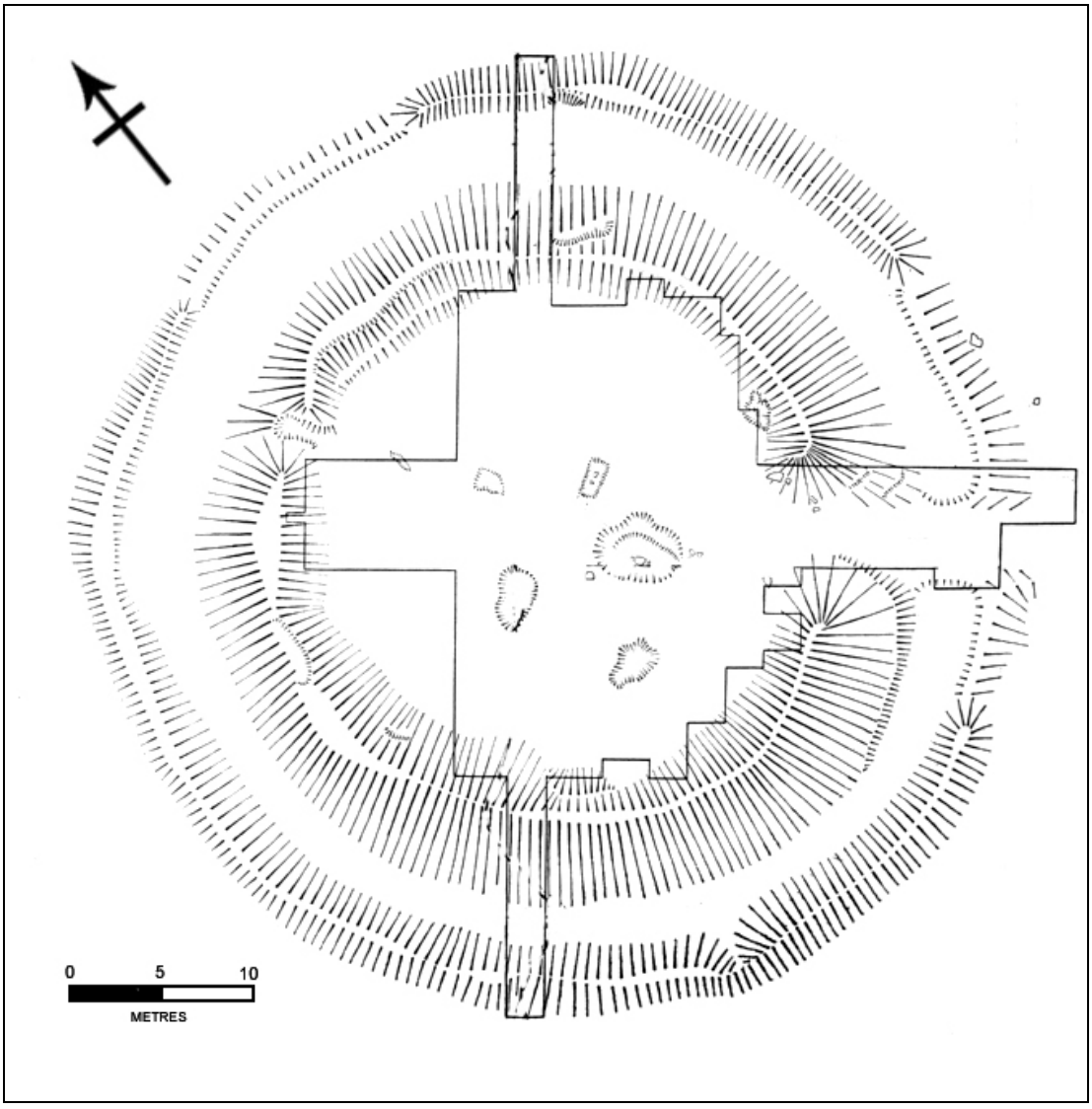


Fig. 236: Plan of excavations at Letterkeen, Co. Mayo (after Ó Ríordáin & MacDermott 1951-2, Plate XVIII).

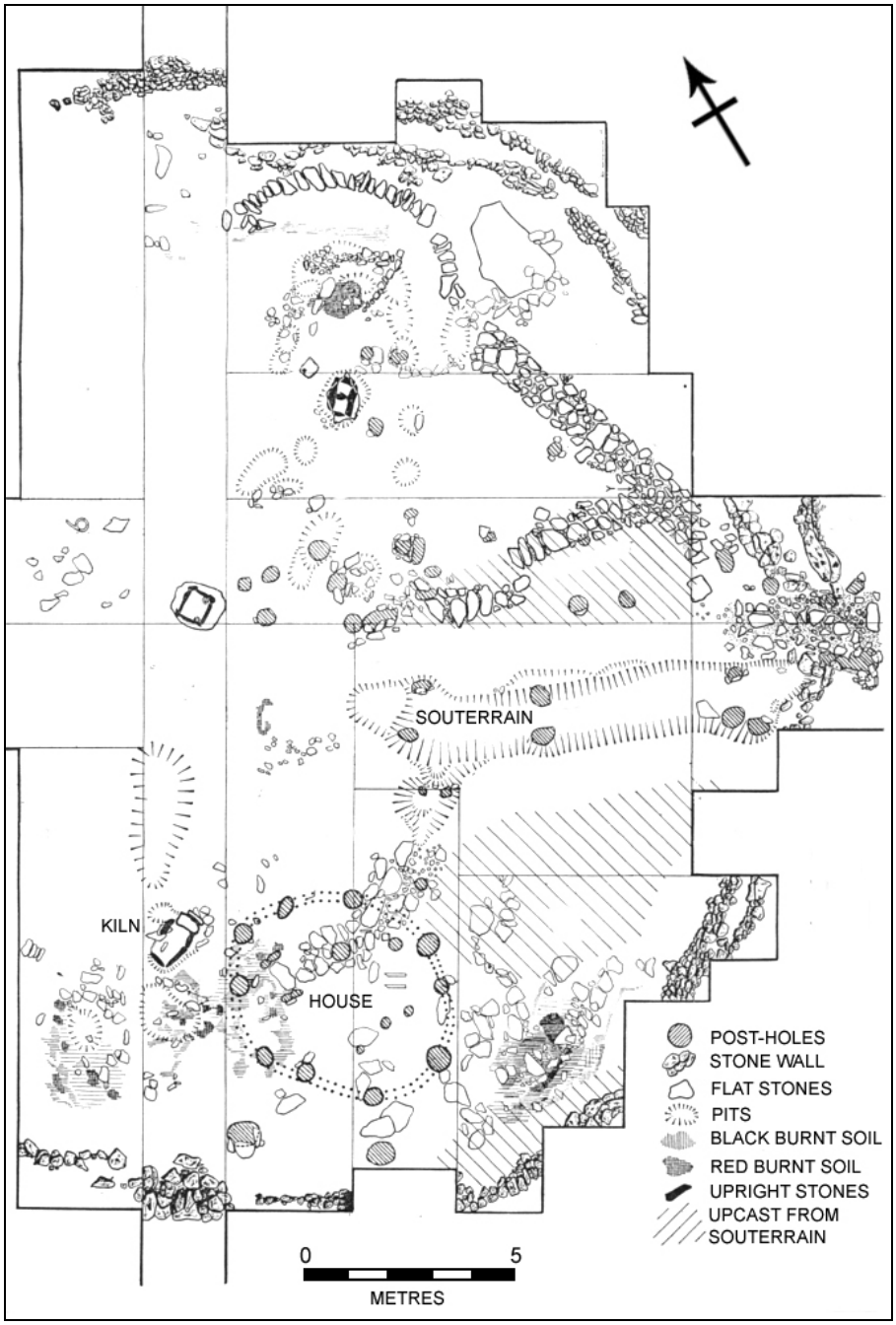


Fig. 237: Features near entrance at Letterkeen, Co. Mayo (after Ó Ríordáin & MacDermott 1951-2, Plate XIX).

References:

Ó Ríordáin, S. P. 1951. Ringfort, Letterkeen townland, Co. Mayo. *Journal of the Royal Society of Antiquaries of Ireland*, 81, 71

Ó Ríordáin, S. P. & MacDermott, M. 1951–2. The excavation of a ringfort at Letterkeen, Co. Mayo. *Proceedings of the Royal Irish Academy Section C*, 54C, 89–119.

Lislackagh, Co. Mayo
Early Medieval Settlement Enclosure.
Grid Ref: **M35679758 (13567/29758)**
SMR No: **MA071-042**
Excavation Licence: **92E0152**
Excavation Duration/Year: **September 1992 – March 1993.**
Site Director: **G. Walsh (for Mayo County Council)**.

The site consisted of a severely truncated enclosure (38.5m by 39.5m in internal diameter) which had been almost completely levelled in the late-1970s (Fig. 238); excavation was required in 1992 to facilitate the construction of the Swinford by-pass.

Excavation through the ditch recorded a stony basal layer, with subsequent gradual in-fill layers. Animal bones and iron slag were recovered from these contexts. Excavation in the interior of the site revealed evidence for three roundhouses (Fig. 239). House 1 was the largest (4.6m in diameter), and contained the burnt remains of wattle-and-daub. A number of possible internal postholes were also identified, potentially belonging to roof supports. Finds from this building include quantities of animal bone (751 fragments), an (unfinished?) blue glass bead, part of a bronze pin head, fragments of bronze, and iron slag. House 1 appears to have been burnt down, but this does not appear to have been the case with House 2 (3.6m in diameter). Finds from this house include a fragment of bronze and three blue glass beads, as well as quantities of animal bone (499 fragments). House 3 (3.9m in diameter) was the most truncated structure. The fill of the foundation trench for this building included a fragment of iron slag with limestone inclusions which was interpreted as refuse from a failed smelt. An iron smelting furnace pit was later identified on site. Iron slag and smelted iron nodules were recovered from this area.

A number of un-stratified, but diagnostic early medieval artefacts, were recovered from the topsoil. These included two iron 'hooks', an iron knife blade, a yellow glass bead, a calcite bead, and a fragment of a lignite bracelet. Analysis of the faunal assemblage suggests that cattle dominated (with almost 50% of the identified bones). Surprisingly horse was next in order (with almost 40%), although this may be due to taphonomic survival. There were variations between the three houses, for example in House 2 there were only three sheep bones, and no horse bones, whereas in House 3, there were only horse and pig bones.

Although the site appears to be typologically early medieval – a supposition which is supported by the material culture – the dates from the three houses on site are Iron Age (see below). It is possible that the houses substantially pre-dated the enclosure, and any perceived relationship between them was merely coincidental. Given the early medieval nature of some of the finds from these structures, that is an unlikely option. It thus seems most probable that these dates were retrieved from charcoal from structural timbers, and as such, these dates refer, not to the felling date of the tree, but rather to a date when the tree was still growing.

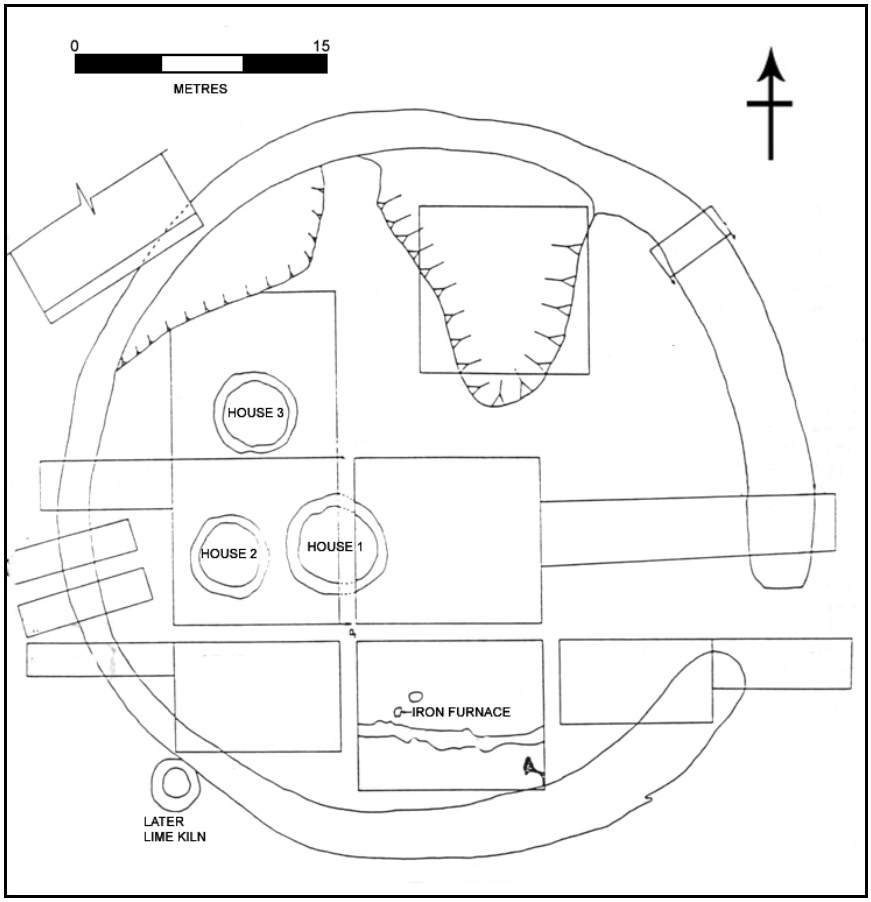


Fig. 238: Plan of excavated area at Lislackagh, Co. Mayo (after Walsh 1995, 8).

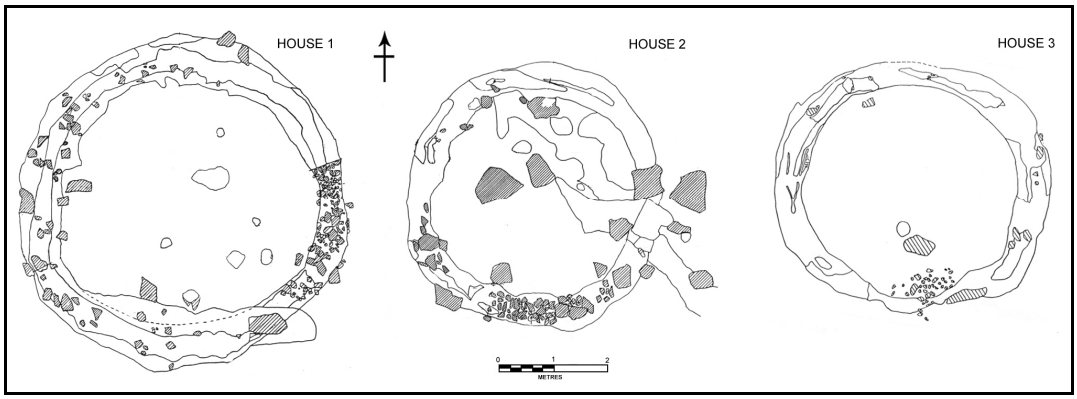


Fig. 239: Roundhouses at Lislackagh, Co. Mayo (after Walsh 1993).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-3764	Charcoal from foundation trench of House 1	2071±35 BP	**183 B.C. – A.D. 2**.
UB-3765	Charcoal from top of foundation trench of House 2	1996±81 BP	**200 B.C. – A.D. 181**; A.D. 187-214.
UB-3766	Charcoal from foundation trench of House 3	2050±49 BP	**186 B.C. – A.D. 54**.

References:

Walsh, G. 1993. Archaeological Excavations on the Swinford By-Pass N5. Unpub'd report for Mayo County Council.

Walsh, G. 1995. Iron Age Settlement in Co. Mayo. *Archaeology Ireland*, 9(2), 7–8.

Moyne, Co. Mayo
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **M255674949 (125678/249491)**
SMR No: **MA123-060002**
Excavation Licence: **N/A**
Excavation Duration/Year: **September – November 1982.**
Site Director: **C. Manning (National Parks and Monuments Branch, Office of Public Works)**.

The site consisted of a large enclosure (135m by 125m) and a ruined church, surrounded by a stone-wall, set on a patch of pasture located between a bog and rocky terrain. Aerial photographs of the site showed that the interior of the enclosure had been subdivided by a system of earthworks. The graveyard was still in use, and the site was excavated after purchase by Mayo County Council required the provision of an access road.

A series of trenches were excavated inside the enclosure (Fig. 240). These trenches cut across some of the internal features revealing that some were post-medieval field walls, but also revealing that some were early medieval ditches. The ditches may have been associated with the ecclesiastical site however it is also possible that they were associated with an earlier secular site, which the excavator argues may have preceded the foundation of the church site.

Finds from these trenches included a number of un-diagnostic objects, but nevertheless the types of artefacts which are generally associated with early medieval sites - four iron knives; a piece of worked bone; iron slag; a piece of sheet bronze; an iron pruning hook; half of a set of iron shears; and an iron disc-headed pin. Quantities of animal bone recovered from the trenches are dominated by cattle and pig, although a large number of red deer bones were also found on site, as well as sheep, horse, otter, cat and dog.

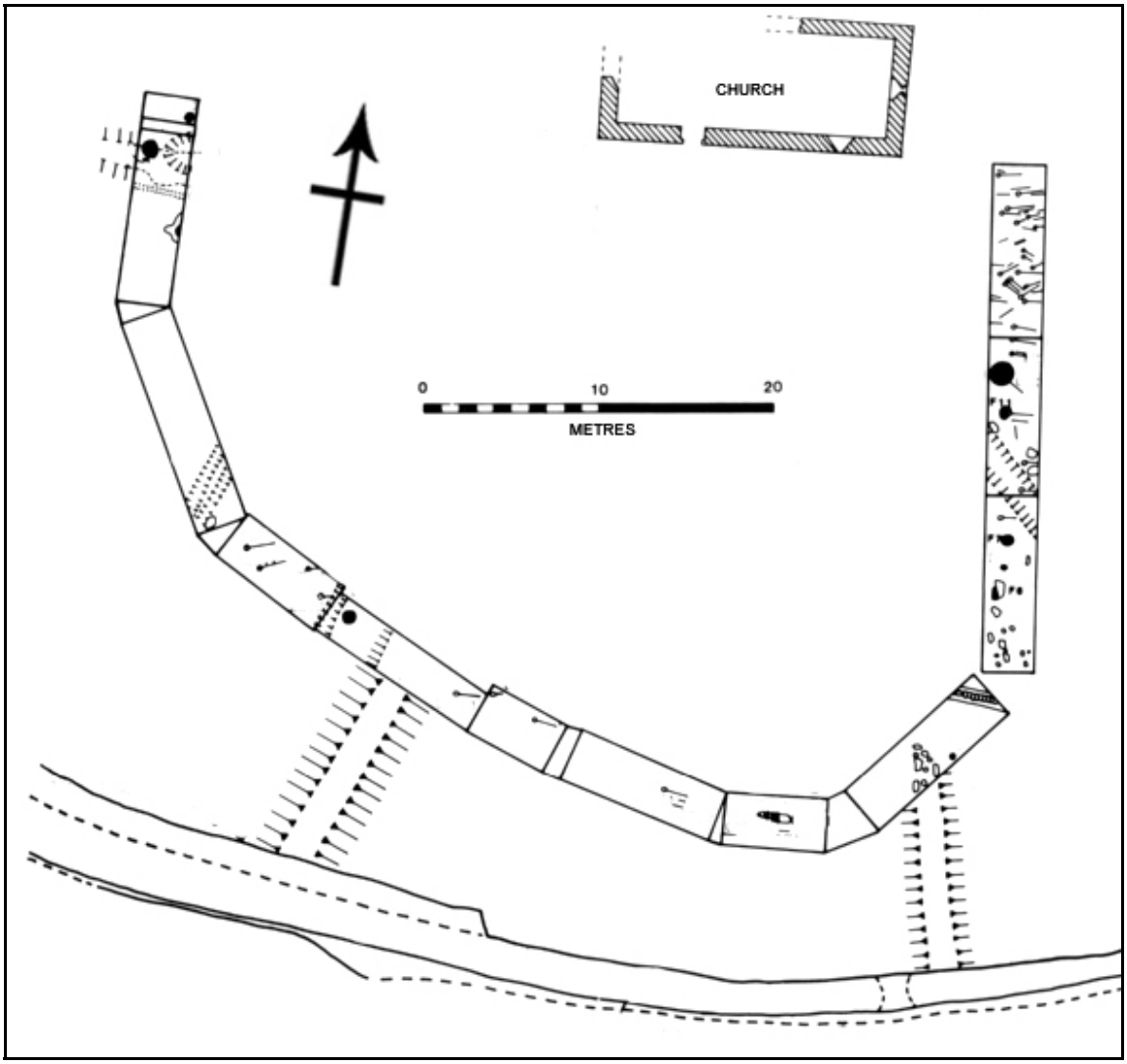


Fig. 240: Plan of excavated area at Moyne, Co. Mayo (after Manning 1987, 46).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
GU-1783	Human bone from lintel grave	1090±85 BP	A.D. 713-745; **A.D. 767-1057**; A.D. 1076-1154.

References:

Manning, C. 1987. Excavation at Moyne graveyard, Shrule, Co. Mayo. *Proceedings of the Royal Irish Academy Section C*, 87C, 37–70.

County Meath

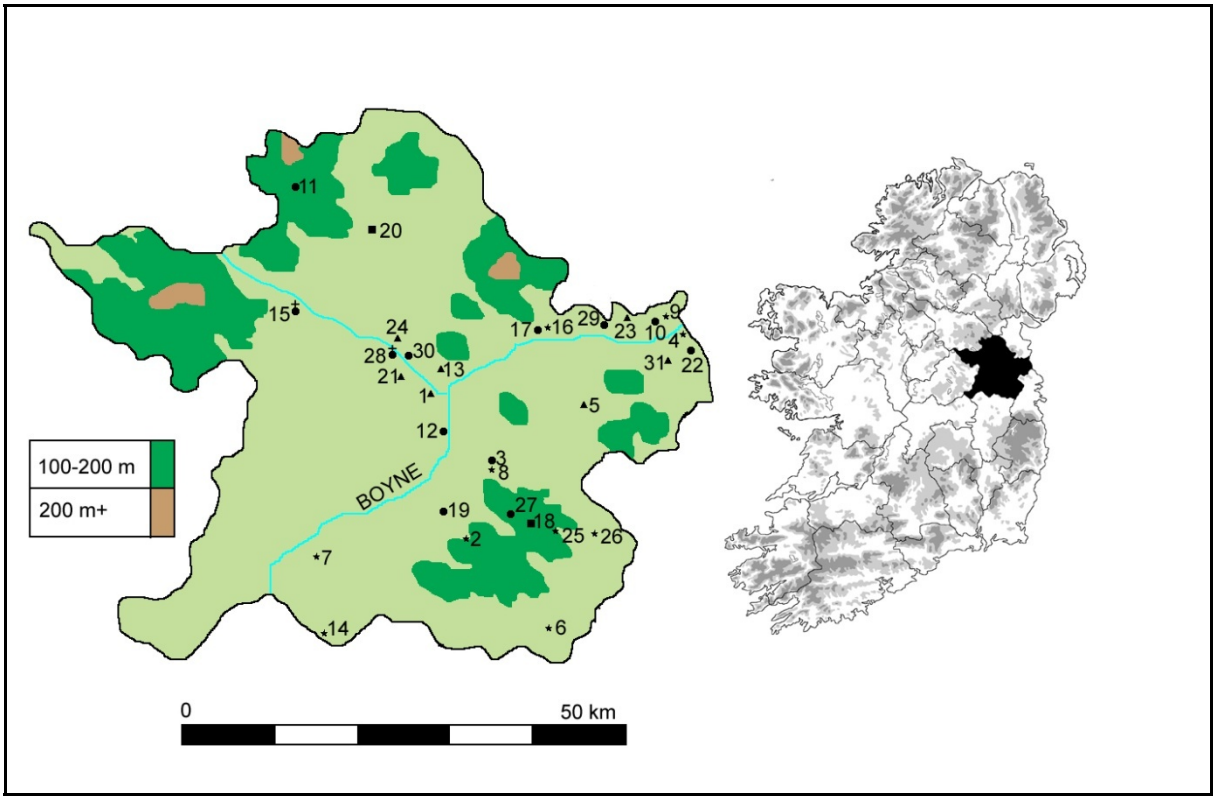


Fig. 241: Significant early medieval excavations in Co. Meath.

1	Athlumney	**12**	Dowdstown	**23**	Platin
2	Augherskea	**13**	Ferganstown	**24**	Randalstown
3	Baronstown	**14**	Johnstown	**25**	Ratoath
4	Betaghstown	**15**	Kells	**26**	Raystown
5	Boolies Little	**16**	Knowth 'M'	**27**	Roestown
6	Castlefarm	**17**	Knowth	**28**	St. Anne's
7	Cloncowan	**18**	Lagore Crannog	**29**	Sheephouse
8	Collierstown	**19**	Madden's Hill	**30**	Simonstown
9	Colp West	**20**	Moynagh Lough	**31**	Smithstown
10	Colp West	**21**	Nevinstown		
11	Cormeen	**22**	Ninch		

Athlumney, Co. Meath
Souterrain Complex and Scandinavian Burial
Grid reference: **N881336669 (288133/266695)**
SMR No: **ME025-049**
Excavation License No: **97E322; 98E0596**
Excavation Duration/Year: **September 1997, January - March 1999**
Site director: **E. O'Sullivan (Margaret Gowen and Co. Ltd.); C. Jones (Freelance)**

Four souterrains on the high east bank of the River Boyne, and a Scandinavian burial are recorded within the townland of Athlumney, Co. Meath in close proximity (Fig. 242).

Two souterrains were identified within a quarry at Athlumney in a field above the flood-plain of the River Boyne. Subsequent test excavation in 1997 found that no archaeological features were associated with them within the areas investigated. Further excavation, in advance of the construction of a business park in 1999, revealed another two souterrains, an overlying occupation layer and several large ditches in the area.

Souterrain 1 was truncated by the quarry and survived as a short section of passage and a small portion of a circular chamber.

Souterrain 2 – which was preserved in good condition – had a ramped entrance, two right-angled left-hand turns in a gradually descending passage, a drop-creep, another short section of passage and a T-junction with a passage that terminated at each end in a beehive-shaped chamber. The entrance to the souterrain was deliberately blocked with a fill of midden material and stones.

Only the top stones of Souterrain 3 were exposed and it was not excavated. The portion exposed was a 6.5m length of straight passage.

A potential fourth souterrain was identified but not excavated. The exposed section revealed a dry-stone wall that was three courses high. It is likely this represented the outside souterrain passage wall. Two hearths and a shallow ditch were associated with an occupation layer that had not been disturbed by the quarry. Several large ditches were also discovered. All contained charcoal and/or animal bone. They appeared to represent multi-phase activity at the site because they did not form an integrated pattern that would suggest a single-phase enclosure.

Finds were limited and included two bone pins, a glass bead, fragments of lignite bracelets, a bone bead, a few lithic flakes and some metal items. Carbonised remains of both domestic (oats, barley, rye and wheat) and wild plants were recovered.

A Scandinavian presence is suggested in Athlumney by a horse skeleton that was found with a collection of horse furnishings and some human bones (Harrison 2001, 72). Downham (2003/04) suggests that the burial may be linked to the base at Rossnaree. However, it is more likely that the burial – accompanied with a mount, a bridle-bit, four bronze-plated iron rings and seven decorated plaques – belonged to a settlement, possibly a *longphort* site, at Athlumney on the eastern bank of the River Boyne (Clinton 2000, 386-8). Clinton (2000, 388) interprets the burial as being female which would imply a more permanent type of settlement whereas Harrison (2001, 65, 72) believes that the presence of a large amount of horse bones indicates the ritual deposition a male with a horse burial. Either way, it is more likely that this burial occurred in an area – where the rivers Blackwater and Boyne merge – that featured some form of Scandinavian settlement in the ninth century.

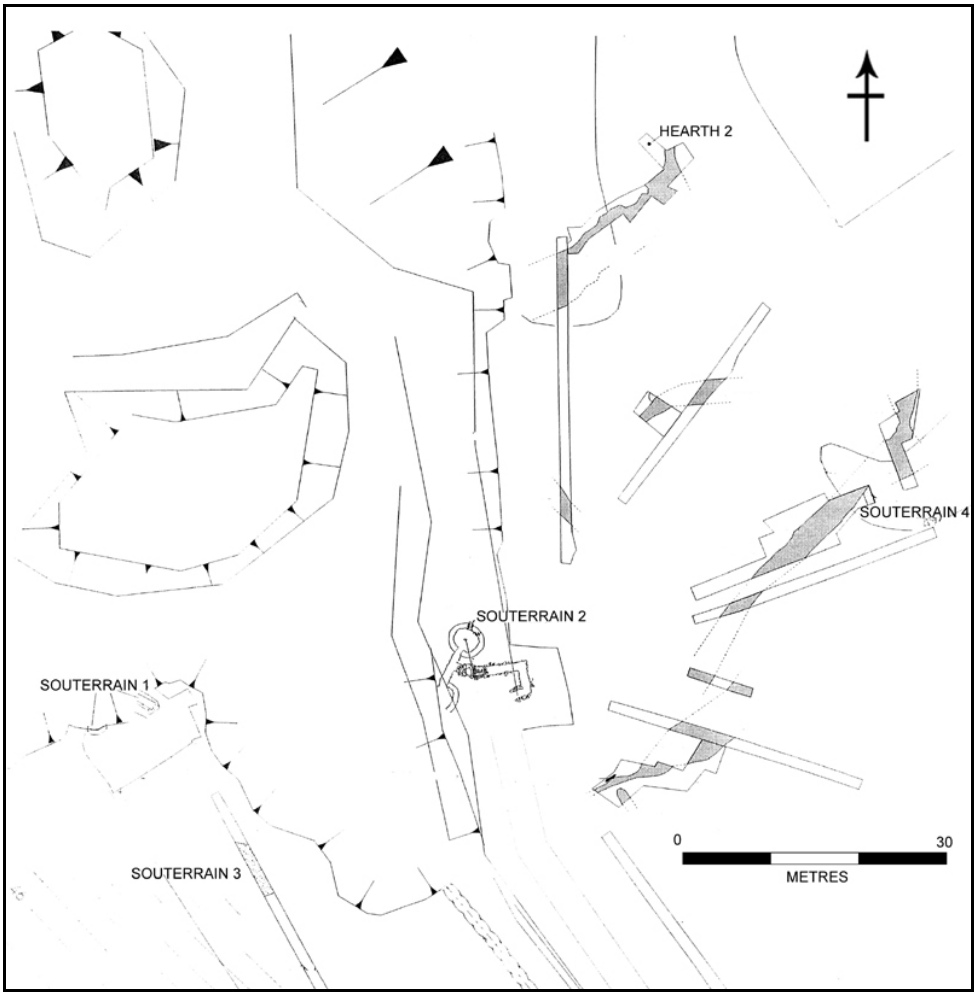


Fig. 242: Plan of excavations at Athlumney, Co. Meath (after Jones 1999).

References:

Jones, C. 1999. Archaeological Excavations of Souterrains and Associated Features at the IDA Business Park, Athlumney, Navan. Unpub'd Excavation Report.

Clinton, M. 2000. Settlement dynamics in Co. Meath: the kingdom of *Lóegaire*. *Peritia* 14, 372–406.

Downham, C. 2003/04. The Vikings in southern Uí Néill to 1014. *Peritia* 17/18, 233–55.

Harrison, S. 2001. Viking graves and grave-goods in Ireland, in A. Larsen (ed.) *The Vikings in Ireland*, 61–75. Roskilde. Viking Ship Museum.

Jones, C. 1999:701. Souterrains, IDA Business Park, Kilcarn, Athlumney, Navan, Co. Meath. www.excavations.ie.

O'Sullivan, E. 1997:424. Athlumney House, Kilcarn, Co. Meath, possible souterrain. www.excavations.ie.

Augherskea, Knockmark, Co. Meath
Early Medieval Settlement/Cemetery
Grid reference: **N91675166 (291678/251668)**
SMR No: **ME043-049**
Excavation License No: **02E1229**
Excavation duration: **August - November 2002**
Site director: **C. Baker (Margaret Gowen and Co. Ltd.)**

Excavation in advance of the gas pipeline to the west at Augherskea, Knockmark, revealed a cemetery that was bounded by settlement evidence to the west and agricultural features to the east (Fig. 243). The extent of excavation included an area measuring 100m east-west by 20m which formed the pipeline corridor.

The burial ground was enclosed by a U-shaped ditch, which was 2.3m wide and 0.9m deep, on its eastern side and intersecting ditches to the west that resulted in a maximum east-west dimension of approximately 63m. The northern and southern enclosure ditches were identified through geophysical survey and indicated an enclosure measuring approximately 65m north-south.

A total of 187 burials were revealed in two excavated areas. Eighty six burials were identified in Area 1 and 101 in Area 2. Many of the graves were cut and truncated by other internments which resulted in significant deposits of disarticulated bone. The majority of burials were extended and aligned west-east. The only finds associated with the burials included a shroud pin and an iron nail.

Two separate areas, that were indicative of settlement, were located immediately west of the cemetery. The northern area consisted of a series of inter-cutting drains and gullies. Artefacts from this area included a ringed pin, a decorated bone comb fragment and a blue glass bead. The southern area included a series of inter-cutting pits and gullies. Agricultural activity was apparent to the east of the burial ground and consisted of a series of drainage ditches and gullies which were cut by cultivation furrows. A fragment of a lignite bracelet was the only find recovered from the furrows.

A total of 80 artefacts were recovered at Augherskea although half were un-stratified due to the truncated nature of the site.

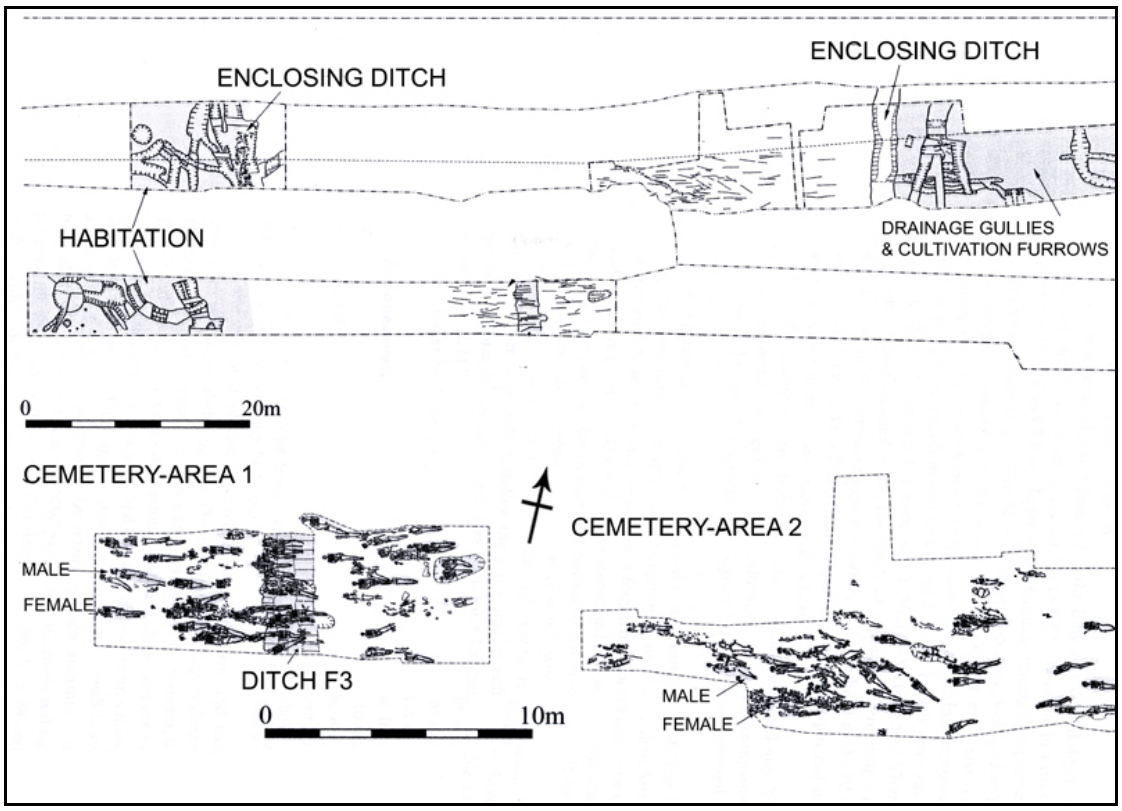


Fig. 243: Plan of Augherskea, Co. Meath (after Baker 2007).

Reference:

Baker, C. 2007. Augherskea, early medieval cemetery, in E. Grogan, L. O'Donnell & P. Johnston (eds.) *The Bronze Age Landscapes of the Pipeline to the West*, 316–8. Bray. Margaret Gowen and Co. Ltd. Wordwell.

Baronstown, Co. Meath
Early Medieval Settlement Enclosure Complex
Grid reference: **N94405936 (294401/259365)**
SMR: **N/A**
Excavation Licence No: **A008/017**
Excavation duration: **September 2006 – April 2007**
Site director: **S. Linnane (ACS Ltd.)**

Baronstown excavated in advance of the M3 road-scheme was a large early medieval enclosure complex (Fig. 244). It appears to have functioned as a well fortified farmstead in its early years but its importance gradually declined until its abandonment probably in the tenth or eleventh centuries. Artefacts were relatively scarce for a site of this scale but a successful mixed agricultural economy was evident by a large animal bone assemblage and the presence of a number of cereal-drying kilns. The site was located on the summit of a small hill – at 112m OD – and the ground sloped steeply down to the River Gabhra to the west and more gently to the north. This afforded the site a prominent position within the immediate landscape and resulted in commanding views to the north, east and west. The lower ground in these areas would have been subject to flooding prior to canalisation of the river.

The first early medieval phase at Baronstown witnessed the construction of a circular enclosure which had an internal diameter of 40m. The enclosing ditch was on average 4m wide and 3m in depth and was re-cut on numerous occasions. The ditch became smaller after each re-cut and it appears its defensive role receded as the centuries passed. One of the primary ditch fills was dated to A.D. 540-654 while a later deposit returned a date of A.D. 880-1022 (see below for radiocarbon dates). The radiocarbon dates, ditch re-cuts and finds assemblage indicate that the circular enclosure was in use across many centuries.

Few features survived internally within the initial enclosure and this is likely due to many centuries of farming activity and truncation of the archaeological deposits. The most significant feature was a C-shaped enclosure with its open end to the north. It had an internal diameter of 14m and at its greatest was 2.8m wide and 0.93m deep. Two re-cuts were noted within the ditch fills and the primary fill was dated of A.D. 645-772. This suggests that the enclosure was constructed slightly later than the circular enclosure but they would also have been in use contemporaneously for a considerable time. Its function remains unclear. It was too big to have acted as a drainage ditch while it probably did not enclose a house as early medieval dwellings are not generally enclosed by such features and, when circular, they tend to be found closer to the middle of enclosures.

An outer enclosure – that enclosed the circular enclosure – was dug at approximately the same time as the C-shaped enclosure. Radiocarbon dates from its basal fills were slightly later than those of the circular enclosure and ranged from A.D. 687-895 and A.D. 684-887. Two ditch re-cuts were evident and, similarly to the primary circular ditch, the ditch became smaller after each modification. A causewayed entrance was located at the west which faced the Gabhra River. The new enclosure was dug close to the circular ditch at its south side but gradually diverged, moving northwards, along the east and western sides to eventually create a much larger enclosure which measured 70m west-east by 30m north-south. Therefore, Baronstown expanded in size within a few generations of the site's primary use.

The entrance into the circular and outer enclosure was located to the southeast. It consisted of linear cuts in the subsoil which extended from the internal edge of the inner ditch, across the area between the inner and outer ditches and beyond the outer edge of the latter ditch. It appears that large timbers were placed in the cuttings which formed the base of a bridge. Successive layers of metalling were found in the area to the south of the outer ditch which reinforces the theory that a bridge was utilised here. A scatter of pits and postholes in the vicinity of the bridge crossing may indicate the location of a timber gatehouse but the surviving features were too flimsy to attempt any form of accurate reconstruction. Of interest

was the burial of a horse's skull in a pit central to the internal edge of the bridge crossing; possibly a foundation deposit, revealing the continuation of pagan practices or at least demonstrating a continuation of past traditions or superstitions after the arrival of Christianity.

A complex sequence of dividing ditches and gullies, which created small plots, was situated to the north and west of the circular enclosure and mostly within the outer enclosure. Their stratigraphic relationships were difficult to determine and they were also, unfortunately, devoid of datable material and chronologically diagnostic artefacts. The ditches probably functioned as drainage channels and may also have demarcated vegetable and/or cereal plots. It is likely that they were related to the later expansion of the site when the outer enclosure was constructed.

Further enclosure activity occurred to the north of the outer enclosure consisting of a northern annex and smaller D-shaped enclosure. The primary fill of the annex ditch was dated to A.D. 564-666 which is earlier than the dates from the outer enclosure. This could be interpreted as an anomaly because the annex ditch respected the outer enclosure. However, it is also possible that this was an external plot or field that was contemporary with the circular enclosure and it was subsequently cut by/appended onto the later outer enclosure.

Two oval enclosures were revealed beyond the confines of the outer enclosure. The enclosure to the north – radiocarbon dated to A.D. 383-560 – was oval, with internal dimensions of 8.2m x 5.93m. Two lengths of curving ditch that formed an oval enclosure were situated to the south of the site. This had internal dimensions of 9m by 8.2m. A radiocarbon date of A.D. 530-648 was retrieved from the structure. A cereal-drying kiln was located in the latter and one of the enclosure's gullies from the former contained charcoal, cereal grains, chaff from cultivated oats and barley as well as weed seeds. It is likely therefore that the enclosures were related to arable activity, such as cereal processing, rather than features that enclosed or defined a dwelling.

A total of 29 pits and depressions – many of which were hearths – had evidence of burning either through charcoal-rich fills or oxidisation of clays. Dated examples spanned the fourth until the twelfth centuries and it appears that the majority had a domestic rather than industrial function.

The finds assemblage from Baronstown was small. Personal dress items included a ringed pin, nine bone pins, a bird-headed brooch (which dates to the seventh century), a glass bead, a composite bone comb fragment and a fragment of curved tubing from a bracelet. Functional items included iron blades, a needle, a spindle whorl, a spherical lead weight with broken iron attachment and various fragments of unidentifiable objects. Due to the waterlogged nature of the circular enclosure ditch, 308 wooden artefacts were recovered including bucket and barrel staves, a near intact turned wooden bowl and an associated wooden scoop. The nature of the wooden artefacts, often broken or degraded, indicated that the inner enclosure ditch was used as a repository for domestic waste material. Iron slag was also present in a number of contexts although no metallurgical features were present. This suggests that much of the ironworking process occurred off-site but in the proximity to the settlement.

Animal bone occurred in large quantities at Baronstown. The three main domesticates of cattle, sheep/goat and pig dominated the faunal assemblage and beef accounted for more than 80% of meat for all phases, with pig being the next most important meat source. No specialised dump areas (associated with activities such as primary butchery or craftwork) were observed. The assemblage would therefore seem to represent the domestic refuse of the site's inhabitants.

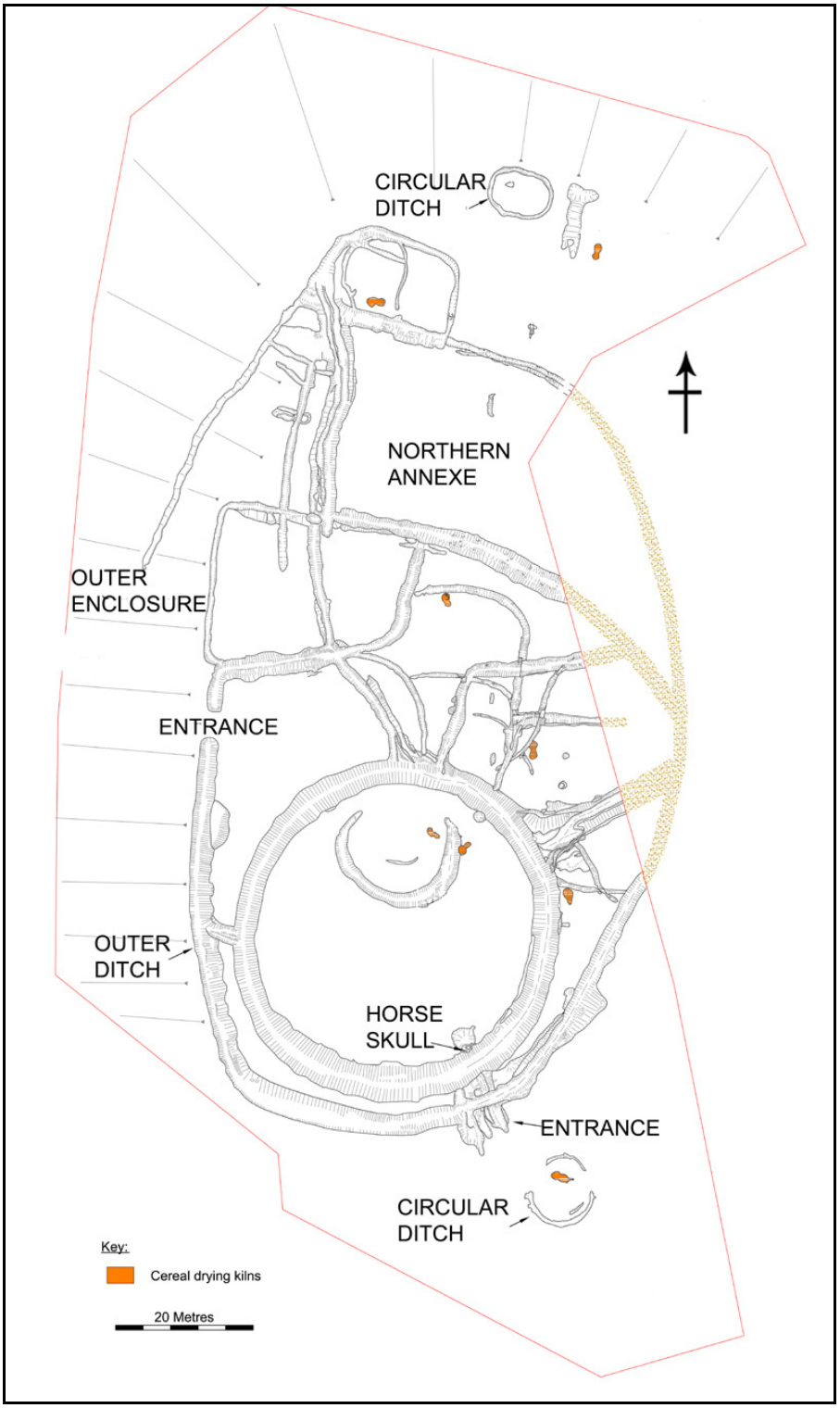


Fig. 244: Plan of Baronstown, Co. Meath (after Linnane & Kinsella 2007).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-252086	1284: Animal bone from primary fill of circular enclosure ditch	1460±40 BP	**A.D. 540-654**
Beta-252084	1045: Animal bone from upper fill of circular enclosure ditch	1090±40 BP	**A.D. 880-1022**
Beta-252087	2215: Animal bone from primary fill of C-shaped enclosure	1330±40 BP	**A.D. 645-772**
Beta-252085	1048: Animal bone from primary fill of outer enclosure ditch	1210±40 BP	**A.D. 687-895**; A.D. 925-936
Beta-247023	3426: Hazel from fill of outer enclosure ditch	1230±40 BP	**A.D. 684-887**
Beta-252091	4094: Animal bone from primary fill of northern annex ditch	1420±40 BP	**A.D. 564-666**
Beta-252088	3017: Barley from fill of oval enclosure	1600±40 BP	**A.D. 383-560**
Beta-252083	1019: Animal bone from fill of oval structure	1490±40 BP	A.D. 436-489; A.D. 513-516; **A.D. 530-648**
Beta-247021	2292: Hazel from fill of hearth	940±40 BP	**A.D. 1019-1185**
Beta-247019	2143: Charred oat grain from fill of hearth	1610±40 BP	A.D. 349-368; **A.D. 379-547**
Beta-247022	3421: Charred barley grain from fill of hearth	1230±40 BP	**A.D. 684-887**
Beta-247027	4163: Charred barley grain from fill of hearth	1660±40 BP	**A.D. 257-301; A.D. 317-443**; A.D. 448-463; A.D. 483-532
Beta-247014	1024: Charred barley grain from fill of cereal-drying kiln	1280±40 BP	**A.D. 658-783**; A.D. 787-824; A.D. 841-861
Beta-247016	1106: Charred barley grain from fill of cereal-drying kiln	1450±40 BP	**A.D. 547-655**
Beta-247017	1151: Ash from fill of kiln	1580±40 BP	**A.D. 402-568**
Beta-247018	1347: Charred barley grain from fill of kiln	1580±40 BP	**A.D. 402-568**
Beta-247020	2182: Maloideae from fill of kiln	1500±40 BP	**A.D. 434-492**; **A.D. 508-519; A.D. 528-643**
Beta-247024	3447: Hazel from fill of kiln	1580±40 BP	**A.D. 402-568**
Beta-247026	3563: Hazel from fill of kiln	1560±40 BP	**A.D. 415-584**
Beta-247028	4202: Charred barley grain	1640±40 BP	A.D. 263-277;

	from fill of kiln		**A.D. 330-537**

References:

Linnane, S. & Kinsella, J. 2007. Fort Baronstown? Exploring the social role of an impressive ringfort on the M3. *Seanda*, 2, 57–9, Dublin. National Roads Authority.

Linnane, S. & Kinsella, J. 2009a Report on the Archaeological Excavation of Baronstown 1, Co. Meath. Unpublished report prepared for Archaeological Consultancy Services Ltd. Available on www.m3motorway.ie

Linnane, S. & Kinsella, J. 2009b Military lords and defensive beginnings: a preliminary assessment of the social role of an impressive rath at Baronstown. In M. Deevy and D. Murphy (eds.) *Places Along the Way: First Findings on the M3*, 101–22. National Roads Authority Scheme Monograph Series 5. Dublin. National Roads Authority. Wordwell.

Betaghstown (Bettystown), Co. Meath
Early Medieval Settlement Enclosure and Cemetery
Grid references: **O15907300 (31490/27300); O15607320 (31560/27320); O14907340 (31490/27340); O15707325 (31570/27325); O15647331 (31564/27331)**
SMR No: **ME021-010; ME021-019**
Excavation Licence No: **98E0072; 01E1170; 02E1709; 04E0533; 04E1649; 05E0005**
Excavation duration/year: **Multiple excavations between 1977 and 2004**
Site directors: **E.P. Kelly (National Museum), R. Meenan, J. Eogan, E. Halpin, E. Kieran, J. Lehane (ADS Ltd.), L. Clarke, D. Murphy (ACS Ltd.)**

Excavations occurred initially in Betaghstown in the late 1970s and an intensification of development from the late 1990s produced further archaeological investigations that revealed a range of features dating from prehistory until the post medieval period. Early medieval activity is preset in the form of settlement and burial evidence. Many of the excavations occurred on part of – and adjacent to – a low ridge overlooking the sea just south of the village of Betaghstown.

Initial excavations at Betaghstown revealed a small cemetery and a Bronze Age cist burial to its west (ME021-010). The former consisted of 16 graves which potentially date to the late prehistoric and early medieval periods. The majority were extended inhumations in unlined graves and two were stone-lined. An iron object, perhaps a strap end, was found in one of the graves containing the skeleton of a child. Two of the burials were in crouched positions and two later extended burials were in slab-lined graves, one of which cut into one of the crouched inhumations One of the former was accompanied by two penannular brooches, dating to the late Iron Age, and an iron belt buckle. A stone axe pendant was suspended from the neck and a bronze plate, perforated at each end, seems to have served as a hair ornament. Remains of two types of textile and of a hair net were present in the grave.

Excavation – in advance of a residential and commercial development – approximately 20 years after Kelly's investigations revealed three main phases of archaeological activity to the south of the above cemetery. These consisted of a Neolithic timber circle, an early Bronze Age flat cemetery and a larger cemetery that extended along the top of the ridge. The latter consisted of 55 extended west-east inhumations. The majority were buried in simple stone-lined pits although three burials were interred in lintel graves and six were found in slab-lined graves. The cemetery cut the earlier Neolithic timber circle and likely dates to the late prehistoric and early medieval periods.

An archaeological assessment in advance of a proposed residential development site at Narrow Ways in Betaghstown revealed the partial remains of two disarticulated skeletons potentially dating between the late prehistoric and early medieval periods.

Further testing and excavation in the areas in proximity to the above sites revealed a burnt mound trough with associated midden and roasting pits, linear ditches, an unstratified skeleton, possible cremation pits and a series of curvilinear ditches that enclosed a souterrain. The souterrain was situated in the northern area of the enclosure and was constructed of water-rolled stones. Several habitation layers were recorded. A decorated bone comb was found in association with a stone floor at the western terminus where the entrance was potentially located.

The most recent excavations at Betaghstown uncovered a curving ditch, which probably formed a complete enclosure, near the above cemetery (ME021-010). It was filled with shell, animal bone and pieces of waste flint. This ditch enclosed three large oval-shaped pits that were probably the remains of refuse pits. Charred plant remains – identified as hulled barley and oats – and charred wood – identified as apple, cherry/plum, willow, ash and hazel – were

recovered from the pits. One of the pits was dated to A.D. 430-620. Four roughly circular pits were identified to the north of the ditch. A scatter of small charcoal and oxidised clay spreads were also identified across the site. Charcoal recovered from one of the spreads returned a radiocarbon date of A.D. 550-660. Animal bone – identified as cattle, sheep, pig, horse, dog, deer and cat – was recovered from the features in this area of the site and the assemblage is typical of occupation debris from a nearby settlement. The molluscan remains also represent food debris and were predominantly cockles and mussels.

(No plans were available for this site).

References:

Eogan, J. 1998:502. Bettystown**,** Co. Meath. www.excavations.ie.

Clarke, L. 2001:945. Narrow Ways, Bettystown, Co. Meath. www.excavations.ie.

Halpin, E. 2002:1430. Betaghstown, Bettystown**,** Co. Meath. www.excavations.ie.

Kelly, E. P. 1977/79:0056. Betaghstown**,** Co. Meath. www.excavations.ie.

Kelly, E. P. 1977/79:0057. Betaghstown**,** Co. Meath. www.excavations.ie.

Kieran, E. 2004:1186. Betaghstown**,** Co. Meath. www.excavations.ie.

Lehane, J. 2004:1187. Bettystown, Co. Meath. www.excavations.ie.

Meenan, R. 1998. Bettystown (Betaghstown townland)**,** Co. Meath. www.excavations.ie.

Murphy, D. 2004:1186. Betaghstown**,** Co. Meath. www.excavations.ie.

Murphy, D. 2005:1158. Betaghstown**,** Co. Meath. www.excavations.ie.

O'Brien, E. 1992. Pagan and Christian burial in Ireland during the first millennium AD: Continuity and change, in N Edwards & A Lane (eds.) *The Early Church in Wales and the West: Recent Work in Early Christian Archaeology, History and Place-Names*, 130–7. Oxbow Monograph 16. Oxford. Oxbow.

Boolies Little, Co. Meath
Early Medieval Unenclosed Souterrain and Cemetery
Grid reference: **O04166548 (304166/265486)**
SMR No: **ME033-002**
Excavation License No: **N/A**
Excavation duration/year: **October – November 1980**
Site director: **D. Sweetman (Office of Public Works)**

Excavation at Boolies Little occurred after the remains of a souterrain and burials were discovered during land reclamation. The latter were located immediately to the east of the souterrain and some of the burials had been interred before the souterrain was constructed. It appears that both were unenclosed although the extent of excavation meant an enclosure may have existed but was not detected. The site was on top of a low natural north-south ridge.

The souterrain consisted of two almost intact chambers and a partly destroyed passage (Fig. 245). The souterrain passage was constructed with dry-stone walling with some larger boulders placed towards the base. Roofing slabs were absent and had been removed in antiquity. The passage was approximately 1m high but dropped suddenly by 0.5m at its eastern end. This step-down was faced with stone walling and would have allowed someone to stand upright before entering the chambers on either side to the left or right. This lower area was almost square in plan and was 2m high and 1m wide. The walls narrowed slightly at the top and were capped by a large flagstone. The only find associated with the passage was a sherd of late medieval pottery from its upper fill which demonstrates that the souterrain was abandoned prior to the thirteenth century.

The two chambers were directly south and north of the step-down area. Similarly to the passage, they were of dry-stone construction with larger stones at the base. They were corbelled towards the roof and were capped with flagstones. The entrances in both chambers had a double lintel. Rounded cobbled stones were placed on the floor of both chambers and a bone pin and a possible iron plough sock were discovered from under these in the south and north chambers respectively. Another, more distinct, floor level was built over the stones in the latter chamber and animal bone and some charcoal was present.

The remains of a small hearth were situated immediately north of the northern chamber. A few bones and charcoal flecks were found scattered around it. No structural evidence was identified.

The cemetery was located immediately to the east of the souterrain. Its southern chamber destroyed the upper portion of three internments demonstrating that the cemetery was in existence prior to the building of the souterrain. The burials were extended and orientated west-east. The earliest burials were interred in shallow stone-lined graves and some had secondary burials inserted over them. Some of the roof slabs rested on the bodies rather than on the side slabs. Seven of the primary burials were male and nine were females. Just two children were identified. A small number of items were associated with the primary and secondary burials and included two bronze links and a bronze strip fragment.

Potential post medieval burials were interred above the primary and secondary burials in the topsoil. These were in simple unlined graves and many were disturbed by later additions. A halfpenny dating to 1737, nineteenth-century pottery and a piece of glass were found in loose clay associated with this phase of burial activity.

In the absence of radiocarbon dates – but based on grave morphology – it can be deduced that people were burying their dead in Boolies Little sometime during the fifth and sixth centuries prior to the construction of the souterrain potentially a few centuries later. The

cemetery was probably utilised for a few hundred years before it was revisited during the post medieval period where it again became a focus of burial activity.

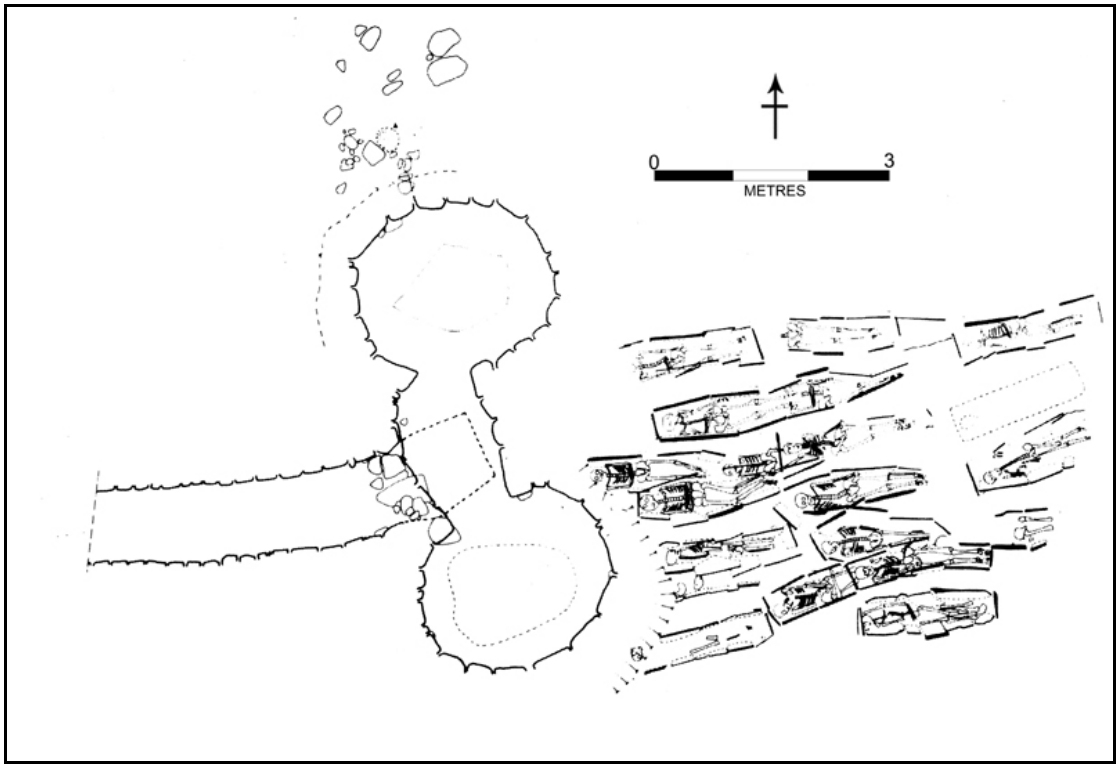


Fig. 245: Plan of souterrain and cemetery at Boolies Little, Co. Meath (after Sweetman 1983, 45).

Reference:

Sweetman, D. 1983. Souterrain and burials at Boolies Little, Co. Meath. *Ríocht na Mídhe,* 7(2), 42–57.

Castlefarm, Co. Meath
Early Medieval Settlement-Cemetery
Grid reference: **O0039416 (300394/241605)**
SMR: **N/A**
Excavation Licence No: **A017/001**
Excavation Duration/Year: **November 2005 – September 2006**
Site director: **A. O'Connell (ACS Ltd.)**

Castlefarm – discovered in advance of the M3 road-scheme – was a multi-phase settlement-cemetery site that was dated between the fifth and thirteenth centuries. Earlier prehistoric activity was also represented by the Neolithic, Bronze Age and Iron Age in the form of lithic objects, a possible burnt mound and a ring-ditch respectively. The site was located a short distance southwest of Dunboyne town on a slightly elevated ridge – at 73m OD – in an area of gently undulating pastureland and was bounded to the north by the River Tolka. Approximately half of the site was excavated.

The primary enclosure at Castlefarm, constructed sometime between the mid-fifth and mid-seventh centuries (see below for radiocarbon dates), was D-shaped and had dimensions of approximately 90m by 70m (Fig. 246). The entrance was at the southwest and consisted of an un-dug causeway. Artefacts from the ditch in this phase included a bone knife handle with ring and dot decoration, iron knife blades and copper-alloy ringed pins. Large quantities of animal bone were also associated with this phase.

At least seven burials – extended with heads to the west – were associated with Castlefarm's initial early medieval phase. They were located outside the enclosure in proximity to the causewayed entrance and both adults and children (males and female) were represented in the small group. A well – also external to the enclosure – was associated with this phase.

The primary enclosing ditch was re-cut on a number of occasions between the seventh and eighth centuries. Artefacts included dress items such as ringed pins, bone pins and lignite bracelets. Functional items included worked bone and antler as well as a variety of iron knives.

The site was considerably enlarged between A.D. 771 and 975 by the construction of an outer enclosure. The D-shaped enclosure was re-cut on its eastern side and the site was expanded to the southwest, west and north. A number of wells were located at the north and west. The new enclosure had dimensions of 110m by 90m. The finds assemblage was comparable to earlier phases and included a variety of dress and functional artefacts. An enclosure annex was constructed at the south of the site and had dimensions of 30m by 20–25m.

The final early medieval modifications to the enclosure occurred between the late eighth and early eleventh centuries. This phase involved a re-cut to the outer enclosure ditch and the incorporation of the enclosure annex. Artefacts included omega pins and penannular brooches and substantial quantities of animal bone were present in the ditch-fills. The latter was present in large quantities throughout the early medieval phases.

Later medieval activity was evident through a re-cut of the outer enclosure ditch and small-scale industrial activity within the inner and outer enclosure ditches. Material culture – in the form of artefacts and animal bone – was not present in large quantities during this phase.

Apart from deep features such as the wells very little survived internally within the enclosures at Castlefarm. Centuries of agricultural activity have erased any domestic features.

Eight large unlined wells – ranging in depth between 1.6–2.5m – were discovered. It is possible that these were related to textile production because numerous sewing needles, spindle whorls, loom beater pins, a weaver's rubbing stone and a loom weight were recovered from some of the enclosing ditch fills.

Small-scale ironworking was evident by the presence of three possible bowl furnaces, a charcoal production pit and the occurrence of iron waste or slag. One of the bowl furnaces was dated to A.D. 564-666 while the charcoal production pit was formed later between A.D. 1035-1225. Evidence for non-ferrous metalworking was also small and included two rough globules of molten copper and a possible copper ingot.

Cereal processing was evident in the form of a figure-of-eight-shaped cereal-drying kiln and the fragments of two rotary quern-stones. Charcoal from the second fill of the kin was dated to A.D. 662-828.

Three hundred and thirty seven wooden pieces were identified at Castlefarm and they all belonged to the early medieval phases. The most prevalent species were alder and hazel, followed by pomaceous fruitwood and ash. Seven components of stave-built wooden vessels were included in the assemblage and the presence of the blade from a cooper's croze – which was a specialist woodworking tool – strongly suggests that stave-built wooden vessels were manufactured at Castlefarm.

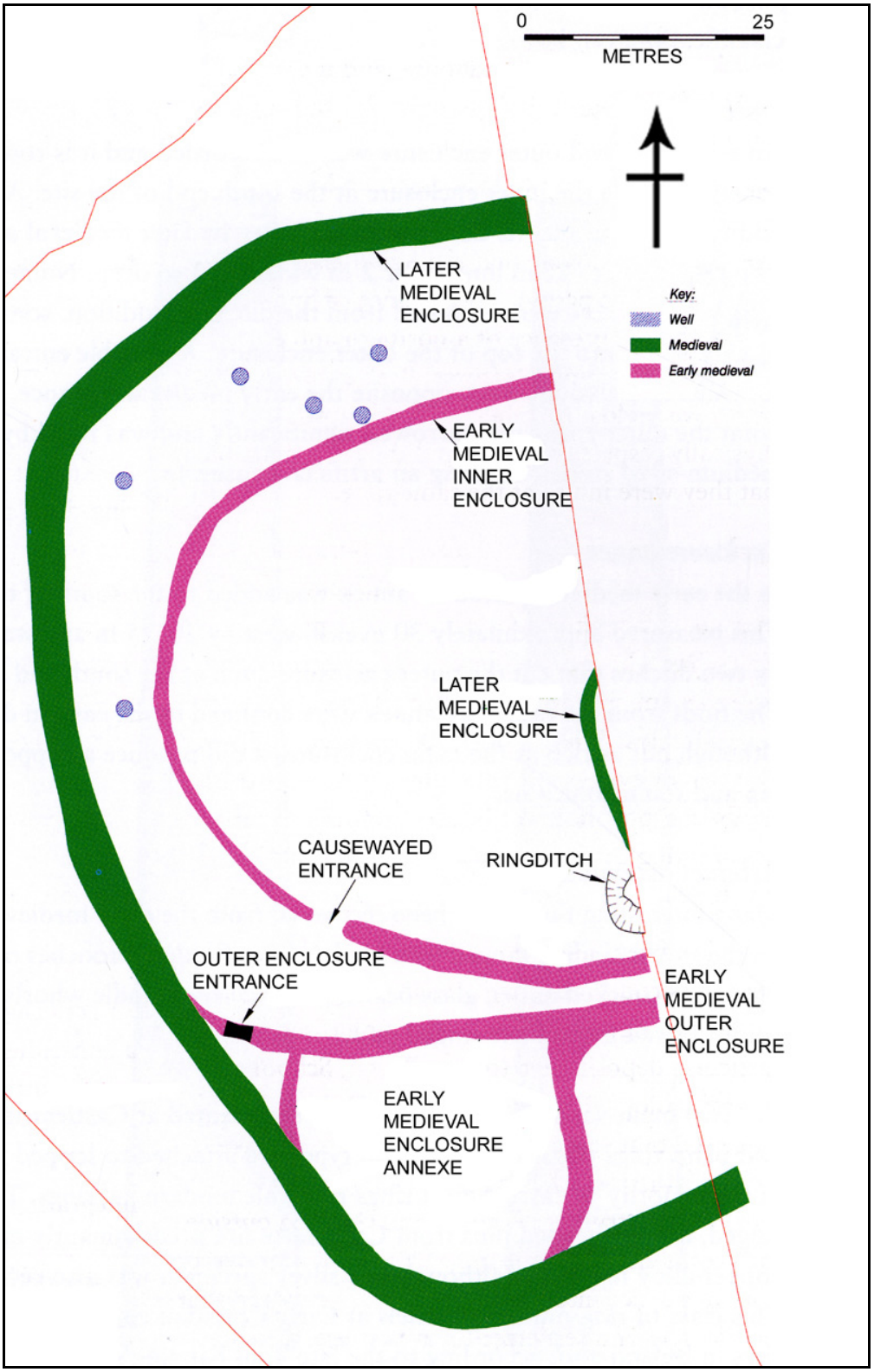


Fig. 246: Enclosures at Castlefarm, Co. Meath (after O'Connell 2006, 19).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-220131	F212: Animal bone from primary fill of inner enclosure ditch	1500±40 BP	**A.D. 434-492**
Beta-246936	F486: Charcoal from second re-cut of inner enclosure ditch	1370±40 BP	**A.D. 599-712**; A.D. 746-767
Beta-220132	F214: Animal bone from fill of outer enclosure ditch	1170±40 BP	A.D. 727-737; **A.D. 771-975**
Beta-220133	F298: Animal bone from primary fill of outer enclosure ditch re-cut	1160±40 BP	**A.D. 775-979**
Beta-229298	Right femur shaft fragment from burial 1	1570±40 BP	**A.D. 409-575**
Beta-229299	Left fibula shaft fragment from burial 7	1530±40 BP	**A.D. 427-608**
Beta-229300	Right femur shaft fragment from burial 10	1280±40 BP	**A.D. 658-783**; A.D. 787-824; A.D. 841-861
Beta-246945	F949: Charcoal from basal fill of bowl furnace C943	1420±40 BP	**A.D. 564-666**
Beta-246938	F527: Charcoal from fill of charcoal-rich production pit C511	880±40 BP	**A.D. 1035-1225**; A.D. 1234-1238; A.D. 1248-1251
Beta-246939	F685: Grain from fill of figure-of-eight-shaped cereal-drying kiln	1270±40 BP	**A.D. 662-828**; A.D. 838-866

References:

O'Connell, A. 2006. The many lives of Castlefarm. *Seanda* 1, 19–24. Dublin. National Roads Authority Magazine.

O'Connell, A and Clark, A. 2009a. Report on the Archaeological Excavation of Castlefarm 1, Co. Meath. Unpublished report prepared for Archaeological Consultancy Services Ltd. Available at www.m3motorway.ie

O'Connell, A. 2009b. Excavations at Castlefarm—director's first findings. In M. Deevy and D. Murphy (eds.) *Places Along the Way: First Findings on the M3*, 43–56. National Roads Authority Scheme Monograph Series 5. Dublin. National Roads Authority. Wordwell.

Cloncowan, Co. Meath
Early Medieval Settlement/Cemetery
Grid reference: **N75494931 (275497/249316)**
SMR No: **ME042-031**
Excavation License No: **02E0883**
Excavation duration: **June – July 2002**
Site director: **C. Baker (Margaret Gowen and Co. Ltd.)**

An initial topographical survey at Cloncowan in advance of the gas pipeline to the west identified a distinct platform approximately 30m in diameter and 0.5m high (Fig. 247). Excavation of its eastern quadrant revealed 34 features of archaeological interest. The results indicate that a Bronze Age ringditch became the focus of a burial ground during the early medieval period. The site was on the east-facing slope of a north-south gravel ridge.

The main focus of the site was a penannular ditch. Its western arc extended for 3.4m and contained seven fills. Three pieces of chert and a piece of flint were recovered from its fill. The longer eastern arc extended for 10m and three phases were identified in the ditch. The primary fill included charcoal-rich, silty clay which contained frequent burnt and un-burnt bone. A number of artefacts were retrieved including a bone spindle-whorl. The second deposit was identified as the result of slippage. The final phase, which incorporated a re-cut of the ditch, contained 13 burials.

Three further graves were enclosed by the penannular ditch. There was no consistency in their alignment and eight were interred in graves that truncated the cut of the ditch. Ear-muff stones were present by the head in one grave while another contained a pillow-stone. The burials have been preliminarily identified as five adults, seven juveniles and four neonates.

Pits, postholes and gullies were located to the south-west of the penannular enclosure. It is unclear as yet if they are contemporary with the cemetery. A wide, shallow ditch – 24.5m in length and 5.9m wide – was found downslope. It produced three sherds of Leinster cooking ware indicating later medieval activity at the site. Thirty six artefacts were retrieved from this site and most were associated with the western arc of the penannular ditch. These included iron pins, a needle, chain links, a bone pin and a fragment of a bone pendant.

Three radiocarbon dates from Cloncowan indicate that the ringditch was constructed during the Bronze Age and re-visited and adopted as a cemetery in the early medieval period. (see below).

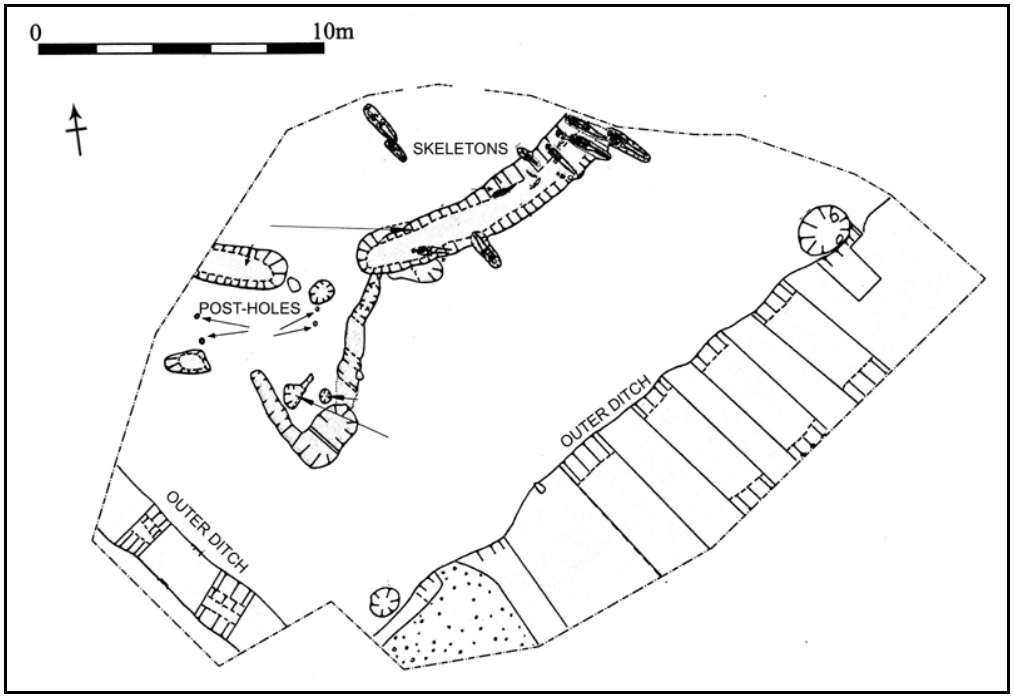


Fig. 247: Excavation at Clancowan, Co. Meath (after Baker 2007, 321).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-4991	Fill from ringditch	3104±40 BP	**1450-1267 B.C.**
UB-4990	N/A	1538±42 BP	**A.D. 424-604**
UB-4992	N/A	1555±24 BP	**A.D. 429-561**

Reference:

Baker, C. 2007. Cloncowan, cemetery, multi-period, in E. Grogan, L. O'Donnell & P. Johnston (eds.) *The Bronze Age Landscapes of the Pipeline to the West*, 320–1. Bray. Margaret Gowen and Co. Ltd. Wordwell.

Collierstown 1, Co. Meath
Early Medieval Enclosed Cemetery
Grid reference: **N94745882 (294743/258825)**
SMR: **N/A**
Excavation Licence No: **A008/015**
Excavation duration: **September 2006 –April 2007**
Site director: **R. O'Hara (ACS Ltd.)**

Collierstown 1 excavated in advance of the M3 road scheme, was a cemetery that was utilised from potentially the mid fifth until the late ninth century. The burial ground was initially constructed as a number of segmented ditches, possibly beneath a mound, and expanded through a succession of enclosures to incorporate a larger number of internments (Fig. 248). The site was situated on a slight ridge on the east bank of the Gabhra River at 120m OD.

The earliest burial at Collierstown 1 was a female who was centrally placed within an area defined by two shallow curvilinear ditches that formed an approximately circular enclosure (Phase I enclosure; 15m by 17m). The enclosure was roughly circular-shaped in plan with an entrance potentially to the north. Finds from the ditch fills included quantities of animal bone, trace inclusions of charcoal, and a sherd of Late Roman Amphora (B*ii* ware). The latter was from a later deposit and probably relates to subsequent phases. The female burial (dated to A.D. 423-594) was interred in a simple extended unlined grave and was orientated west-east. She was buried with a deposit of burnt clay, charcoal and burnt pig bone covering the pelvic area and so was potentially non-Christian. A low mound may have covered this grave because later burials were inserted into stratigraphically higher levels. A further eight inhumations, extended west-east and in dug and partially stone-lined graves, were interred centrally within the Phase I enclosure and represent the first phase of burial activity at Collierstown (Group 1 burials). The absence of children within this group suggested it was not a familial plot but may have been reserved for socially high-ranking adult members of the community (Elizabeth O'Brien, pers. comm.) This enclosure was largely truncated by later enclosures which, for a time, maintained a similar shape.

Phase II witnessed the construction of a series of curvilinear, segmented ditches that were broadly contemporary and were re-cut on a number of occasions (Phase II enclosure; ditch feature numbers F24, F63, F195, F196, F288). Many of the ditches cut through and maintained the shape of Enclosure 1.

F63 - The first north-south curvilinear ditch measured 24m by 2.38m by 0.68m (length by width by depth) and was re-cut once. The primary deposit included moderate to frequent amounts of animal bone; some of which was burnt and traces of charcoal. The latter was radiocarbon dated to A.D. 427-608. The ditch re-cut fill included burnt and un-burnt animal bone and a tiny quantity of slag which suggests possible evidence for iron working at the site during this phase. High status artefacts included two sherds of imported pottery. These were identified as a rim sherd of Phocaean Red Slip Ware, produced in the eastern Mediterranean between the fifth and seventh centuries, and a fragment of E ware, which dates to the mid sixth and seventh centuries. Another prestige item was a rare complete whalebone sword hilt which survived in two pieces.

F288 – This curvilinear ditch appeared continuous with the above but they were two separate ditches. It measured 16m by 1.8m by 0.75m and was orientated east-west. The primary cut contained both burnt and un-burnt animal bone. The re-cut contained small amounts of animal bone; of which frequent amounts were burnt, charcoal and traces of land snail and shellfish. Finds included fragments of unidentified iron objects, a flint flake and a bone gorge used for fishing.

F195 – This ditch was orientated approximately northeast-southwest and followed the alignment of the Phase 1 enclosure ditch. It measured 11.1m by 1.36m by 0.56m and was re-cut twice. The primary deposit contained one fill and included a small quantity of animal bone. The first re-cut was similarly absent of finds but the final re-cut included fragments of Late Roman Amphorae (B*ii* ware). The latter fills also contained quantities of charred oats, barley and assorted grasses. The low number of charred weed seeds and chaff fragments suggested the grains had been processed prior to their incorporation in the ditch. This could be interpreted as domestic or agricultural waste on the site but they may potentially relate to ritual feasting placed in a context of the presence of animal bone (the majority was from food waste and only a small quantity showed evidence for butchery) and the ritual deposition of sherds of imported pottery.

F24 – This curvilinear ditch measured 9.5m by 2.13m by 0.44m and was located 4m east of, and approximately concentric with F63. It was re-cut at least once. Two deposits from the original cut contained trace amounts of charcoal and animal bone; some of which was again burnt. The first re-cut had a single fill with inclusions of animal bone, charcoal and burnt bone. The latter was unidentified but is likely to be animal. Other finds were small fragments of iron and copper-alloy objects. This ditch could represent an extension of the Phase II enclosure in an effort to provide more space within an increasingly congested cemetery possibly for the Group 3 interments (see below).

F196 – This was a short ditch or pit that measured 5.06m by 1.42m by 0.75m and was located immediately northwest of the western terminal of F195. It is unlikely that F196 and F195 are contemporary due to their proximity and relative positioning so it may represent an expansion of the site in the same manner as F24. It contained seven deposits. Animal bone was found in most contexts along with lesser quantities of burnt animal bone and charcoal. Artefacts included Late Roman Amphorae (B*ii* ware) and a further fragment of an iron object. This feature was radiocarbon dated to A.D. 402-568.

A comb sideplate fragment found in a pit less than 2m south of the southern terminal of the above dates to the sixth or seventh century.

The second group of burials encircled the Group 1 burials but remained within the Phase I enclosure. The graves contained eight females, five males and one unsexed individual and they were a mix of dug, stone-lined and wood-lined graves. The positioning of the Group 2 burials indicated initial knowledge of the location of the Group 1 burials. The recovery of Late Roman Amphorae (B*ii* ware) from the fill of one of the Group 2 graves suggested this burial occurred at the time similar pottery was being deposited in the Phase II Enclosure ditches. Therefore, some of these burials may be contemporary with the second enclosure phase. Preserved oak lining from one grave was dated to A.D. 427-608 while the earth-cut grave of an adult female was dated to A.D. 423-594.

The Group 3 burials were the largest group and consisted of 26 interments. They were formally laid out in rows of approximately five burials each. They were centrally placed within the Phase II enclosure but did not respect and truncated the Group 1 burials. The graves were again a mix of dug, stone-lined and wood-lined examples and the cemetery continued to be utilised exclusively for adults. The high status nature of those within and associated with the burial ground is inferred by the recovery of E ware, Late Roman Amphorae (B*ii* ware) and Phocaean Red Slip Ware in the surrounding ditches (during the mid-sixth century AD). A piece of antler was found next to the left hand of a male and was probably a deliberate deposit. A sherd of Late Roman Amphorae (B*ii* ware) was found within the fill of another grave which also contained a large amount of charcoal although the latter may have been the result of disturbance of another feature or grave fill. The burial of an adult female was dated to A.D. 423-594, and the remains of oak lining from a double male burial were dated to A.D. 559-662.

The Phase III enclosure consisted of a partially surviving ditch that measured 34m by 2.3m by 1.50m. It would have formed a circular-shaped enclosure in plan but only a small portion of this ditch survived because the remainder was extensively truncated by the Phase IV enclosure. This ditch contained a large number of dumped or naturally accumulated deposits. Animal bone was retrieved from many contexts and a quantity of land snail was also identified. Other finds included Late Roman Amphorae (B*ii* ware) pottery and fragments of iron objects. The ditch provided two radiocarbon dates of AD 569-671 and AD 559-662.

The last group of 12 burials may have been roughly contemporary with the Phase III enclosure. Infants – for the first time – were interred and this was a mixed cemetery that possibly represented an extended family across a generation. The graves were a mix of dug-, stone- and wood-lined examples and they cut through one of the Phase II enclosure's eastern ditches. The burial of an adult male was dated to A.D. 687-895 while another was dated to A.D. 540-654.

The final and fourth enclosure phase consisted of a re-cut to the Phase III enclosure and an extension of the site southwards in the form of a triangular-shaped enclosure.

F25 – This ditch measured 58.5m by 4.50m by 1.30m and replaced and removed much of the eastern side of the Phase III enclosure. It contained eight deposits which included animal bone, burnt bone, snail shell and seashell. Finds included flint debitage, a flint end scraper and a copper-alloy spiral-headed ring-pin. Late medieval pottery, an iron spur fragment and post medieval pottery was retrieved from the upper fills which demonstrated that the ditch was open for a long period.

F360 – This represented the western part of the Phase IV enclosure ditch and measured 54m by 2.35m by 1.10m. It similarly obliterated much of the Phase III enclosure on this side and contained seven deposits of mostly washed-in sediment. Charcoal was present as were some un-charred seeds which were dated to A.D. 402-568. The lower deposits contained animal bone and preserved organic material including wood. Artefacts included a wooden stave fragment and a fragment of Late Roman Amphorae (B*ii* ware).

A number of features – other than the burials – were situated within the enclosures. Some postholes were clustered towards the centre of the site but they did not form any coherent structural plan. They may have supported grave markers such as large wooden crosses. A square-shaped enclosure – formed by two L-shaped ditches – was located to the immediate north of the Phase I and II enclosures and measured 6m by 6m. The entrance to the Phase II enclosure was directly opposite the square enclosure entrance. Its ditches contained inclusions of burnt and un-burnt animal bone and charcoal. Artefacts included an iron fragment, possibly from a knife, Late Roman Amphorae (B*ii* ware) and a twisted copper-alloy fragment. The exact function of this feature is unclear but it may have marked the site of a shrine or small wooden church. One hearth and a large number of pits were also scattered throughout the interior of the site but their relationship to other features was unclear.

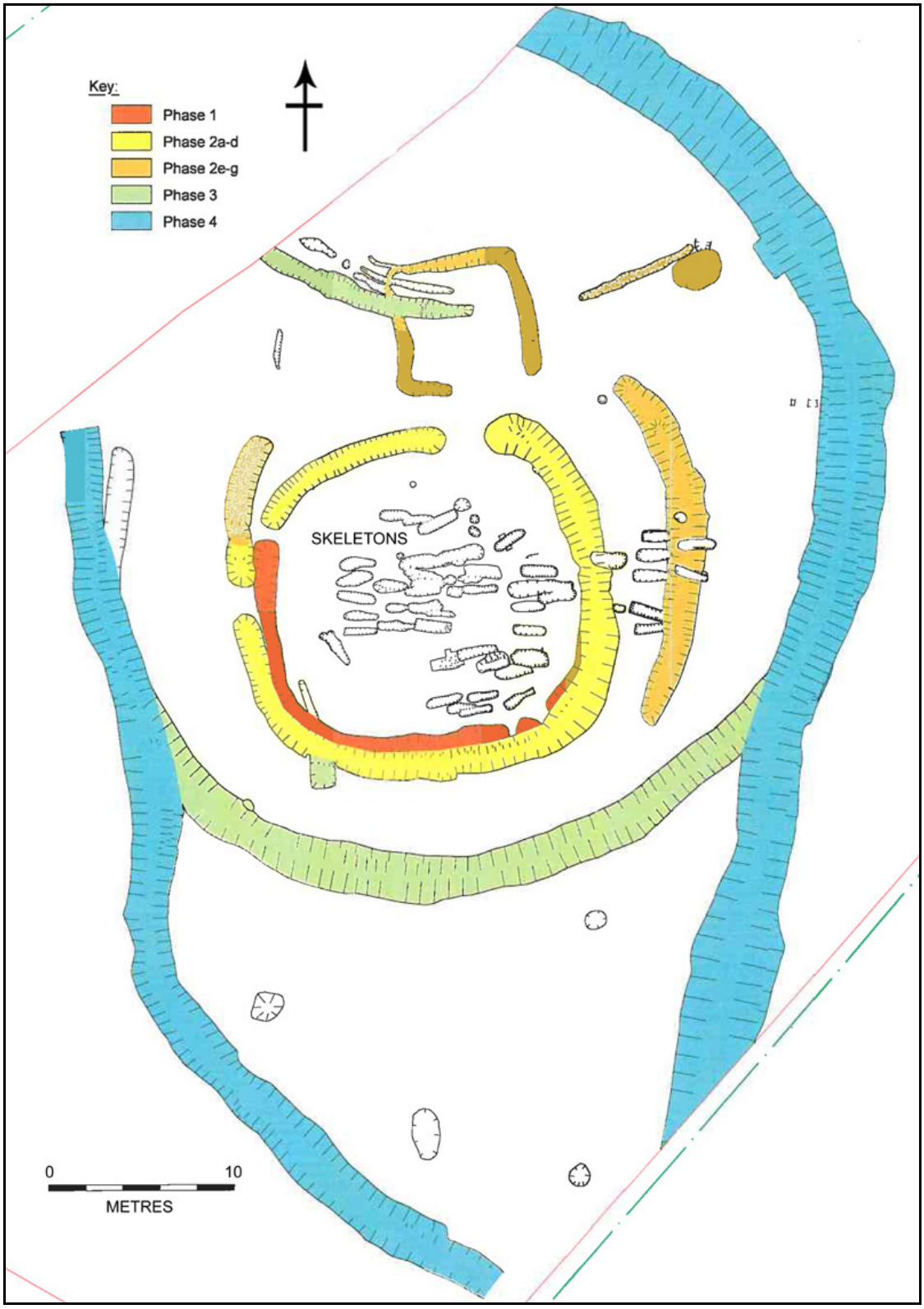


Fig. 248: Phases at Collierstown, Co. Meath (after O'Hara 2009).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-250161	Human bone from central and primary female burial 48	1550±40 BP	**A.D. 423-594**
Beta-247009	Charcoal from fill of Phase II enclosure ditch	1530±40 BP	**A.D. 427-608**
Beta-247207	Charcoal from fill of Phase II enclosure ditch	1580±40 BP	**A.D. 402-568**
Beta-247005	Human bone from burial 47	1530±40 BP	**A.D. 427-608**
Beta-247008	Human bone from burial 58	1550±40 BP	**A.D. 423-594**
Beta-247001	Human bone from burial 1	1550±40 BP	**A.D. 423-594**
Beta-247007	Wood from grave of burial 54	1430±40 BP	**A.D. 559-662**
Beta-241296	Charcoal from fill of Phase III enclosure ditch	1410±40 BP	**A.D. 569-671**
Beta-247011	Wood from fill of Phase III enclosure ditch	1430±40 BP	**A.D. 559-662**
Beta-247002	Human bone from burial 13	1210±40 BP	**A.D. 687-895;** A.D. 925-936
Beta-247003	Human bone from burial 18	1460±40 BP	**A.D. 540-654**
Beta-247010	Charcoal from fill of Phase IV enclosure ditch	1580±40 BP	**A.D. 402-568**

References:

O'Hara, R. 2008 Collierstown, Co. Meath. *Medieval Archaeology* 58, 367–373.

O'Hara, R. 2009a. Report on the Archaeological Excavation of Collierstown 1, Co. Meath. Unpublished report prepared for Archaeological Consultancy Services Ltd.
Available at www.m3motorway.ie

O'Hara, R. 2009b. Collierstown 1: a late Iron Age—early medieval enclosed cemetery. In M. Deevy and D. Murphy (eds) *Places Along the Way: First Findings on the M3*, 83–100. National Roads Authority Scheme Monograph Series 5. Dublin. National Roads Authority. Wordwell.

Colp West, Co. Meath
Early Medieval Enclosed Cemetery
Grid reference: **O12237467** (**312239/274679)**
SMR No: **ME021-011**
Excavation Licence No: **N/A**
Excavation Duration/Year: **N/A**
Site director: **M. Gowen (Margaret Gowen and Co. Ltd.)**

Excavation at Colp West in advance of the north eastern gas pipeline, revealed a cemetery that was demarcated by northern and southern ditches (Fig. 249). Only portions of the cemetery and ditches were excavated within the pipe corridor. Evidence for nearby settlement was identified within the fills of the southern ditch. The site was situated on a gentle north-facing slope at the summit – 30m OD – of a long steep rise south of the River Boyne. An early medieval enclosure complex was excavated nearby in the same townland to the northeast (Clarke and Murphy 2001).

The first phase of archaeological activity was represented by a penannular enclosure and some possible post-holes in the south-eastern part of the larger enclosure. The former measured 15m in diameter and enclosed some unlined and slab-lined graves. Some later burials extended out over the silted-up ditch. Several sherds of Late Roman Amphora (LRA) and E ware, iron nails and a piece of slag were recovered from the ditch's fill.

Two sections of enclosure ditches, to the north and south of the cemetery, were located at a maximum distance of 37m apart internally. The relationship between the two ditches was unclear because their deposits were notably different. The former had a homogenous fill whereas the southern ditch contained well defined layers of humic, dumped soils and silty clays which yielded occupational evidence. Sherds of LRA and E ware, a possible bronze ring, iron slag and large quantities of animal bone were retrieved from the southern ditch. Just one sherd of E ware was recovered from the northern enclosure ditch.

Two further ditches, lying 4m-5m apart, were also revealed and were positioned 20m to the north and south of the southern and northern enclosure ditches. These formed a multivallate enclosure in plan and are likely to represent enclosure activity across many centuries.

Over one hundred burials were exposed within the cemetery (between the northern and southern enclosure ditches). They were extended and aligned west-east. The cemetery was used across many centuries because numerous burials were placed on top, cut, disturbed, or completely displaced earlier burials and only a portion of this large burial ground was excavated. The majority of graves were simple unlined pits but fourteen stone-lined examples were evident. The vast majority of those interred were adults and no children were buried in the excavated section of the cemetery.

A small fragment of a double-sided decorated bone comb and half a decorated blue glass bead were recovered from the grave fills close to the penannular enclosure. Sherds of LRA and E ware were also present in areas associated with burial activity, and these demonstrate that the cemetery was in use between at least the mid-fifth and seventh centuries.

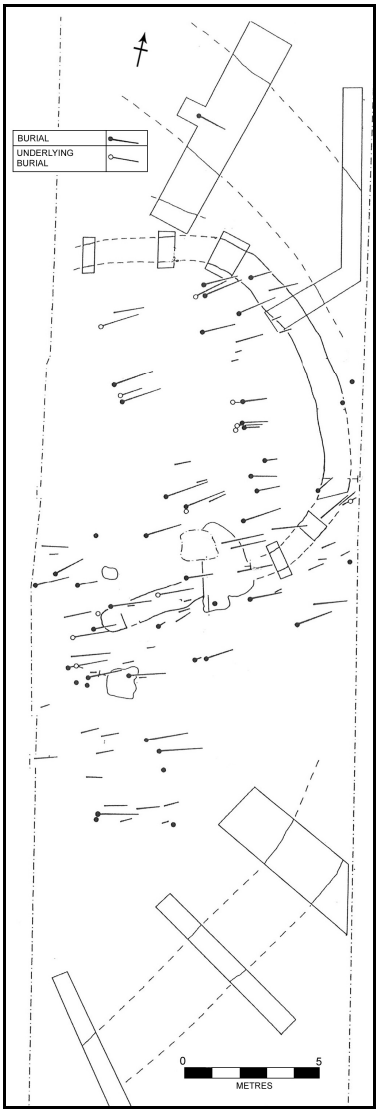


Fig. 249: Excavations at Colp West, Co. Meath (after Gowen 1988a).

References:

Clarke, L. and Murphy, D. 2001 Report on the Archaeological Resolution of a Multi-period Settlement Site at Colp West, Co. Meath. Unpublished report prepared for Archaeological Consultancy Services Limited.

Gowen, M. 1988. Excavation at Colp, County Meath, North Eastern Pipeline II. Unpublished report prepared for Margaret Gowen and Co. Ltd.

Gowen, M. 1988:051 Colp West, Co. Meath. www.excavations.ie.

O'Brien, E. 1992. Pagan and Christian burial in Ireland during the first millennium AD: Continuity and change, in N. Edwards & A. Lane (eds.) *The Early Church in Wales and the West: Recent Work in Early Christian Archaeology, History and Place-Names*, 130–7. Oxbow Monograph 16. Oxford. Oxbow.

Colp West, Co. Meath
Early Medieval Settlement Enclosure Complex
Grid reference: **O11797415 (31179/27415)**
SMR No: **ME020-043**
Excavation Licence No: **99E0472**
Excavation Duration/Year: **September 2000 - February 2001**
Site director: **L. Clarke (ACS Ltd.)**

Colp West, excavated in advance of a housing development, was a multi-period enclosure complex that also revealed at least seventeen cereal-drying kilns, postholes, spreads and pits (Fig. 250). The early medieval phases included a primary circular enclosure and six variously shaped associated enclosures. Some of the kilns were dated to this period. Earlier archaeological evidence included a Bronze Age enclosure, hut and pits, an Iron Age enclosure, cereal-drying kilns and a range of other features. The site was located on agriculturally productive land on a ridge – 40m OD – with good views of the surrounding landscape. It lay southwest of an early medieval cemetery (Gowen 1988) and a monastic site to the east.

The circular enclosure, measuring 29m in diameter, and a southern annex represented the first phase of early medieval occupation at Colp West. The former enclosed a souterrain, a hearth and two pits and an entrance was located to the southeast. The latter had a diameter of 20m and no contemporary features were enclosed. Another oval enclosure, further south (not fully excavated, diameter 11.5m), was possibly contemporary with Phase I and was also absent of features. It is possible that they both functioned as livestock enclosures. Charcoal from silting of the circular enclosure ditch was dated to A.D. 604-725 but the construction date may be slightly earlier (see Table A for radiocarbon dates). The southern oval annex was similarly dated to A.D. 563-688.

Large quantities of animal bone were present in the circular enclosure ditch and cereal grains were also identified. Artefacts included a bronze pin, two knife blades and a whetstone fragment. A fragmentary bone comb with spiral and dot decoration was recovered from the fill of the souterrain. The southern annex produced only a small amount of animal bone. Slight evidence for a timber palisade trench was present which increases the likelihood of its interpretation as a livestock enclosure.

During Phase II, a large sub-rectangular enclosure was annexed onto the northern side of the circular enclosure. It was not fully excavated and measured 55m by 20m. Animal bone from the ditch fill was dated to A.D. 618-772. The southern oval enclosure was replaced, during this phase, by a second sub-rectangular enclosure which had a diameter of 15m. It produced a similar date of A.D. 604-725. The large northern sub-rectangular area enclosed a number of features but these were earlier in date to its construction and were also chronologically earlier than the circular enclosure. No features were evident in the southern sub-rectangular enclosure but evidence for a palisade survived. The lack of internal features and occupational evidence from the enclosure ditches suggests these possibly functioned as livestock or field enclosures.

An undated C-shaped enclosure – measuring 18m in length – cut the above features and possibly represents the final early medieval phase. A decorated blue glass bead was uncovered from the ditch fill. The enclosure ditch was mainly devoid of artefacts and occupational debris.

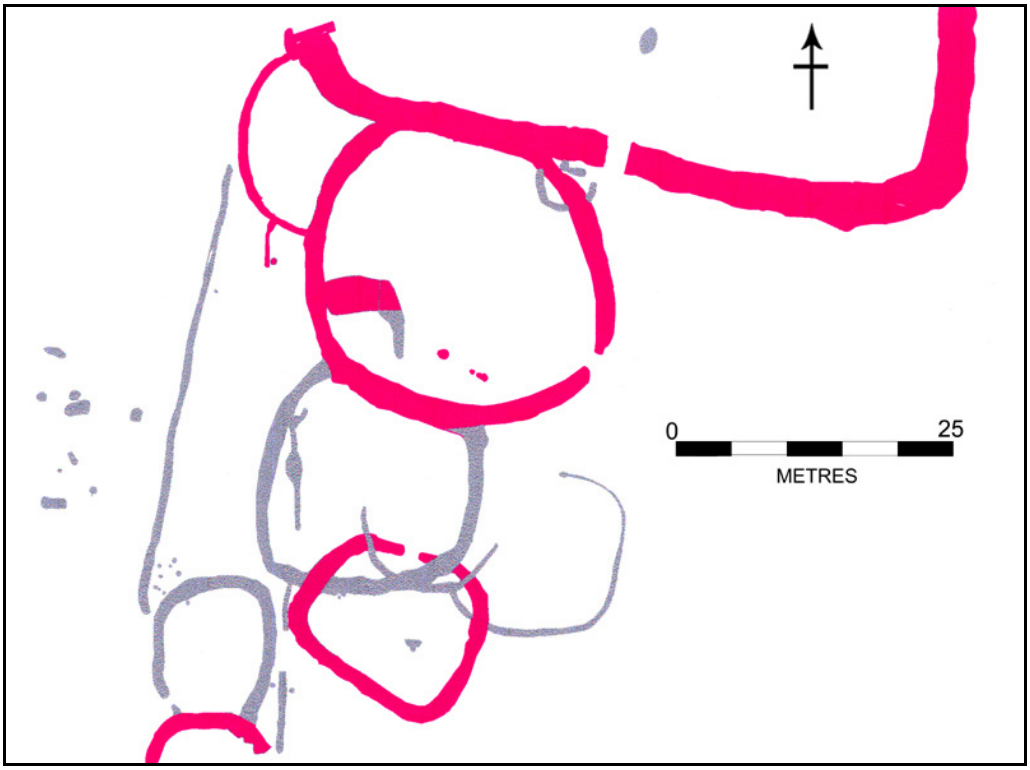


Fig. 250: Enclosures at Colp West, Co. Meath (after Clarke & Murphy 2001).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-4673	Animal bone from silting of circular enclosure ditch	1357±44 BP	**A.D. 604-725**; A.D. 738-771
UB-4674	Animal bone from ditch-fill of southern circular enclosure (annexed onto circular enclosure)	1397±44 BP	**A.D. 563-688**; A.D. 755-756
UB-4675	Animal bone from ditch-fill of northern sub-rectangular enclosure (annexed onto circular enclosure).	1345±44 BP	**A.D. 618-730; A.D. 735-772**
UB-4672	Animal bone from ditch-fill of southern sub-rectangular enclosure (replaced initial southern annex)	1357±44 BP	**A.D. 604-725**; A.D. 738-771
Beta-159619	Charcoal from cereal-drying kiln	1630±80 BP	**A.D. 242-595**
Beta-159620	Charcoal from cereal-drying kiln	1560±70 BP	A.D. 349-368; **A.D. 379-641**
Beta-159621	Charcoal from cereal-drying kiln	1550±60 BP	**A.D. 399-634**
Beta-159618	Charcoal from cereal-drying	1530±70 BP	**A.D. 400-649**

	kiln		

References:

Clarke, L. & Murphy, D. 2001. Report on the Archaeological Resolution of a Multi-period Settlement Site at Colp West, Co. Meath. Unpublished report prepared for Archaeological Consultancy Services Limited.

Gowen, M. 1988. Excavation at Colp, County Meath, North Eastern Pipeline II. Unpublished report prepared for Margaret Gowen and Co. Ltd.

Kinsella, J. 2010. A new Irish early medieval site-type? Exploring the *'Recent?'* archaeological evidence for non-circular enclosed settlement and burial sites. *Proceedings of the Royal Irish Academy*, 110(C).

Cormeen, Co. Meath
Early Medieval Settlement Enclosure
Grid reference: **N738891 (27380/28910)**
SMR No: **N/A**
Excavation License No: **N/A**
Excavation duration/year: **1992**
Site director: **C. McConway and E. Halpin (ADS Ltd.)**

Excavations at Cormeen revealed an enclosure and internal souterrain with associated postholes and gullies. The souterrain was trapezoidal-shaped and measured approximately 10m in length and was 2.5m wide at its terminal end. It appears it was unlined as there was no evidence of stone paving or stone uprights or any evidence that wood was utilised for its construction. The entrance consisted of three steps that were cut into the subsoil and they accessed a gently sloping passage. The maximum depth of the souterrain was 2.6m. The only finds were both Bronze Age pottery and souterrain ware which came from the souterrain's upper fills.

A number of gullies and postholes were located in the immediate vicinity of the souterrain hinting at the former presence of structures but heavy truncation of the site did not enable further interpretation.

The enclosing ditch was revealed by machine trenching prior to pipe-laying. It was positioned 6m west of the souterrain and measured 2.6m in width and was 1m deep. The ditch fill was relatively sterile. The enclosure ditch appeared to relate to another ditch section approximately 43m to the west. Therefore, the souterrain and associated gullies and postholes were within an enclosure that measured 43m in diameter.

There was indirect evidence of an accompanying bank because the volume of re-deposited natural was noticeably deeper close to the lip of the western ditch. It is possible that the bank overlay the souterrain and the settlement builders may have deliberately incorporated the underground passage into the enclosing bank.

(**No plans were available for this site**).

Reference:

McConway, C. & Halpin, E. 1992:150. Cormeen, Co. Meath. www.excavations.ie.

Dowdstown 2, Co. Meath
Early Medieval Settlement Enclosure Complex
Grid reference: **N89686254 (289684/262547)**
SMR No: **N/A**
Excavation Licence No: **A008/033**
Excavation Duration/Year: **September 2005 – December 2006**
Site director: **L. Cagney (ACS Ltd.)**

Dowdstown 2 excavated in advance of the M3 road-scheme, was a large early medieval enclosed settlement and mixed agricultural complex (Fig. 251). Initially, a circular enclosure was constructed between the mid fifth and mid seventh centuries. This was succeeded by a complex of field enclosures and annexes dating to the eighth/ninth centuries. Two structures and a large number of cereal-drying kilns were also recorded. The site was situated on a steep scarp where the land fell away very sharply to the northwest – between 44m and 49m OD – towards the River Boyne. This area was regularly flooded during excavation.

The earliest feature on site was a circular enclosure (Enclosure 1) measuring 32m in internal diameter that was dated between A.D. 426 and 600 (see below for radiocarbon dates). The entrance was possibly located to the northeast although this was not entirely certain. Finds associated with this early phase included animal bone, an iron knife, a bone knife handle and decorated bead, a quern stone fragment, fragments of iron objects and assorted struck flints.

The enclosure ditch was re-cut between the mid-sixth and mid-seventh centuries as it was prone to silting. The shape and form of the enclosure was maintained. Animal bone was not discovered in large quantities during this phase and artefacts were also few and included a copper alloy fragment and struck flint. A second, and final, re-cut to the enclosing ditch revealed a larger quantity of finds including a bone pin, a possible whetstone, a copper alloy fragment, a possible clay loom weight and struck flint. Animal bone was again rare.

Only a few internal features survived within the circular enclosure at Dowdstown 2. These included a C-shaped ditch that was re-cut a number of times and was probably contemporary with the enclosure. Finds from the initial excavation and re-cut of the ditch were few but the second and third re-cuts produced a more plentiful assemblage including iron knifes, a needle, a pin, copper alloy objects, fragments of iron objects, worked bone and struck flint. Some iron slag and oxidised clay was also present from the third re-cut.

A rectangular multi-phase enclosure (Enclosure 2), measuring 32m by 16m, was annexed onto the eastern side of the circular enclosure. The ditch fills included animal bone and charred seeds. Artefacts included a worked stone, a piece of quartz, an iron fragment and a number of flints. It is likely that this was contemporary with the circular enclosure and with enclosures 4 and 5 (Figs. 252; 253).

The next phase at Dowdstown 2 consisted of the amalgamation of the two enclosures above into a larger D-shaped enclosed settlement (Enclosure 3). The enclosure ditch was re-cut on a number of occasions but internal features were again rare. Finds from the initial ditch cut included a fragment of a copper alloy strap attachment, an iron knife, fragments of iron objects, bone objects including a comb fragment and spindle whorl and a bone pin fragment, a fragment of lignite and numerous flint objects. The initial construction of the D-shaped enclosure has been dated to A.D. 680-882 and its establishment represented a clear expansion of the settlement.

The shape and size of the enclosure was maintained after its first re-cut. This phase was dated between the mid seventh and late eighth centuries. Animal bone was common but charred cereal grains were less frequent. Artefacts included a decorative ring from a tinned copper alloy pin, an iron bill hook, iron knife fragments, fragments of iron objects, a lignite

fragment and frequent flint items. The second re-cut displayed potential evidence for a causewayed entrance to the east as this had not been located in earlier excavation. Animal bone and finds were few. The final re-cut again contained only a few artefacts and animal bone in some contexts. Charred seeds were also present.

A multi-phase rectangular enclosure (Enclosure 4), measuring 40m by 24m, was annexed onto Enclosure 2 and continued in use throughout the D-shaped enclosure's (Enclosure 3) lifetime. Charred seeds and animal bone was present in the ditch fills. These were also discovered in the succeeding ditch re-cut as well as a copper alloy pin shaft and a needle. A final re-cut revealed animal bone, charcoal, charred seeds, worked bone and a copper alloy ringed pin.

A small sub-circular enclosure (Enclosure 5) – 18m in diameter – was located to the east of the above enclosures and enclosed a hearth and a kiln. The ditch fill included small quantities of charred cereal and animal bone.

A large multi-phase rectangular enclosure was located to the north of Enclosures 1-5 within the River Boyne floodplain (Enclosure 6). A 2m causewayed entrance was located on its western side. The ditch was dug in the seventh century and very few finds were associated with this phase. Small quantities of animal bone, charred seeds, snail shell and charcoal were located within the first ditch re-cut. Artefacts included flint, an iron knife, fragments of iron objects and a copper alloy loop-headed pin shaft. Again, artefacts were scarce related to the final re-cut. A drain connected this with Enclosure 4. This large enclosure may have functioned as a floodplain-enriched meadow for cattle during the summer.

A shallow, badly preserved enclosure ditch was recorded for a short distance along the eastern limit of excavation (Enclosure 7). However, the geophysical survey demonstrated that it formed an enclosure broadly similar in size and form to Enclosure 4 which suggests they were contemporary. Its single fill contained small quantities of animal bone.

An irregular-shaped enclosure (Enclosure 8; 20m by 22m) was located to the south of Enclosure 3. Animal bone, charcoal and charred grain were recovered in varying quantities and an iron knife was the only artefact retrieved. A small enclosure was appended to its western edge (Enclosure 9).

Two poorly preserved structures were identified at Dowdstown 2. The first, (Structure A), was possibly square, or rectangular, and survived to a maximum length of 10m. This post-built structure was surrounded by a partially extant drip gully and may have been 6m wide. It was cut by Enclosure 2 and, therefore, predated it. Charred barley grain from one of its postholes was dated to A.D. 553-658 indicating that it was contemporary with Enclosure 1. The structure may have served as a barn or grain store because charred grain was recovered from a number of associated deposits.

A collection of 11 postholes were clustered together internally within Enclosure 1 but they did not form a recognisable structural plan. One posthole was dated to A.D. 689-899 and it is possible that more than one building is represented by these features. The radiocarbon date suggests that a structure was contemporary with Enclosure 3.

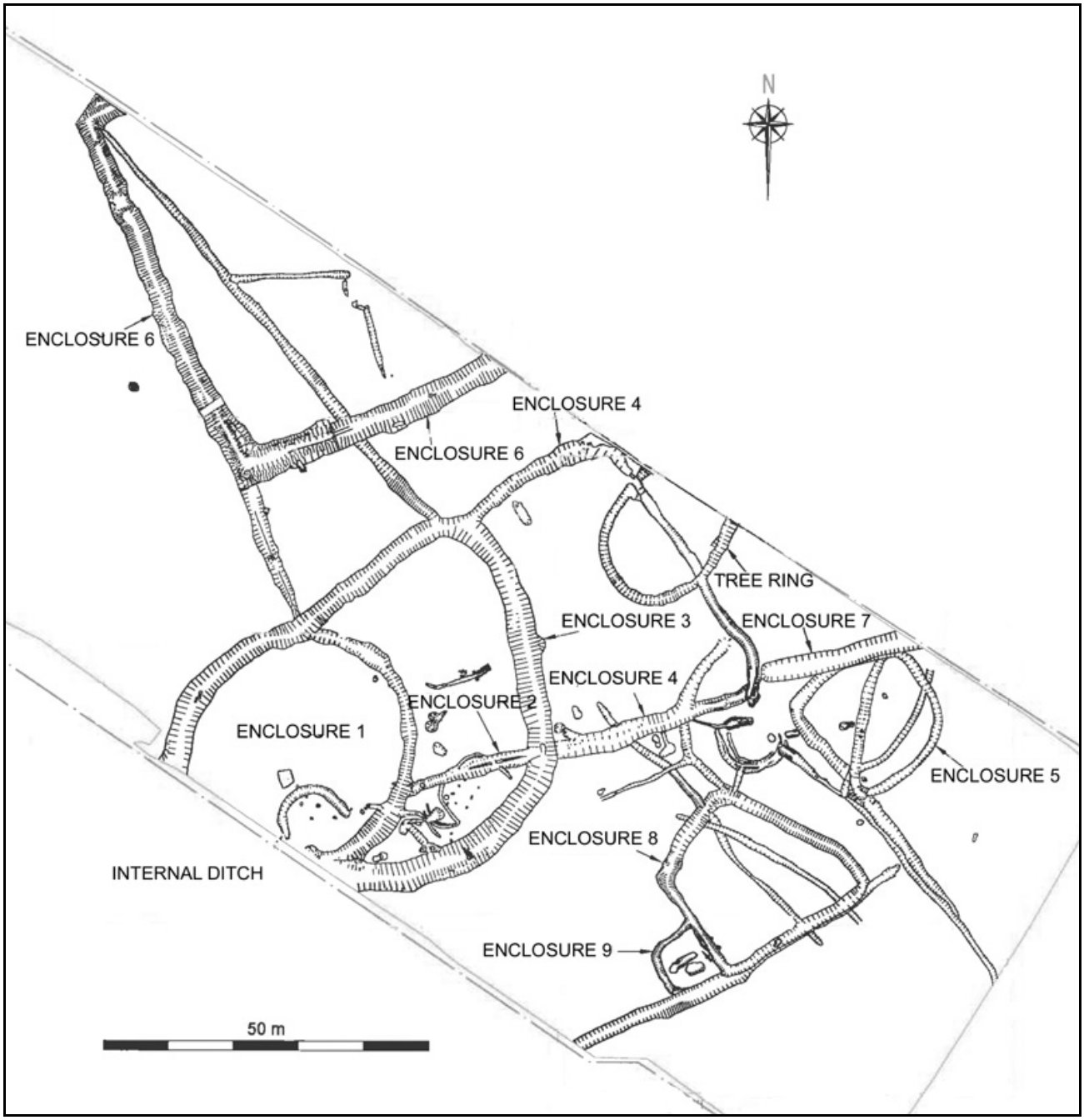


Fig. 251: Early medieval enclosures at Dowdstown, Co. Meath (after Cagney et al. 2008).

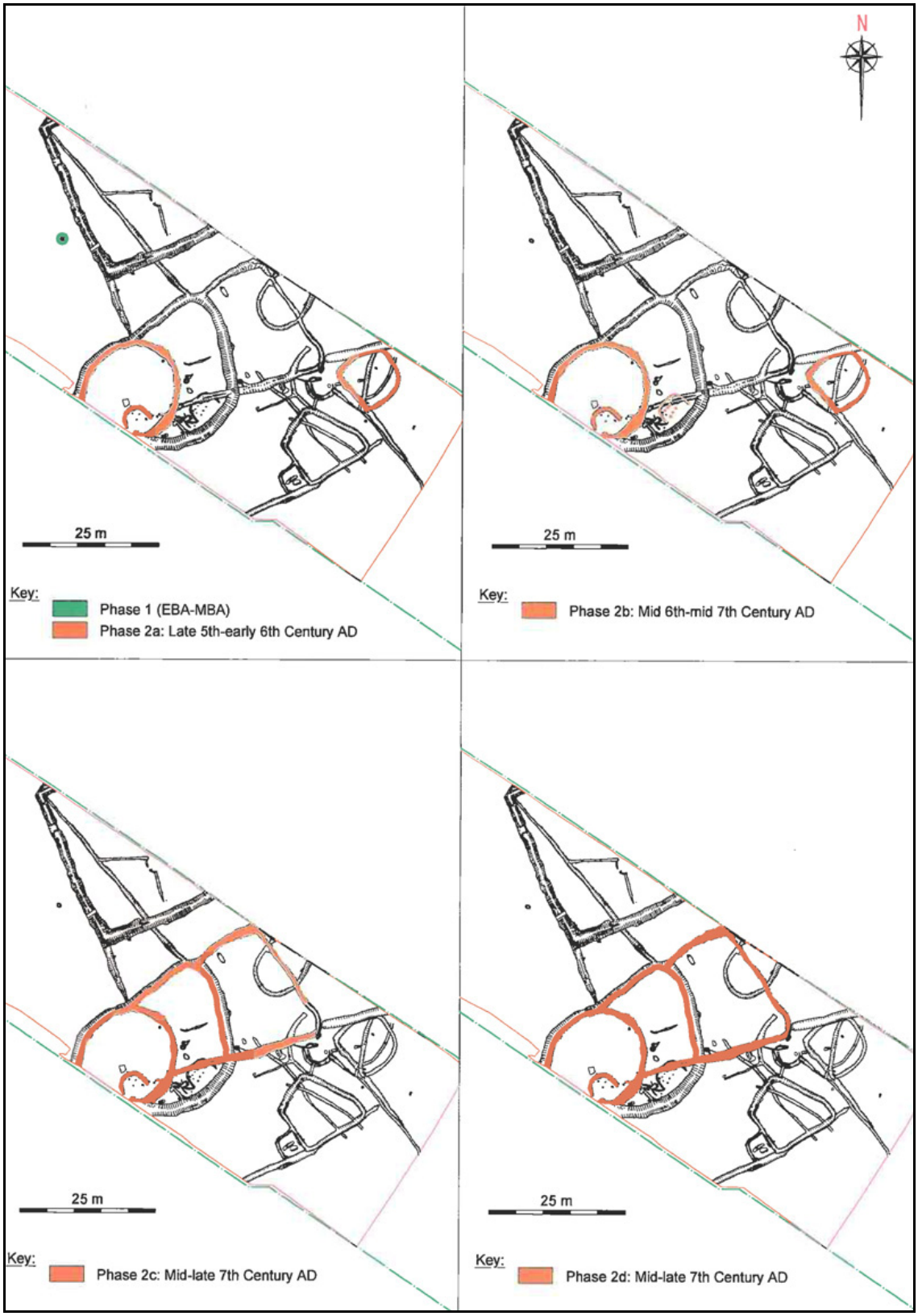


Fig. 252: Phases of enclosures at Dowdstown, Co. Meath – until late-seventh century (after Cagney et al. 2008).

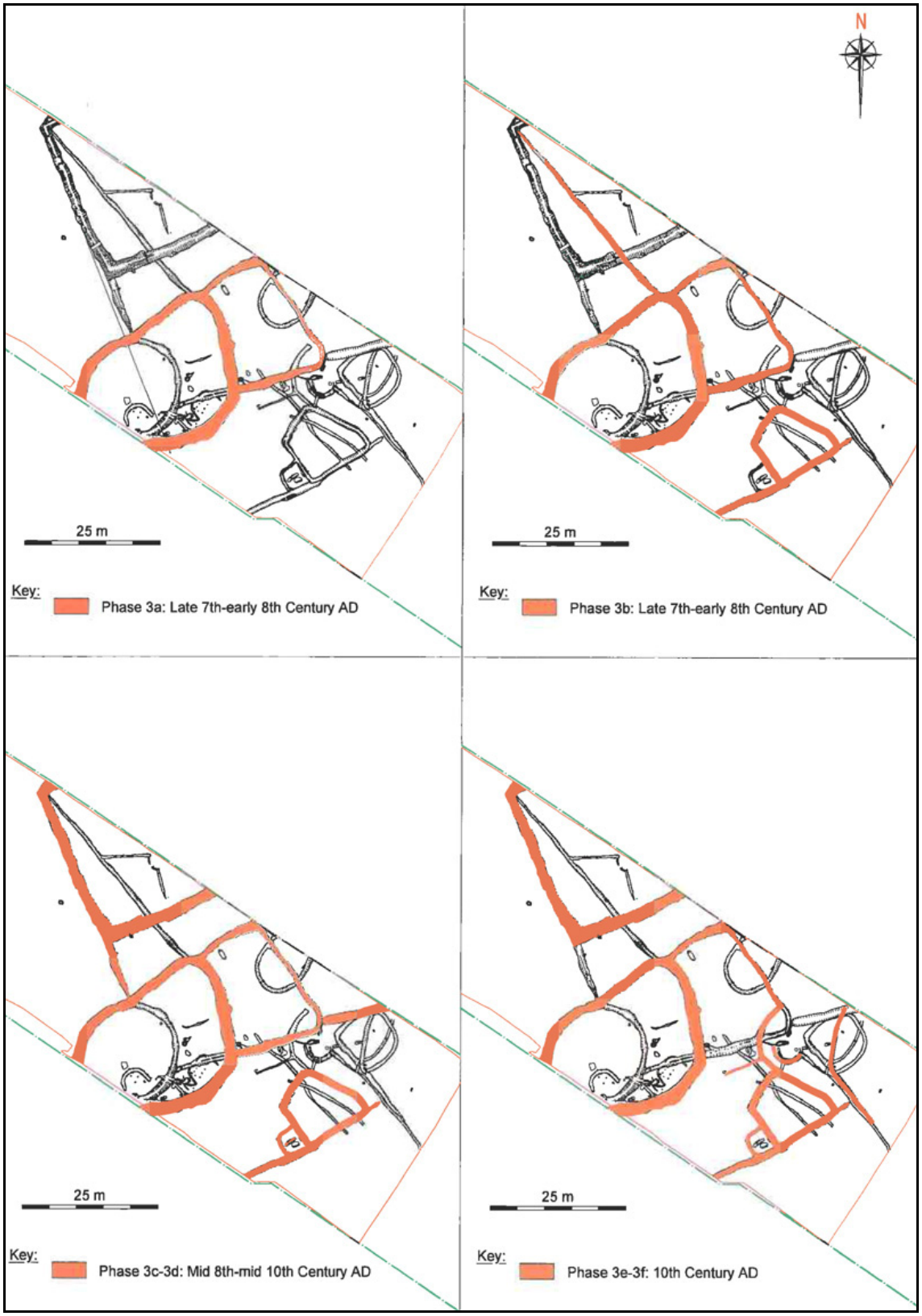


Fig. 253: Phases of enclosures at Dowdstown, Co. Meath – until tenth century (after Cagney et al. 2008).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
QUB-7039	F496: Animal bone from primary fill of Enclosure 1	1454±33 BP	**A.D. 554-651**
Beta-220119	F442: Animal bone from primary fill of Enclosure 1	1540±40 BP	**A.D. 426-600**
Beta-220117	F328: Animal bone from primary fill of re-cut Enclosure 1 ditch	1240±40 BP	**A.D. 680-882**
Beta-220120	F548: Animal bone from primary fill of Enclosure 3	1300±40 BP	**A.D. 649-781**; A.D. 791-807
QUB-7009	F336: Animal bone from fill of Enclosure 6	1369±33 BP	**A.D. 605-691**; A.D. 750-762
Beta-247068	F721: Fill of posthole associated with Structure A	1440±40 BP	**A.D. 553-658**
Beta-247072	F1476: Fill of posthole associated with Structure B	1200±40 BP	**A.D. 689-752**; **A.D. 761-899**; A.D. 919-948
Beta-247069	Cereal grain from oval-shaped cereal-drying kiln (Kiln A)	1180±40 BP	A.D. 717-743; **A.D. 768-907**; **A.D. 911-971**
Beta-247071	Cereal grain from oval-shaped cereal-drying kiln (Kiln C)	1340±40 BP	**A.D. 637-772**
Beta-247070	Cereal grain from cereal-drying kiln (Kiln H)	1320±40 BP	**A.D. 648-774**

References:

Cagney, L., O'Hara, R., Kelleher, G., & Morkan, R. 2009. Report on the Archaeological Excavation of Dowdstown 2, Co. Meath. Unpublished report prepared for Archaeoloigcal Consultancy Ltd. Available at www.M3motorway.ie.

Cagney, L., & O'Hara, R. 2009. An early medieval complex at Dowdstown 2, in M. Deevy & D. Murphy (eds.) Places along the Way: First Findings on the M3, 123–34. National Roads Authority Scheme Monograph Series 5. Dublin. National roads Authority/Wordwell.

Kinsella, J. 2008. New discoveries and fresh insights: researching the early medieval archaeology of the M3, Co. Meath, in J O'Sullivan and M Stanley (eds.) *Roads, Rediscovery and Research*, 95–107, National Roads Authority Monograph Series 5. Dublin. National Roads Authority. Wordwell.

Kinsella, J. 2010. A new Irish early medieval site-type? Exploring the *'Recent?'* archaeological evidence for non-circular enclosed settlement and burial sites. *Proceedings of the Royal Irish Academy*, 110(C).

Ferganstown and Ballymackon, Co. Meath
Early Medieval Unenclosed Souterrain
Grid reference: **N89126933 (289129/269331)**
SMR No: **ME025-058**
Excavation License No: **99E0178**
Excavation duration/year: **1999**
Site director: **K. Hanley (Freelance)**

Excavation in advance of the construction of a sewerage treatment plant revealed a potentially unenclosed souterrain in the townland of Ferganstown and Ballymackon. The site was situated south of the River Boyne and approximately 3km north-east of Navan town.

The souterrain consisted of a single dry-stone passage, which lead westwards into a simple beehive chamber. The excavation was limited to four trenches that were inserted across the site area. Therefore, the possibility remains that an enclosure exists but was not detected by the excavation trenches.

The first trench was sectioned across part of the souterrain passage. Its walls were constructed from roughly shaped limestone rocks and they slanted inwards. The passage was crowned by seven large lintels. It measured 3.3m in length, was 1m high and sloped down to the beehive chamber. The chamber was constructed using both flat and rounded rocks and was sealed by a large capping stone. There was sufficient evidence to suggest that there may have been an entrance passage or drop-hole feature leading north from the exposed end of the existing passageway. Cow and pig bone was present around the souterrain passage and analysis showed that slaughtering and primary butchery was carried out in the vicinity of the site.

Another trench revealed a series of four linear parallel cut features which were possible furrows. Two shallow pits, a curving ditch and a circular structure were also identified. No associated stake- or postholes were identified in association with the latter – which lay outside the arc of the ditch – but it may have demarcated a dwelling area.

The remaining two trenches revealed no archaeological features.

(**No plans were available for this site**).

Reference:

Hanley, K. 1999:0687. Ferganstown and Ballymackon, Co. Meath. www.excavations.ie.

Johnstown 1, Co. Meath
Early Medieval Settlement-Cemetery
Grid reference: **N76984047 (27698/24047)**
SMR No: **ME048-031**
Excavation Licence No: **02E0462**
Excavation Duration/Year: **April – October 2002**
Site director: **L. Clarke (ACS Ltd.)**

Johnstown 1, excavated in advance of the M4 road-scheme, was a multi-period settlement-cemetery and industrial site that was utilised for over 1000 years. Two areas of activity were evident. The first was a succession of enclosures that respected a burial mound, which originated in the late Iron Age, and defined areas of burial, settlement and industrial activity until potentially the seventeenth century. The second area was outside the enclosure and consisted of a mill-race ditch and the site's final use as a *cillín* in the post medieval period. The site was situated on the summit of a low promontory that overlooked marshland and was located close to the River Blackwater and the border between Meath and Kildare.

A succession of three enclosures was centred on the burial mound which measured 15.5m by 18.5m. The mound was not initially enclosed when the first burials were placed there. One of the earliest depositions included the incomplete remains of three adults in a charnel pit beneath the mound. Burials associated with the mound were dated between the late fourth and late seventh centuries (see Table A for radiocarbon dates). Following this, up until the end of the tenth century, burials were placed to the south of the mound. Gradually, burial activity moved to the south-east and then east of the mound between the final centuries of the early medieval period until the end of the late middle-ages. Three hundred and ninety eight inhumations were associated with the enclosures including 70 male adults, 72 female adults, 41 unsexed adults, 18 adolescents, 111 juveniles and 149 infants. The majority were extended, aligned west-east, within simple, unlined graves.

Three enclosing phases demarcated the cemetery, settlement and industrial areas (Fig. 254). The primary enclosure was sub-oval and measured 59m in diameter. The entrance was at the north and finds within the ditch included large quantities of animal bone, iron slag and iron objects. The ditch was excavated between A.D. 432 and 651. The second enclosure (53m by 54m) had a more substantial ditch and two entrances were evident to the north and south-east. Animal bone was again plentiful as was iron slag. A range of iron finds were present including an arrowhead, a smith's hammer-head and unfinished objects. Other artefacts included fragments of souterrain ware and a copper alloy ringed pin. The second ditch was dug sometime between the fifth and seventh centuries and was finally abandoned before the end of the ninth century. The final enclosure was D-shaped and measured 47.5m by 61m. The enclosing ditch was much wider and deeper than the previous ditches and had a maximum width and depth of 5.3m and 1.8m respectively. Finds were similar to earlier phases including large quantities of animal bone, ferrous metallurgical waste and a range of functional and personal items. The enclosure was probably created in the ninth or tenth centuries before it was abandoned sometime between the fifteenth and seventeenth centuries. It appears that the succession of enclosures was created to accommodate the expansion of the cemetery over many centuries.

Settlement evidence at Johnstown 1 survived as refuse pits, hearths, gullies, spreads and cobbled surfaces that were distributed throughout the enclosures' interior. Large quantities of animal bone (both butchered and un-butchered), significant quantities of plant remains and a range of artefacts (both personal and functional) also show that people were living and working here throughout the early and later middle-ages. Dwelling evidence was mainly dated between the ninth and fifteenth centuries but it is reasonable to predict that this later settlement activity erased archaeological evidence preceding the ninth century.

Ironworking was undoubtedly the dominant industrial activity at Johnstown. Over 2000kg of metallurgical waste was retrieved and ironworking features included bowl furnaces and smithing hearths which demonstrated that both raw iron and finished artefacts were produced. Seven ironworking areas were identified and the majority were outside the enclosures. The earliest dated metallurgical activity occurred to the east of the enclosure in A.D. 250-538 and ironworking continued to be practised in different areas of the site until potentially the seventeenth century. Where industrial activity occurred within the enclosures, it was mainly separated from the settlement areas and cemetery in the western area.

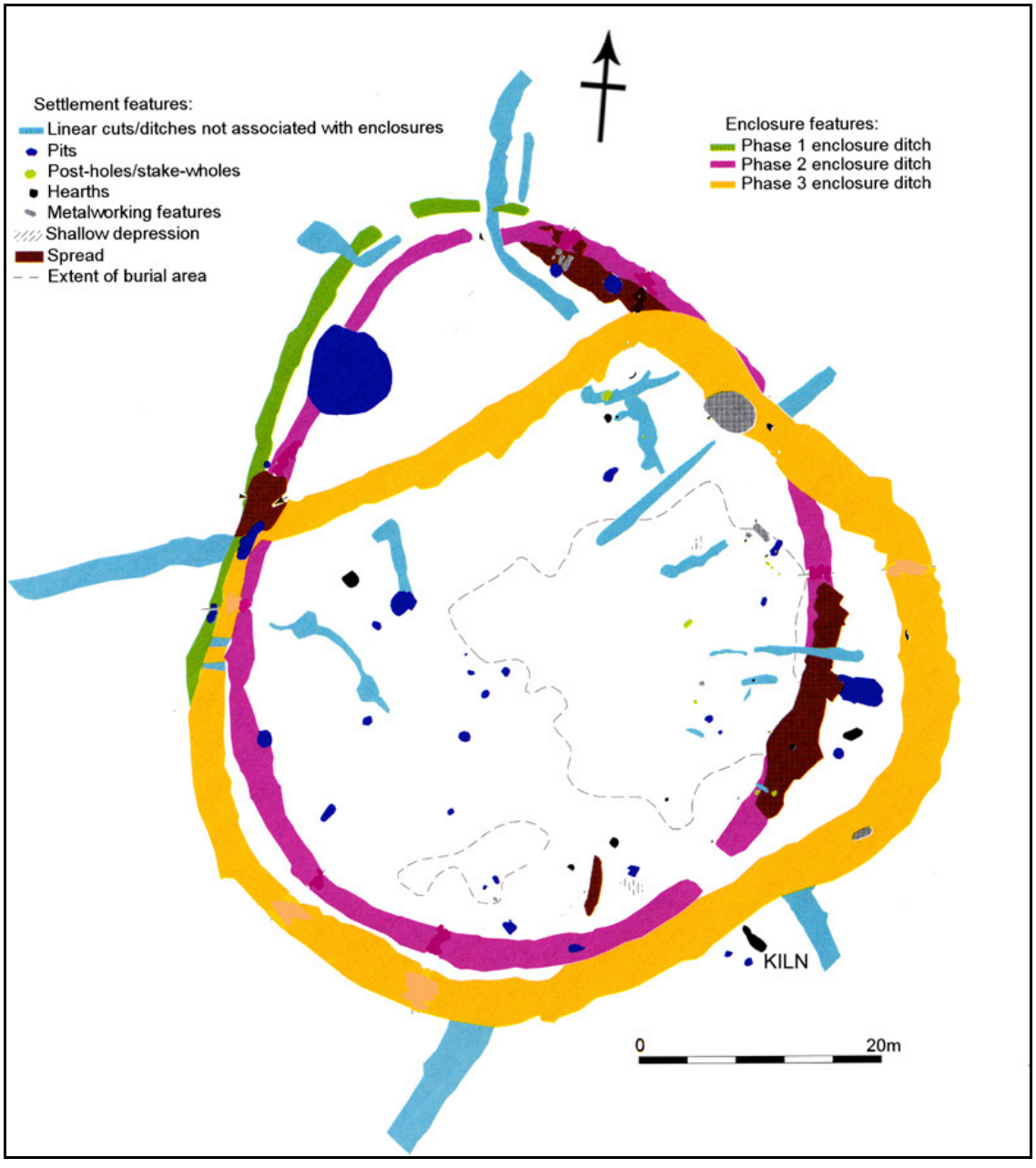


Fig. 254: Plan of phases at Johnstown, Co. Meath (after Clarke & Carlin 2008).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-177959	Animal bone from Phase 1 enclosure ditch	1490±60 BP	**A.D. 432-498; A.D. 501-651**
Beta-177960	Animal bone from primary context of Phase 2 enclosure ditch	1470±60 BP	**A.D. 433-494;** A.D. 505-523**;** **A.D. 526-661**
Beta-176808	Charcoal from spread overlying upper fills of Phase 2 enclosure ditch	1230±60 BP	**A.D. 664-898**; A.D. 920-947
Beta-176807	Charcoal from pit at base of Phase 3 enclosure ditch	840±60 BP	**A.D. 1042-1107; A.D. 1117-1276**
Beta-180653	Human bone from Burial 269 in middle fill of Phase 3 enclosure ditch	930±70 BP	**A.D. 990-1228**; A.D. 1232-1242; A.D. 1247-1251
Beta-178197	Human bone from charnel pit - partial remains of at least three adults (central burial mound)	1560±70 BP	A.D. 349-368; **A.D. 379-641**
Beta-184610	Human bone from Burial 33 (central burial mound)	1460±70 BP	**A.D. 430-670**
Beta-184704	Human bone from Burial 128 in proximity to the mound	1240±40 BP	**A.D. 680-882**
Beta-184702	Human bone from Burial 26 in proximity to mound	1100±40 BP	A.D. 828-839; **A.D. 866-1021**
Beta-178196	Human bone from Burial 118 at eastern edge of mound	790±50 BP	A.D. 1058-1064; A.D. 1069-1071; **A.D. 1155-1292**
Beta-176808	Charcoal from occupational deposit overlying Phase I and II ditches	1230±60 BP	**A.D. 664-898**; A.D. 920-947
Beta-181478	Charcoal from a refuse pit	1020±60 BP	**A.D. 894-1157**
Beta-177963	Animal bone from possible animal enclosure ditch	930±60 BP	A.D. 996-1006; **A.D. 1012-1221**
Beta-184701	Charred material from metallurgical pit to east of enclosures	1660±60 BP	**A.D. 250-538**
Beta-181479	Charred material from metallurgical pit within enclosure	1540±60 BP	**A.D. 410-637**
Beta-184700	Charcoal from a smelting furnace	1200±60 BP	**A.D. 682-905**; A.D. 912-970
Beta-176807	Charcoal from furnace within base of Phase III enclosure ditch	840±60 BP	**A.D. 1042-1107; A.D. 1117- 1276**

Reference:

Clarke, L. & Carlin, N. 2008. Living with the dead: an enclosed burial, settlement and industrial site, in N. Carlin, L. Clarke & F. Walsh, (eds.) *Life and Death in the Boyne Floodplain: Findings from the Archaeological Excavations along the route of the M4*

Motorway, 55–86. National Roads Authority Scheme Monographs 2. Dublin. National Roads Authority. Wordwell.

Kells, Co. Meath
Early Medieval Ecclesiastical Settlement
Grid reference: **N739760 (27390/27600)**
SMR No: **ME017-044**
Excavation License No: **N/A**
Excavation duration/year: **October – December 1987; April – May 1988**
Site director: **G. Byrne (Freelance)**

Excavations at Kells – in advance of a proposed new Garda headquarters – revealed a range of features dating from potentially the Bronze Age until the post medieval periods. Early medieval activity was represented by part of an enclosure ditch and some pits outside the ecclesiastical site at Kells. The site was located immediately to the northwest of the stone-roofed oratory known as 'St Columba's House' – dated between the eighth and ninth centuries from scientific analysis of its mortar (www.megalithicireland.com/High%20Cross%20Kells.htm) – and 150m north-north-west of the round tower. The site was situated on the summit and eastern side of a low hill.

Part of a V-sectioned ditch, which measured approximately 2.2m wide and 1.5m deep, was revealed for a length of about 20m directly to the north-west of St Columba's House. This formed part of a circular enclosure that was approximately 22m in diameter.

The ditch expanded in width and depth at its northern end before terminating at a potential entrance. The entrance was defined by a large number of stakeholes. Many of these formed two main rows which ran parallel to the ditch end. The ditch was partly rock-cut and its fill consisted of several different layers with large quantities of animal bone. Bronze artefacts included a plain brooch from one of the basal fills that possibly dates to the seventh century, a needle and a ring fragment. Items of iron included a ring-handle, a hook and a knife while ironworking was indicated by the presence of a furnace bottom and slag. Stone finds included a bead, whetstones, a flat perforated disc and a number of naturally water-rounded stones. A blue-glass bead and a bone pin were also retrieved.

A shallow ash- and charcoal-filled pit to the west of the ditch contained a green and opaque yellow glass bead.

Further excavation of the enclosure ditch in 1988 (three sections were investigated) produced a large quantity of artefacts including a stone spindle whorl, a socketed iron punch or awl, an iron ring, slag, fragments of a bronze ring, a bone cylinder and the head of a bone pin. Animal bone was also abundant. Another pit was excavated outside the enclosure and it contained a lot of charcoal and ash. The only artefact was part of a polished bone pin. These excavations suggest that there was settlement activity at Kells potentially prior to the foundation of the monastery in A.D. 804 by St Colmcille of Iona.

(**No plans were available for this site**).

References:

Byrne, B. 1987:041. Kells, Townparks, Co. Meath', www.excavations.ie.

Byrne, B. 1988:057. Kells, Townparks, Co. Meath', www.excavations.ie.

Electronic Resource:

www.megalithicireland.com.

Knowth Site M, Co. Meath
Early Medieval Settlement-Cemetery
Grid reference: **N99847387 (29984/27387)**
SMR No: **ME019-069**
Excavation Licence No: **N/A**
Excavation Duration/Year: **2002 - 2004**
Site director: **G. Stout (Research)**

Research excavations at Knowth Site M revealed a settlement-cemetery – enclosed by two sub-circular ditches – dating between the sixth and tenth centuries. A third, undated, outer enclosure was constructed potentially after the tenth century. Settlement evidence was revealed by a platform between the inner and second enclosure ditches and a range of artefacts, animal bone and cereal remains that were retrieved from the ditch fills. Agricultural evidence was also detected within the enclosures. Prehistoric activity was attested to by the presence of large quantities of un-stratified lithics. The site is situated in marshland and is drained by a stream linked to the River Mattock. It is located immediately northeast and down slope from the multi-period burial and settlement site at Knowth in the Boyne river valley.

The earliest phase at Knowth Site M consisted of a series of undated linear trenches and five pits some of which were cut by the later settlement-cemetery.

The settlement/cemetery was enclosed by two sub-circular ditches (Fig. 255). The inner enclosure defined an area measuring 48m northwest/southeast by 40m. It was slightly raised and therefore represented the driest part of the site. The ditch was excavated in five locations and contained similar fills. Animal bone was present throughout and processed cereal grains were abundant. Charcoal was also present in many of the ditch fills. Artefacts included part of a polished stone axe, a flint side and end scraper, iron slag and a fragment of an undecorated bone comb. A blue glass bead and a fragment of a gilt Anglo-Saxon mount were discovered in topsoil above the ditch. Bone and charcoal from the inner enclosure ditch produced a date between the late sixth and mid seventh century (see below for radiocarbon dates). Evidence for an internal bank was present in two cuttings.

The inner enclosure ditch may have been further delimited by a wall and two associated external trenches. The wall, surviving to a height of three courses, followed the edges of two trenches. Charcoal and large amounts of charred cereal grains were present in one of the trenches. A flint scraper was also discovered in its ditch fill. A date of A.D. 767-896 indicates that it fell into disuse at some point during this time. The second trench was cut by the above example. It produced a flint and an iron nail. A highly decorated Hiberno-Scandinavian bronze strap end with interlaced decoration on both sides was located in a layer below the subsoil and overlying the initial trench.

A final trench, located to the west of the first trench and which contained similar fills, produced iron knife fragments. A date of A.D. 877-998 was obtained from its upper fill.

The second enclosure was oval in plan and concentric with the inner enclosure. Evidence for an internal bank was also present in certain places. It had an external diameter of 74m by 62.5m. The ditch was situated between 9m and 10m outside the inner enclosing ditch. Charcoal from its primary fill produced a date of A.D. 662-780. Animal bone was present throughout and there was evidence that the ditch had been re-cut. The only find was an iron disc.

The outer enclosure was eccentric to the two inner enclosures and consisted of two banks with an intervening ditch. It measured 110m in diameter and both banks were over 5m wide. Although this enclosure has not been dated it is believed to post-date the two inner enclosures.

Fifty two burials were revealed in the central and southern areas of the inner and second enclosures. The majority in the central area were extended in simple unlined graves and aligned west-east. Two of the graves may have been covered with stone slabs. Finds associated with these burials were limited and included a stone ball, a flint flake and fragments of two iron nails. Soil surrounding the two graves where stone slabs were present produced a sherd of E ware. Charcoal has dated two of the graves to A.D. 597-673 and A.D. 856-989 which suggests that the cemetery was in use from at least the sixth to tenth centuries.

Ten badly damaged slab-lined graves were located at the south-eastern section of the inner enclosure and some extended into the second enclosure. As with the burials above, they were extended and aligned west-east. One of the graves utilised a fragment of a stone slab featuring megalithic art. A bronze baluster-headed ring-headed pin was found in the topsoil above this section of the cemetery.

A potential trapezoidal structure was located at the western section of the inner enclosure. It was defined by four roughly circular pits. One of the pits appears to have been a post-pipe and was surrounded by packing clay and a large charcoal rich layer. The eastern wall of the post-hole sloped gradually suggesting either that the post was erected at an angle or that it was used as a structural support. Charcoal and cereal grains were present in its fill and the former produced a date of A.D. 561-652.

Habitation evidence was evident in the south-eastern area between the inner and second enclosing ditches. Excavation revealed a platform defined by a curving trench and some pits. Artefacts within the soft dark clay that overlay the platform included a toggle-like object made from a sperm whale's tooth, worked horn and a small worked bone fragment.

Agricultural activity within the enclosures was represented by plough-marked stones, cultivation furrows, trenches and ditches. Radiocarbon date from two of the trenches – one of which contained a spindle whorl and the other charred seeds – demonstrates that farming occurred at Knowth Site M between the mid-sixth and late-ninth centuries.

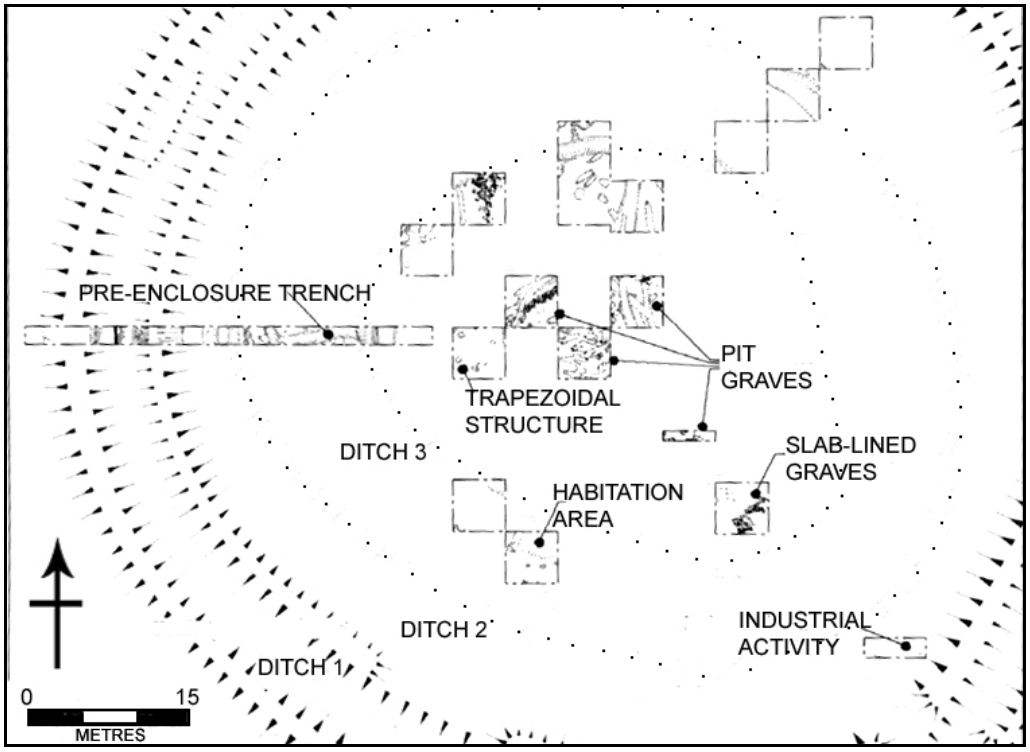


Fig. 255: Excavated areas at Knowth 'M', Co. Meath (after Stout & Stout 2008, 8).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-7019	Bone and charcoal from inner enclosure ditch	1427±32 BP	**A.D. 573-658**
UB-6587	Fill from trench associated with wall	1198±31 BP	A.D. 712-745; **A.D. 767-896;** A.D. 923-940
UB-7018	Upper fill of trench to west of wall and associated trenches	1112±30 BP	**A.D. 877-998**; A.D. 1002-1013
UB-7020	Charcoal from primary fill of second enclosure ditch	1277±30 BP	**A.D. 662-780**; A.D. 792-805
UB-6571	Charcoal from grave B84	1396±32 BP	**A.D. 597-673**
UB-6578	Charcoal from grave H14	1130±32 BP	A.D. 782-789; A.D. 810-847; **A.D. 856-989**
UB-6566	Charcoal from post-pipe related to potential trapezoidal structure	1448±31 BP	**A.D. 561-652**
UB-6579	Charcoal from trench related to agricultural activity	1467±31 BP	**A.D. 548-645**
UB-6573	Charcoal from trench related to agricultural activity	1224±32 BP	**A.D. 690-886**

Reference:

Stout, G. & Stout, M. 2008. *Excavation of a Secular Cemetery at Knowth Site M, County Meath, and Related Sites in North-East Leinster*. Dublin. Wordwell.

Knowth, Co. Meath

1. **Early Medieval Raised Bivallate Settlement Enclosure and Cemetery**
2. **Early Medieval Unenclosed Settlement**

Grid reference: **N99677343 (299674/273437)**
SMR No: **ME019-030**
Excavation Licence No: **N/A**
Excavation duration: **1962-2000**
Site directors: **G. Eogan (Research)**

Knowth, excavated since the 1960s by George Eogan, is a large multi-period burial and settlement complex that was utilised from the Neolithic until post medieval times. The complex of monuments are situated on a low hilltop – at 61m OD – in the Boyne river valley with extensive views over the plains of Meath.

1. Bivallate Raised Enclosure and Cemetery

The passage tomb mound, measuring 85m in diameter, was the focus of the first early medieval phase at Knowth. During the seventh and eighth centuries two concentric ditches were excavated into the mound. The outer ditch was dug at the base of the mound and was on average 5m wide and 2.3m deep. The inner ditch enclosed the top of the mound and was 3m in depth. A steep scarp linked the outer and inner ditches and the average height between the base of the outer ditch and the outer edge of the inner ditch was 6m. There was no evidence for a bank associated with either ditch. A 6m wide causewayed entrance was located to the south-east. No internal domestic features were identified but both occupational and dating evidence was present in the enclosure ditches and mostly within the outer enclosure ditch.

Artefacts from this phase included a sherd of E ware and a single-edged bone comb from the lower fills of the inner enclosure ditch. The former demonstrates that the inner enclosure was in use between the sixth and mid-seventh centuries. Bronze items included a potential ear scoop, two possible spoons and three penannular brooches with zoomorphic terminals. A melon bead was also uncovered. Animal bone was present in both the inner and outer ditches.

A small mixed cemetery of crouched, flexed and extended burials was associated with the passage tomb and some of the latter were contemporary with the first early medieval phase. They were situated outside but close to the mound. Thirteen burials, which were either crouched or flexed, with accompanying grave goods have been dated to the middle Iron Age (see Table A for radiocarbon dates; taken from O'Brien forthcoming). The second phase of burial activity was represented by four slab-lined cist burials which were located at the western perimeter of the passage tomb and potentially date to the fifth and sixth centuries. The final burials included three seventh- and eighth-century disturbed extended inhumations.

2. Early Medieval Unenclosed Settlement

The first phase of early medieval activity at Knowth ceased by the end of the eighth century and occupational evidence during the following century is absent. However, in the tenth century a large unenclosed settlement – including 15 houses, nine souterrains, five metalworking areas, cobbled and paved surfaces and many hearths – succeeded the initial settlement which had been backfilled (Fig. 256). The houses survived as bases of dry-stone walls. They were rectangular with rounded corners and some examples had central hearths on stone floors. The houses measured between 6m and 12m in length and 3.5m to 6.25m in width. Eight souterrains had beehive chambers and some were associated with the houses.

The metalworking areas revealed that iron-, bronze-, gold-working and enamelling occurred on site. Stone-, bone- and antler-working was practised and there was indirect evidence for wood, wool, leather and textile craft. Artefacts from this phase were more abundant than that

of the earlier phase and included many items of personal adornment. These included a range of metal ringed and stick pins dating between the tenth and thirteenth centuries, bone pins, belt buckles, bone combs and jet bracelets. Functional items were represented by iron knives, needles, seven quern stone fragments, grindstones, a horse bridle and flint scrapers. Animal bone was uncovered from a wide variety of contexts including house floors, souterrains, occupational layers, and from within the hearths.

Contact with Scandinavian Dublin was evident by the presence of weighing scales and an eleventh-century Hiberno-Scandinavian bracelet. The rounded corners on the rectangular houses at Knowth also indicate Scandinavian building-style influences. The final early medieval phase ended sometime during the eleventh century. Annalistic references indicate that Knowth was granted to the Cistercian Abbey during the middle twelfth century but no archaeological evidence for this was uncovered. Modification of the south-eastern side of the mound occurred during the late-twelfth century as two stone-lined ditches and a bastion were constructed by the Anglo-Normans.

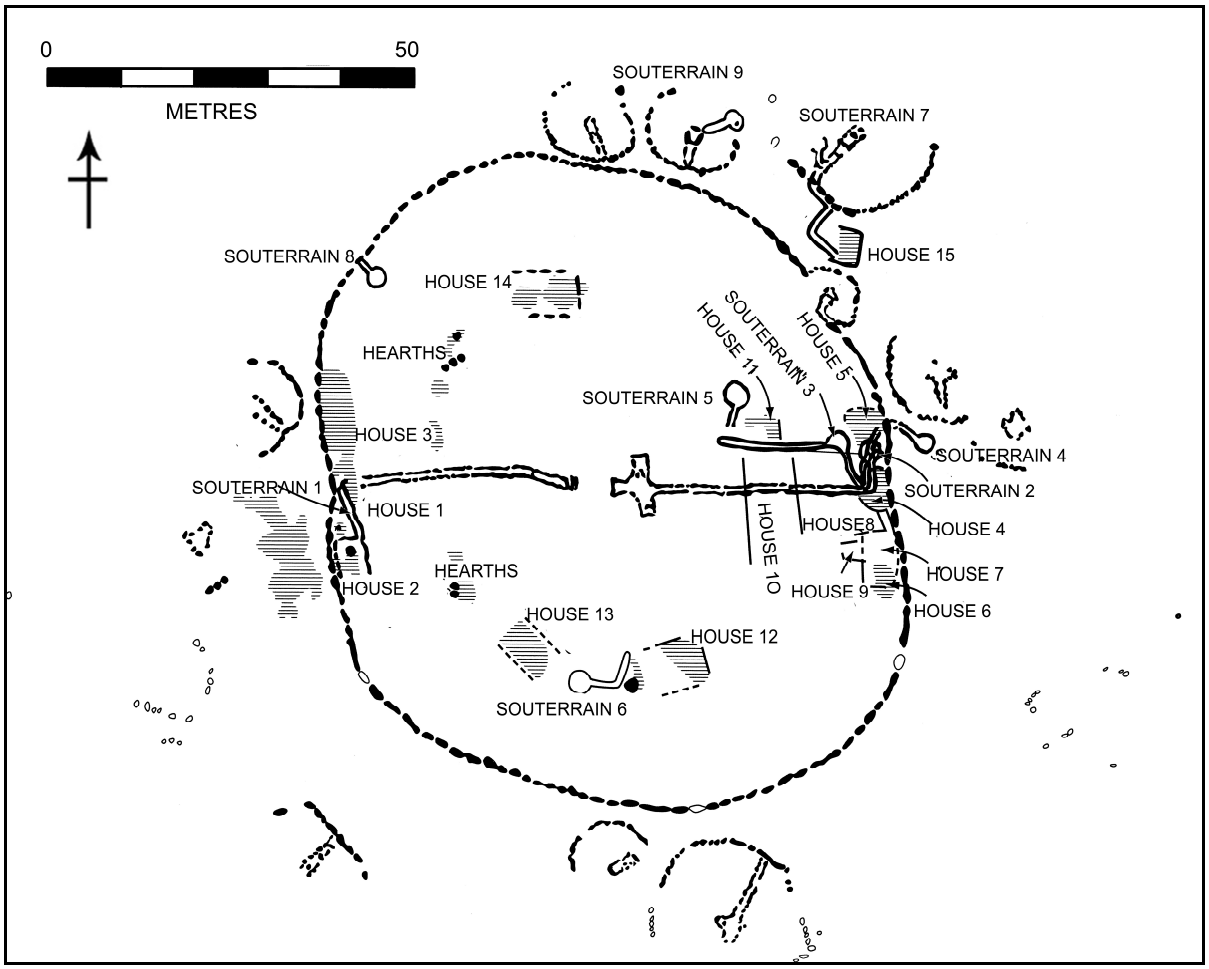


Fig. 256: Plan of early medieval phases at Knowth, Co. Meath (after McCormick & Murray 2007, 5).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
GRN-15370	Burial 7	1920±60 BP	**42 B.C. - A.D. 231**
GRN-15371	Burial 8	1960±30 BP	**39 B.C. - A.D. 87**; A.D. 104-121
GRN-15372	Burial 10	2095±20 BP	**175-50 B.C.**
GRA-13595	Burial 21	1921±50 BP	38-27 B.C.; 25-9 B.C.; **3 B.C. - A.D. 218**
GRN-15384	Burial 11/12	1355±20 BP	**A.D. 646-682**
GRN-1471	Burial 14	1270±25 BP	**A.D. 668-779**; A.D. 794-801

References:

Eogan, G. 1968. Excavations at Knowth, Co. Meath, 1962-1965. *Proceedings of the Royal Irish Academy Section C*, 66C, 299–382.

Eogan, G. 1974. Report on the excavation of some passage graves, unprotected inhumation burials and a settlement site at Knowth. *Proceedings of the Royal Irish Academy Section C*, 74C, 11–112.

Eogan, G. 1977. The Iron Age – early Christian settlement at Knowth, Co. Meath, Ireland. V. Markotic (ed.) *Ancient Europe and the Mediterranean: Studies Presented in Honour of Hugh Hencken*, 69–76. Wiltshire. Aris and Philips.

McCormick, F. & Murray, E. 2007. *Knowth and the Zooarchaeology of Early Christian Ireland*. Excavations at Knowth 3. Dublin. Royal Irish Academy.

O'Brien, E. Forthcoming. Pagan or Christian? Burial in Ireland during the 5th to 8th centuries A.D., in N. Edwards (ed.) *The Archaeology of the Early Medieval Celtic Churches*. Society for Medieval Archaeology Monograph.

Lagore (Lagore Big td.), Co. Meath
Early Medieval Crannog
Grid reference: **N98615284 (298619/252846)**
SMR No: **ME038-027**
Excavation License No: **N/A**
Excavation duration/Year: **1934**; **1935**; **1936**.
Site director: **H. O'N. Hencken (Harvard Archaeological Expedition)**

Lagore crannog, Co. Meath, was first discovered in 1839, when local labourers digging a drainage ditch exposed wooden structures, huge amounts of animal bone and numerous finds of metalwork at the site. The subsequent antiquarian investigations at Lagore can safely be considered to mark the beginnings of research on Irish crannogs. The site was later excavated by the Harvard Archaeological Expedition between 1934 and 1936. The stratigraphy of the crannog was complex and badly obscured by the earlier diggings, so that its dating and structures have been the subject of much re-interpretation.

The crannog survived as a large mound measuring 41m across, consisting of 3m thickness of peat, brushwood and timber, located at the eastern end of a now drained lake (Fig. 257). Lagore crannog was occupied between the seventh and early eleventh centuries A.D. and historical sources have traditionally been used to identify it as the actual historical site *Loch Gabor*, the early medieval residence of the kings of *Brega* of the southern Uí Néill. Archaeologists have in the past attempted to put the date of the start of Lagore back before the fifth century A.D., but most recent commentators have accepted the seventh-century origins for the site.

Lagore crannog was certainly occupied over a long period, re-constructed and re-built on several occasions. There is good evidence for some late Bronze Age activity on the site, although this is difficult to clarify. Hencken, strongly influenced by the constraints of the historical references, identified three separate, chronological, consecutive palisades of firstly piles, then posts and finally planks. Lynn has suggested there were even more phases of occupation. The palisades probably defined the outer defences of the crannog.

Hencken suggested that the crannog builders firstly placed a layer of animal bone, brushwood and peat on the lakebed, to use as a foundation to work from in building the main crannog. This layer he designated as his Period 1a, which he considered, preceded the use of the crannog proper. Lynn has suggested that the Period 1a material is itself evidence of a lake settlement, rather than the debris and working platform of crannog builders. This occupation phase, compacted and driven into the lake muds by the weight of the later crannog, may have had houses, hearths, piles, wooden platforms, brushwood and wattle mats and occupation debris. This earliest phase of occupation produced some Roman pottery (including *Terra Sigilata*) and post-Roman material. The latter included seventh-century pottery, an iron sword, a seventh-century gold ornament and a seventh to eighth-century horse bit. Period Ib was taken by Hencken to represent the first main phase of occupation, but it probably was just one of several successive phases after the first occupation. Period 1b produced Romano-British pottery, evidence for a seventh to eighth century work-shop for making glass studs and a seventh-eighth century bronze disc.

Liam Price's historical research was to strongly influence Hencken's interpretations of the chronology of the site. He believed that historical references to the destruction of the crannog could be identified in the archaeological record. He thought that the Period I occupation was abandoned after the event referred to in the *Annals of Ulster* for A.D. 850, when Cinaed son of Conaing, King of Cianancht rebelled against Mael Sechnaill, plundered the Uí Néill and 'deceitfully sacked the island of *Loch Gabor*, levelling it to the ground' (*corro ort innsi Locha Gabur dolose corbo comardd fria lar*), while also burning the nearby church of Treóit. Period II and Period III produced few finds to enable close dating of the site. Hencken felt that the

Period II occupation probably ended with the destruction by Lagore described by the Annals of Ulster for A.D. 934 when 'the island of Loch Gabor was sacked by Amlaíb, grandson of Imar' (*Inis Locha Gabhar do thogail la hAmlaibh h. nImair*). There are no historical references to the site after A.D. 969. The end of Period III and the probable abandonment of the site probably occurred in the late tenth or early eleventh century A.D. Archaeologists have pointed out the circular arguments that lie behind Hencken's use of historical references to phase the various occupations, but accept his general dating of the site. It is also worth pointing out that other potential phases of prehistoric and medieval occupation at Lagore have rarely been described. Later medieval artefacts from the site were largely ignored by the excavator and a wooden anthropomorphic figure from a sandy layer in the northwest part of the crannog has been dated to the early Bronze Age.

The Lagore excavations produced huge amounts of early medieval finds, described in detail in the original report, within which the nineteenth-century discoveries from the site are also incorporated. There was extensive evidence for bronze working at Lagore, particularly in the seventh-century and the tenth-century phases of occupation. The site produced pieces of copper ore, sandstone ingot moulds and moulds for bronze rings, clay crucibles, *tuyères*, spilt bronze waste and scrap pieces of sheet bronze. There were also bone and stone trial or motif pieces, indicating the preparation of designs on-site. Bronze artefacts from the site included bronze pennanular brooches, zoomorphic pennanular brooches, decorated bronze belt buckles and strap ends, bronze pins and ringed pins, bronze bowls and rings. There were also some on-site black smithing and ironworking, with large amounts of iron slag in the period II occupation and ironworking floors in the Period II and Period III phases. Iron pennanular brooches and pins may have been made there. Objects of finer metals included gold filigree ornament and silver bracelets. There was also evidence for glass-working, with moulds for glass studs occurring, but other finds included glass bracelets and armlets, glass rods, millefiori, enamel and a large number of glass beads. The glass beads were decorated in a range of ways, in blue, white, yellow, khaki and green. The beads varied in shape from annular, to segmented, dumb-bell and melon shaped. There were also large amounts of lignite bracelets. Imported European objects included Roman glass fragments, amber and E ware pottery. Animal bones were used as motif-pieces to work out designs for metalworking.

There was also a range of other domestic crafts practiced on the site. Leather shoes, scraps of leather and a wooden shoe last probably indicate the manufacturing of shoes on-site, while an iron leather working tool, similar to an example from Ballinderry crannog No. 1 was also found. Wooden spindles, spindle-whorls, fleece and animal hair were found, along with un-carded wool and numerous pieces of textiles. Spinning and possibly weaving on a simple loom were probably also carried out in the crannog. Bone working resulted in bone combs, pins, a possible nail cleaner, gaming pieces, bone dice and a possible dice-box. There was a wide range of woodworking equipment, including iron axes, an adze, a wooden mallet, knives, gouges, awls, a punch, two small saws, a draw-knife and iron nails as well as whetstones for sharpening them. Wooden artefacts produced on-site included stave-built buckets, lathe-turned bowls (including some which replica E ware pottery), ladles, spindles and various other domestic utensils.

It is clear from the historical record that Lagore was witness to several violent occasions, when people were killed in raids on the site. The excavations at Lagore produced 200 human bones from lower levels or the seventh-century Period 1a phase of occupation of the crannog, many were from headless bodies. Fourteen human skulls with cut occipita indicated the beheading of victims, while other bodies were scattered about the edge of the site. It is possible that these were early medieval in date, but it is also possible that they are in fact prehistoric burials. Two iron collars with chains, a possible leg-iron and an iron trident have been interpreted as means of controlling hostages or slaves. Weaponry included a range of different types of iron swords. There were twelve iron spearheads, leaf-shaped and shouldered, including a Viking spearhead with an ornamented socket. There were also spear-butts, ferrules and iron shield bosses, while iron horse-bits were also found.

Lagore crannog produced huge amounts of animal bone, fifty thousand pounds of bone were recovered from the excavations and the nineteenth-century antiquarian accounts describe similar huge amounts being removed for fertiliser. Cattle easily predominated (much of it slaughtered) in the faunal assemblage, but pigs and sheep/goat were also kept. Horse was fairly infrequent, although certainly present in small numbers. Dog, cat and fowl were also present. There may have been some limited hunting of deer, hare, wild geese and wild duck. Hencken's impression was that meat-eating predominated over grain, although little attention was paid by him to the use of dairy products. Agricultural tools included iron plough shares, plough coulters, sickles, billhooks and a few rotary querns. Wheat straw (*Triticum* sp.) was identified in a mass of plant remains. There were also iron shears, although these may have been used for textile working. Other evidence for textile production included spindle whorls, fleece and goat hair and woven textiles.

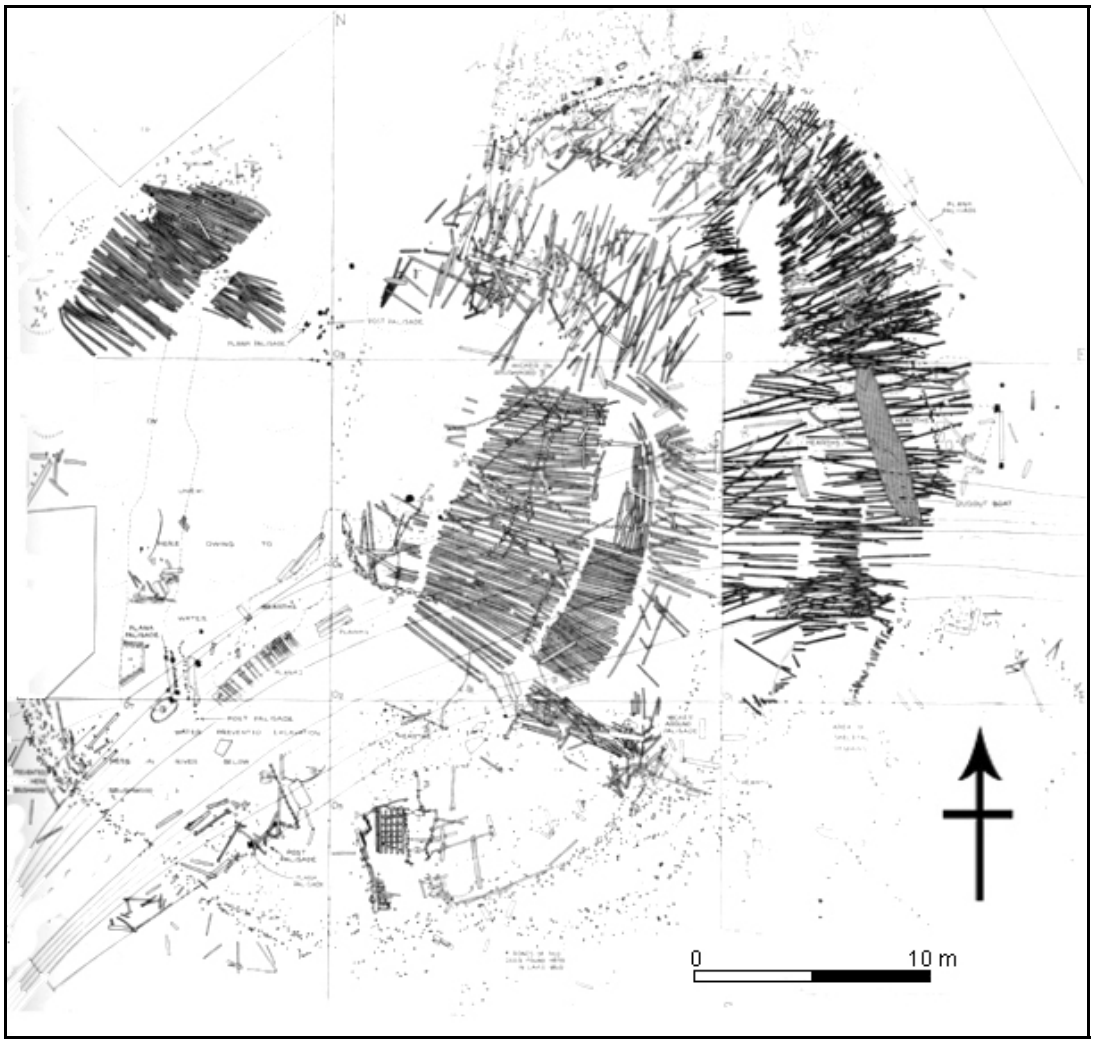


Fig. 257: Ground-plan of Lagore crannog, Co. Meath (after Hencken 1950).

References:

Comber, M. 1997. Lagore crannóg and non-ferrous metalworking in early historic Ireland. *Journal of Irish Archaeology*, 8, 101–14.

Eogan, G. 1966. A bronze double-edged knife-dagger with openwork handle and ring terminal from Lagore, Co. Meath and its affinities. *Journal of the Royal Society of Antiquaries of Ireland*, 96, 147–156.

Eogan, G. 2000. Life and living at Lagore. In A.P. Smyth (ed.), *Seanchas: Studies in early and medieval Irish archaeology, history and literature in honour of Francis J. Byrne*, 64–82. Dublin. Four Courts Press.

Hencken, H. O'N. 1950. Lagore crannóg: an Irish royal residence of the seventh to tenth century A.D. *Proceedings of the Royal Irish Academy* Section C, 53C, 1–248.

Lynn, C. J. 1985-6. Lagore, County Meath and Ballinderry No. I, County Westmeath crannógs: some possible structural reinterpretations. *Journal of Irish Archaeology*, 3, 69–73.

Price, L. 1950. The history of Lagore, from the annals and other sources, in Hencken, Lagore crannóg: an Irish royal residence of the seventh to tenth century A.D. *Proceedings of the Royal Irish Academy* Section C, 53C, 18–34.

Warner, R. B. 1985-6. The date of the start of Lagore. *Journal of Irish Archaeology*, 3, 75–7.

'Madden's Hill', Kiltale, Co. Meath
Early Medieval Settlement Enclosure and Cemetery
Grid reference: **N896265405 (289266/254050)**
SMR No: **ME037-025**
Excavation License No: **N/A**
Excavation duration/year: **1966 (2-week excavation)**
Site director: **E. Rynne (National Museum)**

A short excavation was undertaken in Kiltale townland after human bones were discovered while quarrying for sand. An enclosure, souterrain and earlier cemetery were revealed on top of an esker at approximately 91m OD (Fig. 258).

The enclosure was almost circular in plan and measured 40m by 30m. Two sections through the ditch revealed it was V-shaped and averaged 2.5m wide and 1.7m deep. Large quantities of animal bone were evident in the ditch fill and notably near the bottom. The only other find from this area was a furnace bottom. At least two phases were detected within the ditch deposits.

A souterrain was built on the enclosure ditch fill and part, or all, of it would have extended under the bank when it had existed. It consisted of a short passage and chamber and the latter was situated within the enclosure ditch. The passage was 1.3m in length and narrowed in width from 0.75m at the entrance to 0.55m at its junction with the chamber. It was 0.7m high at the former and 0.6m in height at the later. The chamber measured 1.7m by 1.5m in width and was approximately 0.6m high. The passage and chamber walls were constructed with small rounded boulders but no roof lintels were uncovered. This suggests that the souterrain was never finished, the lintels were taken in antiquity or it was roofed with lengths of timbers. A small quantity of charcoal was found on the passage floor.

A number of extended burials, whose orientation varied, were located immediately to the south-east of the enclosure. The enclosure also cut through a number of burials and therefore post-dated the initial use of the cemetery. Recent farming activities – identified as traces of lazy beds – also resulted in the incomplete survival of many burials.

A natural mound 30m south-east of the enclosure was also utilised as a burial ground. Again, the orientation of the burials varied and many were disturbed and incomplete. The majority of the skeletons were those of children. A three-sided rectangular-shaped enclosure, demarcated by a setting of stones, was found near the centre and within the upper part of the mound. It was open to the south-west and measured 1.5m by 1.3m. This feature did not cut or interfere with any of the burials and no finds or traces of bone were found in association. Therefore, its function remains unclear.

Although the area between the mound and enclosure was not excavated due to time constraints, further burials were identified there during later clearance of the subsoil by the landowner.

A lack of radiocarbon dates from the site hampers interpretation. However, the enclosure ditch cut through some burials which shows the first activity on site was related to burial activity. Many of the burials were disturbed and truncated and their orientation varied. It may be postulated that the initial focus at the site centred on the natural mound which was used as a cemetery sometime during the latter part of the Iron Age and during the early middle-ages. The cemetery probably expanded in size and utilised the area outside the mound to the northwest. The enclosure and souterrain cut these later burials and represented the final early medieval phase at Kiltale. If the children within the mound came from its upper levels, this may represent a post medieval *cillín* cemetery and final use of the site.

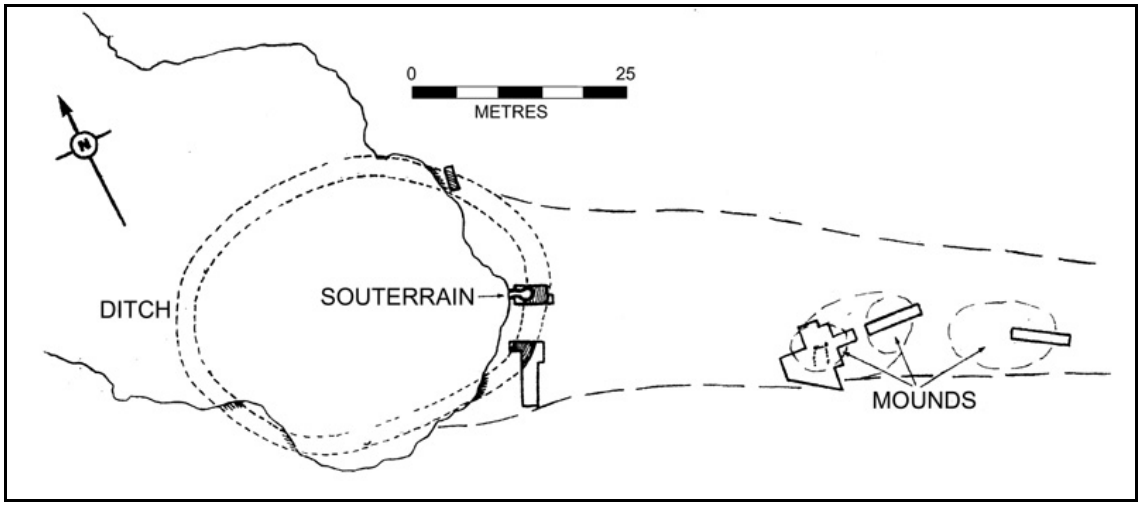


Fig. 258: Plan of enclosure and souterrain at Kiltale, Co. Meath (after Rynne 1974, 268).

Reference:

Rynne. E. 1974 Excavations at "Madden's Hill", Kiltale, Co. Meath. *Proceedings of the Royal Irish Academy Section C*, 74C, 267–75.

Moynagh Lough, Co. Meath
Early Medieval Crannog
Grid reference: **N81988555 (281980/285559)**
SMR No: **ME005-099**
Excavation License No: **E337**
Excavation duration/year: **1980-1998**
Site director: **J. Bradley (St. Patrick's College, Maynooth)**

Moynagh Lough, Co. Meath, is the most significant early medieval crannog excavated in Ireland in modern times, having been the subject of a long-term programme of excavations since the 1980s by John Bradley (Fig. 259). The site had been occupied in the Late Mesolithic, and in the early and late Bronze Age, followed by a hiatus in the Iron Age. In the early medieval period, there were several phases of occupation from the late-sixth to the ninth century A.D., with a sequence of palisades, circular houses and evidence for on-site metalworking, the trade of exotic goods, diet and economy.

The early medieval crannog was situated at the southern edge of a former lake on the River Dee, overlooked by hills and slopes to the south and west. The site was sheltered from south-west winds and was snugly placed inside one corner of the lake with good views to the north and north-east. It seems that the muddy knolls and artificially constructed mounds of peat occupied in the Mesolithic and Bronze Age remained as lake shallows beside the deepest part of the lake, making it a good location for crannog construction. There are several substantial early medieval enclosures on the neighbouring drylands, notably those to the immediate west at Lissanard, Lissnacross and Cherbourg Wood. An Anglo-Norman motte at Nobber to the north may also have its origins in the early medieval period, perhaps being originally an early medieval raised enclosure. Other sites in the environs include several crannogs, an early medieval church site at Nobber, a potential unenclosed settlement at a souterrain at Ballynee, as well as possible horizontal mills on the River Dee.

There were at least six phases of occupation in the early medieval period, each marked by a re-deposited layer of peat and possibly representing a generation of activity. The crannog varied in form through these five phases of occupation, but in general terms it measured 40m by 32m. The sub-structure consisted of stones, gravelly earth, timbers, brushwood and re-deposited peat. Piles were driven into the ground both outside the crannog (to a distance of 10m out from the western side) and within to retain the foundation layers.

Phase U was the earliest phase in the early medieval period, probably dating to the late-sixth to seventh centuries A.D. It has produced an early medieval occupation horizon, with a hut and pathway that apparently pre-dates the main palisade construction (as both are cut by it). There was a small circular hut (3m in diameter), with an arc of post-and-wattles (2.9m by 1.9m), a charcoal-rich floor, and a spud-stone to hold a door at the south side. There was also a pathway running away from the house, 4m in length, consisting of 32 flat timbers, some re-used. There were also gravel spreads on the east side of the crannog, potentially the earliest of the early medieval occupation layers. At the south side of the crannog, there was a stone hearth, with a C-shaped arc around it. Finds from the vicinity of the hut included E ware (sixth/mid-seventh-century imported pottery); an iron shield boss; and a rectangular bronze mount (similar to the escutcheons on the Sutton Hoo hanging bowl). Finds from the gravel spread included two Merovingian glass bottles and a bronze spatula for removing their contents, both being sixth/seventh century in date. At the south side, there were bone combs and amber beads.

Phase V is represented by a group of refuse layers, but no structures are reported. The phase is interpreted as dating to the mid- to late-seventh century A.D. Finds included a rim-sherd of E ware, a bronze disc-pendant pin, a bronze pennanular brooch with birds head terminals, double-sided bone combs, glass beads and a leather shoe.

Phase W was occupied *c.* A.D. 690-720. It had a small circular house (3m in diameter) or workshop, with an entrance to the east and a hearth with rectangular stone settings was present within the foundation layers of the house. The occupation surface of the crannog was a thick layer of charcoal-flecked soil and ash, sometimes compact with charcoal and bones, sometimes grey and smooth with burnt bones, charcoal and iron flecks. A significant industrial feature included a pit, cut into the peat and filled with ash. A layer of gravel was spread over the pit and a stone-lined rectangular hearth was built upon it. The hearth was surrounded by post-holes, probably from a spit with a pit to one side (in which was a large rotary quern fragment). There was also a bowl furnace, being a keyhole shaped pit set in gravel and lined with mud, while it had been carefully back-filled with sand. There were also a series of un-phased middens outside the site's Palisade 2 on the north, east and west sides. These layers of habitation debris were evidently the 'rubbish tip' of the crannog. They were rich in animal bones, and they also produced a large number of small finds, including a pennanular brooch, small pieces of gold filigree and objects of wood and leather, including a separate-bladed shovel.

Phase X (probably dating *c.* A.D. 720-748) was primarily significant for the evidence for metalworking and industrial production that it produced. The crannog's occupation surface was built of a basal layer of re-deposited peat laid on the site, on top of which there was a roundhouse located between two metalworking areas (1 and 2). There was also an entrance to the crannog on the northeast side, with a timber pathway laid on peat, one re-used timber providing a dendrochronological date of A.D. 625. The house was circular, with a double post-and-wattle wall and measured about 7.5m in diameter. Its floor surface was of re-deposited peat and ashes, although this had mostly been removed. Metalworking Area 1 was situated between the house and the entrance and was defined by a spread of charcoal, 4.2m by 4m, 0.06m in thickness, with thick chunks of charcoal, earth and ash mixed in. There was also a cesspit (1.7m by 1.3m) at the edge of the metalworking area, re-cut on two occasions, which produced layers of dung interspersed with layers of straw and leaves. Finds from Metalworking Area 1 included a pottery vessel, pieces of baked clay, crucible sherds, and fragments of two-piece clay moulds and motif-pieces. There was also an iron stake, used for beating metal. Metalworking Area 2 was larger and was found to the west of the house. It produced four major features, a furnace, a stone-lined area of clay, a spread of compacted pebbles and a dump of metalworking debris. These features were all clearly permanent, intended for re-use as the furnace was filled with sand and gravel, enabling people to return to work there. Finds from Metalworking Area 2 included slag, a whetstone, eight flints, a lump of yellow enamel, amber beads and chips, a bronze pin and button, two iron knives, a head of a bone pin and two cut pieces of horn. There were also 67 crucible sherds, three heating trays and 600 mould fragments (1.7 kg in total weight). They included 400 featureless mould fragments, 100 plain impressed pieces and 60 decorated pieces. The moulds were used for the production of brooches, mounts, studs (of types found on decorated shrines) and other decorated objects. Ingots were introduced onto the site, placed in crucibles, melted in the furnace and poured into the moulds. The furnace was used on at least eight occasions. The moulds may have been cooled nearby on the pebbled area, post-casting work and mould making may have been carried out on a pink clay and cobbled spread. The spatial organisation of the metalworkers' areas can thus be recognised.

In Phase Y, (dated *c.* A.D. 748 - *c.* A.D. 780), the crannog had two roundhouses, a large oak palisade and a furnace-pit, with finds including crucibles, a clay mould, clay nozzles and a bronze ingot. The palisade was of hewn and cleft oak tightly placed together in a U-shaped trench. The palisade construction dates to A.D. 748 and therefore comes at least 180 years after the first occupation of the site. The palisade revets a layer of re-deposited peat upon which the houses were constructed. The largest house (Roundhouse 1) was a substantial circular structure, 11.2m in external diameter (10m internal diameter) with double walls and a pennanular-shaped, laid foundation of reddish-brown gravel internally and an external ridge 0.26m in width, 0.15m in thickness. There were at least 250 internal posts, representing internal partitions, beds and benches. There were several phases of hearths, and 20 spreads of ash and animal bone (rake-outs from the hearth) were scattered through the occupation

layer. The floor deposits were thickest (up to 0.12m in thickness) on the south side near the hearths, and were thinnest on the north side. The earliest hearth was substantial, being a stone-lined rectangular hearth and was followed by fireplaces added to the east. Most of the spreads of animal bone were usually found in the vicinity of these hearths. Finds from the large roundhouse included eight tanged iron knives, three iron key handles, a socketed iron spearhead, a bone spear-point, stone hones, iron nails, spindle whorls. The house also produced such finds as a bronze pseudo-pennanular ring, a spiral headed bronze ring, two ringed iron pins, ball and spatula headed bone pins, two bronze finger rings, bone comb plates, glass beads, eight jet bracelet fragments, a bone gaming piece, 114 pieces of flint (many being strike-a-lights) and a bronze drinking horn terminal. The second house was smaller, approximately 5.2m in diameter and it also had a stone-lined hearth, but the occupation layer was less apparent. There was a bowl-shaped furnace to the west of the house, lined with lake marls. Finds associated with the furnace included three complete crucibles, 50 crucible sherds, three heating trays, a clay mould fragment, baked clay nozzles and a bronze ingot. Many of the crucibles bore evidence of being held by an iron tongs.

Phase Z (probably dating *c*. A.D. 780 – 810) was the uppermost, surviving occupation surface, as it had been greatly disturbed by modern bulldozing during attempted land reclamation in the 1980s. There were the remains of an oak palisade, a foundation layer of re-deposited peat and a single charcoal spread. The palisade was constructed of young oak roundwood trunks. These posts probably had wattles woven around them where they stood above the ground. The crannog would have been 36-40m across. Finds from this layer included three tanged iron knives, two complete crucibles and sherds of others, part of a rotary quern-stone, a bone comb fragment, a glass bead, a chunk of amber and four jet bracelet fragments.

Moynagh Lough is both a well-preserved multi-period archaeological site and a remarkable example of an early medieval Irish crannog. The archaeological evidence of a large house, fine metalwork and imported items suggest that Moynagh Lough was a high-status settlement, particularly by the mid-eighth century AD. Recent historical research suggests that Moynagh Lough itself may be identified as a place known as *Loch Dé Mundech* and that its crannog may well have been an aristocratic or lordly site of the Mugdorne. Its long-term excavation has revealed several important things about early medieval settlement continuities, on-site domestic and industrial activities and the status and lives of its inhabitants. The crannog was apparently occupied continuously *c*. A.D. 600 - 810, a period of some two hundred years. Although there may have been short phases of abandonment, it seems that every generation or so, the entire crannog was reconstructed and ever larger houses placed upon it.

The site seems to have been used both for domestic occupation and for various metalworking practices. The presence of furnaces, copper-ingots, crucibles, heating trays and baked clay nozzles strongly indicates on-site metal production (melting bronze and smelting copper and tin) and the numerous clay mould fragments indicate that a wide range of bronze artefacts were actually being made at Moynagh Lough. Amber, gold wire and enamel found on the site indicate the production of fine jewelry. There was also some iron working on the site since slag, a furnace base and hydrated ferric oxide were found within the large house. Other crafts practiced on-site include the working of wood, leather, bone and antler, while there may also have been glass working, as glass rods, a vitrified glass bracelet and an unfinished glass bead are known. The crannog dwellers obtained several other fine items through long-distance trade networks, such as the Merovingian glass vessels, jet bracelets, amber and tin.

The diet and economy of the site has been revealed by studies of the large faunal assemblage. There were large numbers of cattle, pig and sheep, with smaller numbers of horse, red deer, cat and dog. Dairy cows predominated in the bovine bone record and were only killed when they had past their prime while male calves were slaughtered at a young age. Most of the cattle were slaughtered off-site and dressed meat taken on to it for feasting or normal daily food consumption. It is clear that the surrounding rolling hills were well

populated with good grazing land for large herds of cattle. The presence of rotary querns on the crannog also suggests some measure of arable farming. It is likely that the crannog was being provisioned by the inhabitants of the ringforts and enclosed settlements found around the local lakeshore.

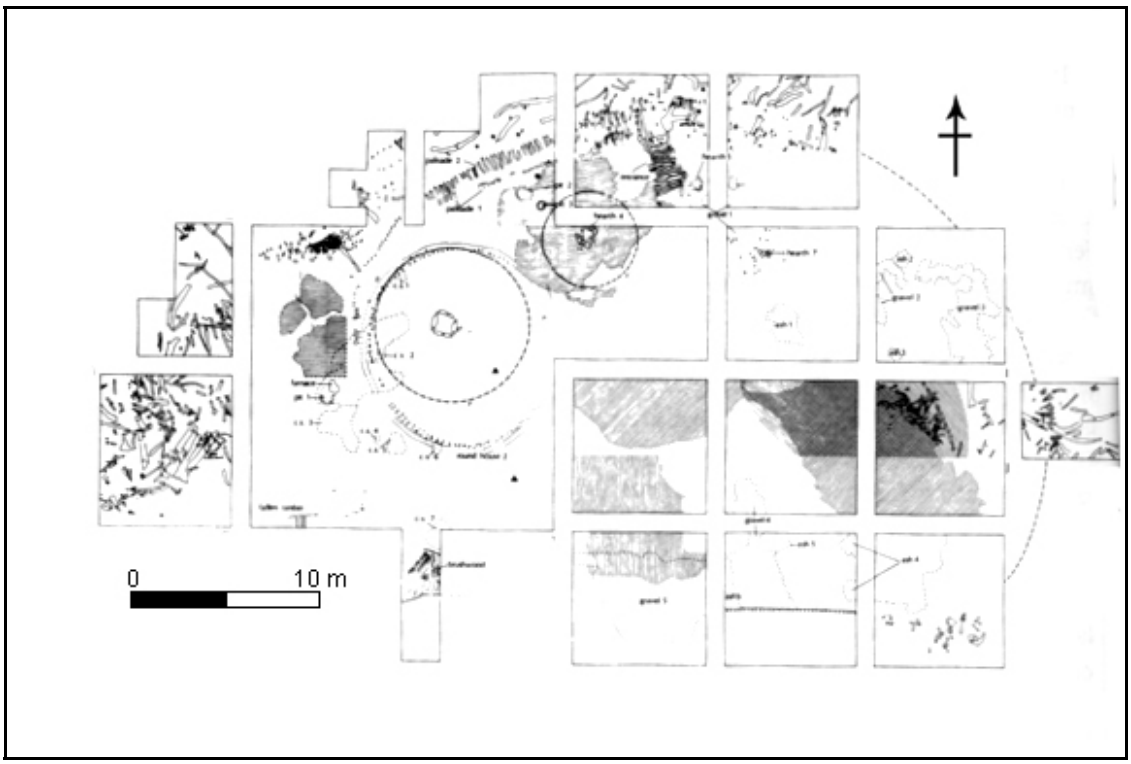


Fig. 259: Plan of Moynagh Lough crannog (after Bradley 1991).

References:

Bradley, J. 1982-3. Excavations at Moynagh Lough, Co. Meath 1980-81: interim report. *Ríocht na Mídhe*, 7(2), 12–32.

Bradley, J. 1984. Excavations at Moynagh Lough, Co. Meath 1982-83: interim report. *Ríocht na Mídhe*, 7(3), 86–93.

Bradley, J. 1985-6. Excavations at Moynagh Lough, Co. Meath 1984: a summary report'. *Ríocht na Mídhe*, 7(4), 79–82.

Bradley, J. 1990-1. Excavations at Moynagh Lough, Co. Meath, 1985 and 1987. *Ríocht na Mídhe*, 8 (3), 21–35.

Bradley, J. 1991. Excavations at Moynagh Lough. *Journal of the Royal Society of Antiquaries of Ireland*, 121, 5–26.

Bradley, J. 1993 Moynagh Lough: an insular workshop of the second quarter of the 8th century. In R. M. Spearman & J. Higgit (eds) *The Age of Migrating Ideas: Early Medieval Art in Northern Britain and Ireland*, 74–80. Edinburgh. Stroud and The National Museum of Scotland.

Bradley, J. 1994-5. Excavations at Moynagh Lough, Co. Meath. *Ríocht na Mídhe*, 9(1), 158–69.

Bradley, J. 1997. Archaeological excavations at Moynagh Lough, Co. Meath 1995-96. *Ríocht na Mídhe* 9(3), 50–61.

Nevinstown, Co. Meath
Early Medieval Unenclosed Souterrain and Raised Settlement
Grid reference: **Souterrain N85166882 (285161/268828)**;
Raised Settlement N85016872 (**285017/268725)**
SMR No: **ME025-004; ME025-043**
Excavation License No: **N/A**
Excavation duration/year: **N/A**
Site director: **M. Cahill (National Museum)**

Excavation in advance of a mining development at Nevistown revealed a range of features spanning prehistory until the post medieval period. The earliest was an urn burial while a late medieval cross and a potential post medieval *cillín* burial ground represented the most recent activity. An unenclosed souterrain denotes early medieval activity while a mound, enclosed by three ditches, may date to the early and/or later middle-ages.

The souterrain (ME025-004), which appeared to be unenclosed, was in very poor condition and it was only possible to determine that a passage approximately 12m long led into a roughly circular beehive-type chamber. It survived to a height of three or four courses because most of the building material had been robbed. Habitation evidence in the immediate area was slight consisting only of patches of occupation soil and a pit which contained two fragments of a saddle quern.

A flat-topped mound (ME025-043) was situated, in proximity to the souterrain, at the end of a gravel ridge above a bend on the Blackwater River. It was enclosed by three concentric ditches and large quantities of animal bone were recovered from each. Three phases of activity were recorded. Phase I consisted of a large number of postholes and similar features that represented one or more buildings which had burnt down. A kerbed platform measuring approximately 2m by 3m was constructed during Phase II and large quantities of iron slag, iron bloom and two iron knives were recovered. Coarse gravel was spread over the resultant heightened mound during Phase III ad artefacts included bone combs, bone needles, stick pins, a barrel padlock, a blue glass bead and jet rings.

The function and chronology of the mound remains unclear without radiocarbon dates. The large quantities of animal bone from each enclosing ditch suggests a settlement aspect as does the presence – although not clearly defined – of a number of buildings from Phase I. Phase II was possibly a smith's forge based on the finds while the domestic nature of the artefacts from Phase III suggests a settlement function. The finds from Phase III could conceivably date from the early or late medieval periods but a lack of medieval pottery from the site seemingly favours an earlier date. Another possibility is that this was originally a raised early medieval settlement that was re-used by the Anglo-Normans.

(**No plans were available for this site**).

Reference:

Cahill, M. 1977/79:059, Nevinstown, Co. Meath. www.excavations.ie.

Ninch, Laytown, Co. Meath
Early Medieval Settlement Enclosure Complex
Grid reference: **O16237195 (31623/27195)**
SMR No: **ME028-025**
Excavation Licence No: **98E0501**
Excavation Duration/Year: **2001; 2002**
Site director: **C. McConway (ADS Ltd.)**

Ninch excavated in advance of a residential development was a large multi-period enclosure complex and burial site that dated from prehistory until the late medieval period. The northern half of the site consisted of four large, roughly concentric, sub-circular enclosures dating between approximately the sixth and tenth centuries. Also present was a cemetery, circular house slots, two souterrains, a well, pits, slots, gullies, cobbled surfaces and animal enclosures dating up until the eleventh century. A series of large enclosures dominated the southern part of the site. At least eight early medieval phases were identified. The site occupied the summit and the eastern slope of a low ridge that ran parallel along the coast with views of the Irish Sea.

The first early medieval phase included an oval enclosure to the north of the site. It measured 38m by 25m, and was situated at the highest point. An entrance was located to the east and a second entrance, to the west, was evident after the enclosure had been re-cut.

Phase 2 involved the construction of a second large sub-circular enclosure – internal dimensions of 34m by 39m – that enclosed the earlier Phase I enclosure. Only part of this was excavated as it continued beyond the excavation limit. Sherds of E ware were recovered from the upper fills of this ditch as well as bone comb fragments, bone needles, knives, iron slag, shell and animal bone. The presence of E ware from the upper ditch fills indicate that the enclosure was still open between the sixth and mid-seventh centuries and was constructed sometime before this.

During Phase III, a third enclosure – measuring 50m by 43m – enclosed the above enclosures and cut the Phase II enclosure on its northern side. The enclosures were situated along the higher part of the ridge and enclosed only a minor number of features. This can be explained by heavy truncation of the site.

During Phase IV, the above enclosures were filled-in and replaced by an open settlement. This consisted of slot trenches between 6.5m and 7m in diameter, which probably enclosed dwellings, an extensive cobbled pathway and field boundaries.

Five variously sized oval enclosures have been assigned to Phase V and probably functioned as livestock enclosures because they lacked internal features and occupational evidence.

A series of gullies, slots and ditches – that produced charcoal, crushed shell and animal bone – and a fourth large structure, 8.5m in diameter, were assigned to Phase VI. They post-dated Phases' IV and V and pre-dated the seventh phase. However, their relationship to the animal enclosures of Phase V is unclear.

McConway has assigned the cemetery to Phase VII. A large enclosure, measuring 80m east-west by 80m north-south, enclosed all of the above features and cut features associated with Phases IV–VI. The enclosing ditch was 5m wide and 2m in depth and was also re-cut on its western side. The burials were mainly located at the centre of this enclosure and a total of 79 articulated burials, and a further thirteen disarticulated burials, were excavated. The majority lay in an area measuring 7m by 4.5m. Two were placed in stone-lined graves to the west and the remainder of burials were located to the east and south. Most were in simple unlined

graves and were oriented slightly north-west/south-east, with the head to the west. However, three burials had slight south-west/north-east orientations and one poorly preserved and disturbed burial appeared to be crouched. E ware was recovered from some grave fills indicating that the cemetery was in use during the sixth and seventh centuries.

Although McConway has assigned the cemetery to Phase VII, its central location and the presence of a potential crouched burial suggests that the burial ground was the initial focus of the site and probably originated during the late Iron Age. It is likely that settlement and agricultural activity developed form the site's initial use as a burial ground and that settlement, burial, industry and agriculture were practised alongside each other across many centuries.

Two souterrains and a large pit – possibly a well – were assigned to Phase VIII. The larger example cut through a junction of ditches associated with Phases I-IV and VI to the north of the site and the smaller souterrain cut the inner edge and upper fills of the large enclosure that surrounded the cemetery and a range of other features.

A number of enclosures to the south of the site were also revealed. The earliest, with an entrance to the southwest, was sub-rectangular and had a diameter of 24.6m. A larger second enclosure measured 50m by 30m. A third enclosure, measuring 80m by 60m, had a substantial ditch which was 2m deep and 3.5m wide. A noticeable lack of archaeology along a 10m band on the inner side of the ditch suggests the former presence of a formidable bank. The ditch was open for some time and a small bucket stave, made from yew, was recovered from the basal fill. Other finds included animal bone, shell, a bone peg, some glass beads, a jet bracelet fragment and two ringed pins. Little survived internally within the enclosures due to heavy truncation. A decorated ringed pin, dating to the late tenth/early eleventh century, is similar to examples from Scandinavian Dublin and it is likely that the inhabitants during this phase were in contact with the town.

(**No plans were available for this site**).

References:

McConway, C. 2001:1007. Ninch, Laytown, Co. Meath. www.excavations.ie.

McConway, C. 2002:1489. Ninch, Laytown, Co. Meath. www.excavations.ie.

McConway, C. 2002. Excavations at Laytown reveal coastal settlement in Meath. *Archaeology Ireland* 16(1), 16–19.

Platin, Co. Meath

1. **Early Medieval Unenclosed Settlement / Industrial Site**
2. **Inland Promontory Fort**

Grid reference: **O08877526 (30887/27526)**
SMR: **ME020-014**
Excavation Licence No: **00E0822, 01E0044**
Excavation duration: **November 2000 – March 2001, January – April 2001**
Site director: **R. Lynch (IAC Ltd.), M. Conway (ACS Ltd.)**

1. Early Medieval Unenclosed Settlement / Industrial Site

The settlement at Platin – discovered in advance of the M1 road-scheme – was located immediately north of the Duleek road 3km west of Drogheda and adjacent to the promontory fort (ME020-014; see below). The site was situated on agriculturally productive pastoral land.

Two unenclosed successive circular structures were discovered (Fig. 260). The earliest structure (Structure B), evident as two concentric gullies, measured 15m in diameter. This represented the first phase of activity on site. The gullies were mostly filled through natural deposition of wash material and slumping of their sides. The only finds included a piece of iron slag, a flint waste flake, a fragment of a ceramic bead and a crucible sherd.

Structure B enclosed a number of pits that may have been contemporary. One – possibly a domestic refuse pit – contained some horse teeth, fragments of animal bone and charcoal. A central circular pit was also present which potentially supported a central roof support although archaeological evidence for such was lacking.

The following phase incorporated the construction of Structure A which cut Structure B. Like the latter, it was 15m in diameter and was defined by two curvilinear gullies. A number of internal features or possible roof supports were present. The enclosure was horseshoe-shaped in plan and gaps or possible entrances were evident to the east and west. Twenty eight stake holes were located along the inner edge of the northern gully and probably formed the basis for a post-and-wattle wall. The southern section of the structure was also defined by a foundation trench with a number of stake-holes, 38 in total, located along its inner edge.

The archaeological evidence suggests that Structure A was dismantled at some stage as the gully fills were subject to a number of episodes of natural silting, side slippage and infilling of occupational material after the abandonment of the structure. Finds from the upper fills included a whetstone, crucible fragments, glass beads, *tuyère* fragments and iron objects all of which appeared to be associated with the Phase III industrial activity on site.

A number of features were located to the west of Structure A including a possible hearth, which was truncated by a small pit, and a series of irregularly shaped pits which contained no dating evidence.

Phase III consisted of two linear parallel gullies which were situated 4m apart from each other and approximately 15m east of the structures. The fills of the first gully suggest that, for the most part, it silted up naturally. The western end showed evidence for *in situ* burning and contained frequent charcoal inclusions and a large concentration of animal bone. A sherd of pottery, an iron nail and a copper-alloy ring were also recovered from its fill.

Approximately 4m to the south was a similar east–west-oriented linear gully which terminated in a posthole at its western end. Industrial activity was evident in the middle part of the gully evident as a high ash content with inclusions of burnt clay and charcoal. This fill also contained slag and a crucible sherd. Below this was further evidence for in situ burning, crucible sherds, ferrous material and a substance which had a glass-like appearance.

Immediately to the west was a layer of fire-reddened or burnt clay. A roughly east–west-oriented sub-linear cut was located to the south of the linear gullies. Its base contained a layer of fire-reddened or burnt clay and pottery, a clay mould and two pieces of iron slag were recovered from its fills indicating further industrial activity. A number of pits were associated with Phase III and one contained iron slag, a sherd of pottery and a number of pot-boiler stones. The occurrence of the latter and bone fragments suggests that some of the dumped material originated from a domestic source.

2. Inland Promontory Fort

Excavation of the western half of Platin Fort (consisting of a substantial west–east-aligned rock outcrop covering an area approximately two acres and surviving up to 10m above the surrounding landscape) – in advance of the M1 road-scheme – revealed a middle Iron Age burial and a Neolithic spread. This area had been badly damaged by quarrying and, as a result, no enclosing earthworks were present. Early medieval occupational evidence was lacking but tentative indicators included lignite bracelet fragments, a stone bead and a ringed pin which were retrieved from the topsoil.

Test excavations to the south and north of the fort also failed to reveal settlement evidence but the remains of at least two cereal-drying kilns were revealed to the north and one has been dated between the eleventh and twelfth centuries.

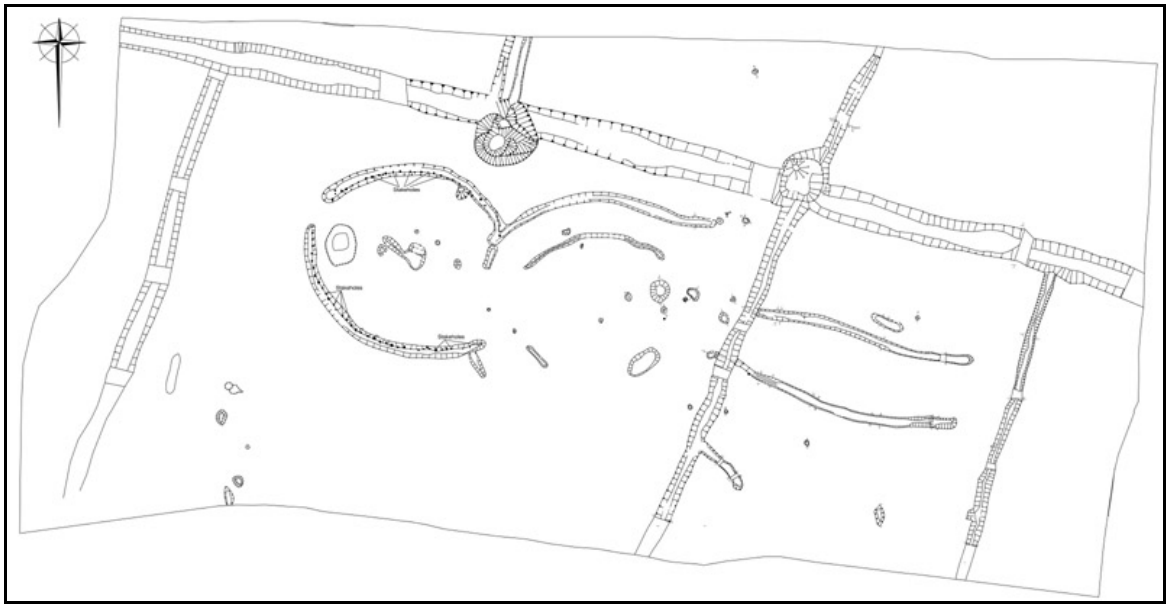


Fig. 260: Plan of Structures at Platin, Co. Meath (after Lynch 2002).

References:

Conway, M. 2001:1019. Platin Fort, Co. Meath. www.excavations.ie.

Lynch, R. 2000:0774. Platin, Co. Meath. www.excavations.ie.

Lynch, R. 2001:1022. Duleek Road, Platin, Co. Meath. www.excavations.ie.

Lynch, R. 2002. Stratigraphic report on an archaeological excavation at Site 22, Northern motorway, contract 7, Platin, Co. Meath. Unpub'd IAC Report.

Randalstown, Co. Meath
Early Medieval Unenclosed Souterrains and Well
Grid reference: **N84217162 (284213/271627); N84037124 (285034/271248); N84087139 (284080/271394)**
SMR No: **ME025-001; ME025-003; ME025-045**
Excavation License No: **N/A**
Excavation duration/year: **1985; 1986**
Site director: **K. Campbell (Freelance)**

Two souterrains were excavated in advance of the construction of a dam at Randalstown. An ecclesiastical settlement was also excavated in the same townland at St Anne's church (Kelly 1975:033, 1976:020), as was a large early medieval settlement enclosure in the neighbouring townland of Simonstown to the east (Kelly 1975:032, 1981).

The first souterrain (ME025-001) was located 180m north of St. Anne's church and consisted of a 13.4m long passage which was 1.2m wide. A set of postholes were identified at the entrance indicating the former presence of a doorway. The floor deposit contained cattle, sheep, pig, cat and bird bones and the point of a bone pin. A series of postholes and pits were identified beside the entrance and this may have marked a dwelling site. The pits contained charcoal and fragmentary animal bone, mostly teeth.

The second souterrain (ME025-003) was situated on the summit of a low hill and was located 840m east of the above. It was L-shaped in plan and was entered along an 8m-long curving ramp to a step which led up into the main passage running at a right-angle to the left. The latter was 11.7m in length and ended in a beehive chamber measuring 3.1m in diameter. The souterrain had been largely destroyed and only a few stones of the base course on the ramp remained. The beehive chamber was roofless but five capstones remained in the passage where the walls were intact. The passage began with a creep, which was 0.45m high, and increased in height towards the chamber until it was 1m high and 0.9m wide. Cattle, sheep, pig and cat bones were found on the ramp floor and the only other find was the endplate of a composite bone comb at the back of the chamber.

Five pits were located near the chamber. One contained the articulated bones of ten horse feet, one complete horse skull, the jawbones of two others and a bone pin. A small flint arrowhead was found on the surface.

An area around a well – known as the Meara Well (ME025-045) – was also investigated and a bronze pin, with watchwinder head and zig-zag ornament on the stem, came from the base of the clay. These types of stick pins have been dated to the last quarter of the tenth century until the end of the eleventh century (O'Rahilly 1998, 23–4). A granite saddle quern and boat-shaped rubbing stone, a flint round-scraper and end-scraper, a fragment of bronze possibly from a palstave and a small quantity of animal bone were recovered from the surface and disturbed areas around the well.

(**No plans were available for this site**).

References:

Campbell, K. 1985:044. Randalstown, Co. Meath. www.excavations.ie.

Campbell, K. 1986:065. Randalstown, Co. Meath. www.exacvations.ie.

Kelly, E. P. 1975:032. Randalstown, Co. Meath. www.excavations.ie.

Kelly, E. P. 1975:033. Simonstown, Co. Meath. www.excavations.ie.

Kelly, E. P. 1976:020. Randalstown, Co. Meath. www.excavations.ie.

Kelly, E. P. 1981. A short study of the botanical zones on a ringfort at Simonstown, Co Meath, used as an aid to the recovery of archaeological features, in D. Ó. Corráin (ed.) *Irish Antiquity*: *Essays and Studies Presented to Professor M.J. O'Kelly*, 67–77. Dublin. Four Courts Press.

O'Rahilly, C. 1998. A classification of bronze stick pins from the Dublin excavations 1962–72, in C. Manning (ed.) *Dublin and Beyond the Pale: Studies in Honour of Patrick Healy*, 23–33. Bray. Wordwell in association with Rathmichael Historical Society.

Ratoath, Co. Meath
Early Medieval Settlement-Cemetery
Grid reference: **O01355215 (30135/25215)**
SMR No: **N/A**
Excavation Licence No: **03E1300; 03E1632; 03E1781; 04E0218**
Excavation duration: **October 2003 – July 2004**
Site director: **A. Wallace, G. Dehaene (Arch-Tech Ltd.)**

Excavation in advance of a large-scale residential development on the western fringe of Ratoath village revealed a large multi-period enclosed settlement, burial, agricultural and industrial complex (Fig. 261). Prehistoric activity consisted of a late Bronze Age ringditch and an Iron Age ringditch and cereal-drying kilns. A settlement-cemetery enclosure and associated agricultural and industrial features succeeded these during the early middle-ages while later medieval activity was also identified. The site was situated on the plateau of an east-west ridge on rich agricultural land.

The enclosure measured 40m in internal diameter and its ditch had an average width of 2.77m and was 1.22m deep. Finds from the ditch fill included animal bone, a penannular brooch and an iron blade. The primary fill returned a date of A.D. 547-655 while an upper fill was dated to A.D. 647-778 (see below for radiocarbon dates).

The cemetery, only partially excavated, was located in the south-east section of the enclosure. Forty nine burials were identified and a small quantity of disarticulated human bone was also present. The graveyard contained 32 adults, 13 juveniles, three infants and five deposits of disarticulated human remains. The majority were aligned west-east in simple unlined graves. Burials that deviated from this included a crouched adult lying on its left side (Burial 12; A.D. 426-600) and an adult with its legs tightly flexed on top of the stomach area (Burial 34; A.D. 569-671). Some extended burials were interred with grave-goods including a young female with a copper-alloy neck-ring (Burial 38; A.D. 668-832), an adult with an iron strap end (Burial 35), a juvenile with an iron needle and two pieces of slag (Burial 48) and an adult – with evidence for ante-mortem injuries to the skull – with an iron knife and a small iron fragment (Burial 46). The neck-ring is similar to an example found from a cemetery at Bergh Apton in Norfolk (O'Brien forthcoming). This suggests possible Anglo-Saxon contacts and cultural influences in Ratoath. Some of the burials (for example Burial 12) potentially pre-date the enclosure and this is in keeping with the evidence from many settlement-cemeteries whose origins lie in the Iron Age.

A complex series of ditches, gullies and pits were identified within the enclosure which spanned the fourth to tenth centuries. No coherent plan for any domestic structures was identified but some of the gullies and slot trenches undoubtedly supported timber buildings. A series of curving gullies were identified in the south-west, north-west and north-east areas of the enclosure and may relate to each other. They possibly formed an enclosure – approximately 22m in diameter – but truncation, evidence for successive phases of re-building and limited excavation of the interior meant identifying relationships between the features was problematic. Some of the gullies pre-dated the enclosure construction while others were contemporary. A substantial east-west slot-trench returned a radiocarbon date of A.D. 809-989 which was chronologically later than a date taken from the upper fill of the enclosure ditch. Another gully, which formed part of a boundary to the cemetery on its western side, was dated to A.D. 685-892. The relationship between the interior features is difficult to assess. Although no hearths were identified, some oval-shaped pits, areas of scorching and finds from the enclosure ditches and gullies, such as large quantities of animal bone, suggest settlement activity. A number of unstratified finds were also discovered and are representative of habitation including complete and fragmented bone tools that were largely associated with weaving, a spindle whorl, lignite bracelet fragments, a blue glass bead, a fragment of an amber bead, two bone comb fragments, rubbing stones and many

miscellaneous scraps of metal. A sherd of E ware was found in the enclosure area and suggests a network of trade and exchange between high-status sites in Brega and possibly further-a-field.

A potential outer enclosure ditch approximately 14m west of the settlement-cemetery enclosure was detected. It followed the same curvature for a length of 28.4m and was 3.4m in width and up to 1.4m in depth. Iron slag was retrieved from one of its four fills. A large U-shaped shallow pit which contained animal bone was located between the inner and outer enclosure ditches.

A number of linear ditches and cereal-drying kilns were representative of agricultural activity at Ratoath to the east of the enclosure. The former produced few artefacts but substantial quantities of animal bone were present. The ditches formed roughly rectangular enclosures and were dated between the fifth and eighth centuries. Several variously-shaped cereal-drying kilns were also identified to the east of the enclosure and they produced large quantities of cereal grains. A large example with a baffle stone was dated to A.D. 860-1018 while a teardrop-shaped and a figure-of-eight-shaped kiln both produced Iron Age dates.

Metallurgical activity – mostly ironworking – was evident in a number of areas surrounding the settlement-cemetery. A large volume of iron smithing slag was recovered from the fills of two L-shaped ditches immediately to the north of the enclosure. A substantial ditch, which extended from the south-east side of enclosure, produced a large quantity of iron smithing slag. A portion of a lignite bracelet was also uncovered in the ditch fill. Two dates from the ditch fills ranged from A.D. 427-608 to A.D. 637-772. This larger ditch formed an annexe with two other smaller ditches which enclosed a large charcoal spread, a small keyhole-shaped kiln (dated to A.D. 431-600). Iron smithing slag was again recovered in large quantities from this area. It appears that smithing was undertaken at specific areas outside the enclosure while an absence of iron smelting slag suggests this occurred further away from the site and probably nearer to where raw materials such as bog ore was sourced.

Non-ferrous metalworking potentially occurred immediately to the west of the enclosure. Several small features, which were badly truncated by modern farm work, produced a lead ingot and a crucible sherd.

Ratoath was a multi-period site which developed from a prehistoric burial place into a much larger early medieval settlement, agricultural and industrial centre. Many phases were identified within the enclosure and its neighbouring field systems and cereal-drying kilns. Therefore, its inhabitants were involved in a range of farming and industrial activities across many centuries in tandem with the site's use as both a dwelling place and a place for burying the dead.

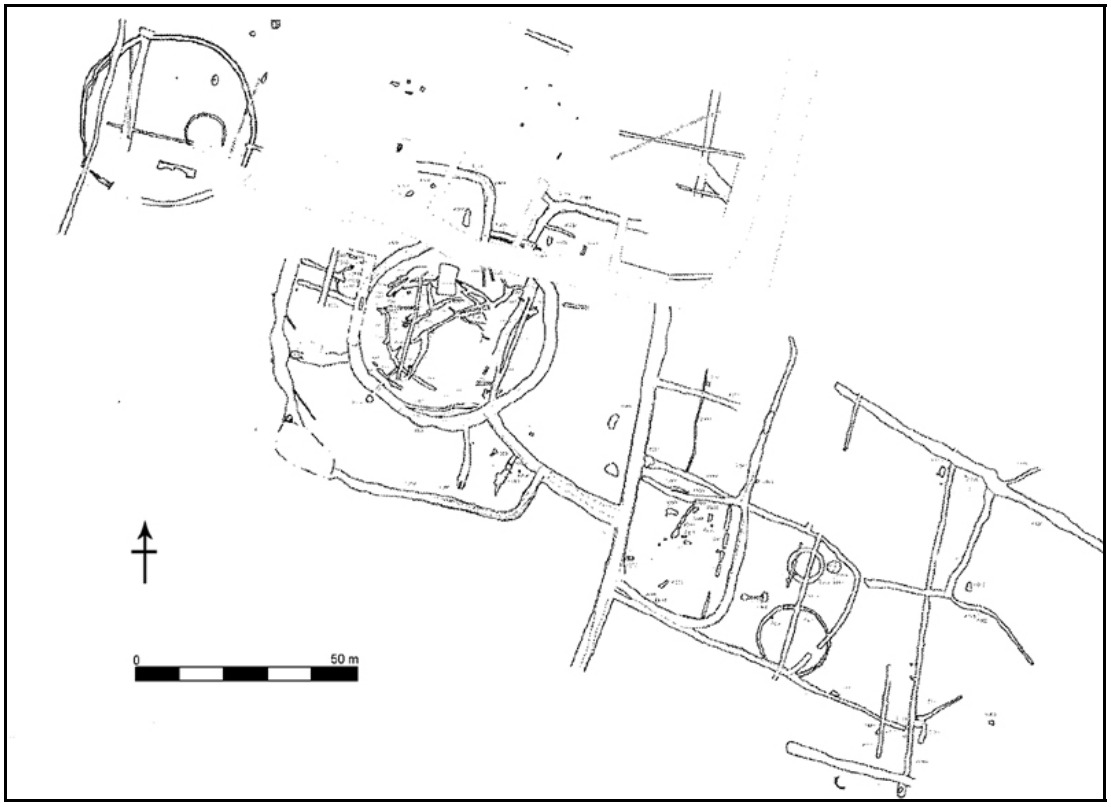


Fig. 261: Plan of enclosures at Ratoath, Co. Meath (after Wallace 2010).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-196367	Bone from small ringditch	2870±40 BP	1193-1171 B.C.; 1168-1143 B.C.; **1132- 922 B.C.**
UB-6539	Charcoal from cereal-drying kiln	1867±36 BP	**A.D. 70-235**
UB-6538	Charcoal from cereal-drying kiln	1812±35 BP	A.D. 90-100; **A.D. 124-261**; A.D. 281-325
Beta-196364	Bone from large ringditch	1790±40 BP	**A.D. 127-345**
Beta-198517	Bone from oval pit	1630±40 BP	A.D. 268-271; **A.D. 335-540**
Beta-198519	Bone from slot-trench	1600±40 BP	**A.D. 383-560**
UB-6546	Carbonised grain from pit	1589±35 BP	**A.D. 403-551**
UB-6542	Charcoal from slot-trench	1569±35 BP	**A.D. 416-565**
Beta-198510	Bone from east-west ditch	1530±40 BP	**A.D. 427-608**
UB-6543	Seed from cereal-drying kiln	1532±35 BP	**A.D. 431-600**
Beta-196362	Bone from curvilinear ditch	1490±60 BP	**A.D. 432-498; A.D. 501-651**
UB-6540	Charcoal from linear feature	1501±38 BP	**A.D. 435-491**; **A.D. 509-518**; **A.D. 528-642**

Beta-196366	Bone from linear ditch	1490±40 BP	A.D. 436-489; A.D. 513- 516; **A.D. 530-648**
Beta-198518	Bone from curved ditch	1480±40 BP	A.D. 441-455; A.D. 460-484; **A.D. 533-651**
Beta-196371	Bone from linear ditch	1410±60 BP	**A.D. 536-720**; A.D. 742-769
Beta-198522	Bone from enclosure ditch	1450±40 BP	**A.D. 547-655**
Beta-196363	Bone from linear ditch	1410±40 BP	**A.D. 569-671**
Beta-196369	Bone from linear ditch	1380±40 BP	**A.D. 582-694**; A.D. 704-705; A.D. 748-765
Beta-198520	Bone from curved feature outside enclosure	1310±80 BP	**A.D. 585-894**; A.D. 929-931
UB-6544	Carbonised grain from pit	1390±34 BP	**A.D. 597-680**
Beta-198512	Bone from north-south ditch	1350±40 BP	**A.D. 614-723**; A.D. 739-770
Beta-198509	Bone from east-west ditch	1340±40 BP	**A.D. 637-772**
Beta-198513	Bone from curvilinear ditch	1310±40 BP	**A.D. 647-778**
Beta-198516	Bone from enclosure ditch	1320±40 BP	**A.D. 648-774**
Beta-198523	Bone from enclosure ditch	1310±40 BP	**A.D. 647-778**
Beta-198511	Bone from ditch	1300±40 BP	**A.D. 649-781**; A.D. 791-807
Beta-196365	Bone from linear ditch	1260±40 BP	**A.D. 668-832**; A.D. 836-869
UB-6545	Carbonised grain from possible furnace	1225±34 BP	**A.D. 688-753;** **A.D. 760-886**
Beta-198515	Bone from ditch	1220±40 BP	**A.D. 685-892**
Beta-198521	Bone from slot-trench	1220±40 BP	**A.D. 685-892**
UB-6541	Charcoal from re-cut of slot-trench	1131±35 BP	A.D. 782-790; **A.D. 809-989**
Beta-196368	Seed from cereal-drying kiln	1110±40 BP	A.D. 783-787; A.D. 817-843; **A.D. 860-1018**
Beta-198514	Bone from curvilinear ditch	910±40 BP	**A.D. 1032-1210**
Beta-196372	Re-cut of ditch	740±60 BP	**A.D. 1166-1319**; A.D. 1351- 1390
Beta-198505	Bone from burial 25	1570±40 BP	**A.D. 409-575**
Beta-198504	Bone from burial 12	1540±40 BP	**A.D. 426-600**
Beta-198508	Bone from burial 54	1490±40 BP	A.D. 436-489; A.D. 513-516; **A.D. 530-648**
Beta-198506	Bone from burial 27	1450±40 BP	**A.D. 547-655**
Beta-196361	Bone from burial 34	1410±40 BP	**A.D. 569-671**
Beta-198507	Bone from burial 51	1300±40 BP	**A.D. 649-781**; A.D. 791-807
Beta-196360	Bone from burial 38	1260±40 BP	**A.D. 668-832**; A.D. 836-869

References:

Dehaene, G. 2004:1328. Ratoath, Co. Meath. www.excavations.ie.

O'Brien, E. Forthcoming. Pagan or Christian? Burial in Ireland during the 5th to 8th centuries A.D., in N. Edwards (ed.) *The Archaeology of the Early Medieval Celtic Churches*. Society for Medieval Archaeology Monograph.

Wallace, A. 2003:1452. Ratoath, Co. Meath. www.excavations.ie.

Wallace, A. 2003:1454. Ratoath, Co. Meath. www.excavations.ie.

Wallace, A. 2004:1324. Ratoath, Co. Meath. www.excavations.ie.

Wallace, A. (contributions by Montgomery, J. & Grimes, V.) 2010. Excavation of an early medieval cemetery at Ratoath, Co. Meath, in C. Corlett & M. Potterton (eds.) *Death and Burial in Early Medieval Ireland, in Light of Recent Archaeological Excavations*, 335–59. Dublin. Wordwell.

Raystown, Co. Meath
Early Medieval Settlement-Cemetery and Agricultural Complex
Grid reference: **O04975147 (304976/251474)**
SMR No: **N/A**
Excavation Licence No: **03E1229**
Excavation duration: **October 2003 - 2004**
Site director: **M. Seaver (CRDS Ltd.)**

Raystown, excavated in advance of the N2 road-scheme, was a large enclosed settlement-cemetery and agricultural complex that was in use for at least 600 years between the early fifth and twelfth centuries (Fig. 262). The site was located on a north-south ridge – between 65m and 71m OD – in an area of mostly low-lying land. It was bounded by a river, streams and an area of water-logged ground on three sides. Geophysical prospection revealed a palimpsest of further activity notably to the west of the excavation.

Phases of Activity at Raystown
The director, Matthew Seaver, has identified a number of phases at Raystown. The initial activity was focused on a penannular burial enclosure on top of the ridge that was dated between the fourth and sixth centuries. It measured 22m north-south by 18m east-west. Eight of the twenty radiocarbon-dated human burials came from this phase and six of these were clustered close to the centre of the enclosure (see below for radiocarbon dates). One of them cut the ditch and was dated to A.D. 432-602 which suggests that the ditch was back-filled by the end of the sixth century. Broadly contemporary cereal-drying kilns were situated to the south and north-east of the burial ground.

During Phase II (A.D. 500-700) a 50m diameter outer burial enclosure was dug concentrically around the original cemetery enclosure. It was probably created in the sixth century. A rim fragment of an imported continental glass vessel – dating between the fifth and seventh centuries – came from the lower plough-soil within the enclosure while a date of A.D. 654-779 was obtained from the northern part of the enclosure ditch. Further burials were placed in the newly expanded area.

Settlement evidence belonging to this phase was identified to the north of the cemetery and consisted of several gullies and an earth-cut souterrain. Postholes along the latter's passageways indicate that it was roofed and it had a circular chamber with a ring of postholes cut into the floor and walls. Cereal grain from one of the postholes was dated between the mid sixth and mid seventh centuries.

Two substantial northwest-southeast boundaries were constructed during Phase II. One may have functioned as a mill-race while the other was fed by a series of north-south gullies and ditches, which drained from a terminal at the junction of the outer burial enclosure. They were both re-cut numerous times – like many of the ditches at Raystown – and they enclosed a number of hearths and pits.

Also associated with this phase was considerable arable activity in the northern and southern parts of the site. Four figure-of-eight-shaped cereal drying kilns were present; two in each area. The southern kilns were associated with gullies which drained into a substantial ditch that was possibly the tailrace of a mill.

The outer burial enclosure was reduced in size on the northern side and became D-shaped during the latter part of this phase and a large drainage ditch was constructed to the north of it.

Phase III (A.D. 600-800) witnessed the digging of a sub-rectangular enclosure around the burial ground and northern habitation area and enclosed an area of 60m^2. It replaced the

earlier outer burial enclosure. Large quantities of burnt grain were present in the ditch and this area became the new focus for cereal-processing. The ditch was open between the mid seventh and early ninth centuries and a rare iron horse snaffle was retrieved from its fill.

A stone-built souterrain – located within the defined area – also belonged to this phase.
The scale of cereal processing during Phase III was further demonstrated by the construction of two water mills. Southern Mill 1 and Southern Mill 4 produced similar radiocarbon dates; the former was dated to A.D. 660-782 and the latter returned a date of A.D. 653-772.

Burial continued during this phase both within and outside the main enclosure.

During Phase IV (AD 700-900), a new substantial mill in the southern mill complex, Southern Mill 5, was constructed, the sub-rectangular enclosure was backfilled and settlement continued in the southern section of the site. Evidence for the latter consisted of a series of hearths, gullies and a refuse pit. The pit contained hearth rake-out, a ringed pin, animal bone and cereal remains.

Large-scale cereal processing was evident for the first time during this phase on the northern part of the site through the construction of a mill whose millrace utilised the east-west part of the sub-rectangular enclosure. The stone stone-built cereal-drying kiln in the northern habitation area was still in use and was dated to A.D. 799-975.

The burial enclosure contained a single burial from this phase which was dated to A.D. 766-898.

A second water mill (Northern Mill 2) replaced the initial mill in the northern part of the site during Phase V (AD 900-1150). It was constructed between A.D. 887-1017 and used a different water-source from the one used by Northern Mill 1. It was abandoned during the twelfth century. Settlement evidence during this phase included a hearth and a baking-slab, gullies and metalling, slot-trenches of a possible rectangular building and a further series of hearths that were associated with this building.

Another mill (the Central Mill) was constructed and cut many of the main features in the southern area during Phase V. It is likely that the Southern Mill Complex had fallen out of use by this time.

A single burial in the cemetery (dating to A.D. 809-989) belongs to this phase while the presence of a late eleventh- to mid twelfth-century stickpin within the burial ground suggests the possibility that burial continued until this time. Settlement evidence is also suggested by the presence two candle holders dating between the mid eleventh and thirteenth centuries.

The site was abandoned during the twelfth century as attested to by the small quantities of late medieval pottery from the site.

The Cemetery
Half of the cemetery was within the road-take and excavation revealed 93 articulated burials (68 adults, three adolescents, 20 juveniles and two older infants) while a further 40 burials were indicated by the presence of disarticulated bones scattered around the area. Geophysical survey suggests that a total of between 300 and 400 burials may have been present if the density of burials was similar outside the road-take and burial continued at the same rate as those revealed during excavation. The radiocarbon dates suggest the majority of burials took place during the first three phases and decreased in numbers thereafter.

Seventy-three burials were identified within the inner enclosure and many of the central ones were inter-cut. They were mainly extended, orientated west-east, and in shallow and unlined graves. The majority of children who died between the ages of one and eight were buried in a specified area to the south of the penannular enclosure. Noteworthy aspects of burial at

Raystown included evidence of violent deaths for two males and the burial of a male in a former cereal-drying kiln. The latter had been covered with stones and was laid in a north-south position with his legs flexed.

Thirty one burials were found to the south of, or cutting the inner enclosure. They ranged in date from the sixth to the tenth centuries. Twenty burials were juvenile and some later examples had a blue glass bead at their necks.

Finds

Ecofacts

A substantial assemblage of animal bone was recovered totalling nine thousand countable specimens. Cattle dominated the assemblage followed by sheep and pig but sheep became the dominant species during Phase III. A relatively high number of horse bones – mainly from ponies – suggest they were utilised for haulage while horses may have pulled ploughs. Wild bird, cat and dog bone was also present.

Unsurprisingly – given the scale of cereal processing – a large number of cereal grains were present from many contexts.

Artefacts

A large quantity of artefacts was retrieved from Raystown. The majority were utilitarian and functional items indicative of dwelling, manufacture, agricultural and industrial activities.

Iron tools included a range of knives, awls and a hollow punch used for manufacturing and the repair of objects. Tool-marks on the timbers indicate that axes, adzes, gouges and chisels were used.

Weaving equipment comprised a slotted and pointed iron object, a tensioner, bone needles, a copper-alloy needle, bone pin beaters, a bone distaff and a lathe-turned spindle whorl.

Evidence for the manufacture of bone buttons or discs was found in the form of buttoners' bones. Small numbers of antler tines also suggest manufacturing. Bone objects included toggles, two combs and two knife-handles.

Stone items included a rotary quern fragment, a hone stone and a rotary grinding stone.

The presence of a horse-snaffle-bit and horse-bit – along with the animal bone – demonstrates the utilisation of horses and ponies.

Personal dress items were few for a site of this scale and included bone pins, three copper-alloy ringed pins and two shafts, two stick-pins and glass beads which were found with some burials.

A fragment of E ware and a glass vessel indicates evidence for trade and exchange.

To conclude, the sequence of activity at Raystown demonstrates that it began as a focus for burial activity during the early fifth century and evolved to incorporate a large settlement and mixed farmstead for a further 600 years until its demise during the twelfth century. The scale of arable agriculture is attested to by the presence of watermills, cereal-drying kilns and field systems. Livestock equally played a significant role as shown by over 700kg of animal bone that was retrieved during excavation.

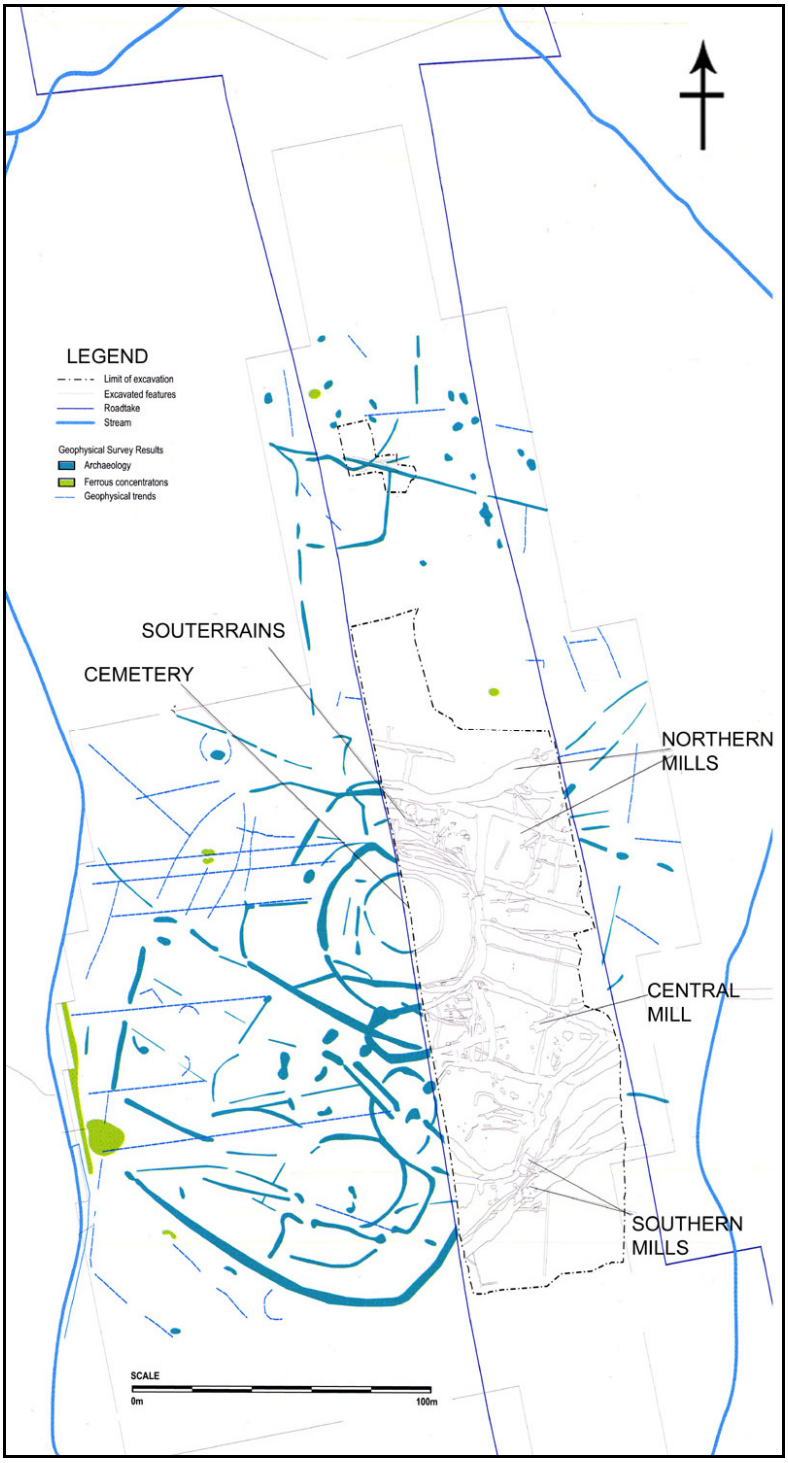


Fig. 262: Plan of Raystown, Co. Meath (after Seaver 2006, 77).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Wk-17910	Single barley grain from sub-rectangular enclosure	1295±36 BP	**A.D. 654-779**; A.D. 794-801
Wk-16823	Human bone from articulated burial within ringditch	1647±33 BP	A.D. 263-277; **A.D. 329-467; A.D. 480-533**
Wk-16306	Human bone from burial within ringditch	1528±33 BP	**A.D. 432-602**
Wk-16821	Human bone from burial south of ringditch	1425±33 BP	**A.D. 573-660**
Wk-16307	Human bone from articulated burial within ringditch.	1334±34 BP	**A.D. 644-724; A.D. 738-771**
Wk-16309	Human bone from burial cutting ringditch with blue glass bead	1130±35 BP	A.D. 782-789; **A.D. 809-989**
Wk-16310	Human bone from articulated burial outside ringditch	1195±34 BP	A.D. 695-696; A.D. 709-747; **A.D. 766-898**; A.D. 920-947
Wk-16302	Charcoal from fill of pit cut by souterrain	1249±53 BP	**A.D. 665-887**
Wk-16294	Charcoal from a circular pit north of the western souterrain	1284±40 BP	**A.D. 656-783**; A.D. 788-820; A.D. 842-859
UB-6521	Oak timber from Southern Mill 1	1279±32 BP	**A.D. 660-782**; A.D. 790-809
UB-6522	Oak timber from Southern Mill 4	1315±35 BP	**A.D. 653-730; A.D. 735-772**
UB-6523	Oak timber from Southern Mill 5	1206±35 BP	**A.D. 691-750; A.D. 763-895**; A.D. 926-935
Wk-16300	Burnt oak in feature within southern mill complex	1188±37 BP	A.D. 713-745; **A.D. 767-901**; A.D. 917-966
UB-6524	Oak timber from Northern Mill 2	1096±35 BP	**A.D. 887-1017**
Wk-16295	Charcoal from backfill of Northern Mill 2	938±32 BP	**A.D. 1023-1164**
Wk-17907	Oat grain from cereal-drying kiln	1575±30 BP	**A.D. 418-551**
Wk-17908	Wheat grain from cereal-drying kiln	1428±30 BP	**A.D. 576-657**
Wk-16296	Blackthorn charcoal from fill of cereal-drying kiln	1151±35 BP	A.D. 779-794; **A.D. 799-975**

References:

Seaver, M. 2004:1334. Raystown, Co. Meath. www.excavations.ie.

Seaver, M. 2005. Run of the mill? Excavation of an early medieval settlement at Raystown, Co. Meath, *Archaeology Ireland* 19(4), 9–12.

Seaver, M. 2006. Through the mill – Excavation of an early medieval settlement at Raystown, in J. O'Sullivan & M. Stanley (eds.) *Settlement, Industry and Ritual*, National Roads Authority Monograph Series 3, 73–88. Dublin. National Roads Authority. Wordwell.

Seaver, M. 2010. Against the grain: Early medieval settlement and burial on the Blackhill: excavations at Raystown, Co. Meath, in C. Corlett & M. Potterton (eds.) *Death and Burial in Early Medieval Ireland, in Light of Recent Archaeological Excavations*, 299–319. Dublin. Wordwell.

Roestown 2, Co. Meath
Early Medieval Settlement Enclosure Complex
Grid reference: **N95795380 (295792/253807)**
SMR No: **N/A**
Excavation Licence No: **A008/002**
Excavation Duration/Year: **September 2005 – March 2007**
Site director: **R. O'Hara (ACS Ltd.)**

Roestown 2, excavated in advance of the M3 road-scheme, was a large multi-phase enclosed early medieval settlement and associated agricultural complex that was utilised from potentially the mid-sixth century through to the thirteenth century. The site, divided into Areas A and B, was dissected by the current N3 (Fig. 263). The former – to the east of Area B – included an animal enclosure and field systems and the latter comprised the settlement and associated field enclosures. Roestown was situated on the edge of a slight northeast–southwest terrace – at 106m OD – in undulating countryside. Redbog – a reclaimed marsh area – was located to the east so much of the surrounding land would have been waterlogged in antiquity.

The primary enclosure (Area B) was D-shaped and was constructed between A.D. 533 and 651 (see below for radiocarbon dates). The enclosing ditch was re-cut on two further occasions between the eighth and tenth centuries. The initial site measured 76m by 53m and its dimensions did not alter radically during later phases. The ditch varied between U- and V-shape in profile and was generally 1.3m deep. The entrance to the enclosure occurred at the northeast. The initial entrance required a bridge or other form of access as the primary ditch was uninterrupted around the site. Following this, in Phase II, a causeway was created at the entrance point.

A number of internal ditches were recorded for Phases II and III within Enclosure 1. These were absent during the primary phase. One of the earliest ditches cut a small structure associated with E ware. Cereal-drying kilns and curvilinear gullies – possible small shelters or structures – were located in the southern partition of the enclosure. This area was potentially utilised for cereal processing. A number of radiating ditches were connected to the outer enclosure to the south and it is likely they were fields associated with cereal growing. The western part of the enclosure was also partitioned by a series of ditches but their function is unclear.

A dry-stone-built souterrain was situated at the centre of the D-shaped enclosure and was not stratigraphically related to earlier features. The souterrain contained three beehive chambers that were connected by three short passages. Other aspects of the souterrain included pits within each chamber, a ramped entrance, a boxed cupboard, an air vent and a trapdoor feature.

A large number of personal dress items were associated with the settlement in Area B including glass and stone beads, lignite bracelets, bone pins, copper alloy and iron ringed pins, bone comb fragments and a belt buckle.

Evidence for ironworking was minimal and consisted of slag residues and furnace bottoms. Non-ferrous metalworking – usually associated with high-status sites – was indicated by the presence of crucible fragments, bone motif pieces, a stone ingot mould and some droplets of copper alloy. Glass working was also practised because some of the crucible fragments contained glazed residues. A number of artefacts were recovered that demonstrated small-scale textile production (spindle whorls, iron and copper alloy needles), bone-working (worked bone) and carpentry (an iron awl).

A series of small irregular fields were located to the east of the D-shaped enclosure in Area A. The largest of these, from Phase I, measured 25m by 25m. A number of artefacts were associated with the Phase I fields including bone pins and combs, an iron knife and sherds of E ware. A dog skeleton dating to A.D. 606-717 belonged to this phase and two disturbed human burials – which were associated with one of the enclosures – may also have been associated with Phase I.

The fields were removed to form a much larger U-shaped enclosure (40m by 30m) that was associated with a number of radiating ditches. The Phase II enclosure and ditches contained large quantities of animal bone and a variety of artefacts including bone pins and comb fragments, iron knives and two stone gaming boards. This phase was dated by radiocarbon to the seventh and eighth centuries.

During Phase III, a rectangular enclosure replaced the U-shaped enclosure. Animal bone was still evident in large quantities and artefacts included a strip of decorated bronze, a fragment of silver, a lignite bracelet and a possible bone flute. This phase potentially dates between the eighth and eleventh centuries. The final phase consisted of a small thirteenth/fourteenth-century enclosure that was constructed in the centre of the Phase III enclosure.

The early medieval phases in Area A began as a series of small fields before they were removed to form a much larger enclosure that was utilised for the slaughtering and processing of animals. Bone working was also evident.

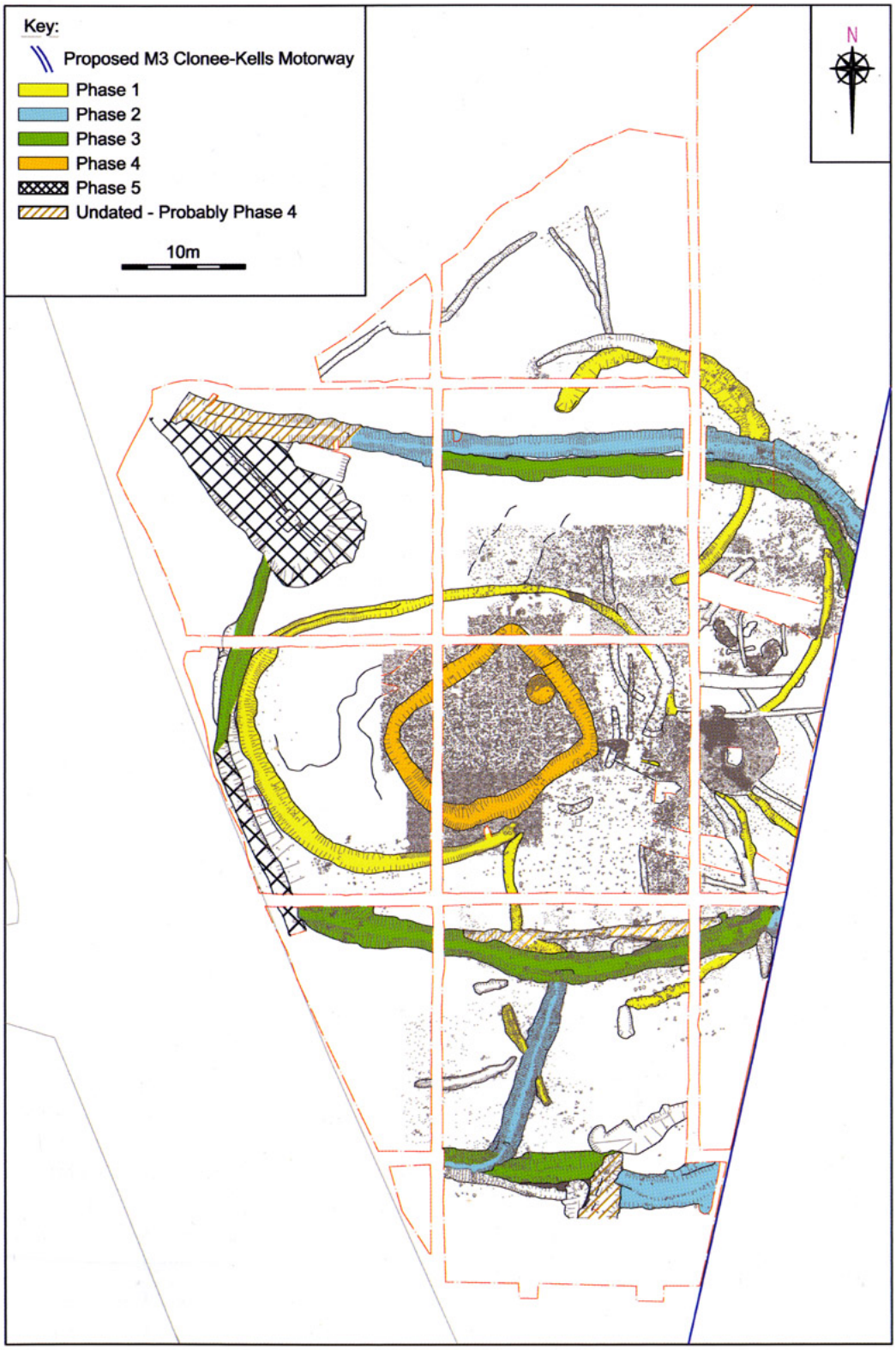


Fig. 263: Phases from Roestown, Co. Meath (after O'Hara 2007, 145).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta-220115	F427: Animal bone from 'D'-shaped enclosure ditch, Area B	1480±40 BP	A.D. 441-455; A.D. 460-484; **A.D. 533-651**
Beta-220116	F484: Animal bone from re-cut of 'D'-shaped enclosure ditch, Area B	1170±40 BP	A.D. 727-737; **A.D. 771-975**
Beta-219005	F 144: Animal bone from primary fill of enclosure ditch, Area A.	1380±40 BP	**A.D. 582-694**; A.D. 704-705; A.D. 748-765
Beta-219003	F116: Animal bone from Phase 1 ancillary enclosure, Area A.	1360±40 BP	**A.D. 606-717**; A.D. 743-769
Beta-219002	F108: Animal bone from primary fill of Phase 1 enclosure, Area A	1320±40 BP	**A.D. 648-774**

References:

O'Hara, R. 2007. Roestown 2, Co. Meath: an excavation on the M3 Clonee to North of Kells, in J. O'Sullivan and M. Stanley (eds.) *New Routes to the Past*, 141–52. National Roads Authority Monograph Series 4. Dublin. National Roads Authority. Wordwell.

O'Hara, R. 2009a. Report on the Archaeological Excavation of Roestown 2, Co. Meath. Unpublished report prepared for Archaeological Consultancy Ltd. Available at www.M3motorway.ie.

O'Hara, R. 2009b. Early medieval settlement at Roestown 2, in M. Deevy & D. Murphy (eds.) Places along the Way: First Findings on the M3, 57–82. National Roads Authority Scheme Monograph Series 5. Dublin. National roads Authority/Wordwell.

St. Anne's Chapel (Randalstown td.), Co. Meath
Ecclesiastical Settlement
Grid reference: **N84137144 (284138/271449)**
SMR No: **ME025-002**
Excavation Licence No: **N/A**
Excavation Duration/Year: **N/A**
Site directors: **E.P. Kelly (National Museum)**

Excavations in advance of a development scheme by Tara Mines Ltd. occurred in the vicinity of St. Anne's holy well and chapel within the townland of Randalstown. The site was situated close to the meeting point of the Blackwater and Boyne rivers. Further settlement evidence in the townland consisted of two souterrains excavated by Kieran Campbell (1985:044, 1986:065). An early medieval enclosure was also excavated at Simonstown which borders Randalstown townland to the east (Kelly 1975:033, 1981).

Sections of the ecclesiastical enclosure ditch revealed an area measuring approximately 90m in diameter. The ditch was 4m wide and 2m deep. A number of internal curvilinear and linear ditches were identified and at least five early medieval occupation phases were evident.

A cemetery containing at least 20 burials were concentrated in the area around the chapel and some of these were interred during the early middle-ages.

Evidence of hearths and pits, which contained animal bone, indicates that occupation occurred within the ecclesiastical enclosure. The wealth of the ecclesiastical site and its inhabitants is attested by a range of artefacts including a penannular brooch, two buckles, fragments of ringed pins, decorated mounts and a fragment of green glass which may have come from a sub-Roman Gaulish cosmetic flask. Other indicators of foreign contacts and trade included the presence of Late Roman Amphora (B ware) and E ware pottery sherds and, dating a few centuries earlier, a Roman fibula. Iron slag was also found demonstrating that ferrous metalworking occurred at Randalstown.

Only a small part of the site was excavated – less than a quarter – and St Anne's was clearly an affluent and important religious site located at a strategic location close to the point where the Blackwater and Boyne rivers merge. The presence of the Roman fibula also suggests a pre-ecclesiastical settlement element to the site.

(**No plans were available for this site**).

References:

Campbell, K. 1985:044. Randalstown, Co. Meath. www.excavations.ie.

Campbell, K. 1986:065. Randalstown, Co. Meath. www.exacvations.ie.

Kelly, E. P. 1975:032. Randalstown, Co. Meath. www.excavations.ie.

Kelly, E. P. 1975:033. Simonstown, Co. Meath. www.excavations.ie.

Kelly, E. P. 1976:020. Randalstown, Co. Meath. www.excavations.ie.

Kelly, E. P. 1981. A short study of the botanical zones on a ringfort at Simonstown, Co Meath, used as an aid to the recovery of archaeological features, in D. Ó. Corráin (ed.) *Irish Antiquity*: *Essays and Studies Presented to Professor M.J. O'Kelly*, 67–77. Dublin. Four Courts Press.

Sheephouse 2, Co. Meath
Early Medieval Settlement Enclosure
Grid reference: **O06307472 (30630/27472)**
SMR: **N/A**
Excavation Licence No: **00E0810**
Excavation duration: **February – May 2001**
Site director: **D. Moore (Moore Archaeological and Environmental Services Ltd.)**

Excavations in advance of the M1 Drogheda By-Pass, revealed a multi-period settlement site that consisted of a Neolithic structure, a potential early medieval enclosure, an undated oval enclosure and a number of ditches, pits, hearths and postholes. The latter occurred in isolated contexts but also formed linear and curvilinear features (possibly forming structures). Arable agriculture was evident by the presence of cereal-drying kilns. The site was 1km west of Drogheda and overlooked the River Boyne to the north. The immediate landscape is utilised for crop cultivation.

The potential early medieval phase consisted of an enclosure which measured 38m in maximum width north-south and continued on in section to the east. Its ditch fills contained lots of animal bone fragments, a blue glass bead and an amber bead. A palisaded entrance was recorded at the north-east and the postholes curved gradually south-west to a cobbled entrance where two external drainage ditches fed into the main enclosing ditch.

The ditch profile differed across the extent of the enclosure. At its east-facing side it had a central slot, perhaps indicating a large stockaded timber fence. However, the southern side was U-shaped and deeper, with steep sides. At the north there was a steep north-facing slope and a gradual south-facing slope. No evidence of a bank was observed. Internally a second, shallower slot-trench was excavated. This may represent a small delimiting ditch or drainage feature.

A series of north-south and east-west ditches were located in proximity to the enclosure and may represent contemporary animal or field enclosures.

(**No plans were available for this site**).

Reference:

Moore, D. 2001:1055. Site 2, Sheephouse, Co. Meath. www.excavations.ie.

Simonstown, Co. Meath
Early Medieval Settlement Enclosure
Grid reference: **N857705 (28570/27050)**
SMR No: **N/A**
Excavation Licence No: **N/A**
Excavation duration/year: **N/A**
Site director: **E.P. Kelly (National Museum)**

A large early medieval enclosure was excavated at Simonstown and the site was a focus of a number of periods spanning the Neolithic until the early medieval period.

The enclosure had a diameter of 75m. Within this was a small circular house that measured 5m in diameter and an area where iron smelting occurred. A number of artefacts were retrieved including glass beads, fragments of jet bracelets and some iron knives.

Earlier activity was represented by the foundations of a large sub-rectangular house that measured 10.5m by 6.25m. Its date was not determined but it predated the enclosure as did a number of Neolithic pits and hearths which were stratified under the enclosure's bank.

Contemporary activity was recorded in the neighbouring townland of Randalstown to the west including excavations of an ecclesiastical settlement at St Anne's Chapel (Kelly 1975:033, 1976) and two souterrains (Campbell 1985:044, 1986:065).

(**No plans were available for this site**).

References:

Campbell, K. 1985:044. Randalstown, Co. Meath. www.excavations.ie.

Campbell, K. 1986:065. Randalstown, Co. Meath. www.exacvations.ie.

Kelly, E. P. 1975:033. Simonstown, Co. Meath. www.excavations.ie.

Kelly, E. P. 1981. A short study of the botanical zones on a ringfort at Simonstown, Co Meath, used as an aid to the recovery of archaeological features, in D. Ó. Corráin (ed.) *Irish Antiquity*: *Essays and Studies Presented to Professor M.J. O'Kelly*, 67–77. Dublin. Four Courts Press.

Smithstown, Co. Meath
Early Medieval Unenclosed Settlement
Grid reference: **O13037049 (313036/270490)**
SMR: **ME028-022**
Excavation Licence No: **N/A**
Excavation duration: **1988**
Site director: **M Gowen (Margaret Gowen and Co. Ltd.)**

Excavation at Smithstown in advance of the north eastern gas pipeline revealed portions of four potentially unenclosed souterrains and a series of gullies and ditches to the north which may have been contemporary. The site was situated at the top of a south facing rise in ground extending north of the River Nanny.

Souterrain 1 consisted of a gently sloped and cobbled 2.5m long entrance ramp that lead to a gallery. The latter was exposed for a length of 6m and measured 1 .4m in width. The souterrain was filled with two deposits and the only finds were fragments of animal bone.

Souterrain 2 had no obvious entrance and was approximately 7m in length. It was 0.6m wide and up to l.4m deep and had a slightly expanded terminal at the west. A number of posthole-type pits were evident within the souterrain and may have predated its construction. The fill of one pit produced a decorated bone spindle whorl. The souterrain was constructed into a ditch-like escarpment at the south side of the site.

The third souterrain – like Souterrain 2 – was also built into the loose fill of the escarpment. Only a small portion was excavated which revealed a stone structure measuring 5.5m in length. Souterrain 4 was revealed in the eastern section face of the pipeline trench and was 1 .4m wide and lm high. The side walls were noticeably corbelled inwards and it was backfilled with three layers of loose, humic, ash and charcoal flecked soil.

The escarpment ran east-west across the pipeline corridor and had a maximum depth of 0.8m at its northern edge and was 1.8m wide. It was filled with two deposits. The upper fill contained animal bone, shell, ash lenses and charcoal and the lower deposit also contained some animal bone and shell. No trace of the escarpment survived to the south of the site.

A series of ditches, gullies and related features were revealed to the north of the souterrains. An annular gully – of which only a quarter was excavated – was present and measured between 7m and 8m in diameter. A sherd of E ware was recovered from its fill. A keyhole-shaped potential cereal-drying kiln abutted the inner edge of the gully close to its southern and only terminal. Keyhole-shaped cereal-drying kilns usually date to the latter stages of the early medieval period and the late middle-ages so this probably post dates the construction of the annular gully. The gully potentially enclosed an early medieval dwelling or structure which was abandoned centuries before the construction of the kiln and which has not survived archaeologically.

A second curvilinear gully, which was traced for 11m, lay to the south-west of gully above. No finds were recovered from its fill. The relationships between the escarpment and gullies is unclear as is their relationship with the souterrains although we know that Souterrains 2 and 3 were built into the escarpment ditch fill and so must be chronologically later.

(**No plans were available for this site**)

Reference:

Gowen, M. 1988:055. Smithstown, Co. Meath. www.excavations.ie.

County Monaghan

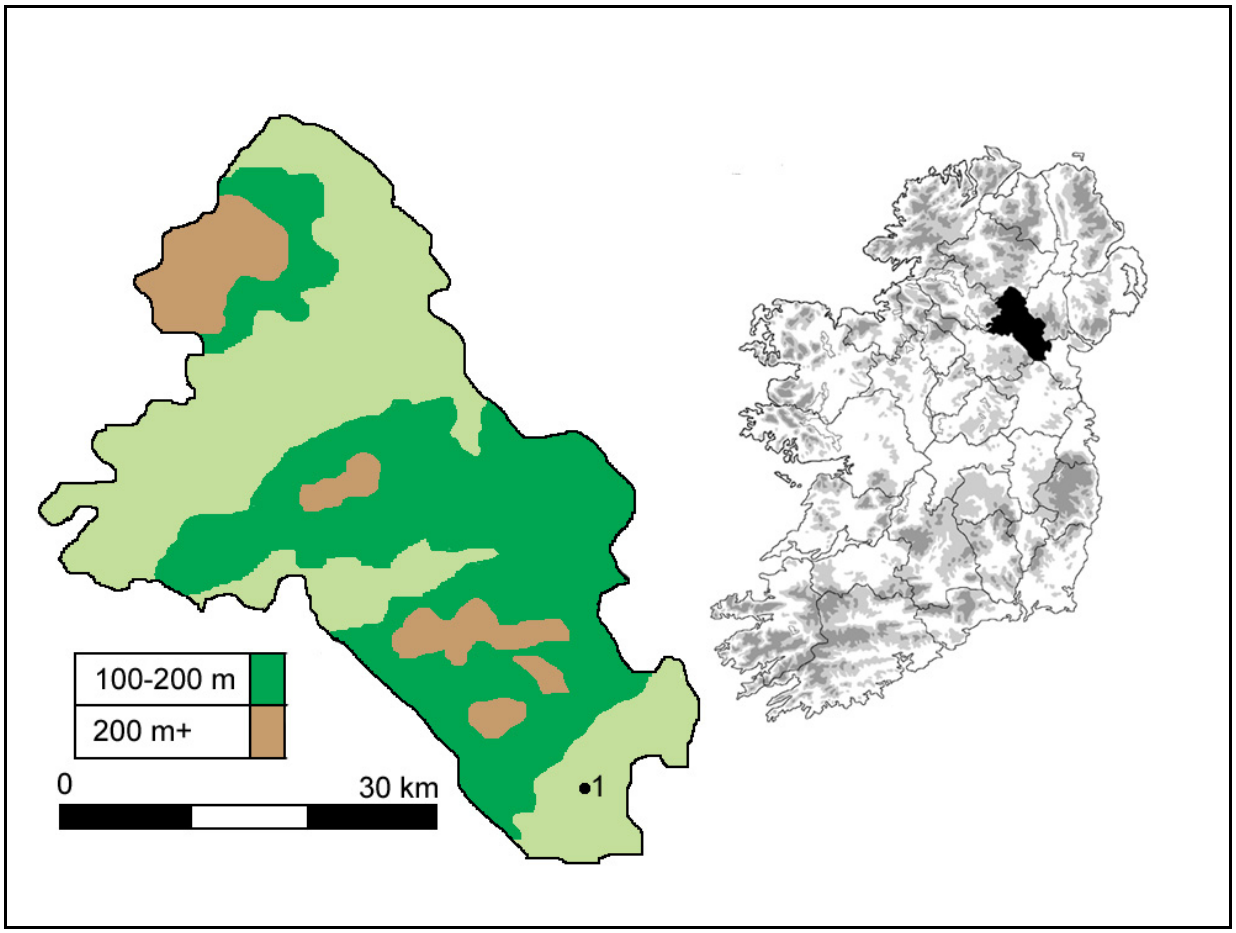


Fig. 264: Significant early medieval excavations in Co. Monaghan.

1	Lisanisk		

Lisanisk, Co. Monaghan
Early Medieval Settlement Enclosure.
Grid Ref: **H85030370 (285030/303700)**
SMR No: **N/A**
Excavation Licence: **03E0890**
Excavation Duration/Year: **March - September 2003.**
Site Director: **T. Coughlan (Irish Archaeological Consultancy Ltd.)**

The site was discovered during topsoil stripping in advance of road construction, which revealed a double-ditched enclosure (external diameter of 60m; internal diameter of 40m) (Fig. 265). There was no stratigraphic evidence to suggest that the construction of the ditches was not contemporary, although the inner ditch appears to have been deliberately in-filled during the seventh/eighth century. A number of internal features, pits, postholes and two possible structures were also discovered.

The outer ditch was broadly U-shaped in profile, with a maximum width of 3.3m, and a maximum depth of 1.4m. The lower ditch fills were almost completely sterile, with the exception of occasional animal bone fragments; and the upper fill was likely to be associated with the deliberate filling of the ditch. A coin dated to 1692 was found in the upper fill, indicating that the ditch remained open until at least this time. The enclosure, however, was not recorded on the First Edition OS maps, suggesting that it was finally in-filled in the intervening years. An articulated human skeleton discovered in the ditch would appear to have been a casualty of an attack on the nearby crannog in 1647.

The inner ditch was broadly V-shaped in profile, with a maximum width of 1.5m, and a maximum depth of 1.1m. Like the outer ditch, it had been filled largely with generally sterile re-deposited clays. Waste material dumped into the upper fill of the eastern ditch section, however, included occasional sherds of pottery and lumps of slag and charcoal. It is likely that this material is associated with two specific areas of industrial activity located within the outer ditch, and to the south-west and west of the inner ditch.

The excavation of the west side of the inner ditch revealed a substantial cut through the ditch in this area to widen and deepen it. A probable smithing hearth was identified at the base of this cut with a number of associated stakeholes (interpreted as a possible shelter), and spreads of charcoal and burning. The hearth appeared originally to have been too large and so was relined to make it smaller, possibly after only one use. Excavation of the material filling the re-cut revealed two main dumps of waste material consisting of blackened soil with significant amounts of slag, along with a substantial portion of one tuyère, and more than 30 fragments from others. It was originally thought that the large amount of slag and hammerscale sampled from the area may indicate the making of weapons for the 1641 uprising. However, radiocarbon dates (see below) have placed this metalworking to the end of the seventh century, and thus contemporary with the site occupation.

Another area of industrial activity was located 16m to the south-east of this smithing hearth and probably represented an immediate continuation of a similar activity. It was initially identified as an area of rough kerbing, to the north of which was located another possible smithing hearth, along with an associated working platform. It is possible that part of the kerbing supported the bellows for the hearth. The area contained a large amount of charcoal and waste metal and slag fragments.

A number of internal features – pits, postholes and two possible structures – were also identified on the site. These features were evident between the two ditches as well as within the inner ditch enclosure. There are no specific dates or functions for any of this material. A small cluster of seven stakeholes in the centre of the site may represent the location of a small hut. A second possible small hut, with an associated hearth, may be located in the

north-east of the inner enclosure, but there was no evidence of large-scale permanent structures or houses. A large pit between the two ditches, in the north-west of the site, may have been used for storage, possibly as a cistern, or a foundation for a very large post or beacon. Alternatively, it may have functioned as a test-pit prior to construction of the two ditches.

To the north-east of the enclosure, a probable field boundary/drain extended from the outer ditch, although it is not felt that this feature was contemporary with the original cutting of the ditch. A number of isolated features – pits, gullies and postholes – identified in the area to the south of the enclosure are of unknown date and are thought to be associated with land clearance. This clearance activity could date from the prehistoric to the post-medieval period. It may be more easily associated with the most recent period of land clearance, which led to the present field system.

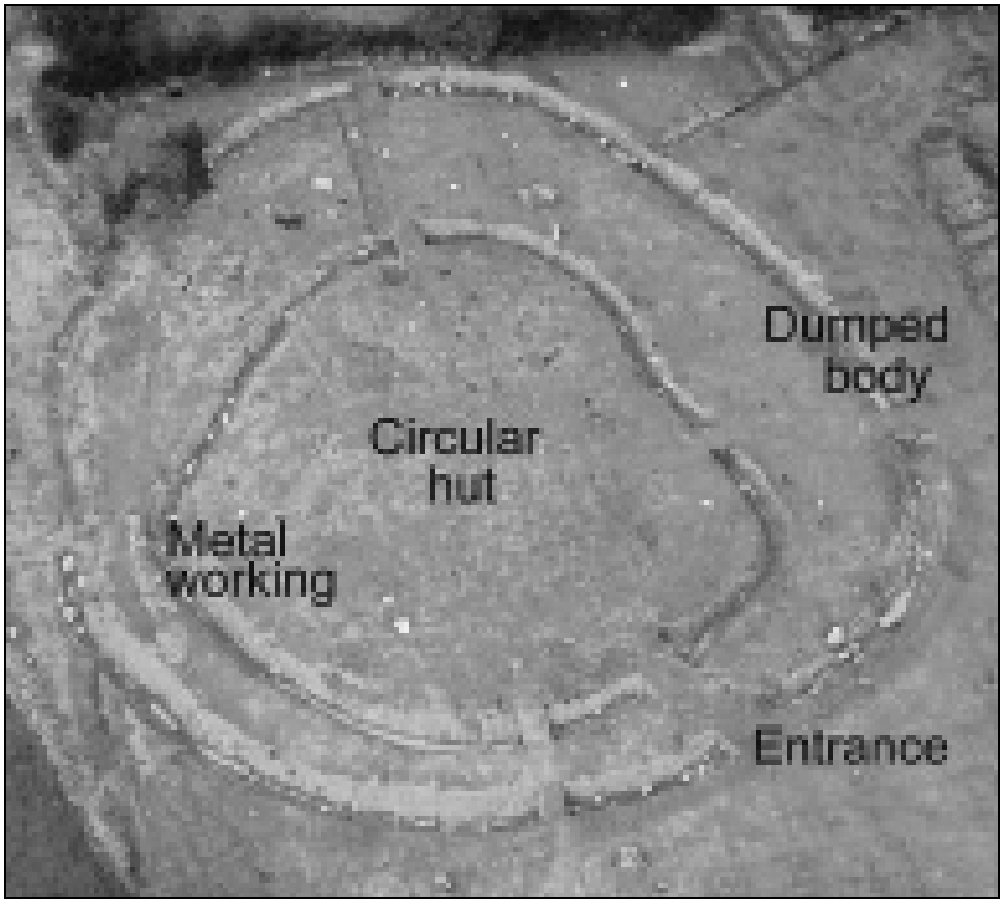


Fig. 265: Aerial photograph of excavations at Lisanisk, Co. Monaghan (after NRA publication).

References:

Coughlan, T. 2003:1490. Lisanisk, Co. Monaghan. www.excavations.ie

National Roads Authority. Undated. N2 Carrickmacross Bypass, County Monaghan: Archaeological Discoveries.

County Offaly

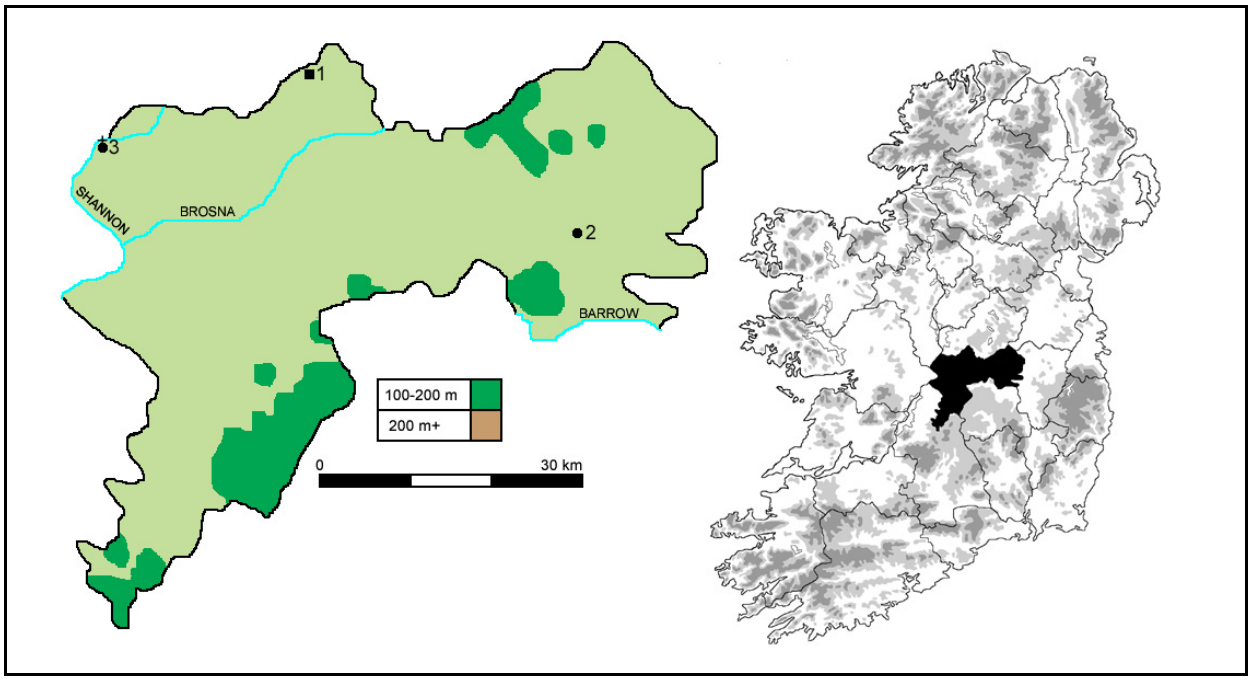


Fig. 266: Significant early medieval excavations in Co. Offaly.

1	Ballinderry	**3**	Clonmacnoise
2	Ballintemple		

'Ballinderry II' (Ballynahinch td.), Co. Offaly
Early Medieval Crannog.
Grid Ref: **N21663886 (221665/238869)**
SMR No: **OF001-001**
Excavation Licence: **E000006**
Excavation Duration/Year: **1933.**
Site Director: **H. O'N. Hencken (Harvard Archaeological Expedition)**.

The Bronze Age and early medieval crannog of Ballinderry No. 2, Co. Offaly was situated in a marshy bog, on the Offaly/Westmeath border. The site was excavated by the Harvard expedition in 1933 (Fig. 267). The site had been known since the nineteenth century, when it was dug into by treasure hunters and antiquarians searching for objects. The site has since been the subject of significant and complex structural and chronological re-interpretations, which will be summarised below. These re-interpretations indicate that the site was first used as a late Bronze Age platform, perhaps with a ritual function (Phase 1). The early medieval site history included a sixth-century pre-crannog occupation phase (Phase 2) and a ninth-century crannog (Phase 3). The early medieval site was initially located on a naturally raised area in either shallow water or marshy, swampy ground, which progressively became wetter, becoming a open lake by the end of the early middle ages.

Phase 1 – Late Bronze Age site
In Phase 1, Hencken proposed that the late Bronze Age settlement had a single large rectangular structure, several post clusters, a stone and brushwood feature and a number of circular wicker structures in a thin black deposit of lake muds. The finds from the Bronze Age lake settlement included bronze and stone artefacts and the sherds of several pottery vessels. The animal bone from the site included cattle, pig, sheep/goat, horse, red deer, badger, otter, crane, wild duck, scaup, duck and cat. The site was then partially covered by a subsequent layer of white marl, prior to its use in the early Middle Ages. However, Newman suggests, on the basis of a complex re-interpretation of the site stratigraphy, that the stone and brushwood feature and the circular wicker structures are later, intrusive features which derive from an early medieval (sixth century A.D.) pre-crannog occupation horizon. He also suggests that a second, substantial rectangular wooden structure can be traced in the grid-like alignment, spacing and orientation of posts at the opposite side of the site. Indeed, the majority of the late Bronze Age finds (i.e. most of the coarse ware pottery, all the amber beads and lignite bracelets) came from this area, suggesting it also was an area of intense activity around a former structure. This second timber structure may have rotted away or alternatively, it was disassembled, possibly because the wooden beams were better preserved on this higher part of the site (a knoll) and could be re-used elsewhere.

Newman's significant re-interpretation implies that the late Bronze Age lake-settlement had two substantial wooden structures, a possible pathway linking them, with the build-up on the site of an occupation layer. Finds from the site included bronze knives, awls, a flesh hook and a possible sunflower pin shaft. Other finds included spindle whorls, a saddle quern, stone rubbers, wooden artefacts and leather. Three human skulls were found in the black layer beneath the wooden structures. While Hencken suggested that there were eight or nine pots amongst the three hundred plus sherds, Newman's recent examination of the rim profiles indicates that there may have been as many as seventeen pottery vessels. Late Bronze Age finds are also known from several places in the immediate vicinity of the Ballinderry 2 site. A hoard of bronze objects (including a socketed, looped spearhead, two socketed gouges, a socketed and tanged chisel, a socketed knife and three large rings) was found in 1944 at 2.5m depth in peat, possibly in Moyvoughly bog. A late Bronze Age cup-headed pin and a bronze ring was also found, possibly in association with cremated bone, from a site 400m to the north of Ballinderry 2. Various other items of late Bronze Age date including tools, weaponry and ornaments have also been reported from the site in the NMI files, although some of these may have been deliberately mis-provenanced so as to increase their value.
Phase 2 – early medieval pre-crannog occupation phase (sixth century AD)

In the Phase 2 occupation (according to Newman's re-interpretation), probably dating to the late sixth century AD, the site had an early medieval occupation surface apparently used as an open-air site used for cooking, bathing and the processing of antler and deer bone, potentially associated with aristocratic red deer hunting. The occupation surface was on the lake marls, overlying the late Bronze Age site. There were also 11 circular wicker structures, clustered in groups, consisting of circular baskets, 1-2.2m in diameter, 0.95m in height, set into the ground. There was also an 'outer hearth' on a small rise, with logs at the base, with stone, gravel, sand and ashes filling the pit. This pre-occupation surface produced a large amount of red deer bone (up to 30% of the site assemblage), consisting of at least 27 individuals, with eruption of antlers on skull indicating that they had been killed in the winter. Chronologically diagnostic finds from Phase 2 included a copper-alloy pin (sixth/seventh century date), sherds of E ware (sixth-mid seventh century), a zoomorphic pennanular brooch (sixth century date, found under timber floor of later crannog). The outer hearth produced gaming pieces, bone dice, glass beads and a bronze drinking horn terminal. Finds from beneath the later crannog's house floor included the bronze pennanular brooch, a bronze armlet with twisted inlay, bone objects, whetstones, rubbing stones and a Type 3 pennanular brooch.

Phase 3 – early medieval crannog (ninth century AD)
In the Phase 3 occupation (dating to the ninth century), there was an early medieval crannog 'proper', with extensive evidence for domestic and industrial activity. The early medieval crannog had a palisade with an entrance, a laid surface of stone and brushwood and some evidence for internal houses, although these were badly disturbed by nineteenth century treasure hunting and antiquarian diggings.

The early medieval crannog (22m by 15m) was built of a stone and brushwood layer laid onto a small natural knoll at the centre of the crannog, with layers of peat, brushwood and general fill and debris making up the body of the mound. This stone and brushwood layer was defined at its edges by small stakes driven into the soft lake marls. The internal area was densely piled with smaller posts to consolidate the marshy ground. The crannog had a well-preserved timber floor on the southern side where there was a large hearth with several layers of ashes. The crannog was enclosed by an 'inner palisade' of a dense concentration of stakes and posts encircling the site, the tops of which lay below the level of the crannog's internal timber floor, implying that it was a revetment rather than a high enclosing fence. There was also an 'outer palisade' of oak posts with a possible berm outside it. The palisade was only partly surviving in the northern side, but it probably had an entrance or gate to the northeast, defined by two posts driven to 1.5m depth. Although generally considered a later feature, a brushwood track-way to the southeast may have been part of the early medieval crannog. The crannog's internal area had a timber floor of horizontal oak and ash posts in the southeast quadrant. This was probably the floor of a house, but its plan has been lost due to nineteenth century disturbance. The timbers had been freshly cut and were not re-used, and were laid in four layers of logs, criss-crossing each other. Packed between the timbers were deposits of cut peat and brushwood. There were also numerous bones in this area, particularly between the inner and outer palisades, suggesting that this was the location of the site's midden.

The site's animal bones were primarily found immediately outside the crannog palisade, where there was an enormous accumulation of food bones, chips and fragments of wood, particularly abundant on the east and south sides of the site. There were also huge quantities of bone inside the palisade, while a refuse pit was filled with bones and gravel (where there were also flint blades, arrowhead, and scrapers). Elsewhere the natural lake muds were covered with a dark clay and thin layer of brushwood, in which animal bone was common. The animal bone was primarily of cattle (90%), with smaller amounts of pig, horse (some broken) and small amounts of hare, rabbit, badger, otter, dog and cat. There were also bones of jay, heron, duck, pintail duck, tufted duck, goose and fowl.

The early medieval crannog at Ballinderry No. 2 produced a large numbers of finds. A dugout boat was found beside the house area, between the inner and outer palisades. The site also produced such high-status items as pennanular brooches (ninth-century types), two ringed pins (ninth/tenth century date) and stick pins. There were also many items of personal adornment, including beads, bone combs, pins and bone cylinders (and some bone gaming pieces). Clothing included leather shoes and textiles, found outside the palisade. Tools or agricultural equipment included knives, shears and spade (found outside the palisade), wooden spindles, mallets and wedges, as well as wooden buckets, lathe-turned vessels and wooden troughs. There were also fragments of eight rotary querns and two whole lower stones from querns. Swords were found outside the palisade, spearheads were recovered from the lake muds and there was also an iron shield boss. Intriguingly, there were also some modern forgeries from the site, inspired by antiquarian interest in it in the nineteenth century and the presence of an iron ladle, iron anvil and a soldering iron suggests that some were even being produced on the site.

The early medieval crannog at Ballinderry crannog No. 2 was probably occupied by fairly wealthy inhabitants in both its sixth century and ninth century phases, people who had access to high-status metalwork, glass and amber and were themselves engaging in a small amount of metalworking, woodworking and perhaps textile production. The crannog may not have been re-constructed many times before its abandonment. The economy of site was reconstructed from the faunal assemblages. There were several rotary querns, suggesting the importance of tillage and arable crops. A large assemblage of cattle bone was taken to indicate the importance of grazing, pig and horse bones were also plentiful. There may have been some limited hunting of wild animals, but there seems to have been relatively little exploitation of wildfowl or fish.

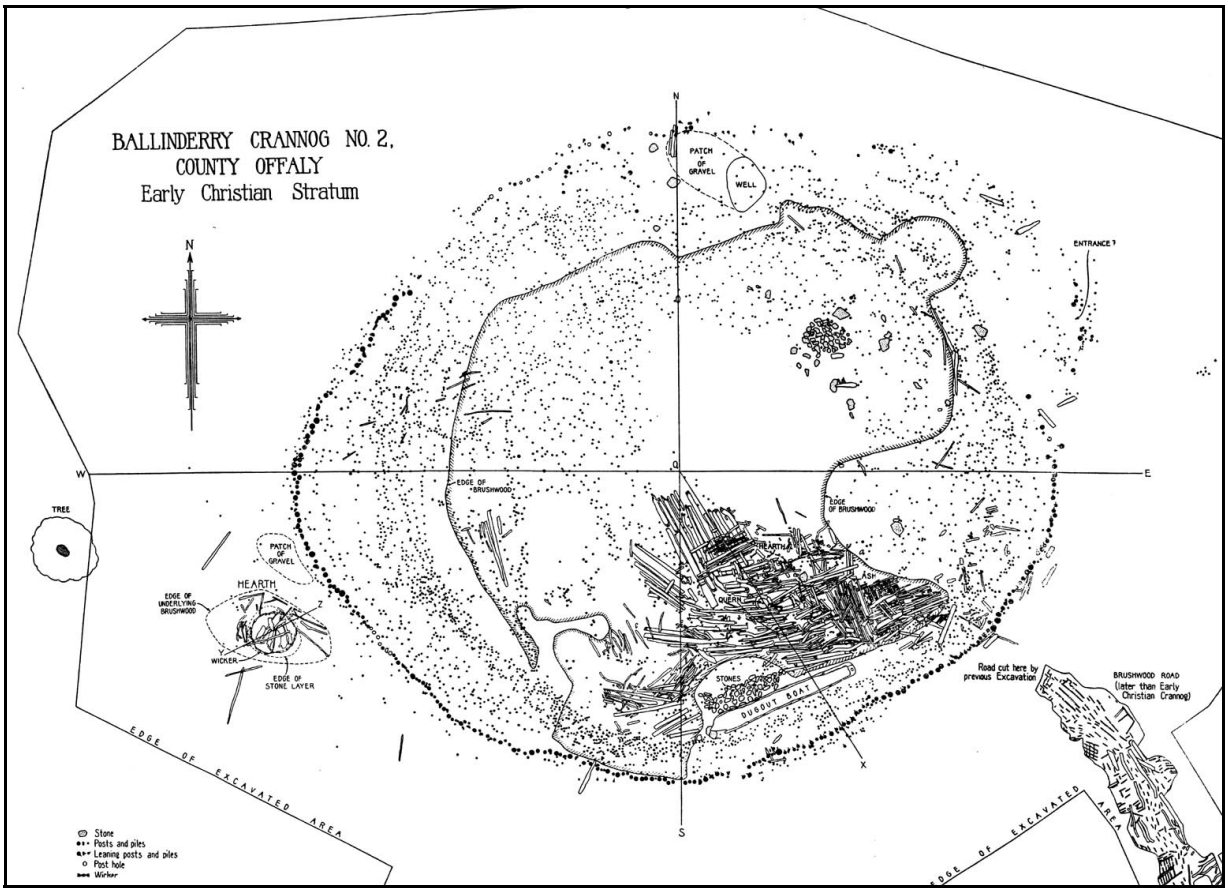


Fig. 267. Plan of Ballinderry crannog No. 2, Co. Offaly (after Hencken 1942, pl. IX).

References:

Ffrench, J. F. M. 1902. Notes on three bone pins found at the bottom of the Ballinderry lake in the county Westmeath' in *Journal of the Royal Society of Antiquaries of Ireland.* 32, 153–57.

Graves, J. 1883-4. Stone and bone antiquities, some with oghamic inscriptions, found at a crannóg in Ballinderry Lough. *Journal of the Royal Society of Antiquaries of Ireland*, 16.6, 196–202.

Hencken, H. O'N. 1942. Ballinderry crannóg no. 2, *Proceedings of the Royal Irish Academy Section C,* 47C, 1–76.

Newman, C. 1986. *The archaeology of Ballinderry Lough*. Unpub' MA thesis, NUI.

Newman, C. 1997. Ballinderry crannóg No. 2, Co. Offaly: the Later Bronze Age. *Journal of Irish Archaeology*, 8, 91–100.

Newman, C. 2002. Ballinderry crannóg No. 2, Co. Offaly: Pre-crannóg early medieval horizon. *Journal of Irish Archaeology*, 11, 99–124.

Wilde, W. R. 1857. *A descriptive catalogue of the antiquities of stone, earthen and vegetable materials in the Museum of the Royal Irish Academy*. Dublin.

Ballintemple, Co. Offaly
Early Medieval Settlement Enclosure.
Grid Ref: **N50662158 (250669/221581)**
SMR No: **N/A**
Excavation Licence: **03E1127**
Excavation Duration/Year: **2003.**
Site Director: **C. McDermot (Irish Archaeological Wetland Unit)**.

A sub-circular enclosure was exposed on the field surface during peat cutting. This was defined by an outer palisade of (predominantly) single posts, and a gap in the north-eastern side may represent the original site entrance (Fig. 268). Brushwood rods appear to have been interwoven around these posts, creating a wattle wall. A second line of posts was located about 1m on the inside of the outer palisade.

A large hearth was located at the centre of the enclosure. This was associated with fragments of burnt stone and burnt bone. Approximately 60 vertical posts at the northern and south-western corners of the hearth would appear to represent structural features; and a wooden flooring of interlocked roundwood extended on three sides of the hearth. The hearth and its surrounding features appear to be defined by two arcs of stakes, possibly representing the double-wall of a wicker-built roundhouse. A radiocarbon date taken from the charcoal in the heath would suggest an early medieval date for this structure.

Seven disturbed artefacts were recovered from the surface of the site – three fragments of a stone disc; three pieces of flint; a chert core; two possible whet-stones; and two fragments of leather.

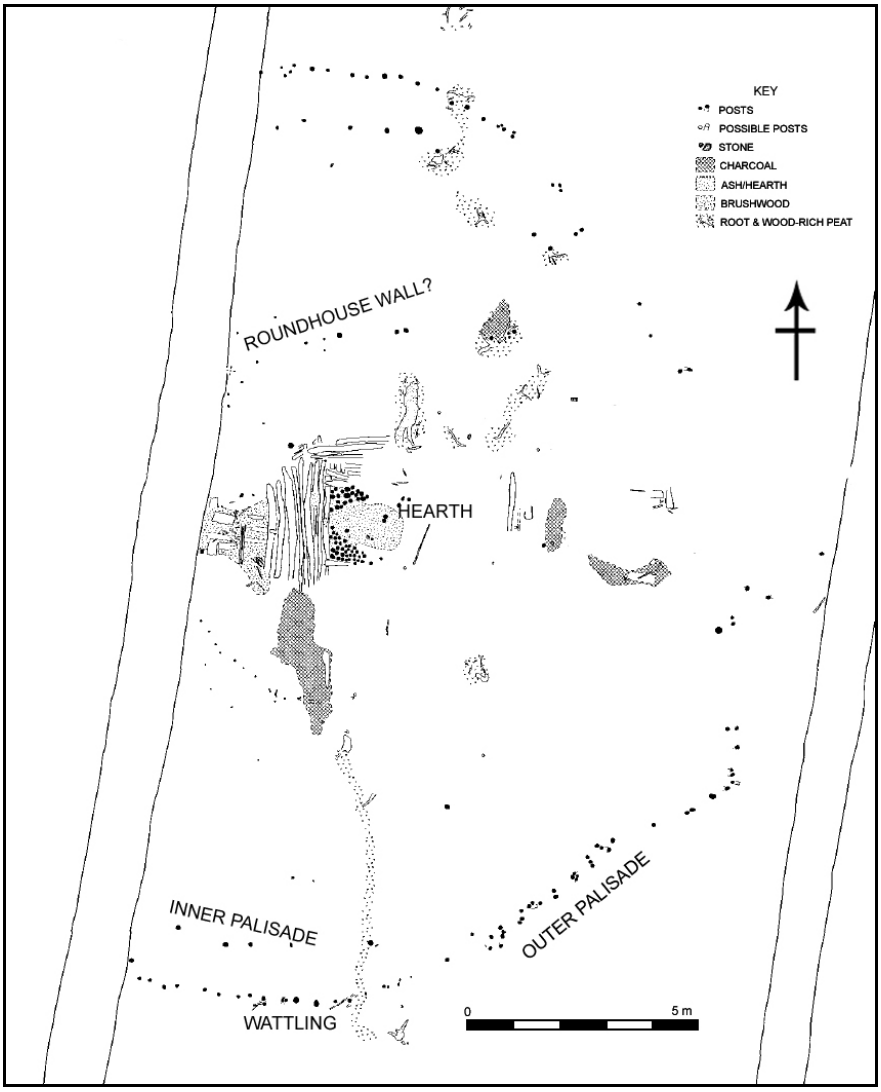


Fig. 268: Plan of palisaded enclosure and roundhouse at Ballintemple, Co. Offaly (after IAWU 2004).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
Wk-13754	Charcoal from hearth	1456±39 BP	**A.D. 544-653**.

References:

IAWU. 2004. Peatland Survey 2003: Supplementary Archaeological Survey Report – Ballykean Bog.

Stanley, M. & Moore, C. 2004. Medieval peatland dwellings. *Archaeology Ireland* 18(4), 12–4.

Clonmacnoise, Co. Offaly
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **N011308 (20110/23080)**
SMR No: **OF005-004; OF005-058.**
Excavation Licence: **E000181; E000558; 93E0086; 93E0123; 95E0231; 97E0243; 99E0715; 02E1407**
Excavation Duration/Year: **July – August 1979; 1989-1990; 1990 – 1998; 1995; 1997 – 1998; 1999-2000; 2002.**
Site Director: **R. Ó Floinn (National Museum of Ireland); C. Manning (OPW); H. King (National Monuments and Historic Properties Service, Dúchas); A. O'Sullivan (Management for Archaeology Underwater Ltd.) & D. Boland (Management for Archaeology Underwater Ltd.); D. Murphy (Archaeological Consultant Services Ltd.)**

The monastery is situated on the east side of the Shannon at a crossing point of the major east-west route-way, the *Slighe Mhor*, itself located on the *Eiscir Riadda* (Central Ridge) of Ireland. The site is linked with St. Ciaran, who may have founded the earliest church there *c.* A.D. 545. The site borders the three over-kingdoms of Connaught, Munster and the Southern Uí Néill. Although kings of Connaught took an interest in Clonmacnoise from an early date, the site had fallen within the control of the *Chlann Cholmain* dynasty of the Southern Uí Neill by the ninth century. This period saw a concentrated phase of patronage at the site including the construction of the cathedral and the erection of the 'Cross of Scriptures' in the early-tenth century. The ruins of the ecclesiastical site include the cathedral, seven churches, two round towers, six high crosses, a holy well and the largest collection of early medieval cross-slabs in Ireland. Although an Anglo-Norman castle was built to the west of the ecclesiastical site, the main crossing point of the River Shannon moved upstream to Athlone in the medieval period and Clonmacnoise became a relatively quiet and unspoilt archaeological landscape for the next eight centuries.

Recent field- and under-water survey, geophysics and above all excavation have uncovered extensive evidence for enclosing boundaries, structures, paved roads, surfaces, industrial and agricultural features and an underwater bridge, all dating from the seventh to twelfth century (Fig. 269). Excavations on the sites of three high crosses within the innermost ecclesiastical precincts have uncovered settlement evidence dating from the seventh century prior to the use of the area as a burial-ground (King 1993:186; 1994:196). Further excavations to the west at the Steeple Gardens (Visitor Centre), northeast (New Graveyard) and northwest (on the sloping ground from the Visitor Centre to the River Shannon banks) of the medieval ecclesiastical core produced significant evidence for three phases of early medieval habitation and industry (Manning 1989:078, 1990:096; King 2009, 335-36, 1992b). Underwater excavations to the northwest of the site has revealed a bridge dated to A.D. 804 (O'Sullivan & Boland 1998, 2000) and further investigations to the southwest near St. Ciaran's National School has uncovered an enclosing monastic ditch (Murphy 2003) and a Hiberno-Scandinavian coin hoard along with industrial features (Ó Floinn and King 1998). Geophysical investigations in the fields surrounding the site in the mid 1990s suggest that an extensive area was settled – in some places intensively – in the early medieval period (Mytum 2003, 56). An area to the southeast of the 'New Graveyard' has produced almost no stratified archaeology. It has been described as the 'Fair Green' on the earliest OS maps and may have been the possible location of the great fairs of Clonmacnoise (King 2009, 345). Local tradition and aerial photography indicate the possible presence of a mill-race to the east and southeast of the site (King 2009, 336).

The earliest settlement evidence at Clonmacnoise has been uncovered within the main original cathedral burial ground. Here, the removal of three crosses – the 'Cross of the Scriptures' (West Cross) and the 'South Cross' in 1991 and 1992 (King 1992c, 1994:196) and the 'North Cross' in the summer of 1993 (Manning 1990:096, 1992; King 1993:186) – revealed that the area to the west of the cathedral may have been initially used for

settlement. Excavations uncovered an early occupation deposit containing hearths, stake-holes, iron objects, slag, worked antler and animal bone in this area pre-dating seventh century burials (King 2009, 345). By the late seventh and early eighth century, this area had been designated a burial ground and continued in this role until it was closed in the 1950s (King 2009, 345). Backfilled pits were uncovered beneath the 'South Cross' and 'Cross of the Scriptures' and may have supported wooden crosses before their stone equivalents were erected in their place in the ninth/tenth century. Finds consisted primarily of a large number of early Christian, medieval and post-medieval grave-slabs, burials and a bronze ringed pin (King 1994:196).

The excavations to the west (The Visitor Centre in the 'Steeple Gardens'), northwest (sloping ground from the visitor centre to the River Shannon) and particularly to the northeast ('New Graveyard') of the ecclesiastical core demonstrate that there was a major expansion of settlement in the seventh and eighth centuries with a further reorganisation and new features suggestive of 'urbanisation' appearing in the 9th century (King 2009, 336). Three main phases of occupation were identified in these three areas but were especially evident to the northeast of the ecclesiastical core. The designation of the area of the ecclesiastical core as a burial-ground in the later seventh century and eighth century appears to have coincided with a major expansion to the east at the New Graveyard in the form of stakeholes, spreads of burnt soil and other features. Above these was the main ninth and tenth century occupation phase which was characterized by a number of houses and other structures. The uppermost late eleventh and twelfth century layer was disturbed by post-medieval agriculture and consisted of flagged and cobbled area, pits, well-shafts and post-holes (King 2009, 335-36).

The rescue excavations in the garden of the round tower (Steeple Gardens) were undertaken in 1989 and 1990 in advance of the construction of a visitor centre (Manning 1989:078, 1990:096). The earliest phase was represented by stakeholes, furnace waste and industrial fragments. A habitation surface, with stakeholes and an occupation surface, was situated above this layer. A path was also discovered composed of gravel. Another habitation layer with stakeholes was confined to the eastern half of the area. Preliminary analysis suggests that these stakeholes may represent the remains of circular huts. Part of a two-sided comb and a bone trial piece with interlace and fretwork patterns were found in a dark humic layer; and a large quantity of animal bone was also recovered.

The 'New Graveyard' at Clonmacnoise had been opened in the mid-twentieth century, without prior archaeological investigation. An ogham stone was discovered during grave-digging in 1990, which persuaded the Office of Public Works to authorise a limited excavation. Excavation carried on in this area for the next eight years by Heather King and revealed much about the domestic and industrial aspects to the monastery (See King 2009). The excavations demonstrated that house types between the eighth to twelfth centuries evolved from post-and-wattle to larger circular houses built on stone-revetted platforms above the River Shannon floodplain which were in turn replaced by rectangular equivalents. There was evidence for the construction, maintenance and remetalling of streets and pathways throughout this period and continuity of house plots were also demonstrated where a rectangular house was built above the foundations of a circular structure (King 2009, 345).

The earliest evidence of occupation at the 'New Graveyard' was a series of postholes in the natural sandy soil of the esker ridge, interpreted as the remains of a wicker-walled house. Above this, approximately one-third of a round house was discovered in the form of a wall, a hearth and a clay floor. Most of the structures on the site appear to be contemporary with, and adjacent to, a metalled roadway which ran from the *Eiscir Riada* (the gravel ridge located behind the monastery), to the monastic enclosure. Radiocarbon dates from the post-road phase gave a twelfth/thirteenth century date (see below), with other radiocarbon dates confirming that the settlement developed in the seventh century and carried on for subsequent centuries (see below). A round house (6m in diameter) was discovered beneath a rectangular building. This structure (10.5m x 3.5m) had two identifiable phases of occupation, and had a probable internal division, creating a two-celled building.

A later roundhouse (7m diameter) appears to have been contemporary with a rectangular or 'D'-shaped platform (6m x 3m (destroyed)), and both are associated with the road-way. Both of these buildings had contemporary enclosed yards with evidence for a wooden gate and a hearth. A possible structure for storing grain was also uncovered in the metalled yard of a round house and consisted of four large oak posts which may have supported an overhanging platform on which the grain was stored (King 2009, 336-37). Excavations in 1991 and 1992 uncovered a rectangular 'sod house' and an external occupation area containing a central stone-lined hearth (a possible second structure), as well as many pits, postholes, drains and trenches. A cobbled surface in the northwest corner of the 'New Graveyard' was interpreted as a quay or slipway for the River Shannon and a number of oak posts found along the edge of the cobbled surface may have provided moorings for small fishing boats (King 2009, 338). Two contemporary corn-drying kilns were also excavated in the 'New Graveyard' with the hearths and flues of both later removed by the insertion of a wooden-framed storage pit. An abandoned well filled with antler waste, including shavings, partly sawn fragments and cut antler points dating from the later phases of the 'New Graveyard' was also uncovered and might indicate the approximate location of a craft worker operating nearby (King 2009, 339).

Further evidence elsewhere for the expansion and reorganisation of settlement at Clonmacnoise in the eighth and ninth century are demonstrated by the construction of a massive enclosing ditch and a timber bridge across the River Shannon. Excavations near St. Ciaran's National School and the medieval castle to the southwest of the monastic site in 1999 and 2000 revealed (Murphy 1999:745; 2000:0810, 2003) a large roughly V-shaped infilled ditch with a flat bottom and a possible bank along its north side. The ditch measured 6.2m wide at the top, 1m wide at the bottom and 3.7m deep at the west end, and 5m wide at the top, 1.7m wide at the bottom and 3.8m deep at the east end. The ditch appeared to have been deliberately infilled in one episode rather than silting up over a long period of time. Animal bone recovered from the main fill provided a date of 1228±43 years BP indicating that it was infilled in the eighth or ninth century. Two late twelfth/thirteenth century burials were uncovered to the south of the infilled ditch while other related features included pits, iron slag, a possible bowl-shaped furnace and post-medieval cultivation furrows.

The infilling of the large enclosing ditch may have roughly coincided with the construction of a massive oak bridge crossing the River Shannon (Murphy 2003). It was identified in an underwater survey to the northwest of the site and may represent the bridge mentioned in the *Annals of Clonmacnoise* in A.D. 1158. Seven pairs of posts were found along the northern bank, and longitudinal timbers, possibly representing the side supports of the bridge, were also discovered. These timbers were dendrochronologically dated to A.D. 804. Further excavation of the bridge in 1997 revealed that the bridge originally measured 120m long and 5m wide, and was likely to be about 10-13m in height. The bridge was built of 25 pairs of vertical oak posts. It appears to have been a single-phase structure (no evidence for repairs was discovered) and would not have lasted much longer than 40-50 years.

The discovery of Hiberno-Scandinavian coins in a field to the south of St. Ciaran's National School instigated further excavations in 1979 (Ó Floinn 1977-79:0063; Ó Floinn and King 1998). The site was to the southwest of the monastery and outside the line of the monastic enclosure excavated by Donald Murphy. The hoard consisted of three pennies (including one silver penny) of Hiberno-Scandinavian date, a bronze ingot and a fragment of a gold earring deposited *c.* AD. 1065-1095. A stone-lined drain and a hearth were also excavated, and these revealed a jet bracelet fragment and a bone pin, as well as several industrial remains (crucible fragments, a fragment of tuyère, fragments of a clay mould, industrial slag (4kg), and a furnace bottom). Further excavations at St. Ciaran's National School in 1992 produced evidence for a quantity of animal bone and slag in almost every cutting together with a cut antler tip and a bronze scrap (King 1992:158). In general, these excavations uncovered limited evidence for occupation in comparison to the extensive stratified archaeological deposits to the immediate west and east of the monastic site (King 2009, 335).

Over 5,000 artefacts have been recovered from the various excavations throughout the monastery. Approximately 4,000 of these have been uncovered during the various excavation seasons at the 'New Graveyard' and included iron objects (e.g. knives, rings, pins, fishhooks), iron weapons (an axe-head, a sword pommel, and an armour piercing arrow-head) and bronze objects (e.g. wire, loop-headed pin, tweezers, needle, pins, buckle, and off-cuts) as well as a copper-alloy sewing needle case. High status metals were also recovered (e.g. a fragmentary crucible with a speck of gold, and a silver ingot). Glass and enamel artefacts were also discovered (e.g. blue glass beads, a green glass bead, a yellow glass bead, fragments of a blue glass bracelet, and a blue enamel bracelet fragment). Imported material was present in the form of sherds of E ware, fragments of green porphyry, pieces of jet, and Hiberno-Scandinavian and Anglo-Saxon coins.

The evidence demonstrates that small-scale bone-, antler-, lignite-, glass-, and fine metal-working were carried out within the settlement areas, although large-scale iron-working was more confined to the west of the site (King 2009, 345). Crucibles, tuyères, mould fragments and slag indicate metalworking; spindle whorls indicate textile production; and off-cuts and shavings of bone and antler suggest bone-working and comb manufacture. Evidence for copper-alloy-working has been identified in at least two areas of the 'New Graveyard' in the form of a hearth, crucibles, moulds, a cache of scrap metal objects and two fragments of guage bronze wire (King 2009, 342-43). Some of the crucibles may have been used for glass-working as at least two droplets of green glass could indicate its manufacture in the area of the 'New Graveyard' (King 2009, 344).

Although extensive evidence for both the smelting and smithing of iron has been identified in the form of lumps of slag, furnace bottoms and furnace material, the excavations have only yet uncovered one definite early medieval smelting furnace; that beside St. Ciaran's National School (Ó Floinn and King 1998, 130-31). The most substantial evidence for ironworking was uncovered within the monastic enclosure on the site of the Visitor Centre in the form of furnace waste, iron slag, and túyere fragments (Manning 1989:078, 1990:096) and to its immediate northwest (King 2002:1565, 2003:1535) where an extensive quantity of dumped ironworking material was located during the construction of a waste-water treatment system. The monastery at Clonmacnoise also obviously supported a large number of masons and stone-cutters attested by the manufacture of over 700 carved stone cross-slabs, at least six high crosses and the various churches and round tower.

Evidence for fishing at Clonmacnoise is demonstrated by stone net sinkers, iron fish hooks, fish scales and also perhaps eleven dug-out wooden boats found close to the submerged ninth century bridge (King 2009, 338). The mammal bone evidence from Clonmacnoise has been published, at least in summary form (Soderberg 2004; McCormick and Murray 2007, 209-217; King 2009, 336-38). In common with Viking Dublin, the age-slaughter pattern of the cattle at Clonmacnoise was dominated by older animals, indicating that the site for the most part was a consumer settlement, provisioned by outside producers and not by its own herds. The evidence for quern-stones and a large mill-stone – re-used as the base for the 'North Cross', - as well as reaping hooks, bill hooks, two corn-drying kilns, a possible silo and mill-race finally indicate extensive tillage activity at Clonmacnoise.

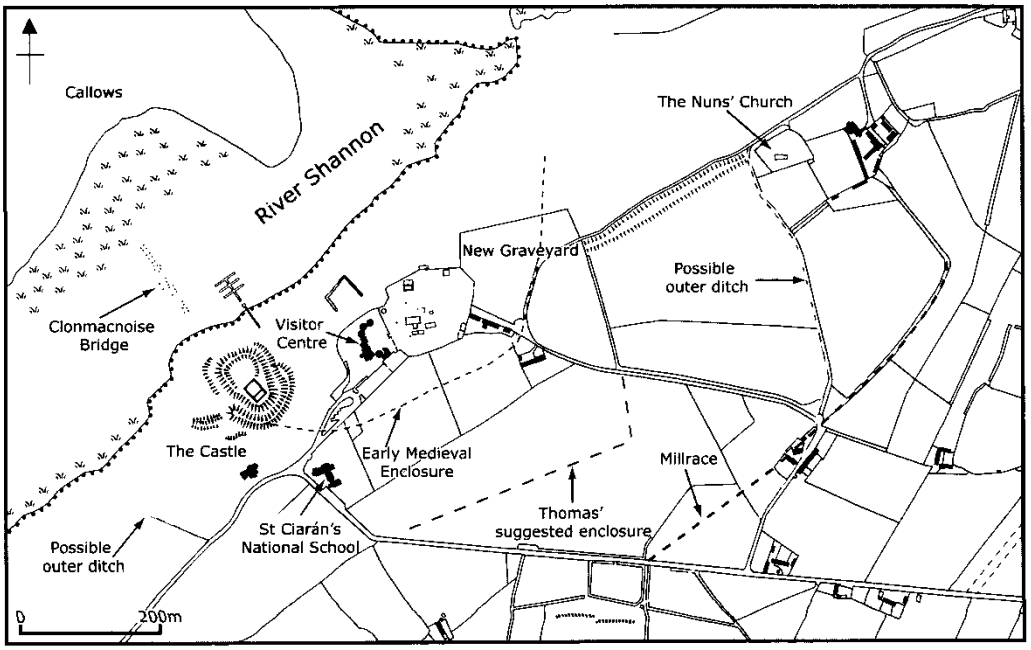


Fig. 269: Map of Clonmacnoise Landscape (After King 2009, 335)

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
Gr-?	After abandonment of road in 'New Graveyard'	860±20 BP	A.D. 1056-1075; **A.D. 1154-1224**.
Gr-?	Pre-house platform construction in 'New Graveyard'	1255±45 BP	**A.D. 669-876**.
Gr-?	Pre-house platform construction in 'New Graveyard'	1330±20 BP	**A.D. 652-695**; A.D. 698-707; A.D. 748-765.
Gr-?	Pre-house platform construction in 'New Graveyard'	1285±25 BP	**A.D. 669-773**.
	Animal Bone from main fill of the outer ecclesiastical enclosure (Murphy 2000:0810)	1228±43 BP	**A.D. 680-890**

References:

Boland, D. 1995:239: Clonmacnoise, Bridge, Co. Offaly. www.excavations.ie.

Boland, D. & O'Sullivan, A. 1997. Underwater excavations of an early medieval wooden bridge at Clonmacnoise, Co. Offaly, in F. Mitchell & C. Delaney (eds.) *The quaternary of the Irish midlands*. Dublin: Irish Association for Quaternary Studies, 55–63.

Kenny, M. 1983. A hoard of Hiberno-Norse coins from Clonmacnoise, Co. Offaly. *Numismatic society*

of Ireland: Occasional Papers Nos. 24-28, 25, 7–12.

King, H. 1990:097: Clonmacnoise New Graveyard, Co. Offaly. www.excavations.ie

King, H. 1991:110: Clonmacnoise New Graveyard, Co. Offaly. www.excavations.ie

King, H. 1992:157: Clonmacnoise New Graveyard, Co. Offaly. www.excavations.ie

King, H. 1992:158: 'St Kieran's National School', Clonmacnoise, Monastic Site, Co. Offaly. www.excavations.ie.

King, H. 1992b. Excavations at Clonmacnoise. *Archaeology Ireland*, 6(3), 12–4.

King, H. 1992c. Moving Crosses. *Archaeology Ireland* 6(4), 22–23.

King, H. 1993:186: Clonmacnoise High crosses, Co. Offaly. www.excavations.ie.

King, H. 1993:187: Clonmacnoise New Graveyard, Co. Offaly. www.excavations.ie

King, H. 1993:188: Clonmacnoise Early Christian site, Co. Offaly. www.excavations.ie.

King, H. 1994:196: Clonmacnoise High crosses, Co. Offaly. www.excavations.ie.

King, H. 1994:197: Clonmacnoise New Graveyard, Co. Offaly. www.excavations.ie

King, H. 1995:240: Clonmacnoise New Graveyard, Co. Offaly. www.excavations.ie

King, H. 1996:324: Clonmacnoise New Graveyard, Co. Offaly. www.excavations.ie

King, H. 1997:448: Clonmacnoise New Graveyard, Co. Offaly. www.excavations.ie

King, H. 1998:548: Clonmacnoise New Graveyard, Co. Offaly. www.excavations.ie

King, H. (ed.) 1998. *Clonmacnoise studies: Seminar Papers Vol. 1*. Dublin: Heritage Service.

King, H. 2002:1565: Clonmacnoise, Monastic site, Co. Offaly. www.excavations.ie

King, H. 2003:1535: Clonmacnoise, Monastic site, Co. Offaly. www.excavations.ie

King, H. (ed.) 2003. *Clonmacnoise studies: Seminar Papers Vol. 2*. Dublin: Stationery Office.

King, H. 2009. The Economy and Industry of Early Medieval Clonmacnoise: A Preliminary View, in N. Edwards (ed.) *The Archaeology of the Early Medieval Celtic Churches*. Leeds: Maney Publishing, 333-49.

Manning, C. 1989:078: 'Clonmacnois', Clonmacnois Early Christian monastic site, Co. Offaly. www.excavations.ie.

Manning, C. 1990:096: ‘Clonmacnoise', Clonmacnoise, Early monastic site, Co. Offaly. www.excavations.ie.

Manning, C. 1992. The base of the North Cross at Clonmacnoise. *Archaeology Ireland* 6(2), 8–9.

Manning, C. 1994. *Clonmacnoise*. Dublin: Stationery Office.

Manning, C. 1995. Clonmacnoise Cathedral- The Oldest Church in Ireland. *Archaeology Ireland*, 9(4), 30–3.

Manning, C. and Moore, F. 1991. An Ogham Stone find from Clonmacnoise."*Archaeology Ireland* 5(4), 10–11.

McCormick, F. & Murray, E. 2007. *Excavations at Knowth 3: Knowth and the zooarchaeology of early Christian Ireland*. Dublin: Royal Irish Academy.

Moore, F. 1996. Ireland's oldest bridge at Clonmacnoise. *Archaeology Ireland*, 10(4), 24–7.

Murphy, D. 1999:745: Clonmacnoise, Early Christian ecclesiastical, Co. Offaly. www.excavations.ie.

Murphy, D. 2000:0810: Clonmacnoise, Early monastic site, Co. Offaly. www.excavations.ie.

Murphy, D. 2003. Excavation of an early monastic enclosure at Clonmacnoise, in H. King (ed.) Clonmacnoise Studies v.2, Dublin: Stationery Office, 1–34.

Mytum, H. 2003. Surface and geophysical survey at Clonmacnoise: defining the extent of intensive monastic settlement, in H. King's (ed.) *Clonmacnoise Studies: Seminar Papers v.2*, Dublin: Stationery Office, 35-58

Ó Floinn, R. 1977-79:0063: Clonmacnoise, Monastic Site, Co. Offaly. www.excavations.ie

Ó Floinn, R. & King, H. 1998. Archaeological Excavations at St. Ciaran's National School, in H. King's (ed.) *Clonmacnoise Studies: Seminar Papers v. 1*. Dublin: Heritage Service, 119-32.

O'Sullivan, A. & Boland, D. 1997:447: Clonmacnoise, Early medieval bridge, Co. Offaly. www.excavations.ie.

O'Sullivan, A. & Boland, D. 1998. Medieval Irish engineers bridge the River Shannon. *Discovering Archaeology*, 1, 32–7.

O'Sullivan, A. & Boland, D. 2000. *The Clonmacnoise bridge: an early medieval river crossing in County Offaly*. Bray: Wordwell.

O'Sullivan, A., Brady, N. & Boland, D. 1998:547: Clonmacnoise, Early medieval wooden Bridge, Co. Offaly. www.excavations.ie.

Soderberg, J. 2004. Wild cattle: red deer in the religious texts, iconography, and archaeology of early medieval Ireland. *International Journal of Historical Archaeology*, 8(3), 167–83.

Trodd, V. 1998. *Clonmacnoise and West Offaly*. Banagher: Scéal Publications.

County Roscommon

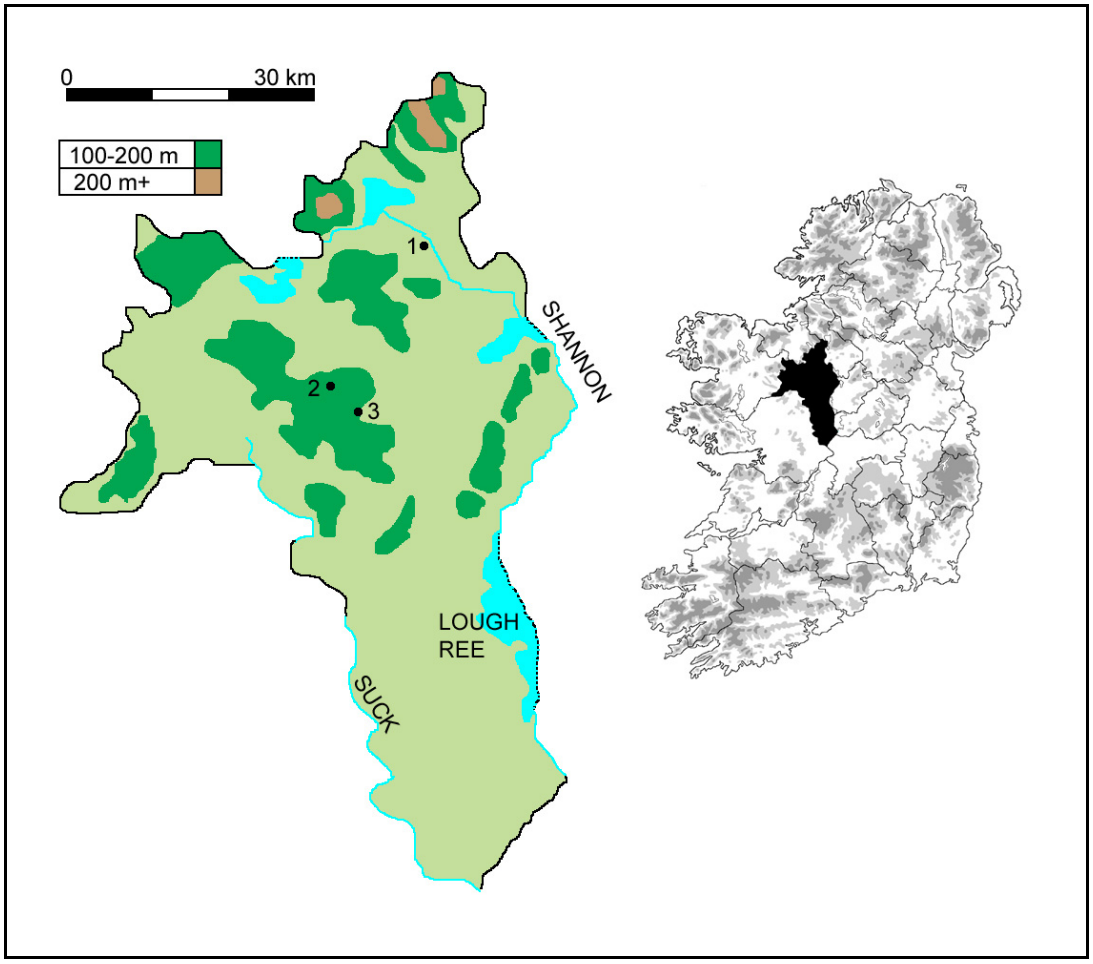


Fig. 270: Significant early medieval excavations in Co. Roscommon.

1	Cloongownagh	**3**	Tulsk
2	Rathcroghan		

Cloongownagh, Co. Roscommon
Early Medieval Settlement Enclosure.
Grid Ref: **M90649997 (190644/299970)**
SMR No: **RO011-160002**
Excavation Licence: **99E0193**
Excavation Duration/Year: **April 1999 – June 2000**.
Site Director: **A.M. Lenon & M. Henry (Mary Henry Archaeological Services Ltd.)**.

A large, sub-rectangular earthwork (64m in diameter, and defined by a ditch (2.3m in width and 1m to 1.55m in depth)) was identified during field-walking. Excavation of half of the enclosure was required in order to facilitate road building.

A number of phases of occupation were identified under excavation, ranging from the prehistoric (there was evidence for Neolithic, Bronze Age and Iron Age occupation), through the early medieval period, and into the post-medieval (Fig. 271).

An earthen bank (2.75m to 3.5m in width) appears to have been constructed around this time within the ambit of a prehistoric ditch which also appears to have been re-cut during the early medieval period. Radiocarbon dates from the basal fills of the ditch, below the re-cut, suggest that it had originally been excavated during the Iron Age. The later bank appears to have been created from the up-cast from the re-cut of the ditch, and overlay a refuse pit which included a broken rotary quernstone and animal bone. A seventh/eighth century date was recovered from burnt bone from this pit (see below), giving a *terminus ante quem* for the construction of the banked enclosure.

The interior of the enclosure had been damaged by subsequent agriculture and the early medieval structural remains consist of two possible postholes and four slot-trenches. The main feature that could be clearly identified to the early medieval period was a linear trench of unknown length (the trench extended into the unexcavated portion of the site). The excavated part of this trench (9.2m long by 1.10m wide by 1.1m deep) was filled with a series of silts and clays, into which were set a series of upright posts and wooden planks, one of which was radiocarbon dated to the eighth/ninth century (see below). Three other slot-trenches were uncovered in the interior, including one which may have been associated with a series of postholes.

Iron slag and a fragment of a quernstone were recovered from the fill of the early medieval re-cut ditch. Radiocarbon dates from the upper layers of the ditch fill suggest that the early medieval site may have been abandoned by the eleventh or twelfth century.



Fig. 271: Location of possible early medieval structures at Cloongownagh, Co. Roscommon (after Lennon & Henry 2001).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UCD-00106	Wooden plank from slot trench	1305±67 BP	A.D. 623-628; **A.D. 631-884**.
UCD-00107	Wooden plank from slot trench	1185±80 BP	**A.D. 673-991**.
UCD-00108	Ditch in-fill	1050±80 BP	A.D. 779-794; **A.D. 801-1161**.
UCD-00111	Ditch in-fill	1180±80 BP	**A.D. 674-994**.
UCD-00113	Burnt bone from pit under bank	1360±67 BP	**A.D. 550-782**; A.D. 789-811; A.D. 846-855.
Quoted in Lennon & Henry 2000	Wooden plank from slot trench	1165±45 BP	A.D. 723-740; **A.D. 770-984**.
Quoted in Lennon & Henry 2000	Burnt bone from pit under bank	1339±50 BP	**A.D. 604-778**.
Quoted in Lennon & Henry 2000	Organic material from basal fill of ditch	2270±60 BP	483-466 B.C.; **416-169 B.C**.
Quoted in Lennon & Henry 2000	Organic material from basal fill of ditch	2370±60 BP	756-684 B.C.; **669-360 B.C**.; 274-260 B.C.

References:

Henry, M. 1999:765. Cloongownagh, Co. Roscommon. www.excavations.ie

Lennon, A-M. 2000:0849. Cloongownagh, Co. Roscommon. www.excavations.ie

Lennon, A-M. & Henry, M. 2000. Preliminary Report on Archaeological Excavation at Cloongownagh, Co. Roscommon. Unpub'd Report, Mary Henry & Co. Ltd.

Lennon, A-M. & Henry, M. 2001. Archaeological Report on the Excavation at Cloongownagh, Co. Roscommon. Unpub'd Report. Mary Henry & Co. Ltd.

'Rathcroghan', Co. Roscommon
Iron Age Settlement Complex.
Grid Ref: **See below**
SMR No: **See below**
Excavation Licence: **N/A**
Excavation Duration/Year: **June - July 1981**.
Site Director: **J. Waddell (University College, Galway)**.

The site consists of a complex of enclosures spread a number of townlands, dating from the Iron Age, and traditionally associated with the royal site of the province of Connaught. A series of surveys and excavations have been conducted on these sites over the years (those sites with early medieval potential are summarised below). Excavation was undertaken at 'Dathi's Mound', and this returned radiocarbon dates from the Iron Age, but surveys at 'Relignaree' and 'Rathmore', especially, indicate that these sites were occupied during the early medieval period, although no more definite dating or information may be obtained without excavation.

'Rathbeg' (Toberrory td.):

Grid Ref: **M79758415 (179750/284150)**
SMR No: **RO022-057001**

This site consists of an enclosure (45m in diameter).

'Rathcroghan Mound' (Toberrory td.):

Grid Ref: **M78008367 (1780010/283670)**
SMR No: **RO022-057010**

This feature consists of a large mound (65m diameter at the base, sloping to 32m at the top), set in the middle of the complex. The top of the mound appears to have been originally surrounded by a low bank, and enclosed a low mound (5m by 4m by 4m in height).

'Rathmore' (Toberrory td.):

Grid Ref: **M79588453 (179580/284532)**
SMR No: **RO022-056017**

This site consists of a raised platform (27m by 30.4m in internal diameter, and a maximum of 5.3m high), surrounded by a low bank (about 1m in height). An apparent revetment of stone-walling has been exposed in the side of the mound. This is located on the top of a hillock, and the site is further defined lower down the slope by a ditch (average width of 5m) which encloses an area with diameter of 74m. Gradiometric and magnetic susceptibility surveys on the summit of the platform suggests that this was an artificial construct, and that a large circular structure (15m in diameter) occupied this area.

'Rathnadarve' (Toberrory td.):

Grid Ref: **M79428368 (179420/283680)**
SMR No: **RO022-057003**

This site consists of a circular enclosure (85m in diameter), surrounded by a bank (on average 2.2m high and 5m wide), and a shallow external ditch (6m in width and 0.5m deep).

'Cashelmanannan' (Glenballythomas td.):

Grid Ref: **M78818268 (178810/282680)**
SMR No: **RO021-042017**

This consists of the remains of a much ruined enclosure (58m north-south), within a bank which is up to 2m wide (although only survived to 0.5m in height).

'Oweynagat' (Glenballythomas td.):

Grid Ref: **M79598312 (179590/283120)**
SMR No: **RO022-057028-31**

This site has been largely destroyed, but it appears to have consisted of a circular enclosure (18m in diameter), with a modified cave. An ogham stone was incorporated into the souterrain as a lintel stone.

'Relignaree' (Glenballythomas td.):

Grid Ref: **M79828286 (179820/282860)**
SMR No: **RO022-057035**

This consists of a large univallate enclosure with an internal diameter of 100m. The bank was constructed of large stones and measured 2.6m wide and 1m high; there was little evidence of an external ditch. In the interior of the enclosure there was some trace of another smaller, concentric enclosure, with a diameter of 48m. The relationship between this and the larger enclosure have not been resolved. Other internal features include three rectangular houses (7m by 5m; 10m by 7m; 10m by 6m); and a stone-wall built souterrain.

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
GrN-11200	Charcoal from beneath pillar stone on Dathi's Mound	2120±25 BP	337-330 B.C.; **203-54 B.C.**
GrN-11429	Charcoal from the lower levels of bank	1940±70 BP	**105 B.C. – A.D. 238**.
GrN-11430	Charcoal from top of bank	1825±30 BP	A.D. 88–103; **A.D. 122-255**; A.D. 304-314.

(**No plans were available for this site**).

References:

Waddell, J. 1983. A Royal Site in Connacht. *Journal of Irish Archaeology*, 1, 21–46.

Waddell, J. & Cruickshank, M. 1987/8. Excavation at Dathi's Mound, Rathcroaghan, Roscommon. *Journal of Irish Archaeology*, 4, 23–36.

Waddell, J., Fenwick, J., & Barton, K. 2009. *Rathcroghan: Archaeological and geophysical survey in a ritual landscape*. Dublin. Wordwell.

Tulsk, Co. Roscommon
Early Medieval Settlement Enclosure.
Grid Ref: **M83418106 (183412/281068)**
SMR No: **RO022-114003**
Excavation Licence: **04E0850**
Excavation Duration/Year: **2002 - Ongoing**.
Site Director: **N. Brady (Discovery Programme)**.

The site consists of a raised mound (36m by 27m on the summit), and a maximum height of 5.3m. The site was subject to a series of surveys and research excavations from 2002 to present (2009).

An early result from the surveys was the identification of an outer ditch, which suggested an overall internal diameter of 55m for the site. Geophysical survey also identified several anomalies which provided the focus for excavations in 2004. These identified the presence of the ditch suggested by the earlier survey, and resolved an anomaly on the summit of the mound as the foundations of a stone tower associated with the motte (Fig. 272).

Excavations in the 2007 season identified an earlier ditch underlying the interior of the medieval tower, and the later medieval ditch. The *in situ* remains of a dry-stone revetment associated with an area of harder clay, which presumably served as a bank, were also identified beneath the medieval tower. The dry-stone wall appears to have been an internal revetment feature, and there was no indication of postholes or other cuts into the bank clays. The early medieval ditch and enclosure were subsequently further investigated in 2008 and 2009.

The early medieval ditch had a steeply sloping V-shaped profile, and was both deeper and narrower than the later ditch. In the west of the site, the fill of the early medieval ditch forms the east-facing side to the later medieval ditch. This fill is homogenous in form and in depth, suggesting that it had been pushed into the earlier ditch when the earlier enclosure was being transformed to accommodate the later stone tower. Underlying this re-deposited level was a clean cut into compact yellow boulder clay that is considered to be the original profile of the enclosure ditch. This layer disappears under the base of the later tower wall. It appears to be sterile, insofar as no artefacts or bone were visible in its matrix.

The early medieval levels were most fully exposed in the western part of the site, although these were somewhat truncated, suggesting that this part of the site was leveled to accommodate the Elizabethan structures. A layer of dark grey/black-coloured clay represents a continuous horizon of early medieval occupation. Above this was located a complex of ash spreads and two firing pits (Fig. 273). A stone-lined flue attached to the northern pit suggested that both pits might have formed part of a corn-drying kiln, although the kiln superstructure did not survive and was presumably removed during the Elizabethan redevelopment.

The early medieval contexts revealed an assemblage of small finds. In previous seasons, the recovery of two bronze pins, and one iron penannular pin in later disturbed contexts, indicated a tenth/eleventh century dating framework for the early medieval horizon. The recovery of lignite bracelet fragments, glass beads, and bone pins – one of which is stylized with a horse-head form, and is comparable to a pin recovered as part of the Lagore - may indicate somewhat earlier levels.

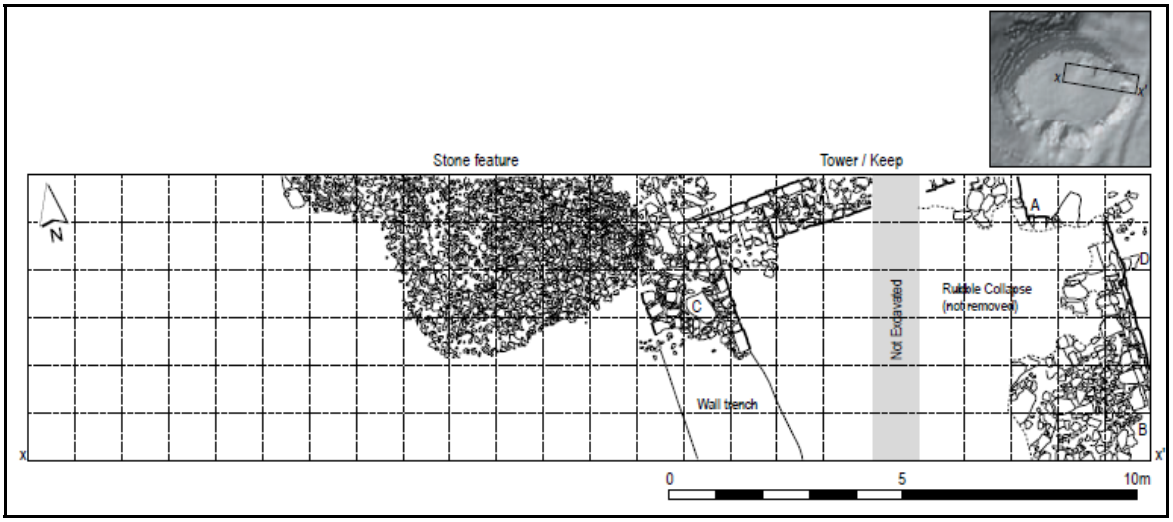


Fig. 272: Summary of 2004 excavation at Tulsk, Co. Roscommon (after Brady & Gibson 2005, 71).



Fig. 273: Corn-drying kiln at Tulsk, Co. Roscommon (after Brady 2008).

References:

Brady, N. 2005:1352. Tulsk, Co. Roscommon. www.excavations.ie.

Brady, N. & Gibson, P. 2005. The Earthwork at Tulsk, Co. Roscommon: Topographical and Geophysical Survey and Preliminary Excavation. *Discovery Programme Reports*, 7, 65–76.

Brady, N. 2008. Archaeological Excavations in 2008 at Tulsk, Co. Roscommon, RO022-11403. Unpub'd Report.

County Sligo

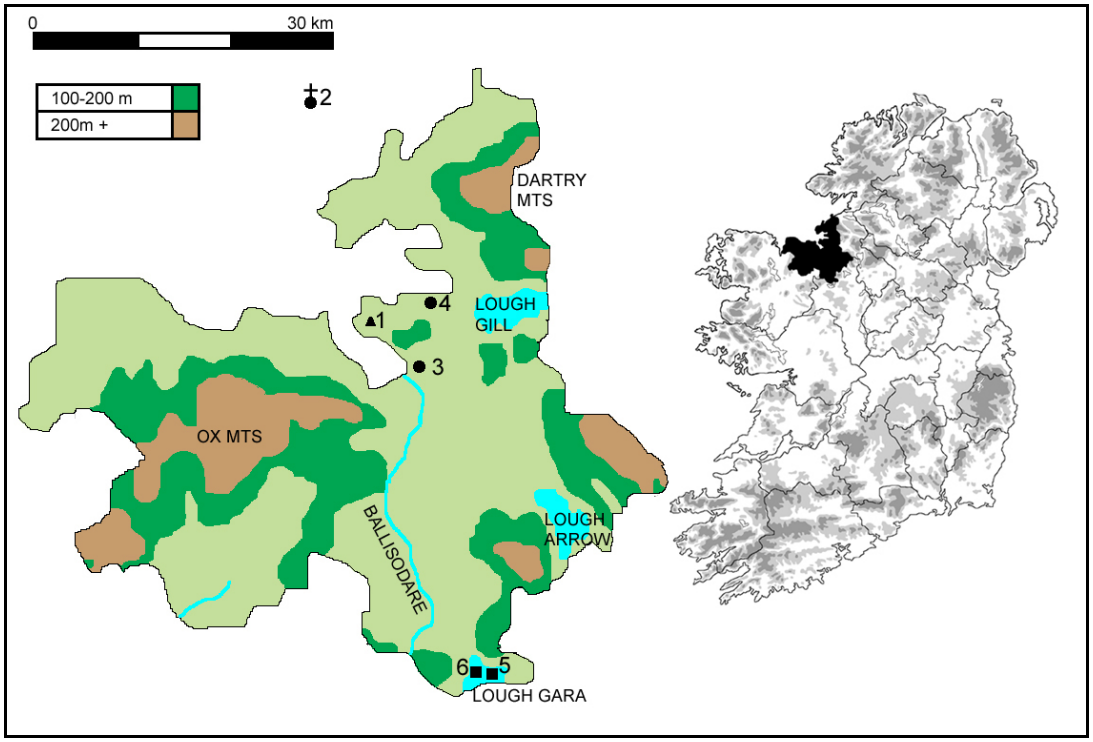


Fig. 274: Significant early medieval excavations in Co. Sligo.

1	Grange West	**4**	Magheraboy
2	Inishmurray	**5**	Rathtinaun
3	Knoxspark	**6**	Sroove

'Grange West' (inc. Ballybeg, Knocknahur, Luffertan and Seafield tds.), Co. Sligo
Early Medieval Unenclosed Settlements.
Grid Reference: **G63003300 (163000/333000)**
SMR No: **SL014-152**; **SL014-153**; **SL014-158002**;
Excavation Licence: **N/A**
Excavation Duration/Year: **1980; 1981**.
Site Director: **G. Burenhult (University of Stockholm)**.

A number of small-scale excavations were undertaken on 'kitchen middens' along the coast between the prehistoric burial complex at Carrowmore and Ballysadare Bay. These sites largely consisted of house platforms, built up with a double circle of stones, which probably represent the inner and outer revetments of turf walls. Shell middens were also associated with these sites. Radiocarbon dates from five of the sites show that they were not associated with the prehistoric activity at Carrowmore, but were of an early medieval date. No enclosure appears to have been identified around these structures, and they must therefore be considered to have been small isolated coastal huts.

Only two of the sites are recorded to any degree (Settlement 2: Grange West; and Settlement 8: Luffertan). The double-ringed enclosure at Grange West was oval in shape (19m by 24m). Excavation uncovered a series of postholes along the axis of the excavation trench, as well as seven postholes associated with a paved surface and a hearth (Fig. 275). A large concentration of sea-shells was also discovered close to the entrance of a (possibly associated) souterrain. Finds from this site included two iron fragments; one piece of iron slag; two whetstones; and four sherds of unidentified pottery.

The site at Luffertan was roughly circular (20m in diameter), and excavation revealed the presence of three smaller internal ditches (of which at least two were concentric). The dates from this site range from the Iron Age through to the early medieval period (see below), and finds included a pair of iron shears; two iron knives; an iron arrowhead; an iron arrow/spearhead; three pieces of iron slag; and two glass beads.

Excavation at a large earthen enclosure at Knocknahur (70m in diameter) uncovered two cist burials at the centre of the monument. Radiocarbon dates of charcoal from one of these burials gave an early medieval date. Finds associated with this burial included three fragments of jet bracelet; six fragments of bronze; two fragments of iron; and two iron knives.

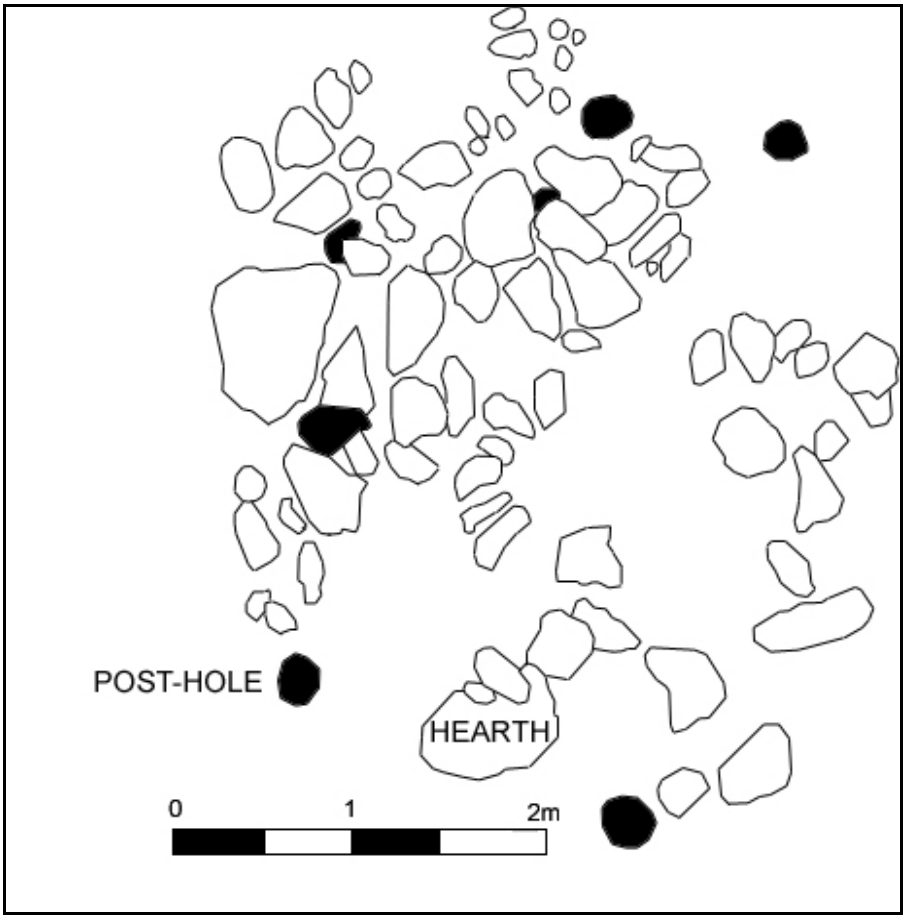


Fig. 275: Post-built structure at Grange West (Settlement 2) (after Burenhult 1984, 89).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Ballybeg, Co Sligo (Settlement 6):

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
Lu-1758	Charcoal	1230±50 BP	**A.D. 669-894**; A.D. 928-933.

Grange West, Co Sligo (Settlement 1):

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
Lu-1753	Charcoal	1160±50 BP	A.D. 718-743; **A.D. 769-990**.
Lu-1754	Charcoal	1010±50 BP	A.D. 898-919; **A.D. 947-1157**.

Grange West, Co Sligo (Settlement 2):

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Lu-1699	Charcoal	1830±50 BP	**A.D. 71-262**; A.D. 278-328.
Lu-1838	Charcoal under stone	1320±70 BP	**A.D. 605-879**.

Grange West, Co Sligo (Settlement 3):

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Lu-1755	Charcoal	1990±50 BP	151-140 B.C.; **111 B.C. – A.D. 125**.

Luffertan, Co Sligo (Settlement 8):

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Lu-1756	Charcoal	1260±50 BP	**A.D. 665-878**.

Knocknahur, Co. Sligo (Settlement 10):

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Lu-1863	Charcoal from cist burial	1260±50 BP	**A.D. 665-878**.

Seafield, Co Sligo (Settlement 11):

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Lu-1757	Charcoal	1310±50 BP	**A.D. 641-783**; A.D. 787-824; A.D. 841-861.

Cloverhill Lough, Co. Sligo:

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Lu-1841	Wood from floor of crannog	1120±50 BP	A.D. 780-792; **A.D. 805-1016**.

References:

Burenhult, G. 1984. *The archaeology of Carrowmore, Co. Sligo, Theses and papers in North European Archaeology*, 14, Institute of Archaeology, University of Stockholm.

Håkansson, S. 1981. *Radiocarbon* (23.3), 384–403.

Inishmurray, Co. Sligo
Early Medieval Ecclesiastical Settlements.
Grid Reference: **G57355415 (157356/354152)**
SMR No: **SL001-007006**
Excavation Licence: **97E0256; 99E0381; 00E0484**
Excavation Duration/Year: **1997-2000**.
Site Director: **J. O'Sullivan & T. Ó Carragáin (University College Cork)**

The island of Inishmurray, located in Ballysadare Bay between counties Sligo and Donegal, was subject to a series of archaeological surveys and excavations between 1997 and 2000. These focused primarily on the number of monastic/ecclesiastical sites on the island, and their utilisation as a focus for medieval pilgrimages. Excavations at the *leachta* (dry-stone built altars) at Relickoran (99E0381) and Ollamurray (00E0484), for example, uncovered human burials, a number of which were radiocarbon dated (see below). These dates suggest that the *leachta* were constructed later than the earliest phase of Christian burials on the island, and that this early phase coincides well with the first appearance of the site of Inishmurray in AU 751.

The excavation at the *leacht* at Trahanareear (97E0256) uncovered an earlier dry-stone built monastic cell partially preserved beneath the later altar (Fig. 276). From the remains it was possible to estimate an internal diameter of 1.8m, and, the relative narrowness of the walls led the excavators to suggest that this building may have been roofed with turf or thatch, rather than being a corbelled 'beehive' hut. This interpretation appears to be supported by the discovery of a central posthole in a paved-area of this cell which had survived beneath the *leacht*. The most intriguing find from this structure was two sherds of a green glass vial found in the wall cavity. These have been identified as either belonging to a seventeenth or eighteenth apothecary's perfume flask; or alternatively as representing the remains of an Imperial Roman '*lacrymar*' – which would have been used to catch the tears of mourners at a funeral. It has also been argued to be of Byzantine or even Frankish manufacture. Subsequent testing was unable to definitively verify the age of this glass vessel, and thus it remains an enigma.

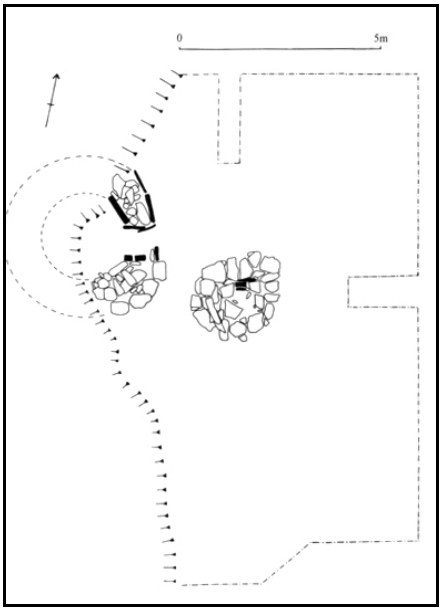


Fig. 276: Early phase of leacht at Trahanareear, Inishmuray, Co. Sligo showing cell (after O'Sullivan & Ó Carragáin 2008, 224).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Relickoran:

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-4635	Burial 13 under *leacht*	1036±43 BP	**A.D. 893-1046**; A.D. 1091-1121; A.D. 1140-1148.
UB-4636	Burial 6	1174±48 BP	A.D. 711-746; **A.D. 766-982**.
AA-37260	Human bone at base of *leacht*	940±50 BP	**A.D. 1018-1209**.
UB-6443	Burial 1	921±32 BP	**A.D. 1027-1185**; A.D. 1203-1205.
AA-37261	Human bone at base of *leacht*	905±50 BP	**A.D. 1024-1219**.
UB-6447	Burial 7	891±30 BP	**A.D. 1041-1108**; **A.D. 1116-1216**.
UB-6446	Burial 6	819±31 BP	**A.D. 1166-1267**.
UB-6445	Burial 3	686±31 BP	**A.D. 1267-1315**; **A.D. 1355-1389**.
UB-6444	Burial 2	560±29 BP	**A.D. 1309-1361**; **A.D. 1386-1427**.
UB-6448	Burial 8	379±29 BP	**A.D. 1445-1524**; **A.D. 1558-1631**.
UB-6450	Burial 10	303±29 BP	**A.D. 1490-1603**; **A.D. 1611-1651**.
UB-6449	Burial 9	286±29 BP	A.D. 1495-1507; **A.D. 1511-1601**; **A.D. 1616-1663**.

Ollamurray:

Sample No.	Context	^{14}C Date	Cal. 2 Σ
AA-46344	Charcoal under *leacht*	1135±45 BP	**A.D. 778-992**.
AA-46345	Charcoal under *leacht*	1190±55 BP	A.D. 689-752; **A.D. 761-972**.

Reference:

O'Sullivan, J. & Ó Carragáin, T. 2008. *Inishmurray: Monks and Pilgrims in an Atlantic Landscape Archaeological Survey and Excavations*. Cork: Collins Press.

Knoxspark, Co. Sligo
Early Medieval Promontory Fort.
Grid Reference: **G67262876 (16726/32876)**
SMR No: **SL020-166**
Excavation Licence: **94E060**
Excavation Duration/Year: **May – July 1994**.
Site Director: **C. Mount (Heritage Council)**.

The site consists of an enclosure set on an elongated ridge. This area was to have been destroyed during a road construction project. However, upon preliminary excavation of the site, the road-take was diverted, allowing the interior of the enclosure to be excavated under research conditions, rather than rescue conditions.

The enclosed area measured approximately 75m by 64m, defined by an arc of earthworks consisting of two series of banks, and an intervening ditch (Fig. 277). This effectively cut off the end of the ridge, creating an inland 'promontory fort' defended by a river bed and marshy area. Two cairns excavated outside the main enclosure would appear to have been contemporary with the in-filling of the ditch.

A smaller sub-rectangular enclosure (23m by 19m) was located within the confines of the 'promontory fort'. It was enclosed by a stone wall that survived up to 0.95m in height. Occupation debris from this smaller enclosure included animal bone, iron artefacts, and iron slag. This enclosure appears to have been established as the boundaries of a cemetery site for over 185 individuals which re-used the central area of the promontory fort. Although cremations were discovered in the two cairns, which seem to have provided the original focal point for this cemetery, radiocarbon dates from animal bones from the cairns suggest it was still in use during the early medieval period (see below).

The cemetery was dominated by east-west orientated burials, suggestive of the Christian rite. A number of the burials may have been earlier, for example a decapitation burial similar to Iron Age example; and one burial was accompanied by a socketed iron spearhead. The radiocarbon date from this later individual, however, placed him firmly in the eighth/ninth century (see below).

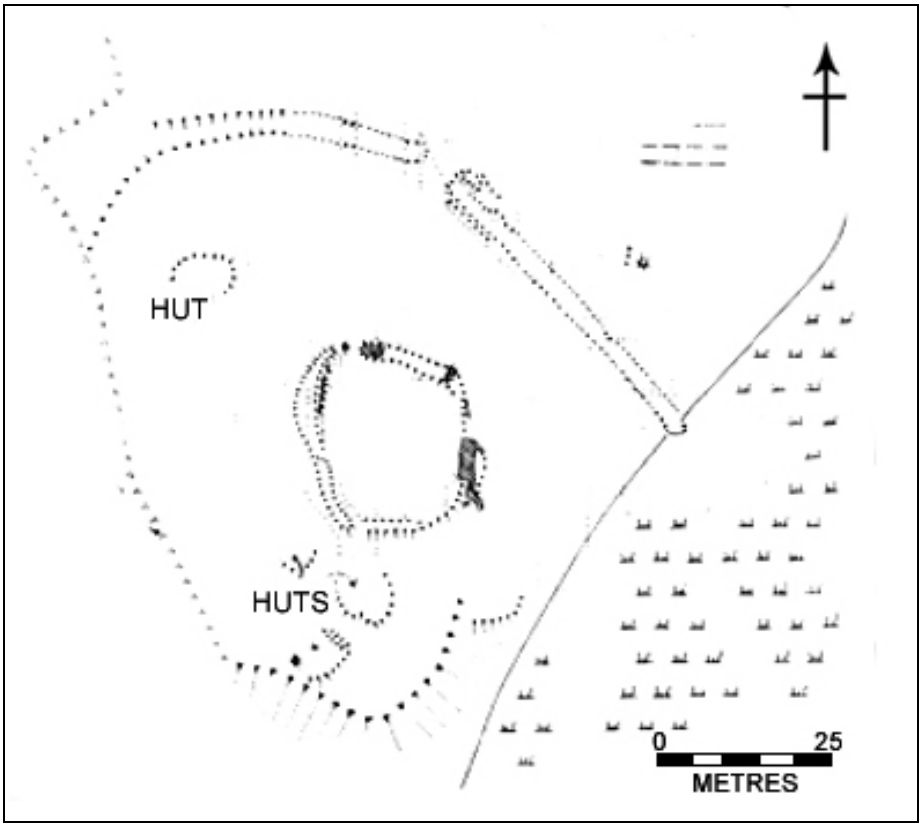


Fig. 277: Plan of Promontory Fort and rectangular enclosure at Knoxspark, Co. Sligo (after Mount 2002, 105)

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
GrA-2452	Animal bone from ditch	1260±40 BP	**A.D. 668-832**; A.D. 836-869.
GrA-2454	Animal bone from ditch	1190±40 BP	A.D. 694-700; **A.D. 708-747**; **A.D. 765-902**; **A.D. 916-967**.
GrA-2455	Animal bone from cairn	1180±40 BP	A.D. 717-743; **A.D. 768-907**; **A.D. 911-971**.
GrA-2456	Animal bone from cairn	1240±40 BP	**A.D. 680-882**.
UB-3836	Human femur from burial 4	1184±31 BP	A.D. 724-739; **A.D. 771-899**; A.D. 918-953; A.D. 958-961.

References:

Mount, C. 1994:206. Knoxspark, Co. Sligo. www.excavations.ie

Mount C. 1994. From Knoxspark to Tír na nÓg. *Archaeology Ireland*, 29(3), 22–3.

Mount, C. 2002. The Promontory Fort, Inhumation Cemetery and Sub-rectangular Enclosure at Knoxspark, Co, Sligo, 103–16. M. A. Timoney (ed.) *A Celebration of Sligo: First Essays for Sligo Field Club*. Sligo Field Club. Sligo.

Magheraboy, Co. Sligo
Early Medieval Settlement Enclosure
Grid Reference: **G68603500 (16860/33500)**
SMR No: **N/A**.
Excavation Licence No: **03E0536**
Excavation duration: **April-November 2003**
Site director: **T. O'Neill (ACS)**

An enclosure (external diameter of 40m), defined by a U-shaped ditch, 2.5m wide with an average depth of about 1m, was discovered during topsoil stripping prior to road construction (Fig. 278). It was located on the side of a south-facing slope, less than 200m to the west of an upstanding enclosure (SL014-125). The site had been truncated by later agricultural activity, and none of the bank survived; about half the site was excavated. A continuous deposit of large stones in the upper layers of the ditch fill (Fig. 279) may represent a stone wall built upon the bank. Alternatively, it may represent the stone revetment for its presumed earthen bank. The ditch had no evidence for maintenance and appears to have been allowed to naturally silt up over the life-time of the site.

The interior of the site produced no evidence for a formal structure, although these may have existed in the unexcavated half of the site. The excavated half contained a series of pits, two hearths and several possible postholes. The fill of one of these pits contained part of a rotary quernstone and charred barley grains.

The site produced a small sample of animal bones (N=189); the high incidence of teeth (N=106) being indicative of poor preservation. The minimum numbers of individuals was as follows; Cattle = 4, Sheep/goat = 5, Pig = 2, Deer = 2. Horse = 1. The charred grain assemblages were dominated by barley with smaller quantities of wheat and oats. Wood charcoal comprises oak (six samples); willow (four samples); crab-apple/apple/pear (three samples); hazel (three samples); alder (two samples); and alder (one sample).

The only early medieval finds from the site were a blue glass bead and a copper-alloy ring pin. Charred grain from the pit produced a radiocarbon date of A.D. 685-892; and charcoal from the two hearths produced dates of A.D. 694-1017 and A.D. 1040-1271. A general construction date was obtained from immediately above the primary silting of the ditch (see below), although unfortunately this date had a large error of ± 80 years.

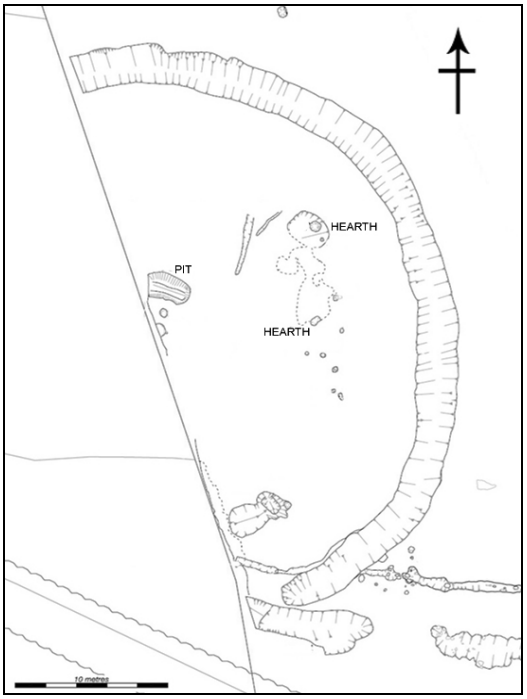


Fig. 278: Outline plan of Magheraboy, Co. Sligo (after O'Neill 2005).



Fig. 279: Enclosure ditch at Magheraboy, Co. Sligo showing deposit of large stones (after O'Neill 2005).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
Beta-197650	Deposit within Linear Feature	1160±40 BP	**A.D. 775-979**
Beta-197651	Pit	1220±40 BP	**A.D. 685-892**
Beta-197652	Charcoal spread over hearth.	1150±70 BP	A.D. 694-702; A.D. 706-748; **A.D. 765-1017**
Beta-197654	Deposit in ditch	1350±80 BP	**A.D. 556-876**
Beta-197655	Pit	850±60 BP	**A.D. 1040-1110**; **A.D. 1115-1271**

References:

Danaher, E. 2007. *Monumental Beginnings: The Archaeology of the N4 Sligo Inner Relief Road*. National Roads Authority Scheme Monograph Series 1. Dublin. National Roads Authority. Wordwell.

O'Neill, T. 2005. *Excavations at Magheraboy, Co. Sligo, April-November 2003*. Published on CD in Danaher 2007.

'Rathtinaun' (Lough Gara td.), Co. Sligo
Early Medieval Crannog.
Grid Reference: **M73019994 (173014/299948)**
SMR No: **SL047-021**
Excavation Licence: **N/A**.
Excavation Duration/Year: **1953**; **1954**; **1955**.
Site Director: **J. Raftery (National Museum of Ireland)**.

The Bronze Age and early medieval crannog of Rathtinaun, Co. Sligo (also commonly known as Crannog 61) was first recognised in 1952 after drainage led to the artificial lowering of the lake-levels of Lough Gara, on the Co. Sligo/Roscommon border. The site appeared as a large stone cairn or mound, 36m by 29m and 2.5m in height, about 30m from the drylands in a sheltered bay or inlet on the eastern side of the lake. Prior to excavations, the discovery of late Bronze Age artefacts on the site indicated its late prehistoric origin. The site was then totally excavated between 1953 and 1955 by Joseph Raftery, of the National Museum of Ireland.

The site had two late Bronze Age phases of occupation (Period I and Period II), followed by a period of abandonment and concealment by lake sands. Previously, it was thought that the site had an Iron Age phase, but recent radiocarbon dating indicates this is not the case. Period 1 probably dated to the late Bronze Age (*c.* 900 B.C.). The site appeared as an oval mound of stones, 29m by 34m by 2.5m in height. Excavation indicated that a natural mound had been levelled and a central depression filled, by piling timbers and brushwood above it. The crannog was further raised with layers of timber and brushwood. A single possible hut, represented by vertical oak piles and 9m in diameter, was associated with a timber trackway. Several 'fire-baskets' were also found. These were circular, built of post and wattle, and lined with protective yellow clay. Finds from this lower level included coarse-ware pottery, a disc-headed pin, a pair of tweezers, several rings, a possible cauldron fragment and a gold 'hair-ring'. Clay mould fragments and wooden containers were also found. The site was then covered by lake-levels, sealing it under a layer of sand.

In Period II, the crannog was re-occupied. There was no great chronological gap between Period I and Period II and the finds from the latter were also of late Bronze Age origin. Layers of brushwood were laid down around an area of central cobbling. There were no clear house structures, but there were six large hearths. These hearths were also in fire-baskets, 2.5m in diameter with hearthstones. One hearth re-used a fire-basket dating from Period I. Finds included two disc-headed pins, a pair of bronze tweezers, a bifid razor, a tanged chisel, a phalera, coarse-ware pottery and wooden vessels. A hoard of objects were found in a box, apparently in the floor of the Period II occupation. The hoard included a necklace of amber beads, rings of bronze, pure tin and three of lead with gold-foil cover. There was also a pair of tweezers, a bronze pin and unusually six boar's tusks. The hoard appears to have been marked by narrow vertical stakes. A number of iron objects were also found in the Period II level, including a pin, a possible sickle fragment, a fork-like implement, a shafthole axehead and a fragment of iron. Until recently this material was seen to represent the transition between bronze and iron tools and implements. Most recent radiocarbon dating indicates that this material is intrusive in Period II and dates to the early medieval phase of occupation. The late Bronze Age lake structures at Rathtinaun appear to have been the permanent settlement site of a small community, engaged in metalworking on a large-scale. The finds from the Period I and Period II occupations are unusually rich, including bronze, gold, amber and other objects. It is likely that these finds indicate the high social status of Rathinaun's Bronze Age inhabitants or that alternatively it was some form of production or redistribution centre.

The early medieval occupation began with the Period III occupation level. Period III was the richest period of activity, suggested by the excavator to date from between A.D. 600-750. However, the presence of a small Merovingian yellow glass bottle or phial (typologically datable *c.* A.D. 500-650) probably indicates a slightly earlier sixth to seventh-century date. In

Period III, a large mound of stones 11.5m in length, was placed on the sands and was retained by a wooden revetment. Peat, logs and stone heaped against and around the sides of this mound which was in turn retained by a timber revetment, increasing the size of the crannog to 28.5m by 21m. A layer of brushwood, gritty yellow sand, flagstones and timber were laid over this at about the same time. The crannog was retained by a vertical pile palisade, probably built in two phases, partly enclosing the site on north and northeast sides (facing the shoreline). Raftery did not recognise any house posts, but a probable oval or circular house was probably represented by a large centrally placed hearth in use over an extended period with a layer of brushwood and peat that may have served as a house floor. The house floor was initially of peat sods, strewn with rushes, and as the sods settled into the stone core below the floor, it was levelled with sand. A hearth was laid down, initially being a simple unprotected hearth. The house had a floor of clay and subsequently of stone.

Finds from the Period III occupation included various stone objects, including two polished stone axes, hammerstones, flint flakes and scrapers, numerous whetstones or hones, spindle whorls, a stone disc, stone beads and bracelets (presumably of lignite) and four rotary querns. There was also a bronze pennanular brooch, a bronze ringed-pin, a bronze pin, a bronze strip, rings, bracelets and an armlet. There was an iron spearhead, a shield-boss, iron ferrules, a tanged iron knife. There were iron pans (4), nails and straps, staple and rods. Other iron objects included an iron ring-brooch, a bill-hook, a socketed iron object and an iron barrel padlock fragment. There were numerous objects of bone, including bone pins (both plain and perforated), bone combs, bone beads, bone spindle whorls, antler handles. There were wooden staves, bases, barrel hoops, dishes or platters and handles, as well as leather shoes. There was also evidence for metalworking in the form of clay crucibles. Glass objects included a glass bracelet, a glass ribbed bead, a fragment of a Merovingian glass vessel, greenish-yellow in colour, an amber bead, a lignite object. A thin layer of sand may have indicated lake flooding and temporary abandonment of the crannog, which itself had slumped to the south (although a layer of sand may also have been laid across the site to ‘clean’ it).

The Period IV occupation began with the levelling of the crannog surface by placing grassy turfs and stones over the Period III remains, which had sloped or tilted to the south. These turfs were obviously taken from the foreshore meadows, with grass, plants, rushes, roots and stones mixed in with them. This new body of material was held in position by a stout revetment of horizontal logs, held in position by two rows of squared oak posts running along the eastern side of the crannog. The solid revetment was not used on the western side, here only oaken piles were driven into the marls. It is interesting to note again that the strongest defences faced towards the land, thus presenting an impressive palisade towards the shoreline.

The initial phase of occupation (IVa) in Period IV was an oval crannog, 25m by 15m. It survived mostly as foundation material, but the Period III hearth continued in use with layer after layer of clay and ash being laid down. There was no protection for the hearth, but some postholes may represent a house. In the latter phase (IVb) of the Period IV occupation, there was a definite house structure. This was a large round house (10.5m in diameter, of carefully sharpened stout oak posts spaced at intervals of 0.20-0.35m). The house walls were probably of wattle. There was a central hearth and spread of ash and the house had a possible entrance facing to the east, looking out at the water. The surviving posts formed the southern wall of the house, but they were cut off at the level where the Period IV ceased and the Period V began. The house may have been demolished on the north side, where no posts remained.

In the final phase of the Period IV occupation (i.e. IVb), it was necessary to extend or strengthen the crannog, so sand, stones, vegetation and other materials were piled against the oak revetment and piles on the southwest side of the crannog. The soils were of a sooty, black texture and the Period IVb phase was sterile of artefacts. Finds from the Period IVa occupation included stone hammerstones, whetstones, flint scrapers, flakes, spindle whorls,

discs and 1 rotary quern. There were also 2 iron pins, 2 iron ferrules, 3 iron knives, nails and a staple. Raftery also mentions a 'hoard consisting of a rotary quern, an iron horse-bit and a wooden pin', potentially a deliberate deposit. There were bone pins, antler handles, and wooden stave-built and lathe-turned wooden vessels, as well as a clay bead. There was also clay mould fragments for casting copper-alloy rings. Period IV occupation was ended by a lake flood which deposited water-washed sands over the site.

The Period V occupation began with the raising of the level of the Period IV surface, with a solid deposit of stone heaped over the whole site, to make a new crannog. This cairn or stone deposit was 1.5m thick, measuring 26m by 20.5m, forming a crannog with oval plan. There was also humus mixed through this cairn. However, the superficial features of the Period V occupation had all but disappeared. It did have a small stone setting, 10m in length, which may have been the curving arc of a wall, while a small concentration (2m by 1m) of fourteen narrow (0.05m diam.) stakes may have formed some structure. A layer of clay and ash, speckled with charcoal, could have been a floor. The raising of a stone cairn over the crannogs in Lough Gara was also carried out on other sites, and at the small crannog at Sroove, it dated to between the seventh and the tenth centuries A.D. The Period V finds included the stone axes, pebbles, chert thumb-scrapers, hollow-scrapers, hones, flint strike-a-lights and discs. There were also 2 rotary querns. There were five bronze ringed-pins and a bronze strap end. There was an iron socketed spearhead, one iron shield-boss, iron knives, nails, san iron sickle. There were bone pins, double-sided combs, spindle whorls and bone and antler handles. Wooden vessels included stave-built buckets, bases, barrel hoops, carved tubs a spoon, a bowl and pins. There was also a glass ring bead and a lead ring-bead. The Period V crannog was then abandoned for a considerable period, allowing the build-up of a turf layer and natural vegetation across the site, forming a 0.10-0.15m depth of dark soil.

The Period VI crannog saw re-occupation of the site after a period of considerable abandonment. The inhabitants of the local area evidently decided to re-use the old crannog site. They extended it by heaping small stones, twigs, peat and grassy sods on the existing mound and beyond it, particularly at the perimeter of its eastern side. Raftery interpreted this as a later crannog which availed of the earlier site as a foundation material. The crannog was supported along its eastern side by a palisade of wooden posts erected in two rows, strengthened on its outer side by a revetting bank of sandy and peaty material that sloped down to the water's edge. This may have been a high palisade, rather than a low revetment, the lines of posts ran for about 31m along the side of the site. The inner row of posts were of oak, the outer row of posts were of birch. The western side of the crannog had been largely washed away by wave erosion. Traces of occupation were meagre, apart from finds of artefacts and a layer of ash and clay on the northeast side of the site. A possible circular house was represented by 7 postholes, a rectangular pit and a layer of flat stones. Finds from Period VI included stone pebbles, flakes, scrapers and chert flakes, as well as whetstones, some with sharpening grooves. There were also stone rotary querns. Other finds included bronze decorated discs, bronze ringed-pins, an iron socketed spearheads, iron knives, iron nails, iron rings, iron slag, bone pins (some with ornamental heads), combs, bone 'spearheads', bone tops, antler pins and handles, wooden staves, bases, binding hoops, wooden beetles. There was also evidence for metalworking in the form of clay crucibles, as well as a glass stud and amber pieces.

The Period VII phase of occupation was the final one on the site. The Period VII phase was scanty and barely traceable. A small area on top of the mound had a thin layer of black soil over it, which was covered by small, angular stones. Thereafter, rising lake levels submerged the crannog under a considerable depth of water, perhaps up to 4m above the site. The Period VII finds included stone axes, hammerstones, hones, chert flakes and stone discs. There were also bronze pennanular rings, bronze discs and pins, iron nails and rods, bone pins and combs, beads and a glass gaming piece.

(**No plans were available for this site**).

References:

Raftery, J. 1957. Lake-dwellings in Ireland. *Scientific Service*, 4, no. 3, 5–15.

Raftery, J. 1966. Drainage and the Past. *Oibre*, 4, 11–3.

Raftery, J. Undated. Rathtinaun crannog excavations archive, Dept. of Archaeology, UCD.

Sroove (Lough Gara td.), Co. Sligo
Early Medieval Crannog.
Grid Reference: **M70059999 (170055/299996)**
SMR No: **SL046-029**
Excavation Licence: **97E0209**
Excavation Duration/Year: **1996**; **1997**; **1998**.
Site Director: **C. Fredengren (Lough Gara Crannogs Research Programme)**.

Sroove crannog, Co. Sligo was a small, multi-phase crannog, situated on the western shore of Lough Gara, Co. Sligo. The crannog was originally located in very shallow water (presently exposed as a water meadow due to modern drainage), on top of an earlier stone causeway. There was also a Bronze Age crannog cairn out in the water, with a similar, probably early medieval crannog, situated directly to the north on the shoreline. The early medieval crannog at Sroove was 15m in diameter, by 1.2m in height. Prior to excavation, it appeared as a cairn of loosely-set angular stones, with some kerbstones and a circle of stones beside it.

In Phase 1 there was stone-built causeway leading out into the lake, 18m in length. The causeway was built over blue lake clays, and a sandy surface produced by trampling lay on its upper surface. There were a few fragments of animal bone (cattle, pig and sheep) from its surface. Its date is unknown.

Phase 2 was an early medieval wooden crannog with a stone causeway, palisade and house. The phase's brushwood floor produced a radiocarbon date of A.D. 770-970. The site was enclosed within a circular palisade, measuring 17m in diameter, of double and single rows of ash-wood posts driven to a depth of 0.40m into the clay. There was a possible rectangular jetty at the north side of the crannog. After the construction of the palisade, an oval to rectangular house with rounded corners was built on the crannog's surface. This house measured 6.5m by 8m internally, and was defined by closely-spaced posts and was protected by stones on the lake side. The house's floor was a thick (0.20m) layer of hazel brushwood, intermixed with clay. The floor produced evidence for blackberries, raspberries and elder berries (suggesting a summer occupation) and grain (four types), although there was relatively little evidence for animal bone. There were 1511 pieces of bone (8.82% of site total), representing at least four cattle (two adults, two juveniles), four sheep/goat, three pig, one young horse, and one deer. There was a possible entrance (1m wide) at the southwest wall of the house, effectively hidden from view from the probable crannog entrance (at the causeway). A possible hearth was represented by a fire-reddened stone at the centre of the house. Outside the house, the space between it and the palisade was narrow. Finds from Phase 2 included a bone pin (found in stone packing at the house wall), a thumb-scraper of flint (a probable late Neolithic/early Bronze Age type) near a post and a black chert arrowhead found in floor clays. These objects were probably carried onto the site.

Phase 3 was a stony-surfaced crannog, with radiocarbon dates from A.D. 600-900. The crannog surface was rebuilt with a floor of flagstones and smaller boulders, in two/three layers, with an outer deck of timbers laid around the edges of the site. Although there was no clear structural evidence for a house, palaeoecological and other studies suggest that there was a house on this floor. The hearth was re-used, suggesting a strong symbolic link with the previous phase's house. The palisade may have been pulled up towards the end of this phase. There were also large amounts of animal bone found, particularly in front of the door of the house and to the left towards the lake. This comprised a major proportion of the site's bone assemblage (56%), representing the remains of at least sixteen cattle, twelve pig, eight sheep, six horse, one deer, one wild duck, and one hare. Finds from inside the house in this phase are more representative of personal possessions, including a lignite bracelet, a comb fragment from near the fireplace, bone beads, as well as iron nails and a bone pin towards the back of the house. There was also a small bone needle and knife found at the back of the house. There were also finds from outside the house, including iron nails, the head of a ringed pin and bronze studs from a leather strap.

Phase 4 was an open stony platform devoted to iron working, with radiocarbon dates between A.D. 600 and A.D. 900. The site had a uniform floor of stone and bone, and was covered with small, shattered and fire-cracked stones (0.10m thick). The stones were mixed with animal bones, suggesting that this was a deliberate floor deposit. There was no house on the platform, which was probably open to the air. There was no palisade, suggesting a decreasing role of the island's boundary. There was a bowl-shaped depression in the southwest corner of the crannog, possibly in origins a furnace for iron-working, set in a floor of fire-cracked stones. There was some iron slag in this area, although there were not large amounts. A heavy stone may have been used as an anvil. There were deposits of animal bone all over the site (comprising 30% of the site assemblage), with large amounts comprising a floor at the eastern edge of the crannog. The bone was frequently fragmented, suggesting that it had been walked into the crannog's surface. The Phase 4 burned and un-burnt bone included at least 20 cattle, nine pig, seven sheep, four horse, one deer and one dog. Finds from across the site included an antler ring, smooth white stones (possibly used in crafts), a tracked stone (for sharpening pins) and a lignite bracelet in the sand.

Phase 5 was the final phase of occupation in the early Middle Ages, probably no later than A.D. 1000. A stone cairn was constructed across the site, with angular stones and boulders laid on it, with a mid-cairn on the lakeward site. It is possible that it had a superstructure of planks or that it was unfinished.

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
N/A	N/A	N/A	**A.D. 770-970**.
N/A	N/A	N/A	**A.D. 600-900**.
N/A	N/A	N/A	**A.D. 600-900**.

References:

Fredengren, C. 1998. Lough Gara through time. *Archaeology Ireland*, 12(1), 31–3.

Fredengren, C. 2001. Poor people's crannogs. *Archaeology Ireland*, 15(4), 24–5.

Fredengren, C. 2002. *Crannogs: A study of people's interaction with lakes, with particular reference to Lough Gara in the north-west of Ireland*, 223–46. Bray. Wordwell.

County Tipperary

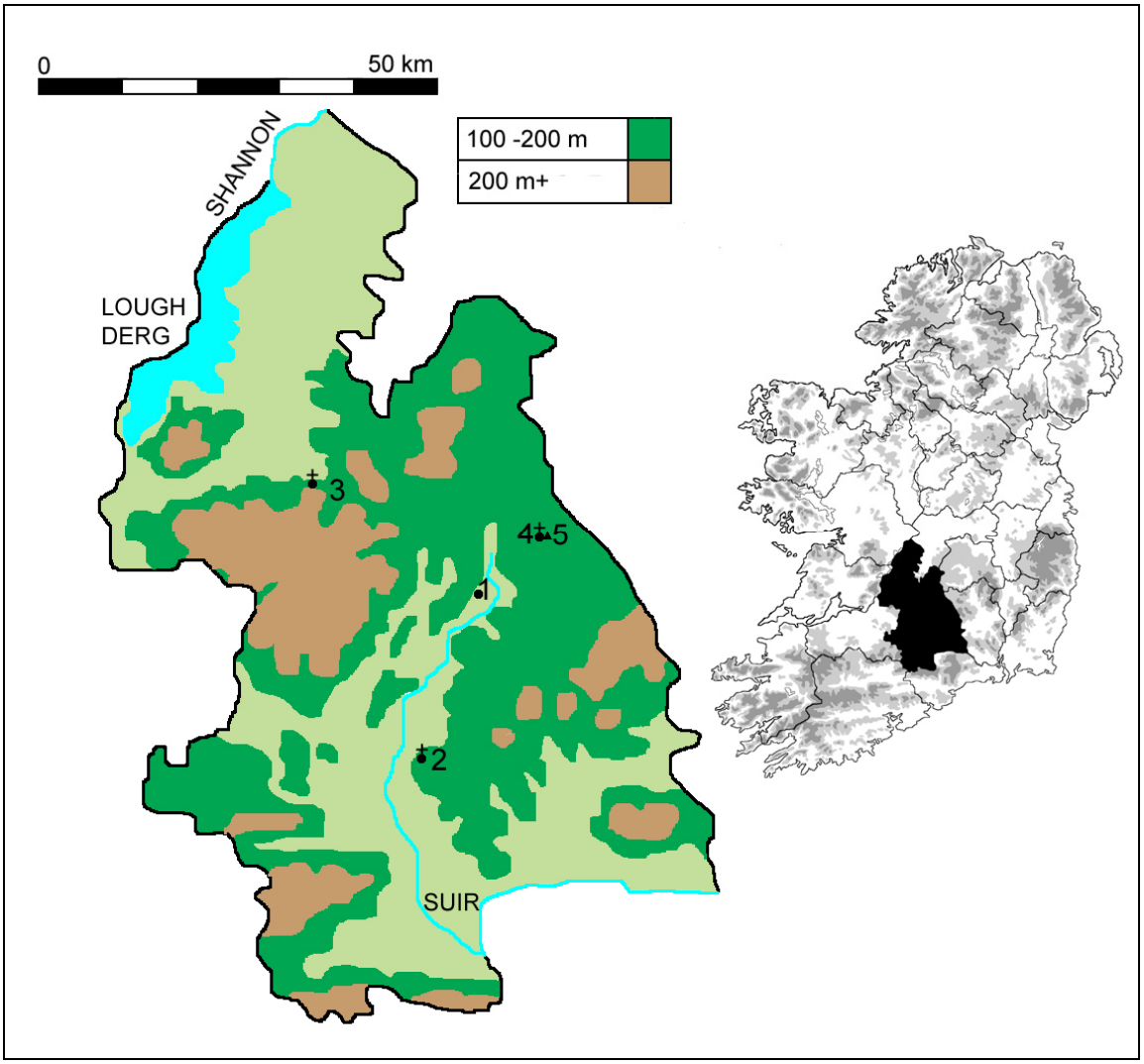


Fig. 280: Significant Early Medieval Excavations in Co. Tipperary.

1	Bowling Green	**4**	Killoran
2	Cormac's Chapel, Cashel	**5**	Killoran (66)
3	Killederdadrum		

Bowling Green, Co. Tipperary
Early Medieval Settlement Enclosure
Grid Ref: **S13895920 (213893/159201)**
SMR No: **TN041-041**
Excavation Licence: **E0091; 97E0282**
Excavation Duration/Year: **1970**
Site Director: **T. Fanning (Office of Public Works); P. Steven (Margaret Gowen Ltd.)**

A large univallate enclosure at Bowling Green revealed a possible post-built rectangular structure, earthen hearth and pits as well as a small collection of early medieval finds. The enclosure had been interfered with by a bulldozer in 1969 and was excavated the following year in advance of a residential development. A number of cuttings were made across the enclosing bank and ditch as well as in the interior of the enclosure (Fig. 281). Limited monitoring in 1997 exposed part of the south-eastern enclosure bank and ditch. The site was situated to the east of Thurles town, on a low ridge (117m OD) commanding good views of the Suir valley and surrounding countryside.

The site was roughly circular in shape and had an internal diameter of 50m and an overall diameter of 70m. The low bank had been badly scarped by the bulldozer though appears to have been revetted with an external stone face along its northern and western perimeters.

The enclosing ditch was 1.6m deep in the northern cutting. Excavations in 1997 identified that the south-eastern perimeter of the ditch was V-shaped in profile and measured between 4.5m to over 6m in width and over 1m deep. Two iron knives were found in its upper fills in the eastern and western cuttings though no finds, apart from animal bone were identified in the primary fill.

A linear ditch (1.3m–2m in width) containing charcoal flecks and animal bone was identified outside the enclosure in 1997 and does not appear to have been associated with the enclosure.

A number of post- and stakeholes, a probable hearth site, shallow pits and trenches as well as a small area of rough pebbling were uncovered in a black stony habitation deposit in the centre of the enclosure. Four large postholes were identified to the south-east of the centre of the site and may have supported the side- and end-walls of a rectangular structure.

The hearth was evident as a clearly defined burnt area surrounding two charcoal pits containing animal bone. Stakeholes in the vicinity of the hearth may represent supports for pots or other instruments. A number of shallow pits containing charcoal were also located around the hearth.

Re-deposited soil overlay the habitation deposit in the southeast quadrant and indicates that the original ground of this area was raised to provide an internal level surface. A bronze stick-pin, two medieval sherds and a seventeenth-century bronze skillet were recovered from this deposit; the latter which could provide a terminal date for its deposition. Sherds of seventeenth/eighteenth-century wares and some iron objects were found within the humus layer and represent further early modern activity.

The majority of the finds was recovered within the black stony habitation deposit in the enclosure's centre and south-eastern quadrant, and included an iron knife, iron horse shoe nail, iron rod, two hone-stones, one spindle-whorl, one strike-a-light, a chert flake and a bone needle. A blue glass bead, comparable to a type recovered at Garryduff I, Co. Cork, and a small bronze buckle-tongue were recovered from the lowest habitation deposit. A large faunal assemblage was recovered from within the ditch fills and inside the habitation deposit and comprised cattle, pig and sheep as well as a small amount of horse.

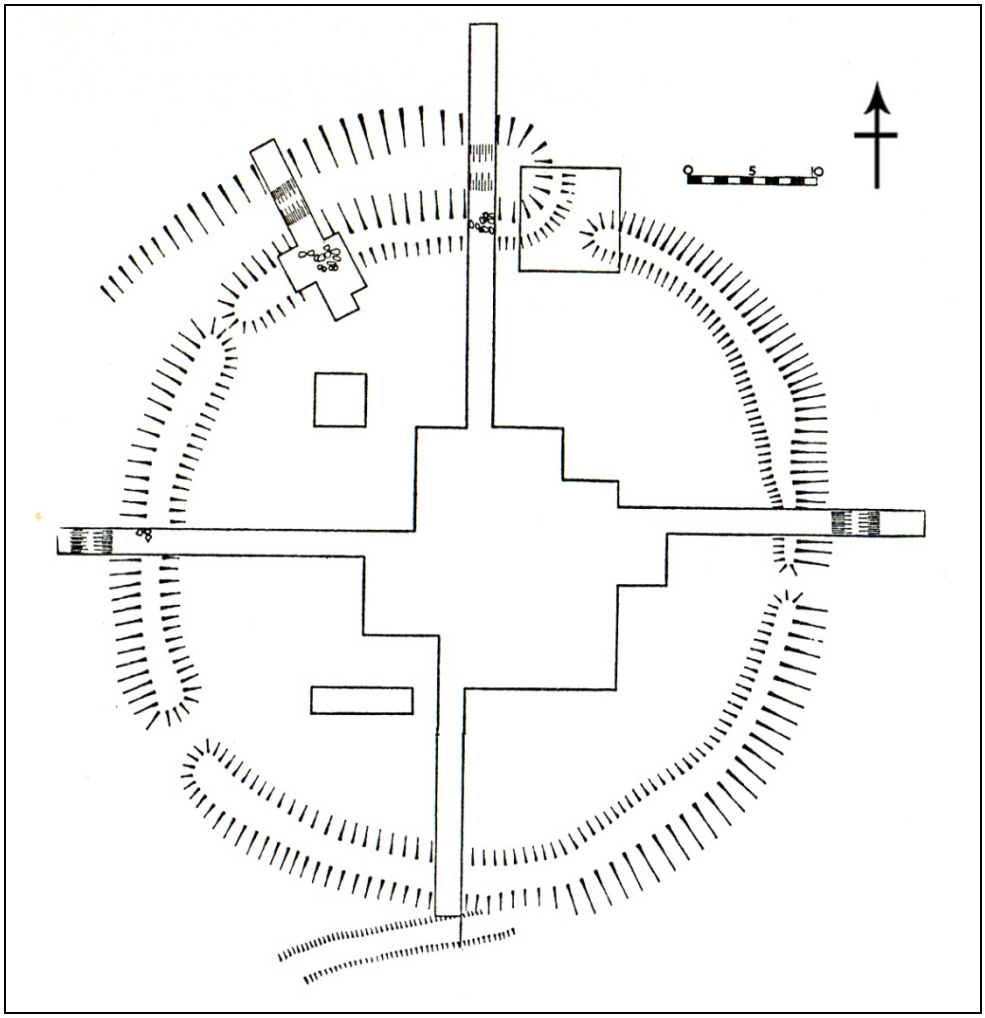


Fig. 281: Plan of Bowling Green, Co. Tipperary (after Fanning 1970, 7).

Reference:

Fanning, T. 1970. Excavation of a ringfort at Bowling Green, Thurles, Co. Tipperary. *North Munster Antiquarian Journal*, 13, 6–21.

Cormac's Chapel, St. Patrick's Rock, Cashel
Early Medieval Ecclesiastical Settlement
Grid Ref: **S07484092 (207483/140924)**
SMR No: **TS061:025**
Excavation Licence: **92E0202**
Excavation Duration/Year: **December 1992; Summer 1993**
Site Director: **B. Hodkinson (Office of Public Works)**

The Rock of Cashel is a 60m high outcrop of limestone towering over the town of Cashel. It was the historic seat of the Kings of Munster and a significant ecclesiastical foundation containing a rich architectural heritage including a *c.* 1100 Round Tower, a thirteenth-century cathedral and Cormac's Chapel (1127-34). Cormac's Chapel was excavated over the course of two periods in 1992 and 1993 as part of ongoing conservation works by the Office of Public Works. The excavation uncovered evidence for four phases of burial and two churches pre-dating Cormac's Chapel as well as early occupation surfaces and features.

The area lying between Cormac's Chapel and the chancel of the cathedral as well as the interior of the north tower, chancel and one half of Cormac's Chapel nave were excavated down to subsoil. Three areas were excavated sequentially (Fig. 282); Area 1 was situated to the east of the north tower, Area 2 lay to the west of the north tower in the enclosed area outside the north door of the chapel and Area 3 lay within the chapel. The following description is based on a short interim report published in a local county journal during continuing post-excavation work.

Eight possible phases were identified during the excavation. It was suggested that Phase A saw a possibly secular use of the site between the sixth and ninth century A.D. Early occupation surfaces were identified in the three areas in the form of rock-cut postholes and in an east-west linear feature in front of the chapel door in Area 2. Evidence for limited burial interment was revealed towards the end of Phase A and possibly associated with this phase were the first burials in Area 1 and possibly a single early burial in Area 2.

Phase B saw the establishment of a possible ninth/tenth century cemetery and wooden church followed by a possible hiatus until *c.* 1100. This phase of burials in Area 1 was orientated upon a possible wooden church in the chancel of the chapel in Area 3. The burials appear to have been restricted to the east of the site with a contemporary occupation surface being identified further west inside the chapel nave in Area 3. The occupation surface inside the nave consisted of a stony surface containing a large quantity of animal bone as well as two sherds of unidentified pottery. A substantial build up of deposits over this occupation surface and the posts of the wooden church followed. There appears to have been some form of break in the ecclesiastical connections of the site in the tenth/eleventh centuries as reflected in the historical sources.

Phase C saw the wooden church being replaced by a stone church lying beneath the present cathedral. This phase of burials in the graveyard was orientated upon this new building while the graveyard extended further south over the area formally occupied by the wooden church. A roughly paved surface associated with some charred grain was excavated in Area 2 which suggests that the western end of the site continued as an open space. A circular stone feature which may have functioned as some form of storage pit, was excavated to the northwest in Area 2 and could be contemporary or slightly later than the paving. A cut feature filled with loose limestone rubble and a possibly west faced edge was identified in Area 2 along the line of the north tower and possibly under the south wall of the nave and could have operated as some form of division between the church/graveyard in the east and the open space to the west.

Phase D saw the construction of Cormac's Chapel (1127-34) and the early use of this building till the mid-thirteenth century. Burial continues in Area 1 while the graveyard appears to have extended into the area to the west of the north tower for the first time. The last four phases

saw the building of the present Cathedral, modifications to Cormac's Chapel in the later Middle Ages and the use of its interior for burial in the early modern period.

A feature of the pre-Cormac Chapel phases was the evidence for a division between the east and west end of the site. No evidence for any burials was uncovered to the west of the chancel arch and north tower of Cormac's Chapel, except for one strange example in Area 2. Some indications that a formal physical boundary existed between these two areas was identified in the later pre-Chapel phases in the form of the cut feature with a stone fill. This evidence for the division between the sacred and profane is comparable to other sites including Reask, Co. Kerry (Fanning 1981).

The pottery assemblage from the site included a modest quantity of medieval pottery and at least one sherd of B ware (Late Roman Amphora). A series of coarse unglazed red wares and a single sherd of reduced black ware were also identified in the lower levels of the site stratigraphy. Other finds from the site included a kidney-shaped pin, stick-pins, a bone crutch headed pin, spindle whorls, a parallelepiped antler die, comb fragments and a large quantity of animal bone. Traces of antler working were also identified. Comb-making was the only trade to leave any manufacturing traces on the site.

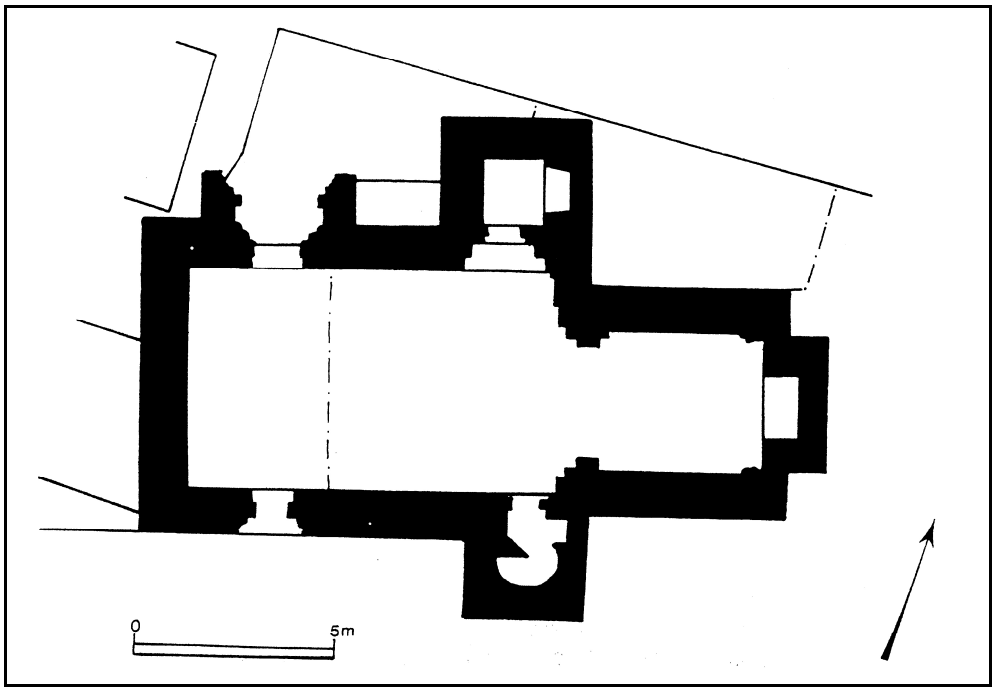


Fig. 282: Plan of excavated areas in the interior and exterior of Cormac's Chapel, Co. Tipperary (after Hodkinson 1994, 168).

References:

Hodkinson, B. 1994. Excavations at Cormac's Chapel, Cashel, 1992 and 1993: a preliminary statement. *Tipperary Historical Journal*, 7, 167–74.

Lynch, A. 1983. Excavations at the base of St. Patrick's Cross, Cashel. *North Munster Antiquarian Journal*, 25, 9–18.

'Killederdadrum' (Lackenavorna td.), Co. Tipperary
Early Medieval Settlement Enclosure or Ecclesiastical Enclosure
Grid Ref: **R94807211 (194800/172110)**
SMR No: **TN027-100**
Excavation Licence: **E00184**
Excavation Duration/year: **September - October 1979**
Site Director: **C. Manning (Office of Public Works)**

A large univallate oval enclosure known as Killederdadrum in the townland of Lackenavorna revealed an early medieval enclosure with associated circular houses, corn-drying kiln, possible souterrain and western annex as well as a mainly post-medieval cemetery. The enclosure was partially excavated in September and October 1979 as it was threatened by a farm improvement scheme. One tenth of the enclosure was excavated and comprised cuttings across the enclosing features, the interior and external earthworks to the west (Fig. 283). The site is situated on a slight east-west ridge of ground in a valley between three hills at an altitude of 168m OD.

The oval enclosure measured 72m east-west and 52m north-south from the estimated inner edges of the enclosing ditches. The enclosing ditch was V-shaped in profile and averaged 2.8m wide at the top and between 1.40-1.80m deep. A riveted iron mounting, iron shears, knife and awl as well as quantities of charcoal, carbonized grain and animal bone were recovered in the fill of the ditches. The enclosing banks were barely identifiable though survived best along the northern perimeter where it was 0.7m high (maximum) and about 3m wide.

The entrance was situated along the southern enclosing perimeter (Cutting 9) and consisted of an un-dug causeway (3m-3.5m wide) across the ditch. Two pairs of large postholes were found inside the causeway flanking the entrance and may have held either successive gate-posts (2.5m apart) or formed part of a single entrance structure. Two smaller pits along the eastern face of the entrance bank suggest that this side may have been supported by a fence or revetment.

A wooden house defined by a circular trench, 8.8m in diameter with an eastern doorway and a possible northern annex, was excavated at the western end of the enclosure (Cuttings 5, 10 and 11). A complex of pits, post- and stakeholes were found inside the house though the lack of stratigraphy made it difficult to interpret them. Internal features of House 1 included two hearths, four postholes for roof supports and a pit containing a bronze pin.

One hearth, probably contemporary with the house, was cut by a recent pit (See below). Other finds associated with House 1 included two iron knives a perforated stone disc, hone-stone, rotary grinding stone and a sliver of sawn antler. An iron axe-head, a polished stone axe, hone-stone and quern-stone were recovered in the ploughsoil above House 1.

Two smaller houses defined by shallow circular trenches and with little evidence for internal features were identified on the north side of the enclosure (Cuttings 7 and 15). House 3 replaced House 2 with apparently little time lapse. Both measured 6m in diameter and contained south-eastern entrances. A slightly curving slot trench pre-dated the two houses and may have formed part of an earlier structure/fence. Two iron knives were revealed in ploughsoil above the houses.

A charcoal sample from the wall trench of House 2 produced a calibrated 2Σ date of A.D. 1157-1325 (see below) though this does not appear to be compatible with the archaeological evidence from the site and the consensus about the early medieval dates of these round houses.

A deep oblong pit (3m max. width) containing two small fragments of iron and the lower stone of a quern cut the south-western side of the circular trench of House 1. A line of

stones, apparently the bottom course of a rough wall, survived on its west side and one shallow posthole was found against its east side near the northern end. This feature is later than House 1 and may represent the remains of a robbed out souterrain.

A pit-like feature, identified as a possible corn-drying kiln, cut into the inner slope of the southern enclosure ditch (Cutting 1) and contained a black layer of carbonized grain similar to that recovered inside the fill of the enclosing ditch. A double row of stones running west along the ditch may represent the demolished remains of the kiln's flue. A calibrated 2Σ radiocarbon date from the grain dated the kiln to A.D. 937-1172 (see below).

A number of other early pits and a hearth were uncovered within the various cuttings (2, 4 and 6) within the enclosure interior. One shallow irregular depression in cutting 4 contained a quantity of charcoal and iron slag and indicates ironworking on site. An undated standing stone situated in the centre of the site (Cutting 2) was held in place by packing stones inside a large shallow oblong pit (0.75m maximum depth).

Two parallel low banks (20m apart) with external ditches ran westwards from the oval enclosure and may have formed part of some type of enclosure annex. The ditches were comparable both in size and fill to the main enclosure ditch and maybe roughly contemporary. Finds from the ditch included a small E ware pottery vessel recovered in a re-deposited context in an upper fill and a small fragment of iron.

The southern bank of the annex cut across a long straight re-cut narrow trench (0.8-1m wide and 0.6m deep) which continued in both directions for 20m beyond the excavation area. A small piece of iron slag was the only find recovered from this feature. Four cultivation furrows inside the annex appear to be later than the annex banks.

The post-medieval cemetery consisted of roughly 80 excavated burials; all from within the eastern two thirds of the enclosure interior and none related to the standing stone. Burials rarely disturbed each other suggesting that they were marked by upright stones or slabs. The burials cut across earlier pits, postholes and other features and shroud pins and a clay pipe from a number of graves confirm a post-medieval date.

Evidence for spinning and weaving on the site was suggested by the perforated stone disc (thread separator) inside House 1 as well as two spindle-whorls from the site. Iron smelting is also indicated by the recovery of slag though no furnace was uncovered. The small fragmentary faunal assemblage comprised cattle, pig, sheep or goat, wild game and a red deer antler fragment. Wheat and oats were grown and were ground with querns recovered from the site.

The two main chronological divisions consisted of an early medieval occupational phase and a mainly post-medieval burial phase. The piece of E ware indicates that the site was occupied from at least the sixth/mid seventh century A.D. Continued early medieval occupation is indicated by the circular houses, the later possible souterrain and the tenth-twelfth century kiln.

The enclosure is about twice the size as the typical 'ringfort' and is more comparable to the dimensions of ecclesiastical enclosures. The lack of any church, definite early burials or cross-slabs might suggest that it was not ecclesiastical though the limited nature of excavation cannot preclude their existence. The parish of 'Kildadrum' (1302-06) and Kyllydiradruim (1450) was recorded in two medieval sources though its absence from the Civil Survey (1659) might imply that 'this was a parish in name only with no actual church structure'.

The re-use of long abandoned sites for worship and burial by the Catholic community after the Reformation is not uncommon and could explain the post-medieval cemetery. Though marked as a graveyard called 'Killederdadrum' in the first edition (1841) O.S. map, the

cemetery appears to have gone out of use about the same time following the relaxation of the penal codes.

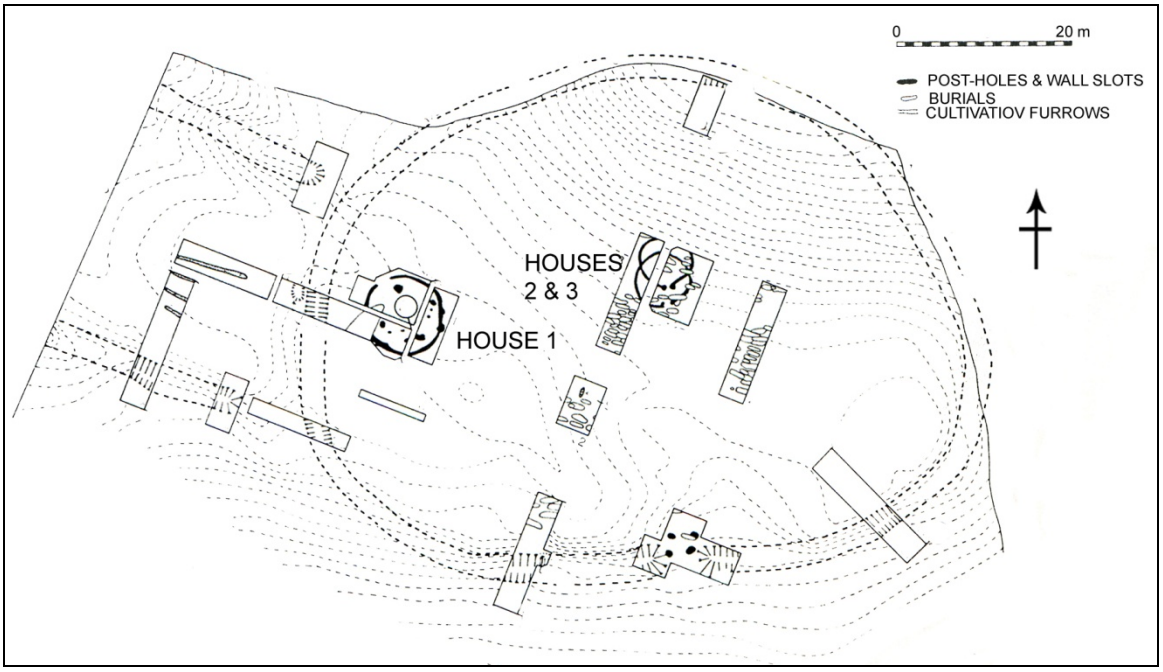


Fig. 283: Plan of excavated areas at Killederdadrum, Co. Tipperary (after Manning 1984, 241).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
GU-1511	Carbonised grain from fill of corn-drying kiln in Cutting 1.	1000±60 BP	A.D. 895-925 **A.D. 937-1172**
GU-1512	Charcoal from a pit cutting into a central hearth inside House 1	85±55 BP	**A.D. 1677-1767** A.D. 1771-1777 **A.D. 1799-1940** A.D. 1951-1955
GU-1513	Charcoal from wall trench of House 2	745±65 BP	**A.D. 1157-1325** A.D. 1344-1394

Reference:

Manning, C. 1984. The excavation of the Early Christian enclosure of Killederdadrum in Lackenavorna,. Co. Tipperary. *Proceedings of the Royal Irish Academy Section C*, 84C, 237–68.

Killoran (31), Co. Limerick
Early Medieval Ecclesiastical Settlement
Grid Ref: **S21066615 (221065/166153)**
SMR No: **TI036-020**
Excavation Licence: **98E0269**
Excavation Duration/Year: **July 1998**
Site Director: **Paul Stevens (Margaret Gowen Ltd.)**

An excavation in July 1998 at the centre of an early medieval ecclesiastical enclosure at Killoran uncovered a cluster of early medieval pits- two with evidence for *in situ* ironworking- as well as a possible internal wattle partition. The ecclesiastical site was located at the southern terminus of a long glacial ridge which formed a low peninsula surrounded on three sides, to the south and west by bog (now reclaimed) and by the curving line of the Moyne stream 50-70m to the east.

A series of excavations were undertaken as part the development of Lisheen mine near Moyne, Thurles close to the border between Tipperary and Kilkenny. The study area comprised three townlands Derryfadda, Killoran and Cooleeny in Derryville Bog which is part of the southern extent of the Littleton raised bog complex. This excavation at Killoran 31 involved the installation of an electricity pole unit and required a rectangular cutting 6m by 5m (120m OD) in the centre of the enclosure up against a modern field boundary bisecting the enclosure (Fig. 284).

The site was probably founded by St. Odran prior to A.D. 563. It consisted of a large sub-circular enclosure 155m in diameter, defined by a curving bank and ditch preserved in the line of a modern field boundary and partly as a low raised-platform. No trace of the site survived to the north of a modern bisecting field boundary.

Several associated pits were clustered together in the southeast area of the cutting. Two of these pits were rich in ironworking waste and contained iron slag and raw bloom (un-worked iron). One oval pit – 0.66m east-west by 0.45m north-south and 0.15m deep – with heavily fire-reddened sides and base contained a large quantity of iron slag, part of the stone base of a furnace and a tiny fragment of bone. Charcoal from two pits was identified as old wood of oak and yew branches (six years old) and produced a 2Σ radiocarbon date of A.D. 431-679.

The next phase of activity comprised an internal wattle partition inside the large enclosure which probably post-dated the ironworking activity. Two overlapping parallel linear slot trenches bisected the cutting and were associated with a cluster of post- and stakeholes roughly aligned to the trenches. A third linear feature or gully cut almost at right angles to the line of the two slot-trenches and stopped short of them. The three features delineated the majority of excavated features and could represent the remains of an internal wattle partition within the large enclosure.

Several features and clusters of postholes of some antiquity were also uncovered within the cutting though it was not clear if they were associated with the linear slot-trenches. Finds included tiny fragments of bone from the fill of one of the slot-trenches. One posthole from the site also contained a sherd of poorly-fired coarse early medieval pottery.

Further excavated evidence for early medieval activity in Killoran townland included a possible unenclosed hut site as well as burnt/roasting pits and land reclamation activity from various sites (Gowen *et. al.* 2005, 255-56 & 284-95).

A relatively recent east-west aligned field bank bisected the enclosure. The cutting was located against the bank and the excavation established that it was built upon an earlier but contemporary ditch that cut the site. Various residential lumps of iron slag, post-medieval pottery sherds and two iron objects were associated with the bank.

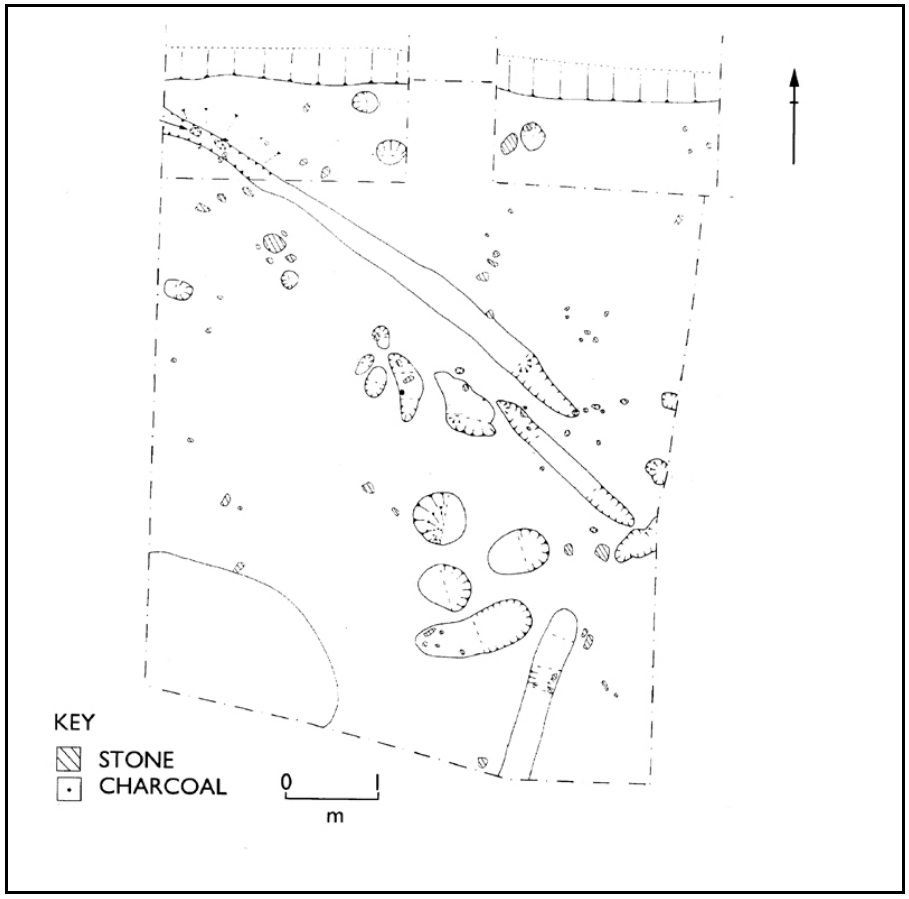


Fig. 284: Features excavated at Killoran 31, Co. Tipperary (after Gowen et al. 2005).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
Beta- 120521	Charcoal from two pits identified as old wood of oak and yew branches (six years old)	1450±70 BP	**A.D. 431-679**

Reference:

Gowen, M., Phillips, M., & Ó Néill, J. (eds.) 2005. *The Lisheen Mine Archaeological Project 1996-8*, Bray: Wordwell, 309–10.

Killoran 66, Co. Tipperary
Unenclosed Settlement
Grid Ref: **S22256659 (222254/166590)**
SMR No: **N/A**
Excavation Licence: **94E0106 & 97E0158**
Excavation Duration/year: **1998**
Site Director: **J. Ó Néill (Margaret Gowen Ltd.)**

A possible eighth/ninth century unenclosed hut site was uncovered at Killoran 66. The excavation was undertaken as part of a planning requirement for the development of Lisheen mine near Moyne, Thurles close to the border between Tipperary and Kilkenny. The study area comprised three townlands Derryfadda, Killoran and Cooleeny in Derryville Bog which is part of the southern extent of the Littleton raised bog complex.

Killoran 66 (126.63m OD) was first recorded in 1994 by the IAWU when all but the western side had been destroyed by peat milling. The western side was examined in 1995 when samples were taken for identification and recording. The hut was almost entirely removed in 1997 and its last traces- the tips of three worked ends on the milled field surface- were recorded in that year (Fig. 285).

The hut site had been heavily disturbed by peat milling and was identified as a sub-rectangular setting of substantial uprights- including roundwood, brushwood and half-split posts- measuring 5.6m by 4m. An internal setting of three stakes bisected the hut. The half split-posts (0.24m-0.32m in diameter and 0.10m-0.18m in width) were set at angles of 40-50º to the vertical, probably as a consequence of heavy machinery across the site. The smaller posts (0.06-0.20m) were uncovered at a variety of angles. The posts all had worked ends and were set into the bog at intervals of between 0.2- 0.5m at either end of the structure. Wood identified on the site included ash, rowan and willow. The associated flooring level was completely removed.

A sample from the site produced a 2Σ radiocarbon date of A.D. 774-887 for the possible hut. An Iron Age trackway was uncovered some 25m to the west of the site at a level contemporary with the initial surviving remains of the site, indicating that a substantial portion of the site had already been removed by 1994. A nearby Bronze Age marginal forest was also recorded at a height of 126.10m- a mere 0.4m below the end of uprights from this eighth/ninth century A.D. site- confirming the considerable loss of peat at the site.

Further excavated evidence for early medieval activity in Killoran townland included burnt/roasting pits and land reclamation activity from various sites as well as ironworking evidence and wattle slot-trenches at a nearby monastery.

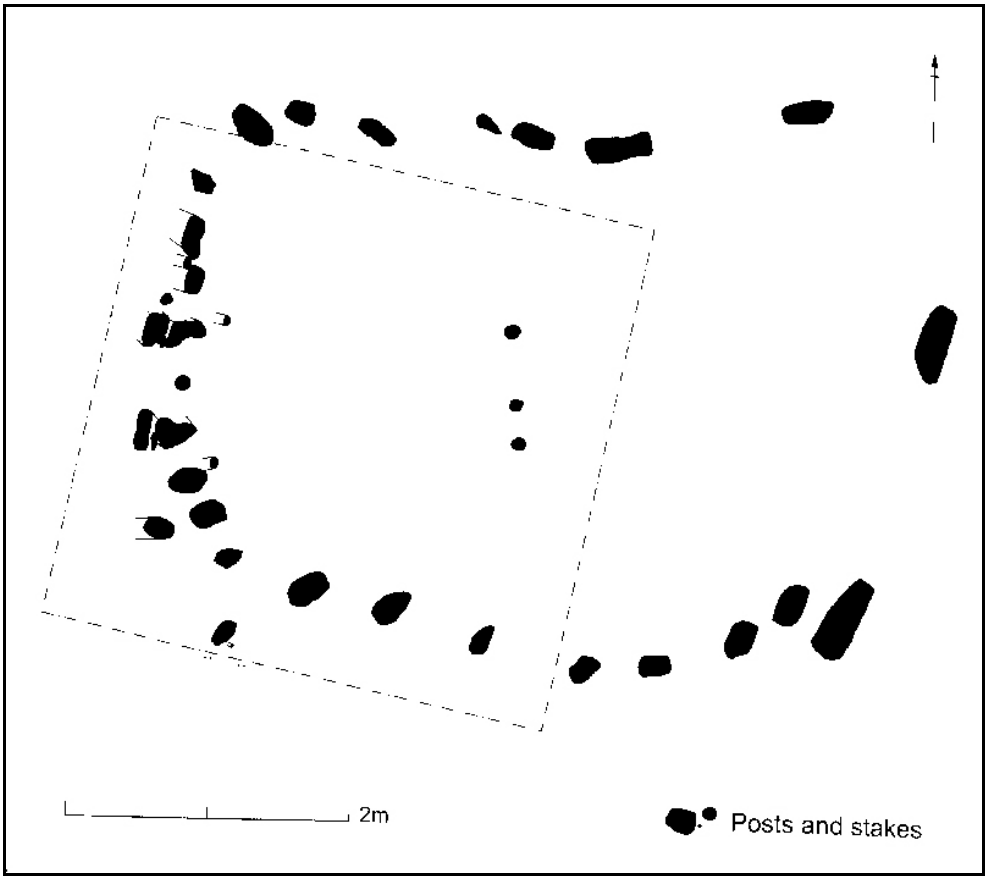


Fig. 285: Plan of hut at Killoran 66, Co. Tipperary (after Gowen et al. 2005).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
GrN-21945	N/A	1200±20 BP	**A.D. 774-887**

Reference:

Gowen, M., Phillips, M. & Ó Néill, J. (eds.) 2005. *The Lisheen Mine Archaeological Project 1996-8,* Bray: Wordwell, 255–6.

County Tyrone

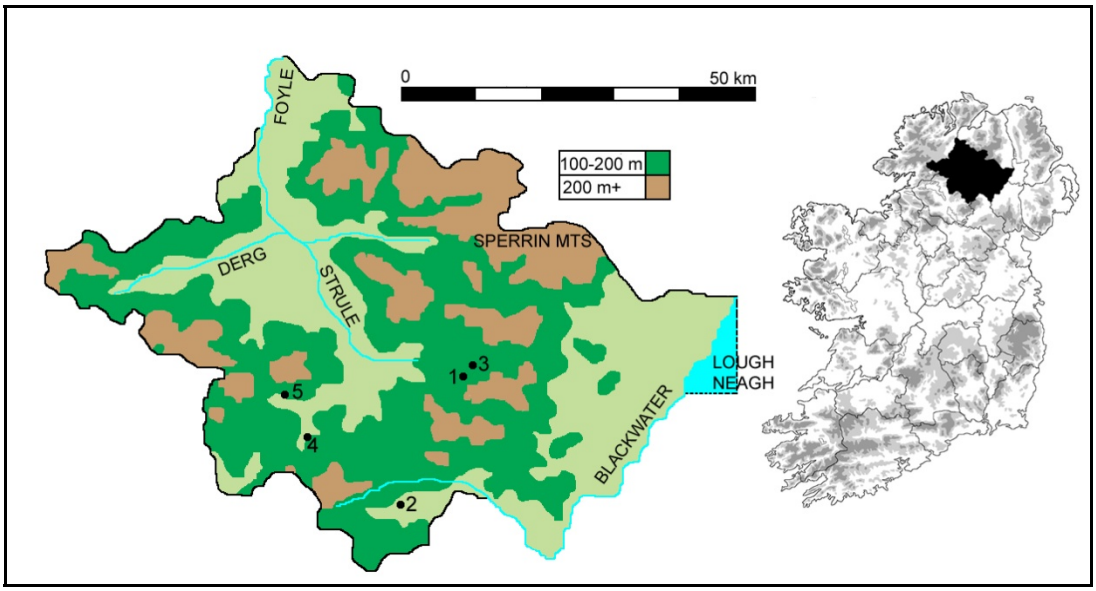


Fig. 286: Significant early medieval excavations in Co. Tyrone.

1	Altanagh	**4**	Killyliss
2	Clogher	**5**	Mullaghbane
3	Dunmisk		

Altanagh, Co. Tyrone
Early Medieval Settlement Enclosure.
Grid Ref: **H62256933 (26225/36933)**
SMR No: **TYR 044:045**
Excavation Licence: **N/A**
Excavation Duration/Year: **1977; Aug. – Oct. 1979; June – July 1980; June – July 1981.**
Site Directors: **B.B. Williams (Historic Monuments and Buildings Branch, Department of the Environment (N.I.)).**

The site consisted of a megalithic structure set within an earthen-banked enclosure on top of a hill. An unlicensed excavation was undertaken on the site in 1977 by the local school, and this uncovered Bronze Age and Neolithic burials associated with the megalith. Further excavation was undertaken by the Department of the Environment and uncovered more prehistoric funerary evidence, as well settlement evidence from the early medieval period.

The early medieval occupation occurred in two identifiable phases. The earliest phase was marked by an area of occupation debris (24m x 18m) which appears to have been contained within the banked enclosure. Considerable evidence for ironworking was recovered from this phase – three bowl furnaces and a large deposit of iron slag were discovered in a defined area (Fig. 287). A series of stakeholes in the bottom of one of these furnaces may have had a structural purpose; and another line of stakeholes close to the furnaces may represent a wind-break or similar structure. Several sherds of souterrain ware were also found in association with this furnace, as well as a blue-glass bead and a perforated jet object.

The later phase of early medieval occupation appears to have occupied the same area as the first phase. The site was covered by a cobbled surface, and a possible low stony bank, with no external ditch (Fig. 288). Six possible furnace bottoms and a group of bowl furnaces were discovered in this phase. Artefacts included an iron sword – rarely found on early medieval sites – which was found associated with the bank, and other iron objects (including a penannular brooch), which were found in association with the ironworking area.

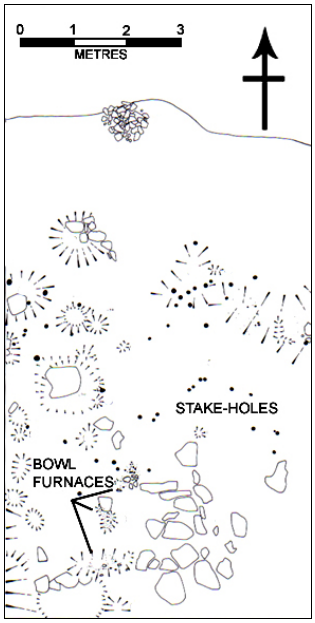


Fig. 287: Early medieval Phase 1 at Altanagh, Co. Tyrone (after Williams 1986, 54).

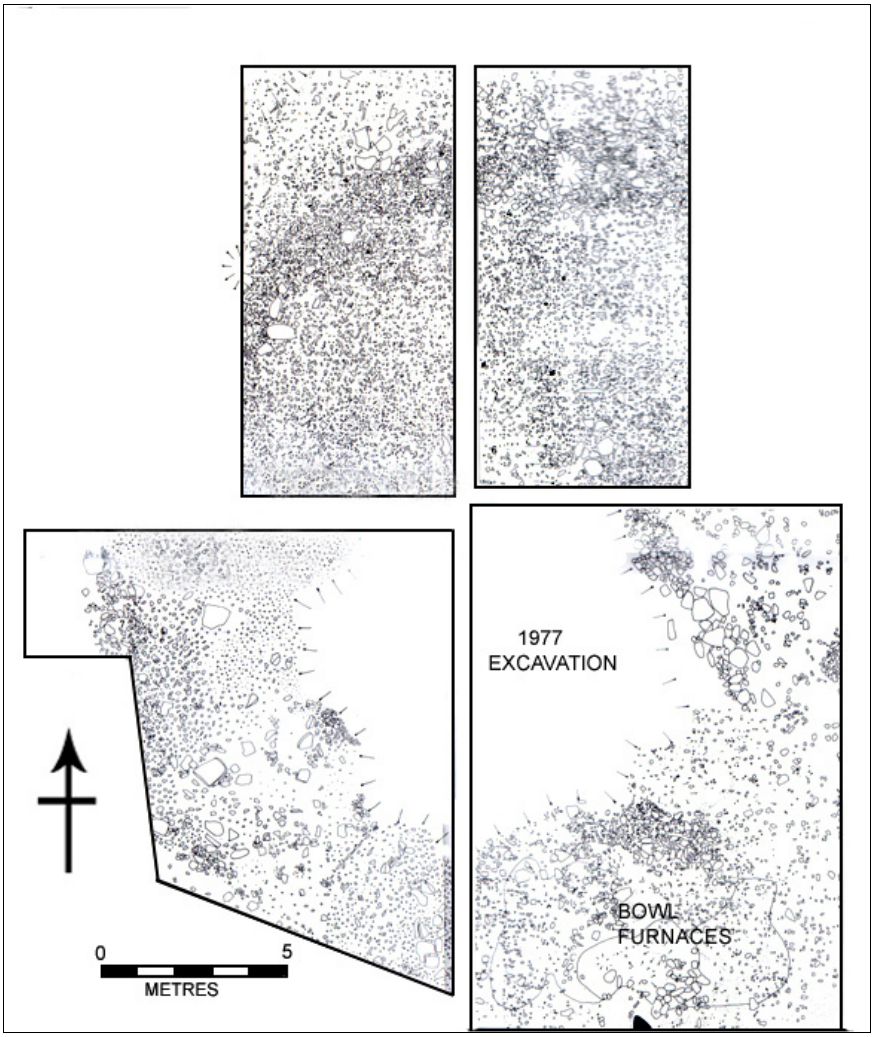


Fig. 288: Early medieval Phase 2 occupation at Altanagh, Co. Tyrone (after Williams 1986, facing 58).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-2564	Charcoal in vicinity of bowl furnaces in later phase	1475±60 BP	A.D. 433-495; **A.D. 504-658.**
UB-2565	Charcoal in bowl furnace from early phase	1585±70 BP	A.D. 262-278; **A.D. 328-618.**

Reference:

Williams, B. B. 1986. Excavations at Altanagh, County Tyrone. Ulster Journal of Archaeology (Third Series), 49, 33–88.

Clogher (Clogher Demesne td.), Co. Tyrone
Early Medieval Settlement Enclosure.
Grid Ref: **H53875133 (25387/35133)**
SMR No: **TYR 058:033**
Excavation Licence: **N/A**
Excavation Duration/Year: **1969; 1971; 1972; 1973; 1974; 1975.**
Site Directors: **R.B. Warner (Ulster Museum).**

Research excavations were undertaken over a number of seasons on the hilltop fort at Clogher, Co. Tyrone. The site is located to the rear of the modern cathedral, and had long been assumed to be the royal site of the Airghialla tribes of mid-Ulster. An early medieval enclosure had been set within the banks of the earlier hillfort which showed evidence for an Iron Age construction/occupation (Fig. 289).

Excavations through the bank, and interior, of the internal enclosure revealed a multiplicity of phases and features. The earliest internal enclosure would appear to have been delimited by a palisade trench, 30m in diameter, with an associated wide external ditch. A low external bank beyond the ditch may have been timber-framed and also may show evidence for another external palisade. A rim sherd of a small amphora found from this phase of occupation suggests that the site had prestigious, international contacts. The artefactual remains suggest that this enclosure was still in use by the mid-sixth century – a sherd of Late Roman Amphora (B ware), and a D type penannular brooch (after Kilbride-Jones), was found in the upper fill of the ditch. Large quantities of fragments of penannular brooches, and a late-Roman bronze bracelet, have been interpreted as evidence for a brooch factory. Part of the hilltop fort ditch appears to have been re-used during this phase as an area for iron smelting, and at least two furnaces were found from this period, and others were implied from the excavation.

A large dump bank was then created outside the ambit of the earlier ditch which was in-filled with yellow clay (the 'Clogher Yellow Layer'). The material for this appears to have been obtained from a deep outer ditch which now defined an enclosure with an internal diameter of approximately 50m. Sherds of E ware sealed by this bank suggest a sixth/mid-seventh-century construction date. Connections with contemporary continental Europe may also be indicated by the discovery of two iron bull-head mounts (originally believed to be from a Belgic 'fire-dog' of earlier date, but now interpreted as belonging to a standard), as well as an iron spearhead of Gaulish form.

A possible rectangular building of post-and-slot construction was found within the interior of this enclosure; and a huge circular building (40m across) has been interpreted as the *rígtech*, or royal house. There was evidence for bronze-working within the enclosure, and iron- and glass-working were conducted inside the hilltop fort, but outside the enclosure. The construction of the 'inauguration mound' would appear to date to this phase of occupation, and excavations on it discovered the presence of a small circular wooden 'hut' on its summit. Several phases of roads were uncovered during the excavations – a bronze 'button' in the shape of a beetle was found in the earliest one - including a cobbled entranceway. The gateway into the enclosure would originally appear to have been set into a six-post wooden tower. This would appear to be an original feature since the earliest of the wooden gateposts were recovered from the entrance were associated with sherds of E ware.

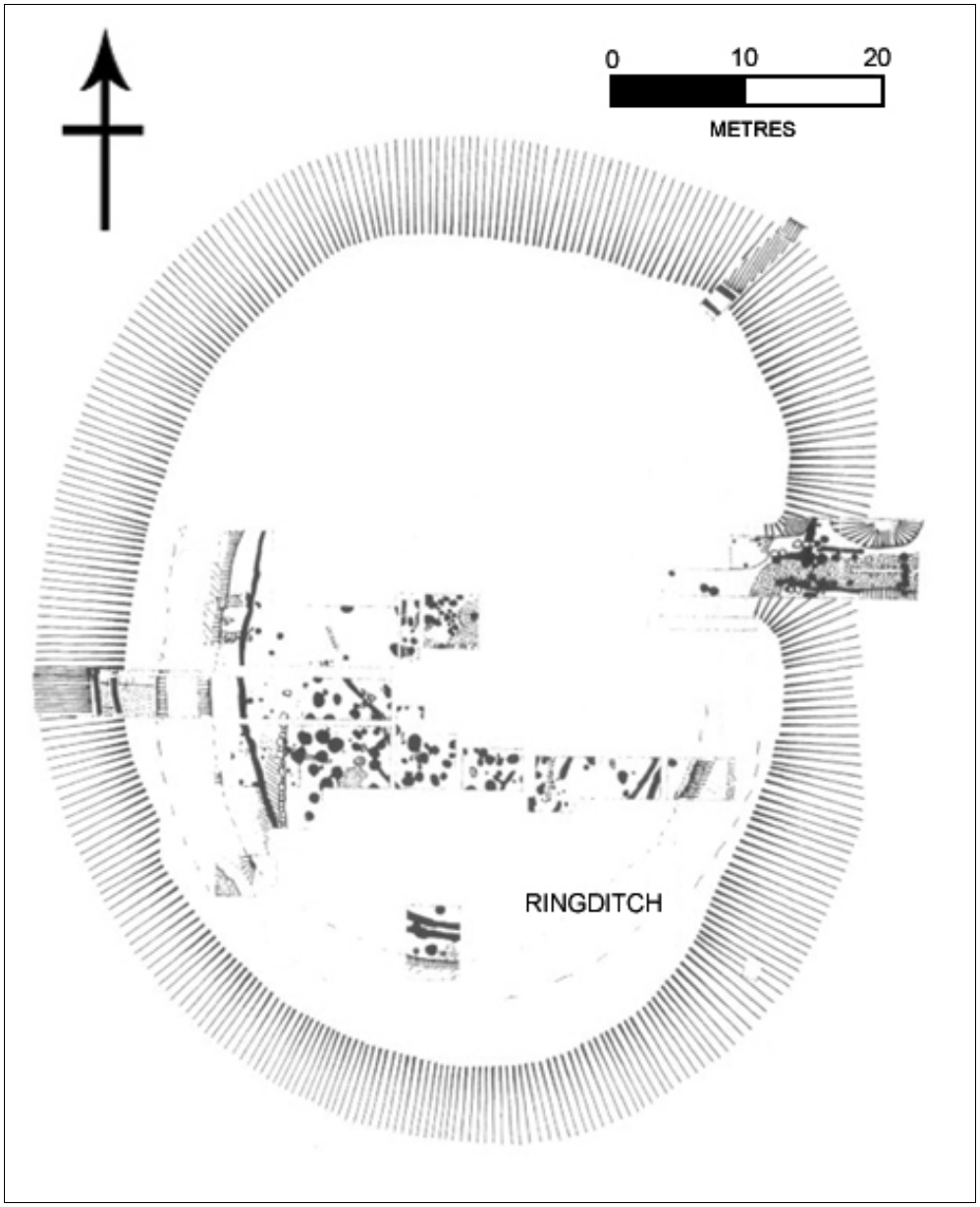


Fig. 289: Excavation plan of Clogher, Co. Tyrone (after Bonner 2001, 19).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
UB-835	Primary silting of ringditch	1515±120 BP	**A.D. 251-715**; A.D. 744-768.
UB-838	Early ringditch fill	1770±65 BP	A.D. 88-103; **A.D. 122-411**.
UB-841	Later ringditch fill	1770±90 BP	**A.D. 53-436**; A.D. 489-510; A.D. 517-529.
UB-842	Late ringfort occupation	1635±65 BP	**A.D. 255-559**.

UB-844	Charcoal with iron smelting	1555±45 BP	**A.D. 415-598**.
UB-2033	Late ringditch fill=2034	1725±115 BP	**A.D. 61-566**.
UB-2034	Late ringditch fill=2033	1670±70 BP	**A.D. 218-553**.
UB-2035	Early ringfort Occupation	1440±45 BP	**A.D. 544-662**.
UB-2036	Earliest ringfort occupation	1710±75 BP	A.D. 133-444; **A.D. 447-464**; A.D. 482-533.
UB-2037	Mid ringditch fill	2185±45 BP	**383 B.C. – 152 B.C.**; 138 B.C. – 113 B.C.
UB-2038	Ringfort occupation	1260±70 BP	**A.D. 649-897**; A.D. 921-944.
UB-2176	Assoc with quartz pebbles	1335±65 BP	**A.D. 596-830**; A.D. 836-868.

References:

Bonner, C. 2001. *The Faunal Remains from Clogher*. Unpub'd MSc thesis, Q.U.B.

Warner, R. B. 1971:032. Clogher. http://www.excavations.ie.

Warner, R. B. 1972:031. Clogher. http://www.excavations.ie.

Warner, R. B. 1973:033. Clogher. http://www.excavations.ie.

Warner, R. B. 1973. The Excavations at Clogher and their Context. *Clogher Record*, viii, 5–12.

Warner, R. B. 1974:037. Clogher. http://www.excavations.ie.

Warner, R. B. 1975:035. Clogher. http://www.excavations.ie.

Warner, R. B. 1979. The Clogher Yellow Layer. *Medieval Ceramics*, 3, 37–40.

Warner, R. B. 2000. Clogher: an archaeological window on early medieval Tyrone and Mid Ulster, in C. Dillon, & H. A. Jeffries (eds.) *Tyrone: History and Society*. Dublin, Geography Publications, 39–54.

Dunmisk, Co. Tyrone
Early Medieval Ecclesiastical Enclosure.
Grid Ref: **H62787070 (26278/37070)**
SMR No: **TYR 036:001**
Excavation Licence: **N/A**
Excavation Duration/Year: **Summer 1984; Summer 1985; Summer 1986.**
Site Directors: **R.J. Ivens (Historic Monuments and Buildings Branch, Department of the Environment (N.I.)).**

The site consisted of a circular enclosure (approximately 40m in diameter) set on a hilltop. Nearby quarrying threatened the site, and as such a substantial rescue excavation was undertaken on both the enclosure and the surrounding hilltop, excavating around one quarter of the entire area.

Although the site was known locally as a 'fort', excavation revealed that it may have been an ecclesiastical enclosure, or possibly a settlement/cemetery (Fig. 290). 535 graves were excavated, and at least ten of these revealed multiple inhumations. A number of skeletons were able to be sexed, and these revealed 26 male and 27 female bodies; and over 40 juvenile skeletons were recovered, the majority of which (30) were of infants under ten years old. The argument for the site having been a small monastic community (with an ancillary mixed-sex workforce) is largely based on the discovery of a rectangular timber-built structure, orientated roughly east-west (Fig. 291). The east end is demarcated by a foundation trench, suggesting a rather substantial feature, whereas the remainder of the structure is outlined by post-holes. A large number of the burials appear to have been aligned with this structure, and some burials appear to have been placed within the structure prior to abandonment. It has therefore been argued that this structure was a small church, and that the enclosure may be equated with the lost monastic site of *Domnach Mescáin* (which could have been corrupted over time to Dunmisk).

Apart from the early medieval graveyard, the site also shows substantial evidence for industrial activity. The industrial area appears to have been set outside the original limits of the graveyard, although both later and earlier graves have encroached into this area. Finds from this area included fragments of several tuyères; large numbers of mould fragments; 145 sherds of crucibles; and large quantities of slag. Most significantly, six of the crucibles showed evidence of having been used for glass-making (the first such evidence for native glass manufacture found in Ireland). Fragments of thirteen separate glass items were also found in this area. The remainder of the finds form site consisted of copper alloy pins (three); an amber bead; part of a lignite bracelet; and two sherds of 'flat-rim' ware.

There is no definitive archaeological evidence for settlement on the hilltop, although it has been suggested by a process of elimination that this may have occurred in the northwest part of the site.

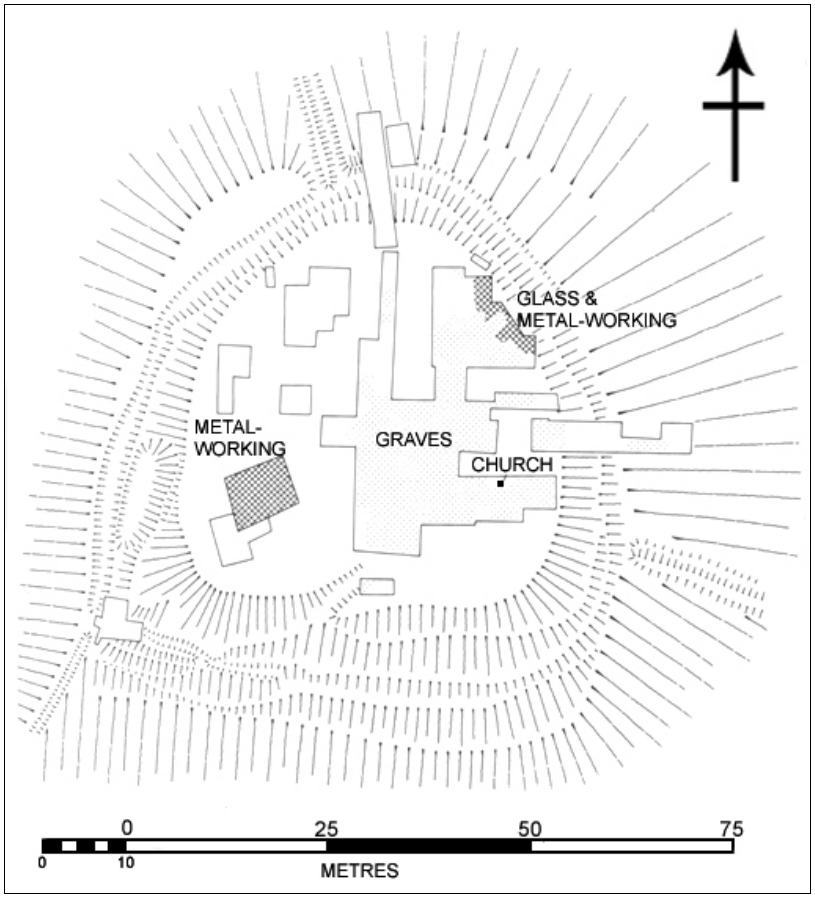


Fig. 290: Excavated area at Dunmisk, Co. Tyrone (after Ivens 1988, 28).

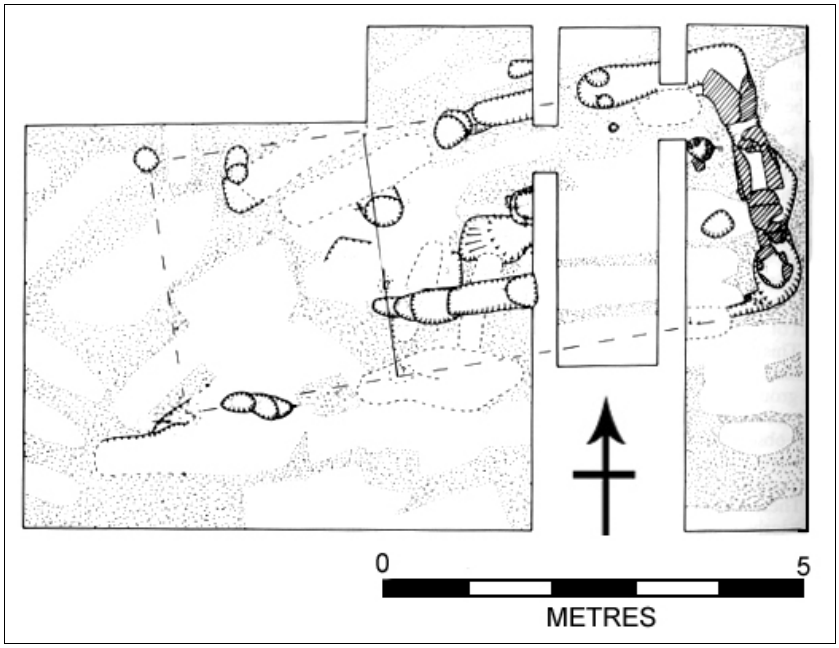


Fig. 291: Rectangular timber structure (church?) at Dunmisk (after Ivens 1989, 60).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
HAR-6833	Old turf layer under bank.	1480±100	A.D. 346-371; **A.D. 377-719**; A.D. 742-769.
HAR-6832	Grave	1270±80	**A.D. 639-900**; A.D. 917-965.
HAR-6831	Charcoal from lower fill of bowl furnace.	1230±80	**A.D. 658-906**; A.D. 911-971.
HAR-6830	Old turf layer cut by ditch	450±80	A.D. 1316-1355; **A.D. 1389-1642.**
HAR-6829	Occupation layer	1320±80	**A.D. 580-890.**
HAR-6828	Charcoal from hearth/ furnace.	1260±70	**A.D. 649-897**; A.D. 921-944.

References:

Ivens, R. J. 1988. Secrets of a hilltop: Dunmisk, Co. Tyrone, in A. Hamlin & C. J. Lynn (eds.) *Pieces of the Past: Archaeological excavations by the Department of the Environment for Northern Ireland, 1970-1986*. Belfast: HMSO, 27–29.

Henderson, J. 1988. The nature of the Early Christian glass industry in Ireland: some evidence from Dunmisk fort, County Tyrone. *Ulster Journal of Archaeology* (Third Series), 51, 115–126.

Ivens, R. J. 1989. Dunmisk fort, Carrickmore, Co. Tyrone: Excavations 1984-1986. *Ulster Journal of Archaeology* (Third Series), 52, 17–110.

Henderson, J. & Ivens, R.J. 1992. Dunmisk and glass-making in Early Christian Ireland, *Antiquity*, 66, 52–64.

Killyliss, Co. Tyrone
Early Medieval Settlement Enclosure.
Grid Ref: **H41816101 (24181/36101)**
SMR No: **TYR 050:007**
Excavation Licence: **N/A**
Excavation Duration/Year: **August – September 1982.**
Site Directors: **R.J. Ivens (Queen's University, Belfast).**

The site consisted of a sub-rectangular enclosure (approximately 42m in diameter) with an external counterscarp bank, set on top of a small drumlin. Excavation was required as the site was threatened by a farm improvement scheme.

The interior of the site had been damaged by subsequent agricultural activity, resulting in many truncated or substantially destroyed features (Fig. 292). Several small gullies, sealed by the inner enclosure bank, indicated that the site may have been occupied prior to the construction of the enclosure. A substantial trench (0.9m deep) encircled most of the interior. This feature was sealed by early medieval occupation layers, and has been interpreted as a possible palisade trench associated with the earlier occupation, or an early drain. An area of cobbling and a single stakehole were found in the interior of the enclosure; and a stone-packed gully and associated postholes were interpreted as the remains of a small roundhouse or hut (Fig. 293). Examination of the remains from a large pit just to the south of this house indicated the presence of human whipworm eggs, suggesting that this feature may have acted as a latrine pit. A shallow gully surrounding this pit may indicate that the latrine was contained within a structure of some sort.

One of the most enigmatic features on site was a small clay platform, which dated stratigraphically to the early medieval period. This platform appears to have been constructed to house a clay-lined trench (1.85m wide and 0.45m deep) which has evidence for structural timbers and postholes. This feature has been interpreted as an 'above-ground souterrain', or at least an earth-covered feature which served a similar purpose.

Excavations on the ditch and banks revealed methods of construction – the inner bank appears to have been built by a series of work-gangs; and the ditch appears originally to have been fitted with a wattle lining. The waterlogged conditions of the ditch meant that various organic materials survived from the early medieval occupation phase. These included artefacts (44 fragments of leather which seemed to mainly come from several shoes) as well as the remnants of a split-rail and wattle fence (which was assumed to have originally surmounted the inner bank before collapsing into the ditch) (Fig. 294).

About 30 sherds of souterrain ware were found on site, the majority of which (28) were from a single vessel. These were discovered in a context which pre-dated the construction of the banks and ditches, suggesting that the earlier occupation of the site also took place during the early medieval period. Two iron knives were found in the early medieval contexts, and a short iron sword was recovered from the latrine pit.

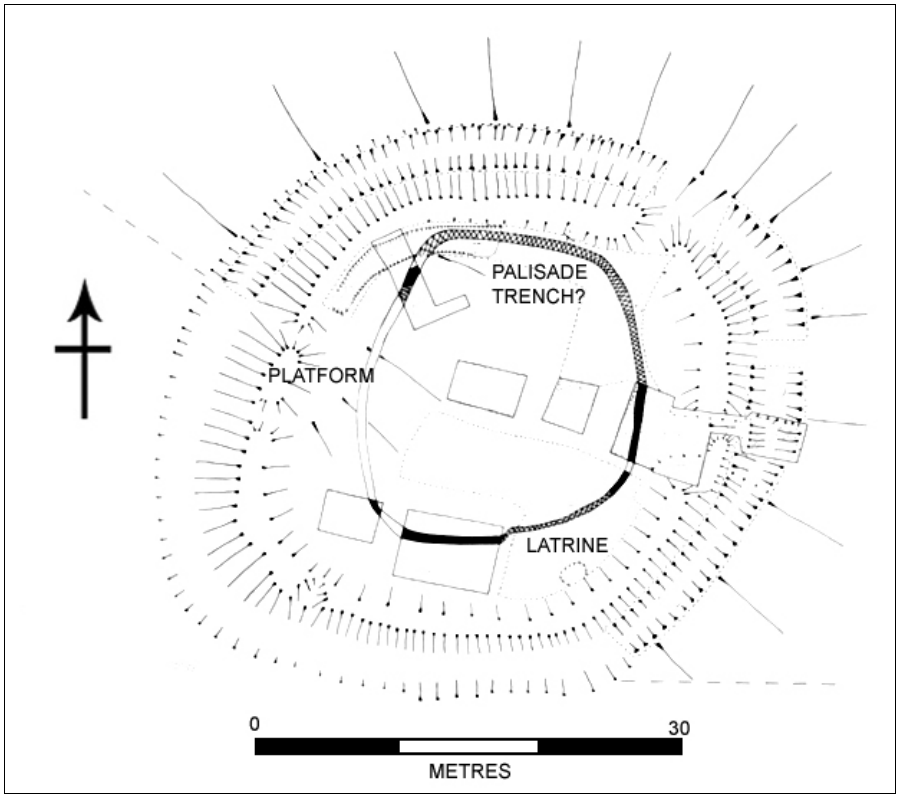


Fig. 292: Excavated area at Killyliss, Co. Tyrone (after Ivens 1984, 12).

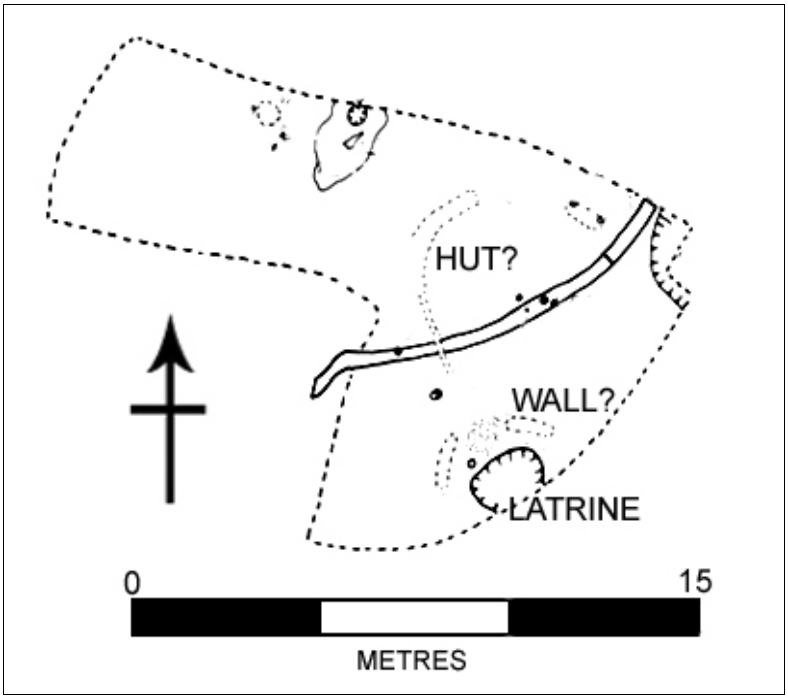


Fig. 293: Hut-site and latrine at Killyliss, Co. Tyrone (after Ivens 1984, 23).

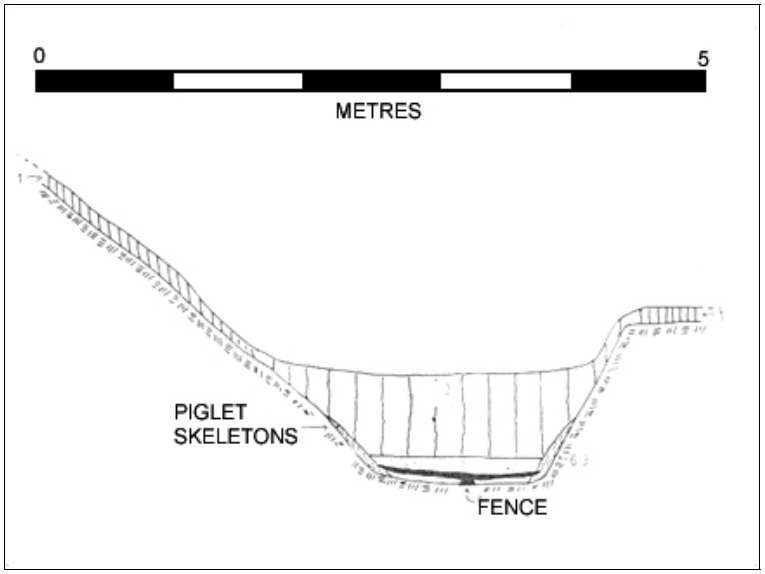


Fig. 294: Section through ditch at Killyliss, Co. Tyrone, showing find location of wicker fence (after Ivens 1984, 21).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-2620	Timber from latrine pit	1180±60	A.D. 689-752; **A.D. 761-983**.
UB-2621	Split-oak palisade post from ditch.	1355±65	**A.D. 560-782**; A.D. 789-812; A.D. 845-856.
UB-2623	Burnt planking from 'above ground souterrain'.	1140±55	**A.D. 772-1017.**

Reference:

Ivens, R. J. 1984. Killyliss Rath, County Tyrone. *Ulster Journal of Archaeology* (Third Series), 47, 9–35.

Mullaghbane, Co. Tyrone
Early Medieval Settlement Enclosure.
Grid Ref: **H38526613 (23852/36613)**
SMR No: **TYR 042:004**
Excavation Licence: **N/A**
Excavation Duration/Year: **April – June 1969.**
Site Directors: **A.E.T. Harper (Historic Monuments and Buildings Branch, Department of the Environment (N.I.)).**

The site consisted of a univallate enclosure (47m by 36m) that was under threat of destruction because of farm improvements.

Excavation through the bank of the enclosure identified three phases of construction, separated by thin lenses of weathered clay. A layer of charcoal was identified on top of the ancient interior ground surface, and this could also be traced over the top of the first phase of bank construction, and was sealed by the second phase. Unfortunately no radiocarbon date was produced for this layer. The nature of preservation of the charcoal layer, however, suggests that the second phase of bank construction occurred soon after the burning incident.

Excavations in the interior of the enclosure revealed a 'pear-shaped' gully (the drip-gully for a roundhouse), which was constructed after the second bank phase (Fig. 295). This gully was later cut into by a refuse pit which contained two large deposits of iron slag (including a furnace bottom), and an oaken plank. Another possible gully feature was partially excavated in the interior; and the foundations of a stone-walled feature were also identified. The function or form of either of these structures, however, could not be identified. Similarly the thirteen postholes discovered in the interior could not be reconciled with a structure.

A blue glass bead was discovered in the 'pear-shaped' gully; and another bead was found near to it. Three fragments of jet bracelets were also found on the site.

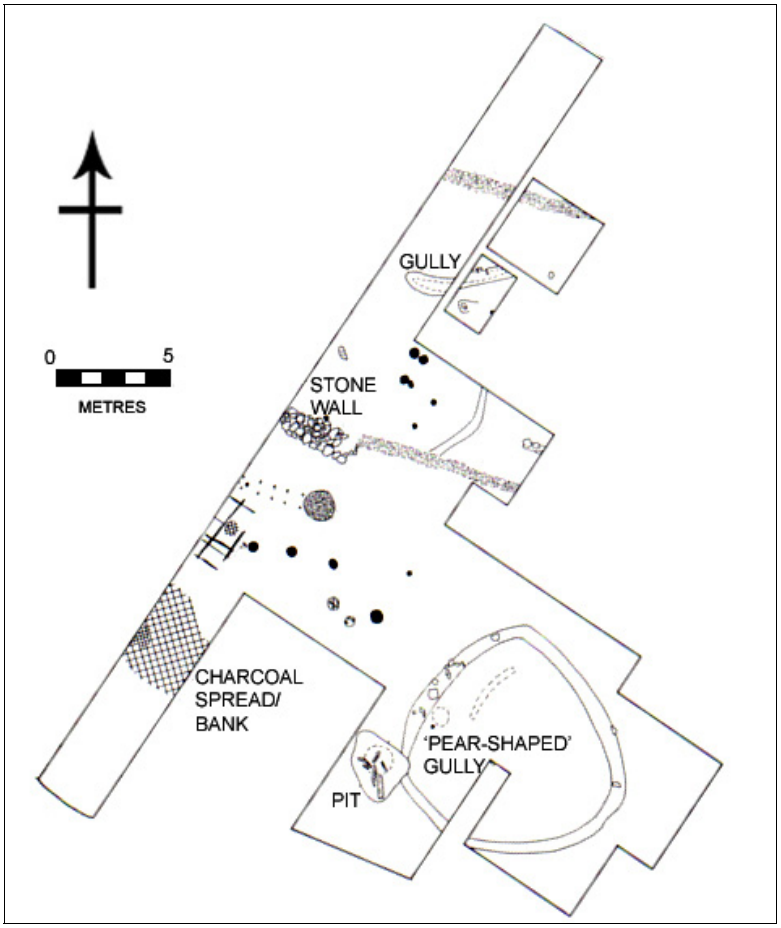


Fig. 295: Excavated features at Mullaghbane, Co. Tyrone (after Harper 1972, 38).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
UB-268	Humic acid from upper 20mm of soil below bank	825±85 BP	**A.D. 1024-1295.**
UB-390	Humic acid from lower 40mm of soil below bank	1715±100 BP	A.D. 85-111; **A.D. 115-544.**

Reference:

Harper, A. E. T. 1972. The excavation of a rath in Mullaghbane townland, Co. Tyrone. *Ulster Journal of Archaeology* (Third Series), 35, 37–44.

County Waterford

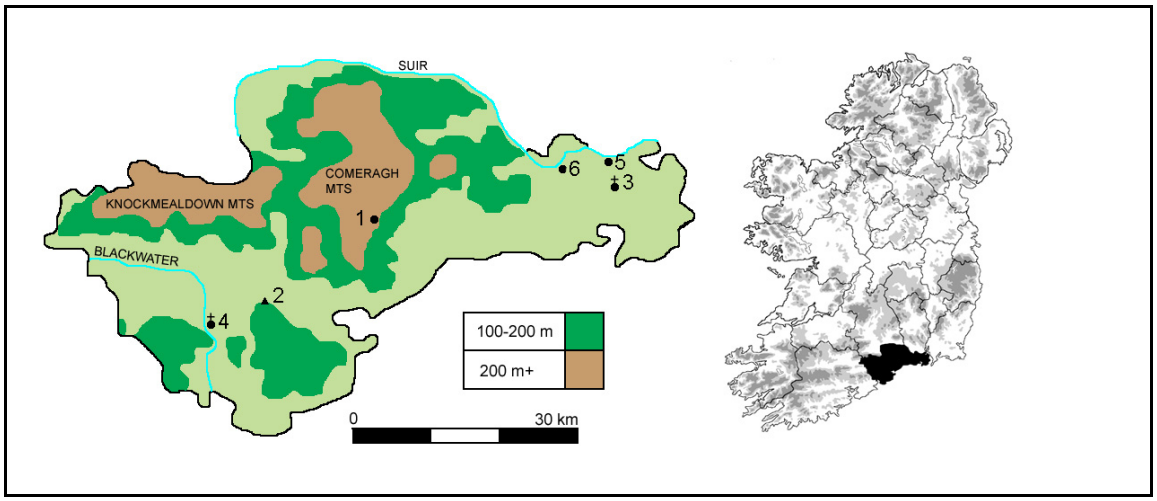


Fig. 296: Significant early medieval excavations in Co. Waterford.

1	Ballykilmurry	**4**	Kiltera
2	Kilgreany	**5**	Waterford
3	Kill St. Lawrence	**6**	Woodstown

Ballykilmurry, Co. Waterford
Early Medieval Enclosure & Souterrain
Grid Ref: **S31570478 (231577/104781)**
SMR No: **WA014-024001**
Excavation Licence: **E000961**
Excavation Duration/Year: **Summer 1933**
Site Director: **L. Mongey**

Excavations were undertaken at a univallate enclosure in Ballykilmurry townland to investigate a souterrain known to exist in the interior. These excavations also recorded three piles of stones, identified as the possible remnants of a structure of uncertain date (Fig. 297). The enclosure is situated on a low hill and commands considerable views across the countryside to the south. It is one of sixteen enclosures in a space of land, approximately 4km in diameter, and partially encircled by the Comeragh Mountains. The enclosure had a diameter of 49m at its greatest part, and was surrounded by an earthen bank (partially stone-faced) which existed in places to a height of over 2m. The entrance was on the eastern side and was defined by two external annexes on each of its sides. There was no visible trace of an enclosing ditch. Three piles of stones in the centre were uncovered in the interior. One pile to the west appears to have defined a rectangular structure (3.05m by 1.07m, and 1.07m high. The second to the northeast was oval in shape and smaller in dimensions and a third small pile in the centre of the site was un-described. These appear not to have been investigated. A dry-stone-walled souterrain was located 3m north of the middle pile of stones in the late-nineteenth century. A vertical stone-lined 'well' feature- 1m in diameter- was uncovered at the mouth of its entrance and contained a number of ash/charcoal deposits within its fill. The souterrain consisted of a passage and circular chamber- 3.65m diameter- with a small recess to its west. A deposit of charcoal and ash was recovered on the floor of the recess. No artefacts were found.

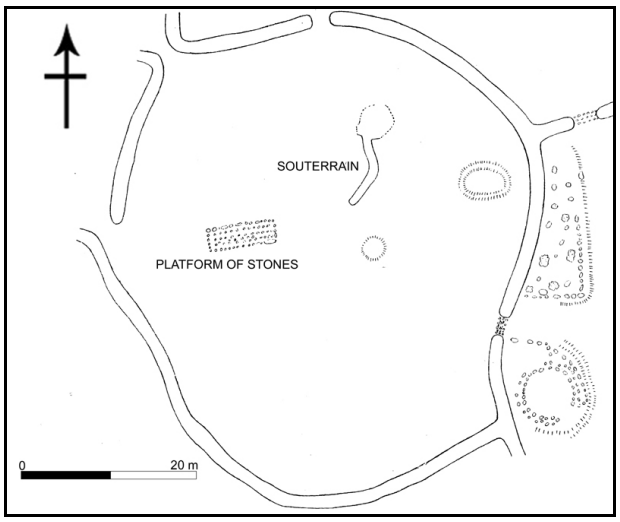


Fig. 297: Plan of Ballykilmurry, Co. Waterford (after Mongey 1933).

References:

Mongey, L. 1933. Ring-fort and souterrain at Ballykilmurry, Parish of Kilrossanty, Co. Waterford (note). *Journal of the Royal Society of Antiquaries of Ireland,* 63, 248–50.

Mongey, L. 1934. Ballykilmurry ring-fort, Co. Waterford, (acknowledgment). *Journal of the Royal Society of Antiquaries of Ireland,* 64, 150.

Kilgreany, Co. Waterford
Cave
Grid Ref: **X17629438 (21762/09438)**
SMR No: **WA030-018**
Excavation Licence: **N/A**
Excavation Duration/Year: **1928; September - 0ctober 1934**
Site Director: **E.K. Tratman (University of Bristol & Royal Irish Academy) & Hallam L. Movius (Third Harvard Archaeological Expedition)**

A cave at Kilgreany produced considerable evidence for early medieval habitation and prehistoric burial and funerary activity. The cave was situated base of a limestone escarpment that forms the underlying geology of a low-lying relatively flat valley captured between the Knockmealdown Mountains to the northwest, the Monavullagh Mountains to northeast and the Drum hills to the south. The valley is drained by the rivers Brickey, Colligan and Finisk. The cave is made up of three chambers ('outer'; 'inner'; and 'rear'), with a total length of 16.5m (Fig. 298).

The cave was first excavated in 1928 by members of the Royal Irish Academy and the University of Bristol Speleological Society, whose objective were to obtain faunal remains. The excavations were concentrated in the outer chamber and produced a range of artefacts, faunal remains and human burials, presumed to be the first proof of Palaeolithic man in Ireland. The Harvard excavations in 1934 entirely investigated the inner and outer chambers. The trenches revealed that late Pleistocene, prehistoric and early medieval evidence were mixed together within the extensively disturbed stratigraphy within the cave. It also suggested that the burials were Neolithic; a theory confirmed by radiocarbon dates procured from human, animal, and faunal remains in recent years (Molleson 1985–6, 2; Brindley & Lainting 1989–90, 2).

A late-glacial horizon represented by an assemblage of wild boar, reindeer, giant deer (Irish Elk), bear, lynx, stoat and arctic lemming- were recovered from inside the cave. Radiocarbon dates from reindeer, Giant Deer (Irish Elk) and Arctic Lemming produced dates of 10,990±120 BP, 10,960±110 BP and 10,360±120 BP respectively indicating activity roughly between 11000-10,000 B.C. Samples of Stoat, Lynx and wild Pig produced dates of 9980±90 BP, 8875±70 BP and 8340±110 BP indicating Mesolithic activity at the site.

The earliest human activity dates to the Neolithic when the cave was used for the deposition of the dead. The remains of at least fifteen individuals and two cremations were placed inside the cave. At least eight adults and an infant belonged to the Neolithic with the remainder also possibly of the same period. Three concentrations of undecorated early Neolithic pottery sherds were recorded on a deposit of brown earth and stones in the inner chamber and comprised the earliest activity on the site. The burials were identified upon charcoal-rich deposits mainly in the outer chamber and were possibly associated with a range of grave-goods- stone axe fragment, shells beads, perforated and worked animal teeth and a hollow scraper. Two inhumation burials (Kilgreany A and B) produced early-mid Neolithic dates (4660±75 BP, 4820±60 BP). A domesticated cattle bone from the outer chamber returned a late Mesolithic/early Neolithic date (5190±80 BP).

The cave appears to have become a focus for votive deposition during the Dowris phase of the Late Bronze Age. A possible late Bronze Age hoard comprising a bronze bifid razor, a bronze socketed knife, two bronze bulb-headed pins, two amber beads, a perforated boar's tusk, an imperforated boar's tusk and possibly coarse undecorated Late Bronze Age pottery were recovered from the cave. It was suggested that some of the un-burnt and/or cremated human remains may date to the Bronze Age though further radiocarbon dates can only confirm this. Several lithics, perforated dog or wolf canine, quartz crystals and a stalactite bead were recovered out of context and indicate further Neolithic and Bronze Age activity in the cave.

The cave was inhabited sometime between the fifth and tenth centuries A.D. The majority of the early medieval material was uncovered in a severely disturbed black earth and stone deposit in the inner chamber which also contained the bones of extinct fauna, fragments of the skull of an individual (Kilgreany D), Late Bronze Age metalwork and post-medieval pottery. Three concentrations of ash identified as hearths were also found within the early medieval deposit in the inner chamber.

Early medieval domestic and personal artefacts included eighteen whetstones, lignite bracelet fragment, ten spindle-whorls, amorphous bone 'points', fragments of a composite double-edged bone comb, fragments of worked bone and antler, antler dice, bone needle, fragments of two rotary quern stones, tanged iron knife, incomplete bronze baluster-headed ringed-pin and bone-pin with a decorated head. An iron loop-headed, ringed-pin was discovered in a fissure in the rear chamber where it may have been placed for safe-keeping. Part of the crest of an eighth-century bell shrine associated with several strips of gilded bronze was also discovered.

The faunal evidence from the black early medieval deposit comprised both domestic and wild animals which included cattle, sheep, goat, pig, horse, cat, red deer, hare, otter, fox, wolf, marten, stoat, bat and hedgehog. One of the cattle bones from the cave (1515±55 BP) produced a date between the fifth and seventh centuries A.D. Marine molluscs from the black early medieval deposit comprised periwinkle, cockle, mussel, oyster and scallop.

The cave is large and spacious and has free circulation of air which would have provided a habitable dwelling place for a single individual or small family unit in the early medieval period. The rear chamber was frequently flooded and would have provided a valuable supply of water. The sea-shells and some of the animal bone indicate food preparation and food consumption at the site while the artefacts signify a range of activities involving sharpening of tools, weapons or ornaments, textile manufacture and the working of skeletal material. The personal items confirm that the cave also functioned as a home for a small community engaged in everyday activities.

Evidence for the intermittent and irregular use of the cave between the eleventh and late-seventeenth century was also identified. A bone gaming-piece for the Viking game of *Hnefatafal* was recovered in the inner chamber and is similar to examples from late-eleventh/late-twelfth-century Waterford city. The other finds included a late-seventeenth century token, a late seventeenth century coin, over 200 sherds of post-medieval pottery, 26 clay-pipe fragments, over 200 fragments of iron and eight fragments of leather.

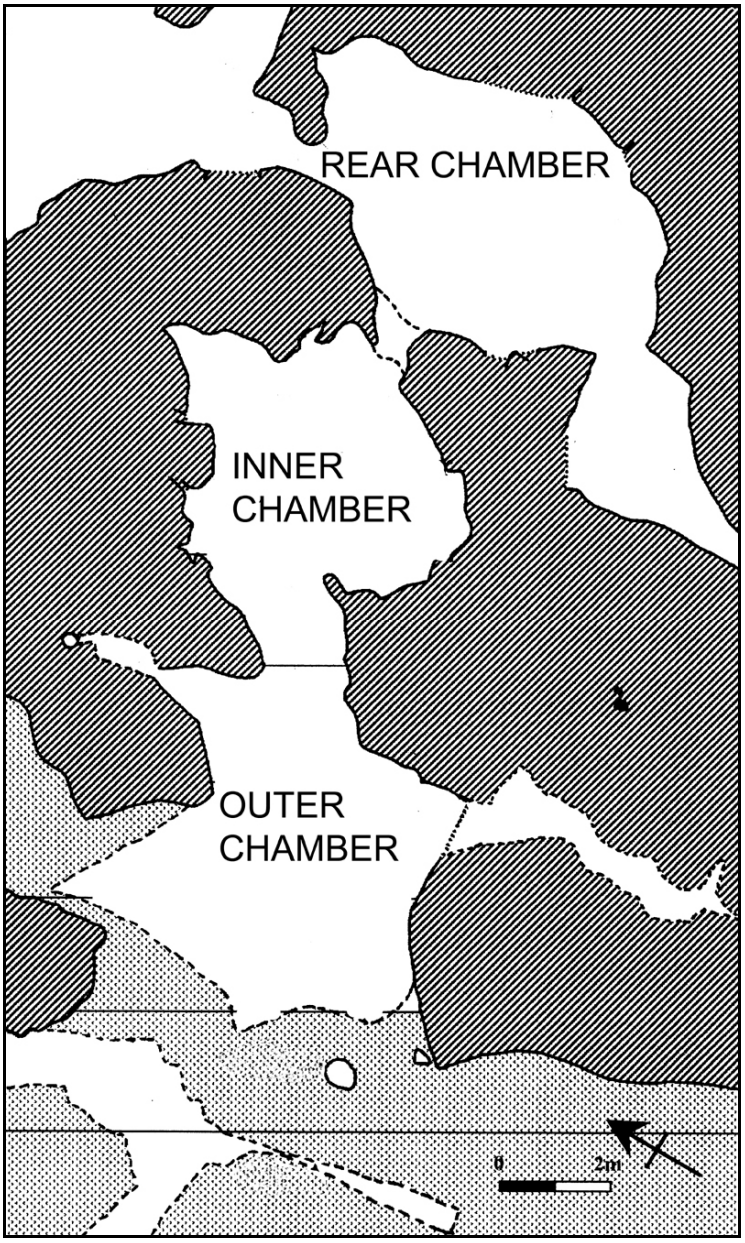


Fig. 298: Plan of Kilgreany Cave, Co. Waterford (after Dowd 2002).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
OxA-5734	Cattle	1515±55 BP	**AD 428- 639**
OxA-5735	Pine Marten	2780±55 BP	B.C. 1108- 1105 B.C. 1072- 1065 **B.C. 1056-811**
BM-135	Human- entrance	4660±75 BP	**B.C. 3639- 3326** B.C. 3231- 3224 B.C. 3219- 3174 B.C. 3160- 3119
OxA-4269	Cattle	5190±80 BP	**B.C. 4233-3893** B.C. 3883-3799
Pta-2644	Human- entrance	4820±60 BP	**B.C. 3710-3499** B.C. 3432-3379
OxA–4240	Reindeer	10,990±120 BP	**B.C. 11,192-10,857**
OxA-4241	Giant Deer	10,960±110 BP	**B.C. 11,156-10,853**
OxA–4242	Wild Pig	8340±110 BP	**B.C. 7579-7133** B.C. 7104-7084
OxA-4239	Arctic Lemming	10,360±120 BP	**B.C. 10,729-9814**
OxA-5732	Stoat	9980±90 BP	**B.C. 9873-9270**
OxA-5733	Lynx	8875±70 BP	**B.C. 8244-7783** B.C. 7771-7756

References:

Brindley, A. L. & Lanting, J. N. 1989–90. Radiocarbon dates for Neolithic Single Burials. *Journal of Irish Archaeology,* 5, 1–7.

Dowd, M. 2002. Kilgreany, Co. Waterford: biography of a cave. *Journal of Irish Archaeology,* 11, 77–97.

Molleson, T. I. 1985–6. New radiocarbon dates for the occupation of Kilgreany cave, county Waterford. *Journal of Irish Archaeology,* 3, 1–3.

Movius, H. L. 1935. Kilgreany Cave, County Waterford. *Journal of the Royal Society of Antiquaries of Ireland,* 65, 254–96.

Stelfox, A. W. 1930–1. Kilgreany Cave, Co. Waterford. *Irish Naturalists Journal,* 3, 118–23.
Tratman, E. K. 1929. Report on excavations in Ireland in 1928. *Proceedings of the University of Bristol Speleological Society,* 3, 109–53.

Tratman, E. K. 1937. Observations on Kilgreany Cave, Co. Waterford (note), Ireland. *Journal of the Royal Society of Antiquaries of Ireland,* 67, 120–4.

Kill St. Lawrence, Co. Waterford
Ecclesiastical Settlement
Grid Ref: **S61320917 (261329/109174)**
SMR No: **WA 017-005**
Excavation Licence: **02E1448**
Excavation Duration/Year: **September 2002**
Site Director: **A. O'Connell; E. Corcoran**

An early ecclesiastical site in Kill St. Lawrence, excavated in advance of road realignment, revealed two concentric enclosing ditches as well as a series of external and internal ditches, pits, deposits and possible hearths/post-holes. The excavation site was directly east of the remains of the church and graveyard on a slight rise of ground at 18m OD in a generally low-lying landscape.

The outer enclosure ditch had an extrapolated diameter of approximately 110m. No evidence of an internal bank was uncovered. Along the southern side of the enclosure, the ditch measured 6m wide at the top and 0.74m deep and had generally a shallow stepped profile with a flat base. Along the northern side of the enclosure, the ditch was 2.8m wide at the top and 1.38m deep and had generally steeply sloping sides and a V-shaped profile. The fills of the ditch contained occasional inclusions of charcoal. Charred material (wood species identity unknown) from the basal fill of the outer enclosing ditch returned a seventh/eighth-century date (see below).

A second ditch was uncovered parallel to the outer enclosure ditch and measured 1.8m wide at the top and 0.58m deep with steeply sloping sides and a concave base. Inclusions of charcoal and five pieces of slag were recovered within its basal fill. This previously unidentified inner enclosure was concentric with the outer enclosure, and had an extrapolated diameter of 60m. No evidence of an internal bank was recovered. Two sections of the inner ditch was excavated and revealed that it measured between 1.9m-2.3m wide and 0.85m-0.96m deep and contained inclusions of charcoal and a flint flake within its fills.

Settlement activity within the enclosure was suggested by the excavation of a variety of features including pits, deposits and possible hearths/post-holes. Twelve roughly sub-circular pits were excavated within the interior and had average maximum dimensions of 0.8m. Charred material was recovered from the primary fill of one of the pits and returned a fourth/sixth-century date (see below). This pit appears to pre-date the construction of the outer enclosure ditch, however this date, derived from oak charcoal, may have been subjected to the 'old wood' effect as it was not possible to determine whether the charred material derived from twigs or trunks of great age.

Three unidentified seeds, a single fragment of charred hazel nut shell, and three fragments of burnt animal bone (either pit or sheep/goat) were recovered from the fill of another pit in the enclosure interior. Three possible hearths/post-holes with an average diameter of 0.25m were situated close together within the inner enclosure and contained charcoal-rich fills. Four irregular to sub-rectangular deposits were also excavated within the enclosure and had average dimensions of 1.3m by 1m. No evidence for burials was revealed within the enclosure.

A number of features comprising two deposits, four pits and one ditch were revealed outside the enclosure ditches. The ditch was approximately one metre wide and orientated east-west. The pits were sub-circular or oval in plan and had an average diameter of 0.3m. The two deposits were sub-circular in plan and had an average diameter of 0.23m.

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta- 183612	Charred material from basal fill of outer enclosing ditch	1310±40 BP	**A.D. 647-778**
Beta-183613	Charred material from fill of internal pit	1620±40 BP	**A.D. 344-541**

Reference:

O'Connell, A. 2004. Recent archaeological investigations at Kill St. Lawrence, Waterford, carried out as part of the realignment of the R708 airport road. *Decies: Journal of the Waterford Archaeological & Historical Society*, 60, 27-64.

'Kiltera' (Dromore td.), Co. Waterford
Ecclesiastical Settlement
Grid Ref: **X10589134 (210580/091343)**
SMR No: **WA029-042001**
Excavation Licence: **N/A**
Excavation Duration: **September 1934**
Site Director: **R.A.S. Macalister (University College Dublin)**

An enclosure known locally as 'Kiltera' revealed a series of early trenches, three ogham stones, a bell-shaped pit associated with an area of ironworking, an undated wall feature and a cemetery of relatively recent date. Approximately three quarters of the interior of the enclosure was excavated as part of a state grant for the relief of unemployment.

The enclosure was located in a field bounded on its eastern side by the deflected course of the River Goish and on the north and west by a side-road. It was situated in Dromore townland and marked as 'site of Kiltera graveyard' in the First Edition O.S. map. Two ogham stones were recorded at the site in the nineteenth century and sparked an interest in the excavation.

Prior to excavation, the enclosure contained an almost effaced circular rampart, approximately 37m in diameter. A mound of stones was uncovered close to the western edge of the enclosure and two ogham stones were recorded on it in the nineteenth century. Some possible ruined structures intermingled with the roots of a sycamore tree were identified near the rampart at the eastern side but were not investigated. Excavations uncovered a range of features.

The undisturbed subsoil of the site consisted of a compact reddish gravel layer which it was suggested was confined to the area of the enclosure. The gravelly subsoil was covered by a blackish loamy organic-rich deposit with occasional pockets of charcoal. Water worn pebbles and fragments of white quartz were identified just below the grass-sods. A few fragments of reddish quartz and jasper also occurred and associated with them were a few scraps of modern china.

The first phase of activity comprised two roughly east-west trenches traversing the enclosure. The inner trench- 0.8m deep- was excavated to the south of the centre of the enclosure. It cut into the underlying subsoil and was uncovered beneath a footing of water-worn pebbles, interpreted as a possible smelting-furnace (See Phase 2). The outer trench was uncovered 6m to the south of the inner trench near the southern enclosure perimeter. The terminals of both these trenches were lost in the parts of the enclosure left un-dug. These trenches were interpreted as forming part of some system of artificial water-courses dug in connection with the nearby river whose original course appears to have run quite close to the site.

The second phase of activity comprised a subterranean circular pit associated with an area of ironworking. The pit (Fig. 299) was bell-shaped (1.8m deep by 2.3m in diameter) and was uncovered just west of the centre of the enclosure. Several pockets of ashes, iron slag and a possible anvil and pestle were uncovered within the fill of the pit while slag was also recovered around the area of the pit. The pit was not stone-lined and was interpreted by the excavator as a 'pit-dwelling of some kind' associated with ironworking activities. Alternatively, the bell-shaped pit may have been used for the storage of grain (Proudfoot 1961, 109).

Associated with the bell-shaped pit was a black clay deposit, 6m to its south from which were recovered numerous fragments of iron slag. The black clay deposit rested on a footing of water-worn stones- interpreted as a possible hearth for an iron smelting-furnace. Several fragments of iron slag were embedded into the water-worn pebbles. A short distance to the south was recovered a bed of ashes also associated with iron slag. It was suggested that the possible anvil and pestle may have been used to pulverize the iron ore, and local memory recorded that a band of iron ore had been exploited in the district till recent times.

The final phase of activity was associated with the use of the site as a cemetery in relatively recent times. A large number of shallow burials- 0.35m-0.60m- were cut into the blackish organic-rich layer. The bones were in a very fragmentary condition and no grave-goods were found in association with any of them. Some of the human teeth studied showed evidence for caries which is generally common among a later medieval or modern population.

Though three ogham stones have been discovered on the site, there was no clear evidence for an early medieval cemetery. Two slabs placed on edge roughly parallel to each other (marked 'GRAVE' on plan) were revealed to the northwest of the centre of the enclosure and appear to look like the surviving fragments of a stone-lined grave. There was, however, no evidence for the continuation of this feature and its function or date cannot be established.

In keeping with the traditions describing the sites as a cemetery, the burials uncovered all appear to be more recent than the early medieval period. They consisted of a large number of shallow pits- 0.35m-0.60m- cut into the black organic-rich layer. The bones were in a very fragmentary condition and no grave-goods were uncovered. Some of the human teeth studied showed evidence for caries which is generally common among a later medieval or modern population

Excavations at the site of the mound of stones at the west side of the enclosure uncovered the remains of a large north-south stone-faced wall- 20m long by 1m thick. The jamb-stones and possible lintel of an entrance-way through the wall were uncovered at the northern end. Three ogham stones- two recorded in the nineteenth century- were found along the line of the wall. They appear to have been removed from their original context and re-used as jamb-stones for this wall. No finds or mortar were associated with the wall and its date could not be established.

A collection of stones at the southern end of the enclosure were tentatively interpreted as evidence for a possible return wall of the north-south structure. At a slightly higher level and to the east of these stones was a layer of water-worn stones, interpreted as the foundations of a jamb of a doorway of some form of structure.

Finds from the excavation included four quern-stones, the possible end of a knife-blade as well as a series of worked stones. One ogham stone was also discovered increasing the total number of these monuments recorded at the site to three.

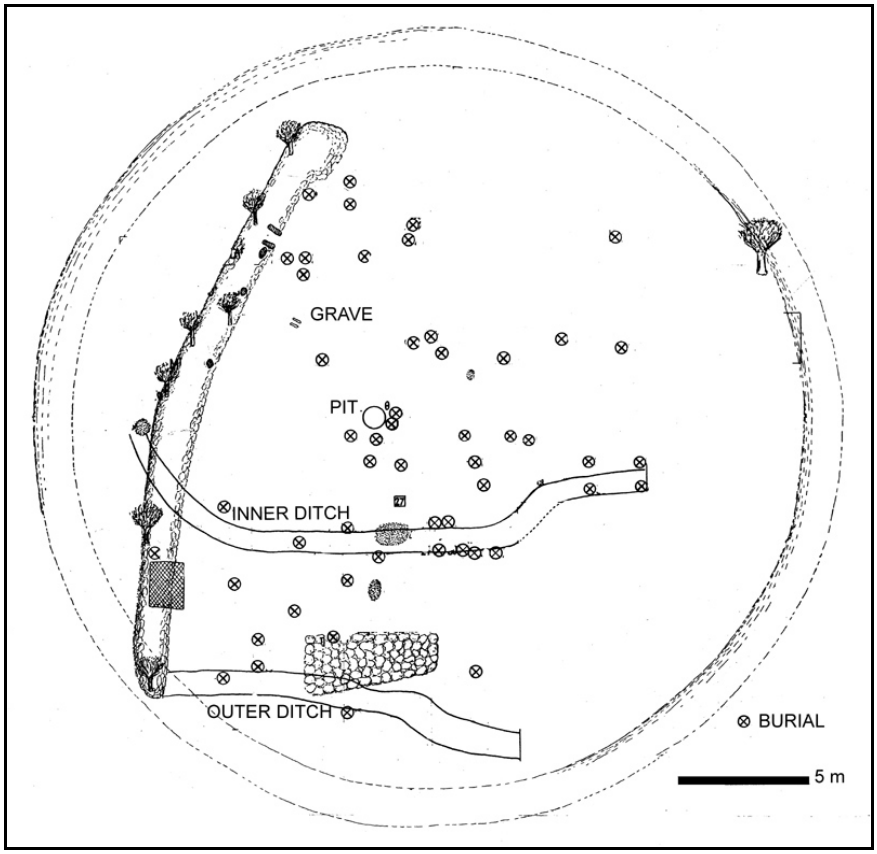


Fig. 299: Plan of Kiltera, Co. Waterford (after Macalister 1935-7).

References:

Macalister, R. A. S. 1935-7. The excavation of Kiltera, Co. Waterford. *Proceedings of the Royal Irish Academy Section C*, 43C, 1–16.

Proudfoot, V. B. 1961. The economy of the Irish rath. *Medieval Archaeology*, 5, 94–122.

Hiberno-Scandinavian Waterford.

St. Peter's Church
Urban Ecclesiastical Settlement
Grid Ref: **S607123 (26070/11230)**
SMR No: **N/A**
Excavation Licence: **E343**
Excavation Duration: **1986-88**
Site Director: **A.S.R. Gittings (Waterford Corporation)**

Lady Lane
Scandinavian Urban Settlement
Grid Ref: **S607118 (26070/11180)**
SMR No: **N/A**
Excavation Licence: **E260**
Excavation Duration: **1982-83**
Site Director: **Michael Moore (OPW)**

High Street/Peter Street
Scandinavian Urban Settlement
Grid Ref: **S607123 (26070/11230)**
SMR No: **N/A**
Excavation Licence: **E406**
Excavation Duration: **1987-89**
Site Director: **Claire Walsh (Waterford Corporation)**

Peter Street
Scandinavian Urban Settlement
Grid Ref: **S607123 (26070/11230)**
SMR No: **N/A**
Excavation Licence:
Excavation Duration: **1989**
Site Director: **Ben Murtagh & Maurice Hurley (Waterford Archaeological Excavations)**

Peter Street/Olaf Street
Scandinavian Urban Settlement
Grid Ref: **S607123 (26070/11230)**
SMR No: **N/A**
Excavation Licence: **E434**
Excavation Duration: **1988**
Site Director: **Claire Walsh (Waterford Corporation)**

Arundel Square/Peter Street
Scandinavian Urban Settlement
Grid Ref: **S608124 (26080/11240)**
SMR No: **N/A**
Excavation Licence: **E527**
Excavation Duration: **January-September 1990**
Site Director: **Maurice Hurley (Waterford Corporation)**

11 Bakehouse Lane
Scandinavian Urban Settlement
Grid Ref: **S608123 (26080/11230)**
SMR No: **N/A**
Excavation Licence: **E550**
Excavation Duration: **1990**
Site Director: **Orla Scully (Waterford Corporation)**

Keyser Street/High Street
Scandinavian Urban Settlement
Grid Ref: **S608124 (26080/11240)**
SMR No: **N/A**
Excavation Licence: **N/A**
Excavation Duration: **1992**
Site Director: **Orla Scully (Waterford Corporation)**

6 Peter Street
Scandinavian Urban Settlement
Grid Ref: **S608123 (26080/11230)**
SMR No: **N/A**
Excavation Licence: **E639**
Excavation Duration: **1992**
Site Director: **Orla Scully (Waterford Corporation)**

Lady Lane/Bakehouse Lane
Scandinavian Urban Settlement
Grid Ref: **S607123 (26080/11230)**
SMR No: **N/A**
Excavation Licence: **E422**
Excavation Duration: **1987**
Site Director: **Alan Hayden (Waterford Corporation)**

19-21 High Street
Scandinavian Urban Settlement
Grid Ref: **S609123 (26090/11230)**
SMR No: **N/A**
Excavation Licence: **93E0056**
Excavation Duration: **1993**
Site Director: **Martin Reid (Waterford Corporation)**

Little Patrick Street/Barronstrand Street
Scandinavian Urban Settlement
Grid Ref: **S607123 (26070/11230)**
SMR No: **N/A**
Excavation Licence: **92E0210**
Excavation Duration: **14th January-12th February 1993**
Site Director: **Joanna Wren (Waterford Corporation)**

9 Arundel Square
Scandinavian Urban Settlement
Grid Ref: **S605122 (26050/11220)**
SMR No: **N/A**
Excavation Licence: **98E0091**
Excavation Duration: **1998**
Site Director: **Joanna Wren (Waterford Corporation)**

Deanery Garden
Scandinavian Urban Settlement
Grid Ref: **S61051237 (261050/11237)**
SMR No: **N/A**
Excavation Licence: **98E0447**
Excavation Duration: **1998**
Site Director: **Orla Scully (Waterford Corporation)**

Bailey's New Street
Scandinavian Urban Settlement
Grid Ref: **S61051237 (261050/112370)**
SMR No: **N/A**
Excavation Licence: **99E0103 & EXT.**
Excavation Duration: **March & July 1999**
Site Director: **Orla Scully & Mary O'Donnell (Archaeological Services Unit, UCC)**

17-18 Broad Street
Scandinavian Urban Settlement
Grid Ref: **2S605122 (26050/11220)**
SMR No: **N/A**
Excavation Licence: **99E0004**
Excavation Duration: **1999**
Site Director: **Jo Moran (ArchaeoGrafix)**

Exchange Street/High Street
Scandinavian Urban Settlement
Grid Ref: **S60851246 (26085/11246)**
SMR No: **N/A**
Excavation Licence: **01E0515**
Excavation Duration: **2001**
Site Director: **Maurice Hurley**

Lady Lane
Scandinavian Urban Settlement
Grid Ref: **S608128 (26080/11280)**
SMR No: **N/A**
Excavation Licence: **00E0276**
Excavation Duration: June **2000-2002**
Site Director: **Joanna Wren (Waterford Corporation)**

There are a growing number of excavated sites in Scandinavian Waterford. Figure 300 illustrates the location of the main excavation phase in Waterford city between 1982 and 1993 when a considerable area of the historic core was excavated. The following is based on general and thematic papers on Scandinavian Waterford and a range of excavation publications related to the town (e.g. Bradley & Halpin 1992; Hurley, Scully & McCutcheon 1997; Wallace 2001) as well as various recent excavation bulletin reports. It will focus on various aspects of the town's layout including its location, defences, streets and pathways, plots and fences, structures and evidence for craft and industry.

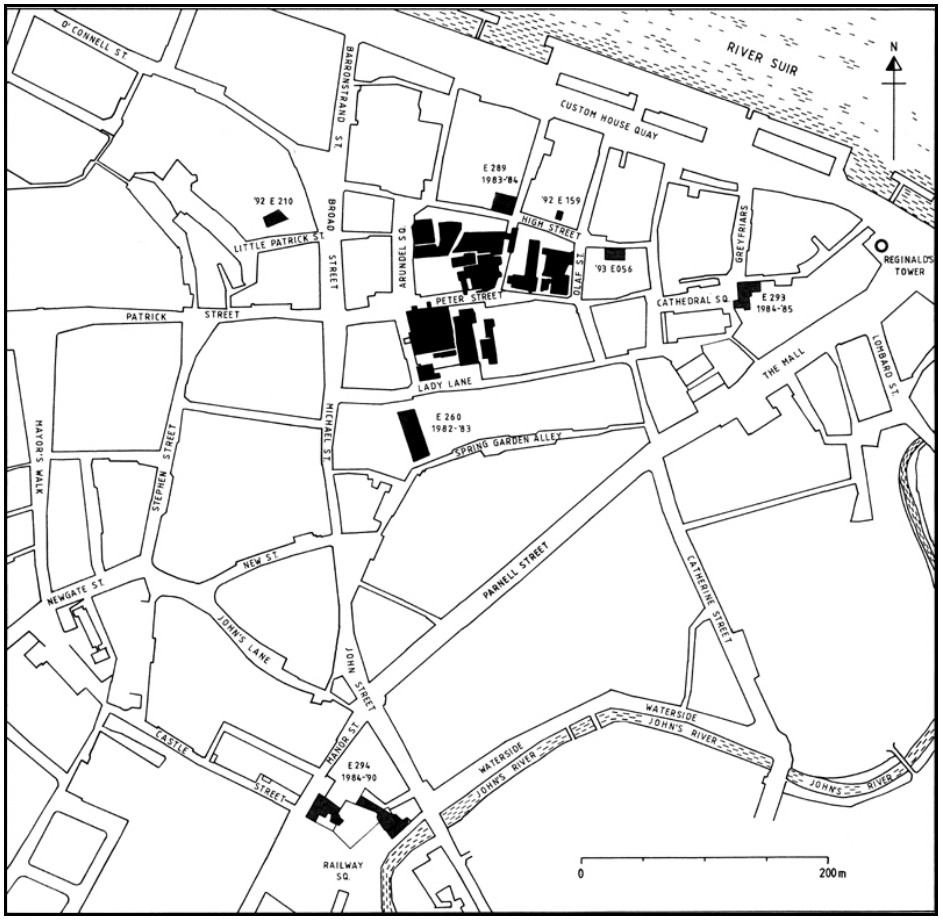


Fig. 300: Location of excavated sites 1982-92 in Waterford City (after Hurley et al. 1997, 3).

LOCATION

The origins of the town at *Port Lairge* or Waterford are still not completely clear though the historical sources would indicate that some type of settlement existed by the early tenth century. In contrast to Dublin and Cork, there is no evidence for any ecclesiastical settlement before the arrival of the Scandinavians. The name *Port Lairge* was widely used in the early Irish annals and has been translated as meaning 'the port of the thigh' (Barry 1997, 13).

There are some early annalistic references (*Annals of the Four Masters*) for the years A.D. 852, 858, 861 and 865 which could be interpreted as possibly reporting the presence of a Viking fleet from *Port Láirge*. Another annalistic reference A.F.M. 893 mentions an army which included the 'foreigners of Port Lairge'. By the early tenth century, we can be confident of a Scandinavian settlement at *Port Lairge* as the *Annals of the Four Masters* and *Fragmentary Annals of Ireland* report that in the year A.D. 910 the 'foreigners arrived in

Ireland and took up at *Port Lairge*' and 'a very large fleet of Lochlainn settled at *Port Lairge* and plundered the north of Osraige (Barry 1997, 13).

The name 'Waterford' appears to have retained its Old Norse-derived place-name and has been translated as 'windy fjord' or fjord of the ram'. The first recorded use of the Latin form of this name was in A.D. 1096 when the citizens of the '*civitatem Wataferdiam nomine*' (the city named Waterford) sought the consecration of a bishop and Malachus was elected by the clerics and people of the city. A twelfth century account of a mid-ninth century Norse chief also contains a battle-catalogue which describes a battle at '*i Vedhrafirdh*' or Waterford (Barry 1997, 13).

The Scandinavian town of Waterford was located within a naturally protective triangular space flanked by the River Suir to the north and St. John's River and marshland to the east and south (Fig. 301). The settlement extended from Reginald's Tower along the south bank of the River Suir to the site of Turgesius castle and from there southwards to St. Martin's castle before returning parallel to the marshy ground adjacent to St. John's River (Hurley 1992, 49; Hurley 1997b, 7).

The triangular enclosure was located on the crest of a ridge- 9.3m OD maximum height- which was over 6m higher than the banks of the River Suir and the marsh of St. John's River on its northern, eastern and southern sides. The ground slopes downwards to the north, south and east of Christchurch cathedral. The crest of the ridge broadens out towards the west with the break in slope occurring to the north of High Street and south of Lady's Lane.

The initial *longphort* of A.D. 914 was probably located at the eastern end of the promontory in an area subsequently known as Dundory, the eastern tip of which was inhabited by Reginald's tower. The placename Dundory might preserve the memory of an earlier fort and it was still used as an alternative name for Reginald's Tower in A.D. 1463 and was apparently used to describe the whole area of the walls between Reginald's Tower and the Cathedral/Bishop Palace complex as late as A.D. 1680 (Bradley & Halpin, 1992).

Hurley (1997b, 8-11) has proposed a model for the topographical development of Scandinavian Waterford based both on cartographic and archaeological evidence. He has suggested that the Phase 1, tenth-century *Dún* (identified as Dundory) may have extended from Reginald's Tower along the quays for 150m before turning to the south through the Cathedral to the marsh. The *Dún* may have contained a single main bisecting street from the river front to Cathedral Square with the main west gateway on the crest of the ridge to the north of the cathedral.

The Phase 2 development may have involved the enclosure by ramparts of a further strip 35m wide top the west of the primary nucleus towards the end of the tenth century. This stage is indicated by an east-west orientation of properties (after Richard and Scalé map of 1764) at variance with the north-south alignment of properties within the triangular space. This unusual layout is mirrored at the west end of the triangle between the eleventh/twelfth-century ramparts and twelfth century wall (Hurley 1997b, 9).

Very little archaeological evidence for the tenth and early eleventh century Scandinavian settlement has come to light but this can probably be explained since the bulk of the extensive series of excavations in the 1980s and 1990s took place along Peter Street, High Street and Lady Lane to the west of the postulated tenth-century settlement.

The Phase 3 development dated to the eleventh/mid-twelfth century represented the single largest expansion of the settlement with the formal layout of three east-west streets from the Stage 2 enclosure. Peter Street was situated on the central spine of the ridge with Lady Lane and High Street to its south and north respectively. The Stage 2 settlement was enclosed on the western side by earthen ramparts in the late eleventh century which were further

reinforced by the addition of a stone retaining wall in the early/mid-twelfth century (Hurley 1997b, 10).

The original church of the Holy Trinity (Christchurch) was built before A.D. 1185. It was probably built in the mid-eleventh century (Bradley & Halpin 1992) after the Stage 2 defences had fallen out of use. Excavations have established that St. Peter's church was also built at this stage while other churches such as St. Mary's and St. Olaf's may date to the same period.

Settlement rapidly expanded to the west (Phase 4) outside the line of the early/late-twelfth century stone wall constructed along the line of Arundel Square and Bakehouse Lane. There is evidence that this was well underway by the mid-twelfth century when a number of houses were found to be built above the backfilled ditch. The line of another later twelfth century (possibly pre-Anglo-Norman) defensive bank and ditch was uncovered in excavations further west (Wren 1998, 2000, 2001 & 2002; Moran 1999). Subsequently, this defensive ditch and bank fell out of use and was replaced in the early-thirteenth century by a new defensive wall with gate-towers.

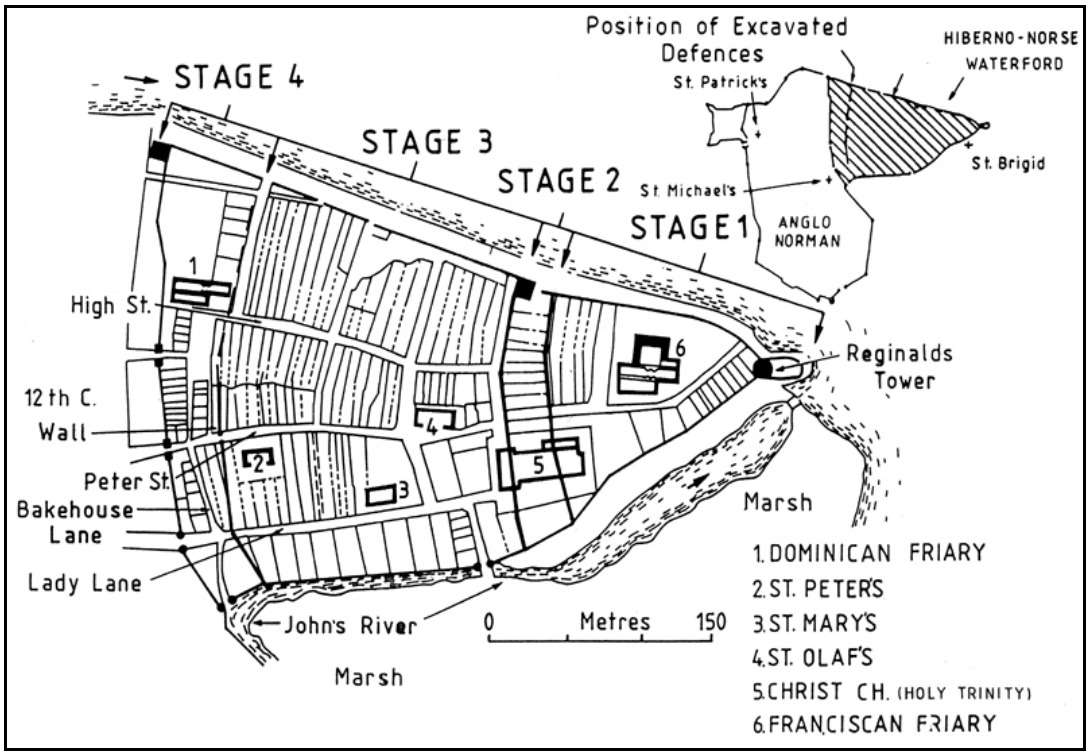


Fig. 301: Topopgraphical development of Scandinavian Waterford (after Hurley et al. 1997, 7).

DEFENCES

Ninth-century Dún Defences

It has been suggested that the original nucleus of the Scandinavian town was in the area of Reginald's Tower (Bradley & Halpin 1992, 108). Hurley's model (1997, 8-11) has proposed a westward expansion with the Phase 1 tenth-century *Dún* (Dundory) comprising a small triangular space between the confluence of the two rivers. A subsequent developmental phase (2) - indicated by the layout of properties in early maps- may have involved the enclosure by ramparts of a further strip, west of the primary nucleus towards the end of the tenth century (Fig. 301 & 302).

There is very little tenth or early eleventh century archaeological evidence though this could be partly explained as the bulk of excavations took place further west outside the postulated original town nucleus. An excavation along Bailey's New Street revealed two large north-south aligned ditches backfilled in the late-twelfth/early-thirteenth century (O'Donnell 1999). The site was situated fairly centrally within the area suspected to be the tenth-century settlement.

The earliest ditch was 5.7m wide and 1.3m deep and extended for 15m north-south across the site. Two sections were excavated and contained twelfth/thirteenth-century pottery, two stick-pins and a ringed pin (*c*. AD 950). The other ditch was filled with material of the same date and extended parallel and to the east of the early ditch. It is possible that the two ditches may mark the western limits of the original tenth century *Dún*.

Late Eleventh-Century Defences

In the late eleventh century, the Phase 3 settlement at Waterford was defended on its west side by a deep ditch and a large inner (eastern) clay bank. The defences (Fig. 301) ran parallel to Bakehouse Lane for an excavated length of 35m and were identified along the eastern side of Arundel Square for a distance of 25m (Hurley 1997c, 21-27). The ditch was revealed in a number of areas (e.g. Gittings 1986, 1987 & 1988; Hayden 1987 & 1988; Hurley 1990; Scully 1990).

The excavated sections of the ditch revealed that it had a maximum width of 8.5m at the top and depth of 2m. The plant remains from the basal layers indicates that it was water-filled when it was open. A leather scabbard and two motif-pieces were uncovered with organic layers sealed by the backfilling of the bank. Sherds of pottery were recovered in the upper levels of the ditch.

The bank was situated on the eastern (inner) side of the ditch and was sourced mostly from up-cast from the external ditch. The bank survived to a maximum height of 1.8m by Arundel Square (Site VI) but may have originally stood up to 3m high. It was evidently partly demolished and had been truncated on its western side by the subsequent stone revetment wall. The tail of the bank was defined by a flimsy wooden fence at Arundel Square (Site VI).

Though post-holes were uncovered at the eastern lip of the ditch (Site IV), it is probably likely that the front (west) face of the bank was un-revetted except for woven wattle which protected the clay from slipping back into the ditch. The bank was composed mostly of stony heavy yellow clay derived from the ditch.

Two drains, one above the other, were uncovered beneath the bank (VI) and immediately preceded or were contemporary with its construction. The earliest drain was timber-lined and produced a dendrochronological date of A.D. 1088±9. This date was consistent with timber from the associated ditch and indicates that both were built in the late eleventh century. The later drain was stone-lined and covered by flat capstones.

A combination of rounded logs and radially split planks were uncovered within the excavated ditch and may have formed part of a breastwork behind which a wooden walkway may have existed. Eight timbers from the ditch produced dates between A.D. 1070-1090 consistent with the date of A.D. 1088±9 for the drain pipe which would indicate that the breastwork superstructure was contemporary with and probably an important component of the bank and ditch defences.

c. 1130 Town Wall

In the second quarter of the twelfth century, the settlement was defended by a town wall (Hurley 1997c, 27-31). The wall was uncovered for total length of 22m parallel to Bakehouse Lane (Fig. 303) with the best preserved lengths in Sites III and IV (20.26m long) and patchy remains in Site I and II (e.g. Gittings 1986, 1987 & 1988; Hayden 1988; Murtagh & Hurley

1989; Scully 1990). If the wall continued parallel to Arundel Square (Site VI), it lay outside the area of excavation.

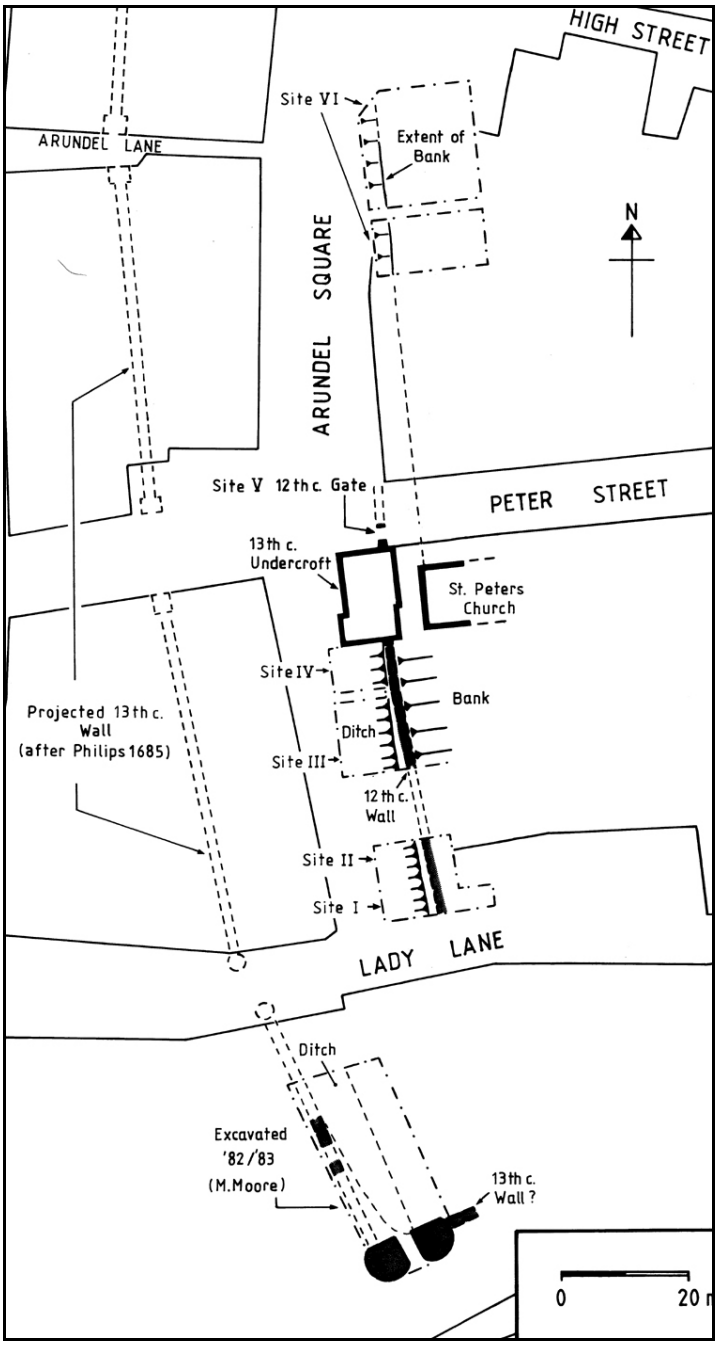


Fig. 302: Location map of Sites I-VI of the excavated defences of Waterford, 1982-92 (after Hurley et al. 1997, 21).

The western (outer) side of the late eleventh-century defensive bank was cut away for a width of between 2.8-3.5m to make way for the stone wall with the bulk of the excavated material being backfilled into the eastern side of the ditch, almost filling it. The wall contained a coursed stone-faced exterior with a mortared rubble core projecting above a footing of one to two courses.

The outer face was well built and battered while the inner face (built against the bank) was more irregularly faced and vertical. The wall was built as a revetment against the remaining

eastern half of the earlier defensive bank. It survived to over eight courses above a stone footing along the northern section and may have originally stood at over 3m high.

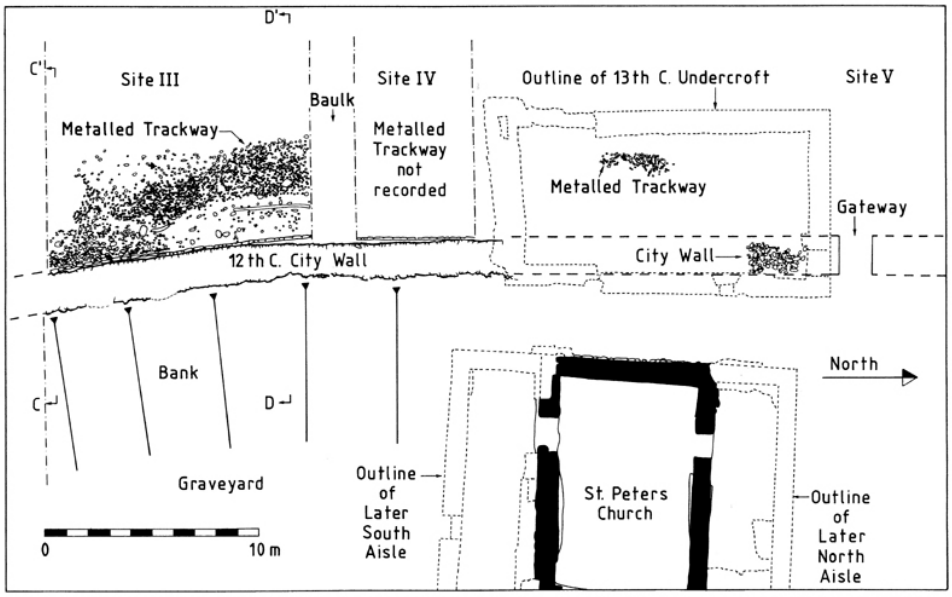


Fig. 303: Plan of excavated defences at Bakehouse Lane, Waterford (after Hurley et al. 1997, 23).

Two distinct building styles were identified in the wall, one towards the north and the other to the south with a distinct constructional break where both meet at the southern end of Site III. The wall along the southern section (Lady Lane (Site I) to almost midway through Site III) was faced with large conglomerate boulders and roughly dressed blocks of sandstone laid horizontally in rough courses above a single-course footing.

Two vertical discontinuities were apparent along the northern length though the masonry was of similar style- regular courses of rectangular or squared roughly dressed shale and sandstone blocks. The discontinuities in the masonry may reflect the practice of building the wall in sections by different groups of masons.

The western (outer) face of the stone wall and a gateway were exposed on the southern side of modern Peter Street (Site V). The gateway consisted of two ashlar built jambs of sandstone, three to four courses high above projecting single-course plinths. A compacted ‘street’ surface of boulder clay at the same level of the plinths was uncovered 3m below modern Peter Street.

The wall was set back from the eastern lip of the ditch creating a narrow berm which increased from 1m at the north end, to 1.7m at the south end due to the divergence of the wall. A metalled surface (4m-4.5m wide) was laid partially on top of the berm, and over the backfilled ditch and extended parallel to the wall for most of its excavated length (II, III and IV, but not I).

Constructional debris such as mortar and chipped stones- apparently derived from dressing the stones used in the wall- overlay the track-way and indicate that it was built shortly before the wall was built. Overlying the chippings was a series of horizontally-laid radially-split oak beams 1m to the west of the stone wall which extended parallel to it for over 14m. The beams ran along the edge of the berm and may have marked the line of firm ground.

One beam lying directly on the chippings yielded a dendrochronological date of 1132±9 and indicates that the wall was probably constructed in the second quarter of the twelfth century.

Layers of dumped organic material accumulated rapidly outside the western (outer) side of the stone wall contained a significant quantity of mid/late twelfth-century pottery sherds (e.g. Ham Green, Minety-type, southeast Wiltshire and coarse cooking wares), as well as butchered bone, horn cores and red deer antler.

Mid-Twelfth century Bank and Ditch

Settlement rapidly expanded to the west outside the line of the early/late-twelfth-century stone wall constructed along the line of Arundel Square and Bakehouse Lane. There is evidence that this was well underway by the mid-twelfth century when a number of houses were found to be built above the backfilled ditch. The line of another later twelfth century (possibly pre-Anglo-Norman) defensive bank and ditch was uncovered in a series of excavations further west (Wren 1998, 2000, 2001 & 2002; Moran 1999). Subsequently, this defensive ditch and bank fell out of use and was replaced in the early thirteenth century by a new defensive wall with gate-towers.

Excavations at 9 Arundel Square (Wren 1998) uncovered the ditch and bank close to the early thirteenth century city wall. The bank had a maximum excavated width of 7.64m but was probably at least 1-2m wider and survived to a maximum estimated height of 1.4m above the occupation debris. Three sherds of Ham Green cooking ware (early twelfth/mid-thirteenth century) were recovered from a clay layer that may have formed part of this bank.

The bank fell out of use and was covered partly by backyard occupation debris, possibly belonging to a second level of houses fronting onto Arundel Square. Associated with these layers was some late-twelfth/early-thirteenth-century pottery. A defensive stone bank was subsequently built into the clay bank, 17.5m west of the modern street frontage of Arundel Square.

The defensive bank and ditch were uncovered in a further excavation at 17-18 Broad Street (Moran 1999). The fills of the ditch included thirteenth/fourteenth-century pottery. The eastern boundary of the excavated site roughly corresponds with the north-south line of the city defences found also by Wren (1998) at 9 Arundel Square.

A series of excavations on the north side of Lady Lane between 2000-2002 uncovered the line of a defensive bank and ditch to the west of this outer defensive ditch and bank (Wren 2000, 2001 & 2002). The site was again situated to the immediate west of the earlier twelfth-century defensive wall at Arundel Square and Bakehouse Lane. A drain was built through the bank on an east–west line and presumably carried water out of the town into the ditch. The ditch upper fills contained twelfth/fourteenth-century pottery. Substantial layers of occupation debris were deposited within the ditch in the late twelfth to early thirteenth century. A stretch of the early thirteenth century Anglo-Norman city wall and the remains of the Lady Lane gate-tower were also excavated.

Part of the remains of a defensive stone wall was also uncovered by Moore (1980-84; 1983) during his excavations at Lady Lane to the west of the line of the early/mid-twelfth century stone wall. It extended in a north-south direction but turned and extended eastwards parallel to the marsh of St. John's River. He also identified a shallow (1.5m deep) north-south broad ditch (7.0m wide) to the east of the wall as well as two east-west orientated post-and wattle structures dated by the excavator to the twelfth century (Hurley 1997b, 10).

STREETS AND PATHWAYS

The Scandinavian town of Waterford was located within a naturally protective triangular space flanked by the River Suir to the north and St. John's River and marshland to the east and south. The settlement had a west-east axis expanding westwards in the eleventh and twelfth centuries, possibly from an original tenth-century *Dún* at the eastern end of the promontory.

Though the archaeological evidence is lacking, it has been suggested that the tenth-century *Dún* may have contained a single main bisecting street from the river front to Cathedral Square with the main west gateway on the crest of a roughly east-west ridge to the north of the cathedral.

The settlement expanded to the west in the eleventh and twelfth centuries with the formal layout of three east-west streets- High Street, Peter Street and Lady Lane- outside the postulated original nucleus. The east-west crest of the ridge broadened out to the west and contained the three streets with the break in slope occurring north of High Street and south of Lady's Lane.

A 16m length of the original mid/late-eleventh-century metalled surface of Peter Street was excavated (Scully & McCutcheon 1997, 55). The road was laid directly on the old ground surface and appears to have been contemporary with the earliest level (mid-eleventh century) of houses. The street was considerably damaged by a modern service trench though may have been approximately 3.6m wide originally. The excavated portion of the street was subsequently covered by a build-up of organic material and was never substantially resurfaced.

The three main east-west streets were crossed by three or four north south bisecting streets and lanes which continued downslope to the banks of the River Suir where ships were presumably docked. Type 4 sunken buildings were excavated adjacent to the modern north-south Olaf street and could tentatively indicate a laneway of late eleventh century date (Hurley 1997b, 9-10).

There is a considerable corpus of excavated pathways associated with plot boundaries and buildings. Over half of the Waterford Type 1 houses contained pathways, particularly outside the back doors. These pathways to the rear of the buildings were best preserved and consisted of a variety of material including gravel, wattle mats, limestone slabs and timber (Scully 1997a, 37).

The paths at the front of the houses were not as long as those to the rear, owing to the proximity of these houses to the streets (Scully 1997a, 37). Modern service trenches had unfortunately truncated the front of most of the street-fronting Type 1 buildings though two buildings at Peter Street revealed short paths connecting the houses to the streets.

PLOTS AND FENCES

There is a general dearth of boundary fences at Scandinavian Waterford in contrast to the abundant evidence from Dublin (Scully & McCutcheon 1997, 106). The location and evolution of plot boundaries at Waterford seems to have been more fluid than excavated examples in Scandinavian Dublin which were rigidly adhered to throughout the centuries (Wallace 1992, 47). The plot boundaries at Waterford were divided by post-and-wattle fences.

Fourteen contiguous plot boundaries were excavated at Peter Street (E639, E527, E406 and E434) along an area almost 90m long, each plot containing the superimposed strata of at least twelve levels of houses dating from the mid-eleventh to early fourteenth century (Scully & McCutcheon 1997, 53-137). The plots were not all occupied at any one time and the property boundaries changed slightly through the centuries.

Where the plot boundaries were excavated, they were usually confined to the vicinity of the backyard houses with rarely any evidence for boundary divisions between street-fronting houses (Scully & McCutcheon 1997, 54 & 106). The Type 2 houses in the backyards of the earlier levels at Peter Street were also found to often transgress the boundary of previous plots indicating that plot boundaries locations were not always strictly adhered to. One rare excavated plot fence at Peter Street was uncovered in Level 1 (mid-eleventh century) and was associated with a log track-way of horizontally-laid oaks (Scully & McCutcheon 1997, 54).

At least fourteen plots were uncovered in a series of excavations adjacent to High Street (E406, E434, E527), of which only eight contained definite structural evidence (McCutcheon 1997a, 142). Post-medieval features had truncated much of the street-fronting sites though it was possible to identify a series of north-south boundary fences associated with these plots to the east of Arundel Square (McCutcheon 1997a, 149; McCutcheon & Hurley 1997, 154).

An east-west boundary fence was uncovered 2.0m from the southern limit of an excavation along the northern side of Arundel Square- at the western end of Peter Street and High Street (McCutcheon 1997a, 149). The boundary division was maintained in various forms from the earliest to the latest level where it was represented by a stone wall on a wooden raft with piled foundations dated to A.D. 1508 (McCutcheon 1997a, 149). It was suggested that this east-west boundary could represent a division between the Peter Street and High Street properties though as these streets diverged to the west, it could alternatively form part of a central plot boundary.

Four east-west plots were uncovered at the western extent of the twelfth-century town along Bakehouse Lane (E343, E435, E550 and E422) which joins Peter Street at the north to Lady Lane at the south (McCutcheon 1997b, 164-165). Three of the plots to the north were contiguous with each other while a further one was situated at the extreme south of the series of excavated sites.

STRUCTURES

Scandinavian House Types

This section will identify the different types of structures that were present in Scandinavian Waterford and follows with descriptions of some of these buildings from a variety of excavation reports. Wallace (1992 & 2001) has identified seven main types of buildings recovered within the Irish Scandinavian towns. Types 1, 2, 4, 6 and possibly Type 7 have been identified at the Scandinavian settlement at Waterford.

Type 1 buildings comprise the vast majority of excavated examples and have been found from the mid-ninth to twelfth-century levels. Type 1 structures were long, rectangular buildings with rounded corners. They had low post-and-wattle walls and a rood that was supported by two pairs of large posts that were set in from the side and end walls. A stone-lined hearth was centrally placed and doors were usually located at each end of the building. The buildings were divided by aisles and the long central floor was flanked on both sides by built-up bedding which ran parallel to the side walls. The average floor area was 40m^2 (Wallace 1992, 9–14). The Type 2 buildings were sub-rectangular in plan, with pronounced rounded corners, and were smaller than Type 1 structures with an average area of 15m^2. They were not aisled and rarely had formal fireplaces. The door was usually in the sidewall and the walls were generally formed with a double line of post-and-wattle. Type 3 (1992, 16–7) are typically slimmer and shorter versions of Type 1 structures that were built in narrow and smaller plots. Type 4 buildings are sunken structures in which the floor is situated below ground level. Examples have been recorded at Waterford, Dublin and Limerick. Type 5 structures describe small huts without roof supports which probably functioned as animal pens or were utilised for other outdoor activities (Wallace 1992a, 17–8;). Type 6 buildings refer to Sill-Beam structures with load-bearing walls which appear to have been constructed from the early-twelfth century onwards in Waterford and Cork. Type 7 refers to rectangular stone buildings found within Hiberno-Scandinavian towns. They have also only been found at Waterford and date to the mid twelfth century.

Excavated Waterford Scandinavian Type Houses

There is a considerable corpus of excavated Scandinavian and medieval buildings in Waterford city. Though a small number of these buildings have been excavated recently (e.g.

Wren 1993 & 1998), the vast majority (118 house foundations) were uncovered between 1986-92 when an entire city block involving four streets was excavated (Scully 1997a, 34). The earliest and most common type was post-and-wattle structures (64 houses). Also excavated were twelve stone houses, six sunken buildings, five stone-footed buildings, four unidentified structures, three stone undercrofts, two timber buildings, and one stone and timber building. Forty-six buildings had evidence for re-flooring.

Two thirds (43) of the post-and-wattle buildings (1986-92) were Type 1 with the remaining third (21) of Type 2. The Type 1 post-and-wattle buildings at Waterford were mostly single walled (68%) and invariably contained doorways in the end walls. A feature of the interior of the Waterford Type 1 buildings unique to anywhere else in Ireland was the fireside benches which occurred between the central hearth and the side aisles. The benches consisted of rectangular raised areas adjacent to the hearth occasionally delimited by planks or post-holes. All except one of the excavated Type 1 houses between 1986 and 1992 were street-fronting (Hurley 1997g, 896).

Discrete occupation deposits containing animal bone, straw, hazelnut fragments, cereal grains and other material covered the floors of the buildings, particularly in the central aisle close to the hearth. The floors of the side aisles frequently revealed a brushwood covering, interpreted as sleeping areas. Eleven of the 43 Type 1 building's contained horizontal doorway thresholds while 37 had evidence for hearths, nine of which were kerbed with stones. The hearths were situated midway between the two entrances in the middle of the central aisles and were associated with numerous post- or stake-holes interpreted as the remains of cooking-spits or pot-cranes.

Type 2 house constituted 33% of excavated wattle structures (1986-1992). Almost half of these buildings were double-walled. Unlike the Fishamble examples in Dublin, the Waterford Type 2 houses were occasionally subdivided into side aisles. They also contained clay floors generally without any coverings of wattle, brushwood and mats though organic bedding material was recovered from a number of the Peter Street structures containing side aisles (Scully 1997a, 38).

Nine of twenty one Type 2 houses in Waterford contained hearths, all but one were simple spreads of burnt clay. The lack of plant remains in the hearths indicates that foodstuffs were not being prepared in the houses. Type 2 houses mostly occurred as subsidiary buildings to the rear of the street-fronting Type 1 houses (Hurley 1997g, 896). They were identified as the possible sleeping quarters of the principal residents of the Type 1 houses as they contained frequently insulated walls, bedding material and a degree of privacy (Hurley 1992, 65; 1997g, 897).

Type 4 sunken floored structures have been uncovered in Waterford city and date to the late eleventh century. The excavated remains comprised four sunken buildings in Peter Street, Olaf Street and High Street and stone-lined passages of a further two structures in the *Insula* South. The buildings were all situated inside the later eleventh century defences. Three of the buildings at Peter Street and Olaf Street were located along the street frontages and may represent the principal structures on these properties (Walsh 1997, 45).

The buildings all had a similar method of construction, set in pits with a uniform depth of 1.5m below the contemporary ground level and their walls formed of vertically set staves of radially split ash placed directly in a narrow trench around the sides of the pits (chambers). An upper storey at ground level was supported by opposing load-bearing oak uprights set along the lines of the stave wall. The buildings also generally contained stone faced, steeped entrances leading into the chambers (Walsh 1997, 48).

The sunken building from Peter Street can be securely dated to the late-eleventh century as three primary structural uprights from the structure produced estimated felling dates centring on A.D. 1083±9. A late eleventh century date for all the sunken buildings at Peter Street, Olaf

Street and High Street is indicated by the recovery of later eleventh-century coarse-wares and Bath 'A' wares from their primary levels (Fig. 304). Sherds of southeast Wiltshire glazed pottery and Ham Green wares from the backfilled material of these structures indicate that the buildings had fallen out of use by the mid-twelfth century. The tradition of stave-built houses was confined to sunken floored structures in Waterford until the mid-twelfth century (Hurley 1997d, 41).

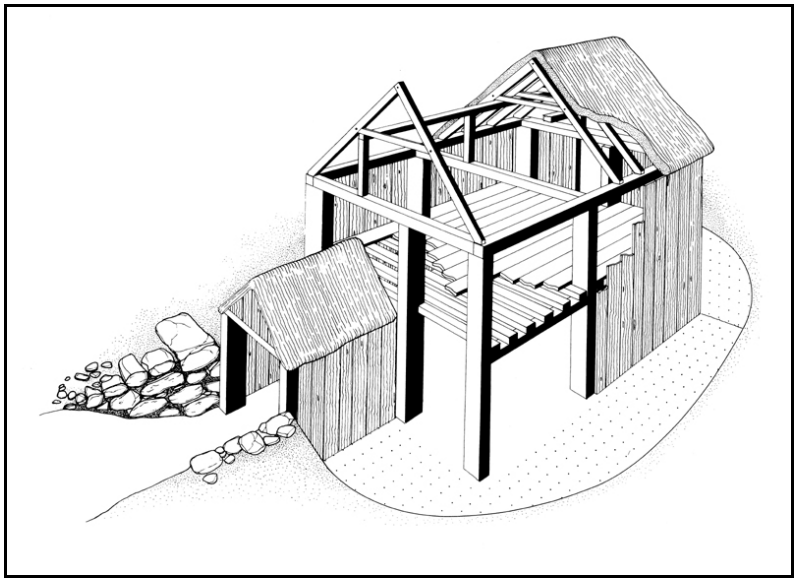


Fig. 304: Artistic reconstruction of sunken building in Peter Street, Waterford (after Hurley et al. 1997, 48).

Type 6 sill beam structures were constructed from the early-twelfth century in Waterford. These houses were built using substantial load-bearing upright earth-fast timber posts in the perimeter walls connected by horizontal ground beams called sill-beams or base-plates. The interior of the earliest of these buildings were similar to post-and-wattle type 1 houses and consisted of a central clay-covered aisle, a central hearth and side-aisles (Scully 1997a, 38). Later examples contained areas of internal stone paving often near the hearths and internal house drains.

Over 21 sill-beam structures have been excavated in Waterford city (1986-92). The earliest structures in the early-twelfth century were excavated in the *Insula* North- an area between the western end of Peter Street and High Street with the latest at Arundel Square- at the western end of Peter Street and High Street- dating to the early-thirteenth century (Scully 1997a, 38).

The first structures in the *Insula* North- the area between Peter Street (south), High Street Arundel Square and Cooke Lane- were situated away from the street-frontage and might indicate a population increase in the early-twelfth century. In contrast, the mid/late-twelfth-century sill beam houses were all located along street frontage indicating the increasing importance of this type of building (Scully 1997a, 38).

A substantial stone and timber house with a possible timber upper storey was excavated at the *Insula* North and dated to the third quarter of the twelfth century. The building was a hybrid of the sill-beam house and the stone-footed type (below) and the structure's closest design parallel was the cruck house (McCutcheon & Hurley 1997, 154-64; Scully 1997a, 39). The timber uprights supported the load-bearing element while the stone wall functioned as a perimeter wall. The structure was classified by Wallace as a Type 7 Hiberno-Scandinavian building (Scully 1997a, 39).

By the early thirteenth century, fully framed sill-beam timber superstructures were being raised upon on stone-footings. The plank walls set inside sill-beam foundations were raised on the low stone walls which were used to both level the beam and avoid underlying dampness. Five stone footed buildings were excavated at Waterford (1986-92) and contained load-bearing walls. Stone-footed structures were replaced by completely stone-built houses and undercrofts by the mid-thirteenth century.

Distribution

The comprehensive excavations fronting onto Peter Street (Fig. 305) yielded details of fourteen contiguous plots along an area almost 90m long, each containing the superimposed strata of at least twelve levels of houses (Scully & McCutcheon 1997, 53-137). With the exception of the sunken floored building in Level 4, Levels 1-8 were dominated exclusively by post-and-wattle structures, with Type 1 houses fronting the street, and Type 2 generally to the rear. The sunken floored building measured 5.2m by. 4.3m, and its two storeys had roughly the same floor space of a Type 1 structure.

Substantial sill-beam timber-built houses gradually replaced post-and-wattle structures as the primary building type from Level 9 in Peter Street (mid/late-twelfth century). Although the sill-beam buildings were far more robustly built, they did not occupy a ground-floor area significantly larger than the post-and-wattle structures (Scully & McCuthcheon 1997, 106). Stone-footed buildings were first used in Level 11 (late-twelfth/early-thirteenth century).

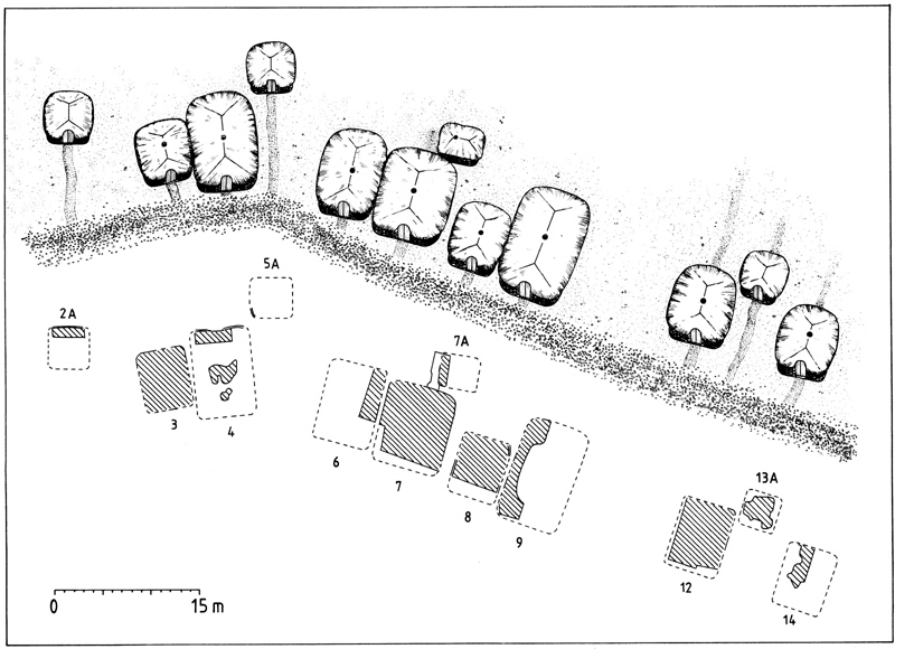


Fig. 305: Level 1 (mid-eleventh century) house plots on Peter Street, Waterford (after Hurley et al. 1997, 55).

Two sunken floored buildings were excavated at Level 4 (late-eleventh/early-twelfth century) adjacent to Olaf Street (McCutcheon 1997a, 137-41). The sunken buildings were occupied in Levels 4 and 5 and backfilled in Level 6 or possibly 7. The backyards of these houses were estimated to extend westwards to another sunken-floored building in High Street. The proximity of these three sunken floored buildings indicates that they may have shared a common yard.

A series of excavations also yielded considerable, albeit fragmentary, evidence for Scandinavian type structures and plots fronting onto High Street, to the north of Peter Street. At least fourteen plots were uncovered in a series of excavations adjacent to High Street, of which only eight contained definite structural evidence (McCutcheon 1997a, 142). The

excavated evidence was confined to the backyards of the street-fronting houses which had been completely truncated by post-medieval basements (Fig. 306).

The earliest High Street structures were dated to the late-eleventh/early-twelfth century (Level 4), perhaps indicating that development in this area was slightly later and perhaps less intense than Peter Street. The excavated structures from these High Street sites comprised Type 2 post-and-wattle structures, a Type 4 sunken-floored house (mentioned above) and type 6 sill-beam houses.

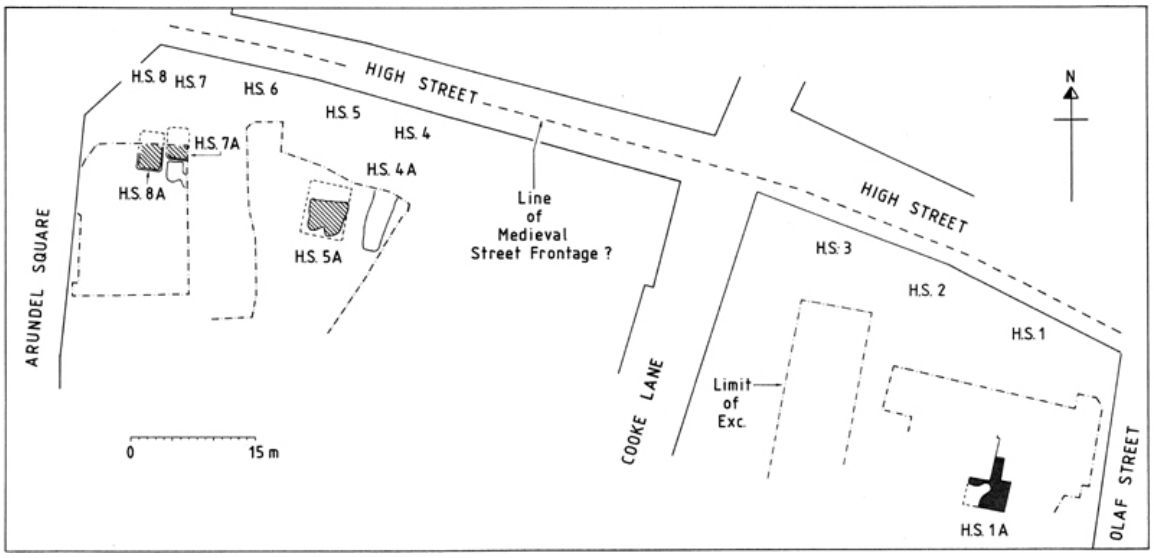


Fig. 306: Excavated buildings on High Street, Waterford, 1986-92 (after Hurley et al. 1997, 142).

Excavation at the eastern end of High Street also yielded a sequence of clay-floored houses fronting onto the street in an area fortunately undisturbed by post-medieval basements. A large quantity of fish bones was later dumped over the site (Reid 1993; McCutcheon 1997a, 142).

Two late-twelfth-century sill-beam structures (Level 10) were excavated along the more northerly 26m of Arundel Square, situated at the western end of Peter Street and High Street. The western walls of the structures possibly abutted the defensive stone wall built in the second quarter of the twelfth century (McCutcheon 1997a, 149-154).

An excavation at 9 Arundel Square uncovered the remains of a sill-beam structure fronting onto Arundel Square (Wren 1998). It was at least 7.3m long east-west though only 1m of its north-south extent was exposed. Pottery from associated contexts may indicate a late-twelfth century date for the structure. To the rear of the street-fronting house was a series of small structures within a backyard extending west for at least 10m.

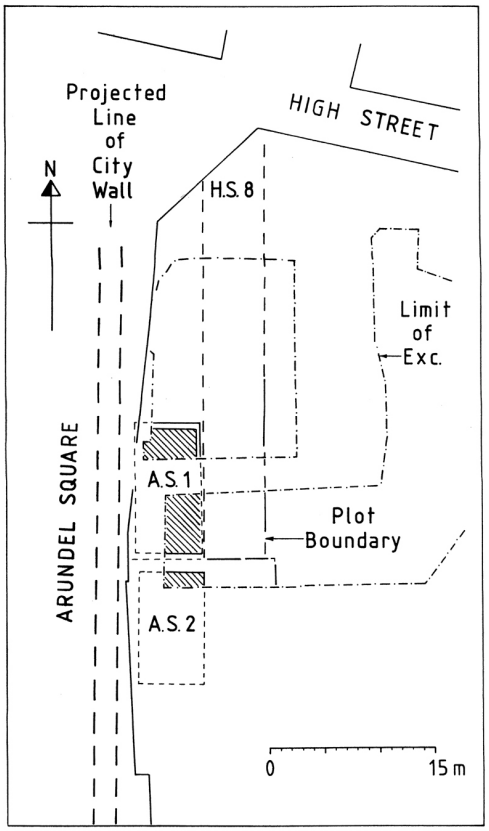


Fig. 307: Excavated buildings on Arundel Square, Waterford, 1986-92 (after Hurley et al. 1997, 150).

The term *Insula* North was used to define the non street-fronting structures lying between Peter Street and High Street to the south and north and Arundel Square and Cooke Lane and its west and east sides. The structures in the *Insula* North (north-south) was comparable to that of the street-fronting houses along High Street and Peter Street. This, along with the absence of any formal pathways or alleyways leading to these *Insula* structures would suggest that they were situated to the rear the street-fronting properties (McCutcheon & Hurley 1997, 154).

The earliest features consisted of scatters of stake/stake-holes, a cistern, pits and several drainage features- shallow gullies to small ditches. A roughly built small stone enclosure set in uncoursed mounds (2.6m by 4.7m) was uncovered adjacent to the cistern. Two wood-lined pits close by to the east and south are likely to be contemporary. Another slightly later (early twelfth century) pit was excavated to the east (McCutcheon & Hurley 1997, 154).

Six house sites were excavated in the *Insula* North and fell into two groups- late eleventh/early to mid twelfth century and late twelfth century. The fragmentary remains were almost exclusively of sill-beam structures. The dating of the earlier group is significant as it indicates the existence of this building type in the early twelfth century which was contemporary with the exclusively post-and-wattle street-fronting Peter street houses (McCutcheon & Hurley 1997, 155) (Fig. 308).

The second group dates to the late twelfth century and consisted of at least two sill-beams structures and a substantial stone and timber house with a possible timber upper storey. The closest parallel to the design of this structure was the cruck house (McCutcheon & Hurley 1997, 156). It dated to the mid-late twelfth century and was occupied till the mid thirteenth century.

Structures were uncovered in excavations along Bakehouse Lane which joins Peter Street at the north to Lady Lane at the south at the western end of the town (Fig. 309). Traces of early houses were uncovered along Bakehouse Lane beneath the cemetery of St. Peter's church. The earliest structures fronting the north of Peter Street also pre-dated the earthen defensive ditch and bank, indicating an 'unprotected' westward expansion of the town.

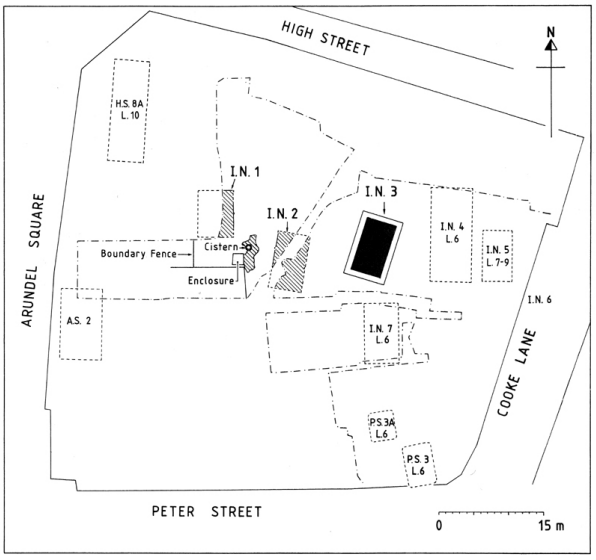


Fig. 308: Excavated buildings in the Insula North, Waterford 1986-92 (after Hurley et al. 1997, 155).

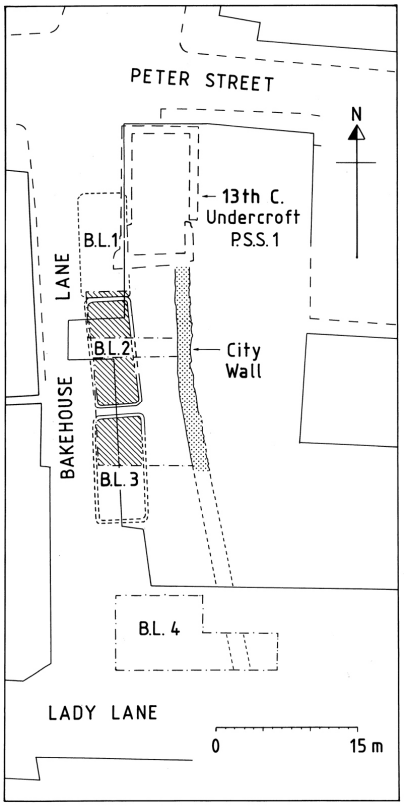


Fig. 309: Excavated buildings along Bakehouse Lane, Waterford, 1986-92 (after Hurley et al. 1997, 165).

Fragmentary structural remains were uncovered in four east-west plots along Bakehouse Lane. The earliest features were in the most southern plot and consisted of an unlined hearth laid upon the bank material, re-deposited in the late eleventh-century defensive ditch as well as some uprights, possibly indicating some structure (McCutcheon 1997b, 164-65).

The three northerly plots were established later (Levels 9-10, (mid/late-twelfth century)) and were built above and to the west of an area of extramural dumping which occurred after the construction of the first stone defences of the town. They contained a series of Type 1 and 2 structures late in the sequence of wattle-walled buildings. The entrances were unusually in long axis of the house which occupied the width of the plot (north-south). The houses were large by Waterford standards (10m-11m by 5.5m-6m) with the north and south portions of the structures divided into distinct 'rooms' from the central area (McCutcheon 1997b, 165).

The term *Insula* South was used to define the evidence of houses to the south of Peter Street and north of Lady Lane and bounded to the west by the eleventh-twelfth century ramparts (Fig. 310). Post-medieval basements had truncated most of the archaeological layers along Lady Lane. Deliberate levelling and successive burial also meant the limited survival of structures in the area of St. Peter's church in the northern half of the *Insula*. Structural remains were identified in four areas of the *Insula*, of which one contained a definite type 1 house (McCutcheon 1997b, 172-75).

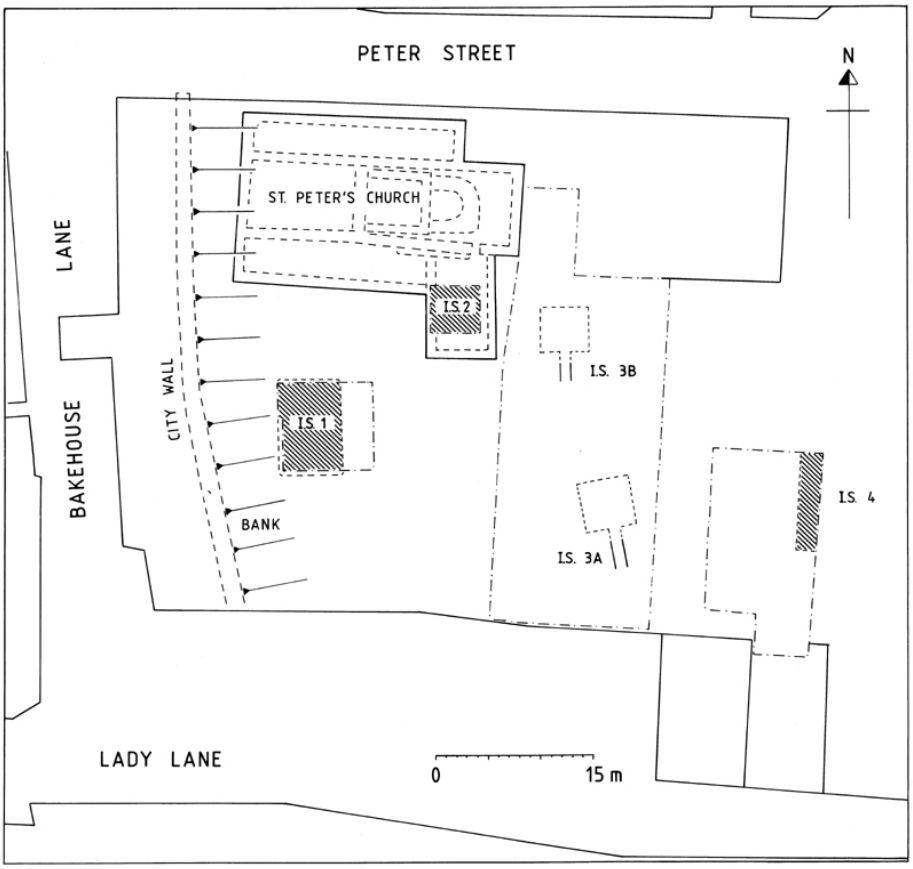


Fig. 310: Excavated buildings in the Insula South, Waterford, 1986-92 (after Hurley et al. 1997, 173).

An excavation at Lady Lane in the early 1980s uncovered evidence for the remains of the 'old wall' a shallow (1.5m deep) broad ditch (7m wide) to the east as well as two east-west orientated post-and wattle structures which pre-dated the cutting of the ditch and were dated by the excavator to the twelfth century (Moore 1980-84; 1983; Hurley 1997b, 10).

An excavation at the corner of Little Patrick street and Baronstrand Street outside the city's pre Anglo-Norman defences (Wren 1993) uncovered a series of fragmentary clay floors and post and wattle walls running south-west/north-east. The features were interpreted as the remains of ancillary buildings located within the backyard of a plot fronting onto Little Patrick St. Eleven occupation levels dated from the mid-twelfth to early thirteenth century.

Chronology
The Waterford Type 1 buildings have been dated to the mid-eleventh/early-thirteenth century (Peter Street- Levels 1-11) though had ceased to be the dominant architectural form by the mid twelfth century. The Type 2 post-and-wattle buildings have a similar date range to the Type 1 houses. They were generally situated to the rear of the properties in an ancillary position to the frequently street-fronting Type 1 structures (Scully 1997a, 37; Hurley 2003, 153). Four street-fronting Type 2 houses were, however, excavated at Peter Street (Scully 1997a, 37). Sunken floored stave-built buildings (Type 4) were first built in the late eleventh century and were in use simultaneously with post-and-wattle structure until just before the mid-twelfth century when ground level sill-beam structures gradually emerged as the dominant architectural form. Stone-footed buildings became common in Scandinavian Waterford in the early thirteenth century with stone houses and undercrofts more common from after the mid thirteenth century.

CRAFT

The excavations at Waterford city have produced considerable evidence for eleventh-twelfth century craft-working and industrial activities. A considerable quantity of twelfth- fourteenth century leather artefacts- shoe, boot fragments and clothing, belts and straps, handles, bag fragments and binding strips were uncovered in the excavations (O'Rourke 1997, 703-35). Cowhide was the most popular followed by calfskin, goatskin and sheepskin. The finds were dominated by footwear, many of which demonstrated evidence of repair and patching. Also, recovered was a large quantity of tools including awls, punches and files- which indirectly indicate evidence for leatherworking at Waterford.

Abundant artefactual evidence for cloth making was uncovered in Scandinavian Cork and included stone, wooden and bone spindle-whorls, metal and wooden needles and tenterhooks. The earliest stratified spindle-whorl was made of sandstone and dated from the early to mid twelfth century (McCutcheon 1997c, 405). The majority of the needles dated from the late eleventh to mid-twelfth century and may have been used for sewing and embroidery (Scully 1997d, 451). Evidence for weaving is indicated by an iron weaver's sword, pin-beaters and a possible weaver's comb. A flat sword-shaped artefact from the floor of a sunken building in Olaf Street was tentatively identified as an iron weaver's sword (Scully 1997d, 470; Hurley & McCutcheon 1997b, 589-98).

The excavated houses, ditches and cess/rubbish pits produced a large collection of textiles, ropes, string, animal hair and vegetable remains (Wincott Heckett 1997, 743), shedding valuable light on people's clothing in the eleventh and twelfth century. Test on a number of textile samples indicated that a small number of had evidence for dying (Walton Rogers 1997, 760-61). A mid eleventh to early-twelfth-century potash glass linen smoother was uncovered in a type 1 building in the *Insula* South (Bourke 1997, 381-389).

Fragments of lathe-turned and stave-built vessels testify to the evidence of wood turning and coopering in Waterford. The bases of a number of wooden baskets are also identified in the course of excavations (Hurley & McCutcheon 1997b, 616 & 618-623). Various parts of ships and boats- stem, mast, bulkhead, knee and floor timbers- were also recovered from the Scandinavian phases and could suggest boat-building in the city in this period (McGrail 1997, 636). It was suggested that the resident of one house at Peter Street was primarily engaged in woodworking as a concentration of wood-chips was found in association with the house (Hurley 1997g, 898).

Large amounts of antler and bone waste as well as horn cores were recovered from the late eleventh to early twelfth century organic layers in the defensive ditches and from twelfth century extramural dumping (Hurley 1997e, 650). Large concentrations of antler off-cuts were uncovered in two houses house at the western end of Peter Street and could suggest that the residents were primarily engaged in the production of combs and other antler objects (Hurley 1997g, 898).

Bone and antler were used to make a wide variety of artefacts at Scandinavian Waterford- combs, casket mounts, gaming-pieces, spindle-whorls, needles, pint-beaters, pins, handles, toggles, drinking horns, tuning pegs, a flute, a possible whistle and cut bone and antler hollow cylinders- in Scandinavian Waterford. The bone and antler artefacts were all recovered primarily from house floors, associated backyards and pits of twelfth- and early-thirteenth-century date.

INDUSTRY

Over 200 hone-stones were recovered from the Waterford excavations (McCutcheon 1997c, 410-21). They dated from the eleventh century and were used for the sharpening of cutting tools and artefacts. The hones varied from rough blocks to well-fashioned stones pierced for suspension. Also recovered were a small collection of rotary grindstones (McCutcheon 1997c, 410 & 421).

A collection of pebbles/pot-boilers were also recovered in the excavations, particularly from features within houses- either accumulation occupation debris or from the floors or hearths (McCutcheon 1997c, 405-06). A group of five was uncovered near the hearth of a mid-twelfth century post-and-wattle house in Peter Street. It was suggested that the regular occurrence of these artefacts in domestic contexts would support their use as pot-boilers.

Evidence for cereal cultivation is attested by a considerable quantity of quern-stones, iron shears and a sickle blade from the various excavations (McCutcheon 1997c, 424-29). Almost all of were rotary querns and many were decorated, one of which contained an incised cross. An iron spade, a number of wooden rakes, pitchforks and shovels as well as five pruning hooks dating to between the late-eleventh and late-twelfth centuries were also found. The hooks were hafted to a shaft and used for pruning trees (Scully 1997d, 461-69; Hurley & McCutcheon 1997b, 600).

Evidence for fishing is attested by the recovery of a collection of weights, net-sinkers and fish hooks from the various excavations dating from the late-eleventh century (McCutcheon 1997c, 421). The fish hooks were mostly recovered from twelfth-century contexts (Scully 1997d, 461).

Four objects were tentatively identified as stone crucibles or moulds though alternatively it was suggested that they could have also functioned as mortars or pivot stones (McCutcheon 1997c, 422). A collection of stone crucibles were also recovered on other sites such as Garranes, Co. Cork where it was suggested that they were used for glass and enamel manufacture. A number of late eleventh-early twelfth century decorated motif-pieces were also uncovered in the excavations and indicate which are likely to be ‘goldsmith’s sketches and trials in advance of casting on site or at some other location (O’Meadhra 1997, 702).

Evidence for metalworking was uncovered on the floor of a house at the eastern end of Peter Street (mid-twelfth century). The excavation revealed four shallow pits rich in slag and charcoal which were cut into the clay and gravel floor of the house (Scully & McCutcheon 1997, 100). Roman glass sherds have been uncovered in Scandinavian contexts in Dublin, York and possibly two pieces from Waterford (E527) and it was suggested that they may represent imports for the purpose of bead-making (Bourke 1997, 381). Commercial activity at Waterford city is attested by a number of copper-alloy scales, one scale-pan and various discs and cylinders of lead-probably used as weights (Scully 1997d, 466-68) as well as a

considerable assemblage of imported pottery (Hurley 1997g, 899). There was a notable scarcity of Scandinavian coins recovered in the excavations.

The Waterford excavations produced a considerable quantity of animal bone dating from the mid-eleventh century (McCormick 1997, 819). The bone assemblage was dominated by the three principal domesticates- cattle, sheep/goat and pig- but also included horse, dog, cat and wild animals- red and roe deer, hare, hedgehog, wolf, wild pig, seal, cetacean, otter and possible fox. Field crops including oats, hulled barley, bread-wheat, wheat, rye and possibly flax as well as wild foodstuffs- fruits and berries- dominated the archaeobotanical evidence (Tierney 1997, 888-93).

Other important artefacts from the Waterford excavations included a twelfth century decorated kite-brooch, twelfth century copper-alloy dog collar band, stone lamps, vast quantity of metal stick and dress pins and iron and metal buckles. Various domestic artefacts included barrel-padlock keys, fragments of bowls, pot-hangers, pricket candle-stick, rush-light holders, mounts, iron hammers, iron axes, iron knives and metal tweezers, wooden spatula and wooden gaming-pieces. Horse equipment such as shoes, spurs, stirrups, links and cheek-pieces and leather harnesses were also recovered as were a variety of military artefacts- arrowheads, arrow-shaft and bow-staves and decorated leather sheaths and scabbards (Hurley 1997f, 736-42).

References:

Barry, T. B. 1997. Waterford: a historical Introduction, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 12–9.

Bourke, E. 1997. The Glass, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 381–9.

Bradley, J. & A. Halpin 1992. The topographical development of Scandinavian and Anglo-Norman Waterford, in *Waterford history and society: interdisciplinary essays on the history of an Irish county*, eds. W. Nolan & T. P. Power Dublin: Geography Publications, 105–29.

Gittings, A.S.R. 1986:075. St Peter's Church', Custom House B Ward. www.excavations.ie.

Gittings, A.S.R. 1987:052. St Peter's Church/Bakehouse Lane, Custom House, B Ward www.excavations.ie.

Gittings, A.S.R. 1988:062. St Peter's Church/Bakehouse Lane, Custom House B www.excavations.ie.

Hayden, A. 1987:053. Lady Lane/Bakehouse Lane, Custom House Ward www.excavations.ie.

Hayden, A. 1988:063. Bakehouse Lane, Custom House Ward www.excavations.ie.

Hayden, A. 1989. Report of excavations at Bakehouse Lane, Waterford (Unpublished), Dublin: The Heritage Service, Department of Environment.

Hurley, M. F. 1988. Recent Archaeological Excavations in Waterford City. *Archaeology Ireland,* 2(1), 17-21.

Hurley, M.F. 1990:108. Arundel Square, Custom House Ward, Waterford www.excavations.ie.

Hurley, M. F. 1992. Late Viking Age Settlement in Waterford City, in W. Nolan & T. P. Power (eds.) *Waterford history and society*. Dublin: Geography Publications, 49–72.

Hurley, M. F. 1995. The Vikings in Munster: evidence from Waterford and Cork. *Archaeology Ireland,* 9(3), 23–5.

Hurley, M. F. 1997a. The Excavations: general Introduction, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation, 1–6.

Hurley, M. F. 1997b. Topography and Development in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation, 7–10.

Hurley, M. F. 1997c. The defences, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford City, 20–33.

Hurley, M. F. 1997d. The use of wood as a structural raw material in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 40–4.

Hurley, M. F. 1997e. Artefacts of Skeletal Material, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 650–98.

Hurley, M. F. 1997f. Sheaths and Scabbard, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 736–42.

Hurley, M. F. 1997g. General Conclusions, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation, 894–9.

Hurley, M. F. 2003. A review of domestic architecture in Cork, in *Excavations in Cork City 1984-2000*, eds. R. M. Cleary & M. F. Hurley Cork: Cork County Council, 151–70.

Hurley, M. F. & McCutcheon, S. W. J. 1997a. St. Peter's church and graveyard, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et*

al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley. Waterford: Waterford Corporation, 190–227.

Hurley, M. F. & McCutcheon, S. W. J. 1997b. Wooden Artefacts, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 553–633.

Hurley, M. F., Scully, O. M. B., & McCutcheon, S. W. J. 1997. *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley,* Waterford: Waterford Corporation.

Hurley, M. F. & Sheehan, C. M. 1997. Ovens and kilns, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 273–7.

Hurley, M. F. 1998. Viking age towns: archaeological evidence from Waterford and Cork, in M. A. Monk & J. Sheehan (eds.) *Early Medieval Munster: archaeology, history and society*. Cork: Cork University Press, 164–77.

Hurley, M. F. 2001a. Domestic architecture in medieval Cork and Waterford (11-17th century), in M. Glaser (ed.) *Lubecker Kolloquium zur Stadlarchaologie im Hanseraum II: Der Hausbeau*. Lubeck, 15–34.

Hurley, M.F. 2001:1250. Exchange Street/High Street, Waterford. www.excavations.ie.

McCormick, F. 1997. The Animal Bones, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 819–53.

McCutcheon, S. W. J. 1997a. Olaf Street, High Street and Arundel Square, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation, 137–53.

McCutcheon, S. W. J. 1997b. Bakehouse Lane, Insula South, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 164–75.

McCutcheon, S. W. J. 1997c. The Stone Artifacts, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley.*Waterford: Waterford Corporation 404–31.

McCutcheon, S. W. J. & Hurley, M. F. 1997. Insula North, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation, 154–63.

McGrail, S. 1997. The Boat Timbers, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 636–42.

Moore, M.J. 1980-84:0196. Waterford (Lady Lane). www.excavations.ie

Moore, M. J. 1983. City walls and gateway at St. Martin's castle. *Decies: Journal of the Waterford Archaeological & Historical Society,* 23, 50–61.

Moore, M.J. 1984. A small corner of Waterford's Past: a preliminary report on the excavations at Lady Lane, Dublin: Dúchas.

Moran, J. 1999:0852. 17-18 Broad Street, Waterford. www.excavations.ie

Murtagh, B. 1997. The architecture of St. Peter's Church, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*.Waterford: Waterford Corporation 228–43.

Murtagh, B., & Hurley, M. F. 1989:093. Custom House B Ward. www.excavations.ie

Ó Floinn, R. 1998. The archaeology of the early Viking age in Ireland, in H. Clarke, M. Ní Mhaonaigh & R. Ó Floinn (eds.) *Ireland and Scandinavia in the early Viking age*. Dublin: Four Courts Press, 131–65.

O'Donnell, M. 1999:0851. Bailey's New Street, Waterford. www.excavations.ie

Power, P. 1943. The town wall of Waterford. *Journal of the Royal Society of Antiquaries of Ireland,* 73, 118–36.

O'Meadhra, U. 1997. Motif-pieces and other decorated bone and antler work, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation, 699–702.

O'Rourke, D. 1997. Leather Artefacts, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. McCutcheon Waterford: Waterford Corporation, 703–36.

Reid, M. 1993:217. 19-21 High St., Waterford. www.excavations.ie

Scully, O. 1990:109. Bakehouse Lane 11, Custom House Ward. www.excavations.ie

Scully, O. 1992:174. Keyser St./High St, Waterford. www.excavations.ie

Scully, O. 1992:175. Peter's St, Waterford. www.excavations.ie

Scully, O. M. B. 1997a. Domestic architecture: introduction and discussion, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation, 34–9.

Scully, O. M. B. 1997b. The Stone Undercrofts, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley.*Waterford: Waterford Corporation 176–85.

Scully, O. M. B. 1997c. Late medieval and post-medieval stone houses, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 186–9.

Scully, O. M. B. 1997d. Metal Artifacts, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 438–89.

Scully, O. 1998:639. Deanery Garden, Waterford. www.excavations.ie

Scully, O. 1999:850. Bailey's New Street, Waterford. www.excavations.ie

Scully, O. M. B. & McCutcheon, S. W. J. 1997. Peter Street, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 53–136.

Scully, O. M. B. & McEneaney, E. 1997. Pits, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation, 244–72.

Tierney, J. 1997. Plant Remains, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 854–93.

Wallace, P. 1992 The archaeology of the Hiberno-Norse town. Journal of the Royal Society of Antiquaries of Ireland, 122, 35–66.

Wallace, P. F. 2001. Ireland's Viking Towns, in A Larsen (ed.) *The Vikings in Ireland*. Roskilde: The Viking Ship Museum, 37–50.

Wallace, P. F. 2005. The Archaeology of Ireland's Viking-Age Towns, in D. Ó Cróinín (ed.) *A new history of Ireland. Vol. 1 Prehistoric and early Ireland*. Oxford: Oxford University Press, 814–41.

Walsh, C. 1987:051. High St./Peter St., Custom House B Ward. www.excavations.ie

Walsh, C. 1988:061. Peter St./Olaf St./Custom House B Ward. www.excavations.ie

Walsh, C. 1989. Stratigraphic report on excavations at Peter St., High St., Olaf St., Waterford, Dublin: Dúchas.

Walsh, C. 1997. Sunken Buildings, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation, 45–52.

Walton, R., P 1997. Tests for dye in textile samples, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late Viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford Waterford Corporation 760–1.

Wincott Heckett, E. 1997. Textiles, Cordage, Basketry and Raw Fibre, in M. F. Hurley, O. M. B. Scully & S. W. J. McCutcheon (eds.) *Late viking age and medieval Waterford: Excavations 1986-1992 /Maurice F. Hurley, Orla M.B. Scully with Sarah W.J. McCutcheon; based on excavations and stratigraphic reports by Andrew S.R. Gittins ... [et al.]; editors: Terry Barry, Rose M. Cleary and Maurice F. Hurley*. Waterford: Waterford Corporation 743–60.

Wren, J. 1993:219. Little Patrick St./Barronstrand St., Waterford. www.excavations.ie

Wren, J. 1998:638. 9 Arundel Square. www.excavations.ie

Wren, J. 2000:1006. Lady Lane, Waterford. www.excavations.ie

Wren, J. 2001:1254. Lady Lane, Waterford. www.excavations.ie

Wren, J. 2002:1813. Lady Lane, Waterford www.excavations.ie

Woodstown 6, Co. Waterford
Hiberno-Scandinavian *Longphort*
Grid Ref: **S55021127 (255022/111276)**
SMR No: **N/A**
Excavation Licence: **02E0441 & C191 /E2964**
Excavation Duration/Year: **March-May 2003; August-September 2003; March-June 2004; March-May 2007**
Site Director: **I. Russell (Archaeological Consultancy Services & DoEHLG)**

Woodstown 6, excavated in advance of the proposed N25 Waterford Bypass, revealed evidence for a possible ninth/tenth century Scandinavian *longphort* associated with considerable industrial, craftworking and mercantile activities. The site is situated close to the point of confluence of the River Suir and an area of marshland containing Killoteran stream, approximately 6 km south-west of Waterford city. The site was the subject of initial testing in 2003 with archaeological excavations undertaken in 2004 for the construction of a water culvert. Subsequent excavations were undertaken in 2007 for the DoEHLG funded Woodstown 6 Supplementary Research Project.

Excavations focused on two low-lying (7.97m OD) fields on the south banks of the Suir. Initial testing was undertaken within the two fields in 2003 with further monitoring in 2004. A series of small investigations were undertaken in 2007 in fulfillment of the Woodstown 6 Supplementary Research Project, carried out on behalf of the DoEHLG. The site was partially trunctuated by cultivation activity and the construction of the nineteenth century Waterford-Lismore-Dungarvan railway-line which ran along the south bank of the River Suir.

Prehistoric activity at the site was indicated by a number of disturbed flint artefacts including a barbed and tanged arrowhead and a possible Bronze Age corn-drying kiln found outside the early medieval enclosure in culvert one at the northern end of the site. The possible kiln or oven represents at the site is one of the earliest of its kind in Ireland.

The possible Scandinavian *longphort* was bounded by the southeast bank of the River Suir and two concentric ditches which appear to enclose a roughly D-shaped area (Fig. 311), 480m by 120m. A smaller D-shaped enclosure defined by a shallow ditch in the northern field could also be contemporary with the main double-ditched enclosure. The chronological developments of the two ditches of the main enclosure are not yet completely understood though excavations indicate that they were consecutive rather than contemporary, with the larger, outer ditch being cut after the inner shallower ditch was backfilled.

The precise length and extent of the ditches was not completely established. The northern extent of the enclosure was trunctuated by the railway line and much of the southwestern area of the site lay outside the proposed line of the road scheme. The line of the two ditches was uncovered in the northeastern field close to the River Suir and geophysical survey has identified that both extended southwestwards terminating in marshy ground around Killoteran stream.

Excavation in advance of a culvert (1) at the northern end of the site revealed that the two ditches had a complex stratigraphy with multiple fills and possible re-cuts. The earliest, shallower ditch was associated with an internal bank covered with a pattern of stake-holes which may possibly represent some form of palisade at its top. The ditch was trunctuated by ploughing and the larger outer ditch was at least 2.2m wide and 0.6m deep.

The inner ditch remained open for a period of time as the bank appears to have slipped back into it and also seems to have been re-cut at least once. The inner ditch was subsequently backfilled and stake-holes were inserted into this fill to form a palisade for a larger ditch which was uncovered immediately outside the line of the smaller, earlier one. The larger outer ditch measured 3m wide and 1.3m deep at the culvert and was re-cut several times. Away from the culvert (1) trench, the outer ditch was even wider- 4.1m wide and 1.2m deep.

A stone metalled entrance-way, 7.5m wide was uncovered on the eastern landward side of this complex stratigraphy in culvert 1. One ditch was exposed on the opposite landward side of this entranceway and appears to belong to the line of the larger 'outer' ditch. The inner, shallower ditch also continued on the opposite side of the entranceway but this could not be confirmed as its projected route lay outside the culvert 1 trench. The two ditches forming the eastern enclosure were excavated within the roadtake at the northern end of the site.

Excavations at the southwestern end of the site overlooking the Killoteran Stream also uncovered a ditch 2m by 1m. The fill of this ditch/pit produced a date of a two sigma date of between A.D. 675-901 (highest probability). It was subsequently sealed by a deposit of burnt stones dated to A.D. 860-1018 (highest probability). After this spread was laid down in the southwestern field, the site appears to have been open in this area (Russell *et. al.* 2007, 43).

The earliest stratified finds in the excavated ditches included a possible hone-stone and a small fragment of lead (< 1 gram in weight) indicating possible lead-working on site. An oak sample from a charcoal-rich deposit in the lower fill of the outer ditch returned a 2Σ date of between the end of the fourth century and the mid sixth century. A large collection of artefacts including burnishing or polishing stones, hone-stones, an iron nodule, a possible glass bead and two amber beads were also recovered in the ditches.

Only a relatively small area of the enclosure has been investigated. A considerable quantity of early medieval artefacts were recovered from the ploughsoil in both field which suggest that while the lower levels of cut features may survive intact, much of the habitation evidence may have been destroyed by subsequent post-medieval cultivation. The distribution of the finds indicates that domestic artefacts- knives and hones- were concentrated in the northern field.

A significant number of hearths, pits, spreads, slot-trenches and post and stake-holes were excavated within the interior of the enclosure ditches and indicate intensive settlement activity. Scatters of post-and stake-holes throughout the site, particularly in the northern field indicate a number of potential oval and rectilinear houses. A sample from the fill of a pit associated with an arc of post-holes and a hearth returned a radiocarbon date of (A.D. 675-901) and indicates that these structures were possibly in use sometime between the seventh and ninth centuries.

A sub-rectangular structure defined by a slot-trench- 10.44m by 7.1m at its greatest extent- was excavated in the south-western field (Russell, 2007, 67 & 81). The slot-trenches appear to have been constructed in two phases. The structure contained a number of floor surfaces and a possible spud-stone on its western side may have marked an entrance. Two external metalled surfaces may have functioned as pathways leading to additional structures to the west.

A considerable quantity of crucibles, hone stones, tuyère fragment and rotary sharpening/ polishing stones indicate that this structure had an industrial rather than a domestic function. There was evidence- glass beads, droplets and slag- that glass was being worked in the immediate area, and probably within the structure itself (Russell 2007, 82).

Excavated pits, hearths, kilns and other cut features were found throughout the area of the enclosure though were primarily concentrated in the southwestern field, indicating that considerable industrial activity was undertaken in this area of the site. A very substantial spread of dark clay, charcoal and heat-shattered stone was deposited upon a number of cut features in the southern field indicating at least two phases of activity in this area.

Immediately outside the enclosure in the southern field close to Killoteran stream were excavated a hearth surrounded by a stake-built windbreak. The hearth was associated with a number of spreads which presumably represented work surfaces or industrial dumping.

Stratified rotary sharpening or polishing stones were recovered from two of the spreads and a possible posthole and indicate that metal-working, or more specifically finishing activity occurred in this area, possibly contemporary with occupation in the main enclosure (Russell, Harrison et. al 2007, 86).

A Viking grave was discovered 22m outside the enclosure entrance at the northern end of the site. It was accompanied by one sword, a shield boss, a spearhead, a battle axe, a copper-alloy ring pin and a perforated hone-stone and may have originally been covered by a small cairn of stones.

Considerable on-site manufacturing activity involving iron, copper alloy, silver, glass and perhaps lead-working, woodworking, ship repair and textile production have been uncovered at Woodstown. Extensive evidence for ferrous and non ferrous metalworking was uncovered in both fields and included crucible fragments, sharpening or polishing stones, ingots of iron copper alloy and silver, stone mould(s), tuyère and furnace fragments and large quantities of slag. Debris associated with over 140 smithing hearths and possible *in situ* metal-working furnaces/hearths were uncovered both inside and outside the main enclosure.

One of the *in situ* furnaces/hearths was excavated within a sheltered portion of one of the larger outer ditch terminals at the northern end of the site. A fill of the furnace was radiocarbon-dated (A.D. 426-600) to between the early-fifth and late-sixth century. The furnace was sealed when a deposit containing waste and finished artefacts and radiocarbon-dated to the late sixth and seventh century (A.D. 582-694) was dumped into the ditch.

Another furnace was excavated outside the enclosing ditch. Three post-holes around the circumference would have supported a flue or chimney lined with daub into which a set of bellows was probably inserted. The recovery of a lead weight from the oxidised clay of the furnace indicates that it may have been used for smelting lead or silver ingots, or possibly the forging of lead-weights (O'Brien and Russell 2005, 122). .

At least four nodules of silver-melt debris were recovered in the topsoil soil and indicate that silver was also being worked as well as exchanged at the site. Over 600 possibly Viking/medieval ship rivets were also revealed in the excavations at the site and it has been suggested (Bill 2006) that many possibly belonged to ships of a Scandinavian clinker-built tradition. Bill (2006, 11) has suggested that the quantity of these rivets indicates that ships could have been repaired or at least broken up at, or, in the vicinity of Woodstown.

Textile production is indicated by a number of stone spindle whorl, including one from a post-hole in the northern field as well as a stone loom weight from the ploughsoil. Also recovered were eight perforated lead artifacts which may have functioned either as weights or spindle whorls (Quinney 2005, 52) and three sets of shears or scissors (Quinney 2005, 52).

Food-production from the site is also indicated by a quantity of fish-hooks and a sickle which it was suggested was of a Norwegian rather than Irish type (Russell *et. al.* 2007, 48).
A considerable number of rotary sharpening stones for metalwork were uncovered from both the ploughsoil and stratified contexts, particularly within the ditches. Other domestic artifacts included a quantity of hone-stones, copper-alloy tweezers, fragments of bone combs and four weights, possibly used for weighing down thatch (McNamara 2005, 126-27).

The trading and mercantile interests of the site is also demonstrated by over two hundred lead pan weights, 30 pieces of hacked silver ingots, stamped and unstamped silver arm-rings and a fragment of two probable silver *kufic* coin from Arabia- all predominantly recovered from the ploughsoil. Also recovered were a number of glass and amber beads as well as an ivory bead- possibly walrus from the North Atlantic (McNamara 2005, 128). It was suggested that one fragment of amber may represent a piece of craft-working debris (Harvey 2005, 6) indicating that these objects were not only being imported but worked on-site.

It has been suggested that there was a pre-Scandinavian settlement at the site (O'Brien & Russell 2005, 121) based principally on a number of early finds and early radiocarbon dates from the ditches. Some typically ecclesiastical finds- copper caskets, stud mounts, possible book clasp and an ornate circular mount possibly from a house shrine- were recovered and it was suggested that they could indicate the presence of an ecclesiastical settlement or subsequent Viking loot.

A more recent reappraisal of the site (Russell *et al*. 2007, 29-33) has suggested that the site was primarily occupied between in the ninth and tenth centuries A.D. with no clear evidence yet for any pre-Scandinavian settlement. The earliest radiocarbon dates were from oak-based samples from the lower fills of the larger ditch and have been attributed to the old-wood effect. All but four of the radiocarbon dates (excluding the possible Bronze Age corn-drying kiln) produced date ranges between A.D. 650-1020 (Russell *et al*. 2007, 29) and centre particularly on the ninth and tenth centuries.

A number of the artefacts- the burial, silver ingots, lead weights and the ship rivets- are diagnostically Scandinavian and also point to a settlement with considerable mercantile and trading interests, most probably in the ninth and tenth centuries. The site was abandoned sometime in the eleventh century and might suggest that inhabitants moved upstream to the developing settlement at Waterford city.

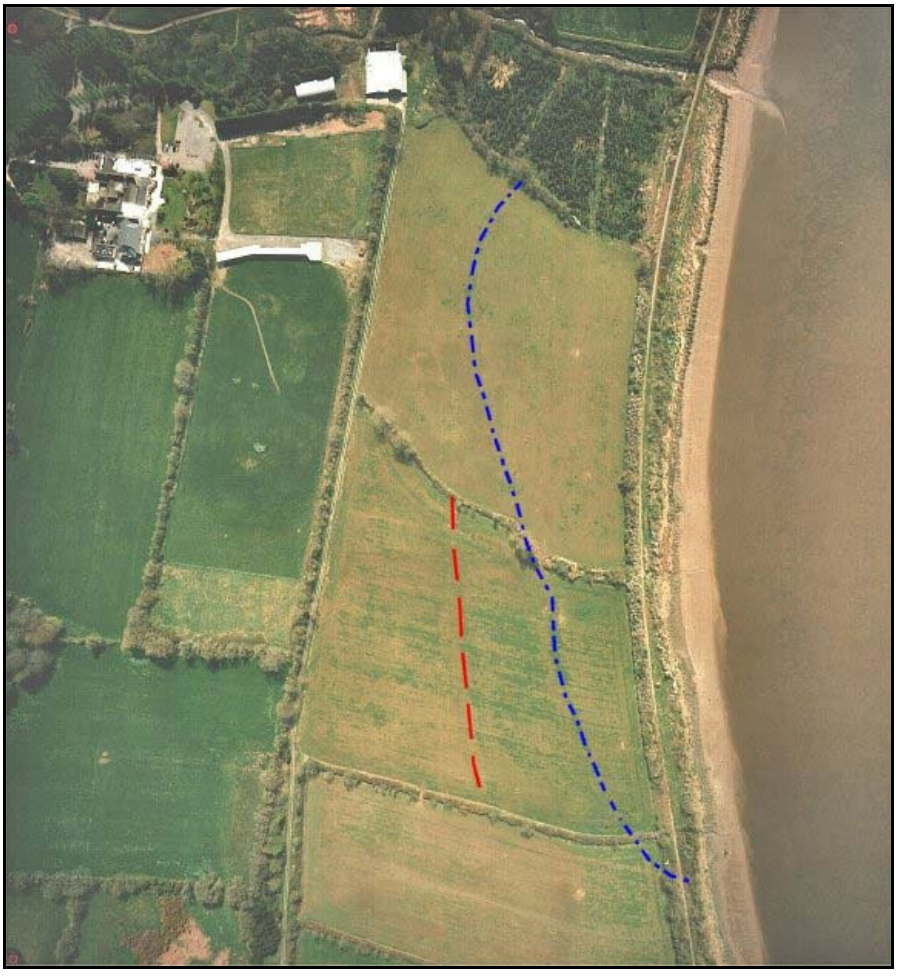


Fig. 311: Aerial photograph of Woodstown, Co. Waterford, showing outline of longphort (blue) (after Russell 2003, pl. 46).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
Beta- 183142	Charcoal from fill of pit	1040±60 BP	**AD 883-1156**
Beta- 183143	Fill of oval shaped pit	1190±60 BP	**A.D. 688-754** **A.D. 757-973**
Beta- 194062	Deposit of burnt stones sealing pit/ditch	1110±40 BP	A.D. 783-787 A.D. 817-843 **A.D. 860-1018**
Beta- 194063	Later fill of enclosure ditch sealing smithing hearth	1380±40 BP	**A.D. 582-694** A.D. 704-705 A.D. 748-765
Beta- 194064	Fill of pit	1140±40 BP	A.D. 779-794 **A.D. 800-987**
Beta- 194065	A primary fill of the enclosure ditch sealed by smithing hearth	1590±40 BP	**A.D. 393-561**
Beta- 194066	Fill of smithing hearth within fills of enclosure ditch	1540±40 BP	**A.D. 426-600**
Beta- 194067	Fill of post-hole	1260±50 BP	**A.D. 665-878**
Beta- 194068	Fill of hearth/kiln	1130±60 BP	A.D. 729-735 **A.D. 772-1020**
Beta- 194069	Fill of pit/ditch sealed by burnt stone deposit	1210±60 BP	**A.D. 675-901** A.D. 916-967
Beta- 195833	Wood from TCD Borehole No. 1 in wetland	3440±40 BP	**B.C. 1881-1663** B.C. 1650-1641
Beta- 195834	Wood from TCD Borehole No. 1 in wetland	4300±50 BP	B.C. 3088-3059 **B.C. 3030-2865** B.C. 2805-2760
Beta- 197002	Alder root from trench No. 1A in wetland	3810±40 BP	B.C. 2457-2418 B.C. 2407-2375 B.C. 2367-2361 **B.C. 2351-2137**
Beta- 197003	Alder wood from trench No. 2 in wetland	1230±40 BP	**A.D. 684-887**
Beta- 197004	Alder root from trench No. 2 in wetland	2760±100 BP	B.C. 1255-1238 **B.C. 1214-771**
Beta- 197005	Oak wood from trench No. 3 in wetland	2110±80 BP	**B.C. 367-A.D. 27** A.D. 40-48

References:

Eogan, J. 2006. From the Euphrates to the Suir: an eighth century Islamic coin from Woodstown, Co. Waterford. *Seanda: National Roads Authority Magazine*, 1, 67.

Eogan, J. 2007. Revealing the treasures within: Conserving the Viking age weapons from the Woodstown warrior grave. *Seanda: National Roads Authority Magazine*, 2, 9–11.

O'Brien, R. & Russell, I. 2004. A preliminary note on the archaeological site of Woodstown 6, Co. Waterford. *Decies: Journal of the Waterford Archaeological & Historical Society*, 60, 65-70.

O'Brien, R. & Russell, I. 2005. The Hiberno-scandinavian site of Woodstown 6, County Waterford, in J. O'Sullivan & M. Stanley (eds.) *Recent Archaeological discoveries on National Road Schemes 2004: Proceedings of a seminar for the public, Dublin, September 2004*. Bray: Wordwell, 111–24.

McNamara, S. 2005. Woodstown 6: the finds, in J. O'Sullivan & M. Stanley (eds.) *Recent Archaeological discoveries on National Road Schemes 2004: Proceedings of a seminar for the public, Dublin, September 2004*. Bray: Wordwell, 125–30.

Russell, I. 2003. Archaeological Excavation of Woodstown 6, (ACS Unpublished Report).

Russell, I, Harrison, S.H., Nichols, J, Kinsella, J, McNamara, S & O'Hare, M. 2007. Woodstown 6 Supplementary Research Project (Unpub'd ACS Report for the DoEHLG).

County Westmeath

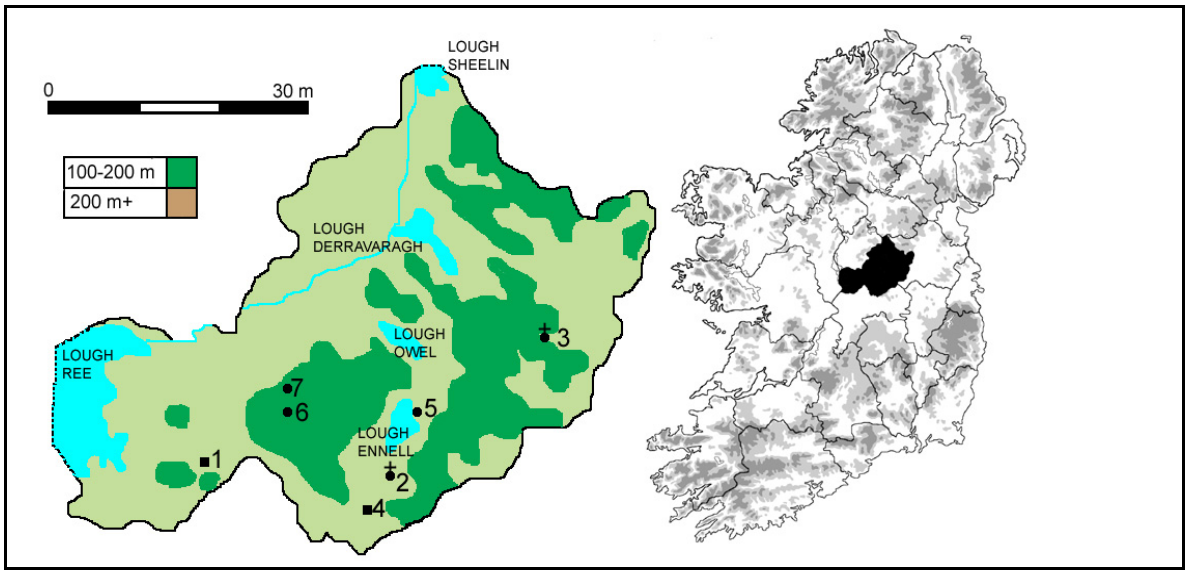


Fig. 312: Significant early medieval excavations in Co. Westmeath.

1	Ballinderry I	**5**	Rochfort Demesne
2	Clonfad	**6**	Togherstown
3	Kilpatrick	**7**	Uisneach
4	Newtownlow		

Ballinderry I, Co. Westmeath
Early Medieval Crannog
Grid reference: **N19884262 (219884/242620)**
SMR No: **WM030-118**
Excavation Licence No: **N/A**
Excavation duration/year: **1932.**
Site directors: **H. O'N. Hencken (Harvard Archaeological Mission)**

The early medieval crannog of Ballinderry no. 1, Co. Westmeath produced occupation evidence for the tenth and eleventh centuries A.D., with intermittent activity on the site until the seventeenth century. The crannog survived as a large weed-covered hillock, measuring 33m by 20m, at the north-west end of an original lake that formerly lay between glacial moraines (close to the *Eiscir Ríada* routeway across the midlands). At the time of its investigation this had been drained to marshy and boggy land. The discovery of a Viking sword in 1928 had brought it to the attention of Adolf Maher of the National Museum. The site was excavated by the Harvard expedition in 1932. The site has since been the subject of various important re-interpretations.

Hencken's interpretation of Ballinderry No. 1
Hencken interpreted the site as a large circular crannog built on a large raft-like central foundation, with phases of an internal plank palisade and an outer pile palisade, with a large entrance, a wooden quay and a series of three houses, the earliest of which occupied most of the island. He believed that the archaeological evidence represented two main phases of occupation, in the latter part of the tenth century and through the eleventh century. The rectangular raft-like structure of thick oak logs which lay in the centre of the site, he took to be the foundation layer. It measured 6m square and was constructed of heavy logs laid directly on the lake-bed, probably during a dry period. The platform had raised sides and pegs driven deeply into the clays. The raft was enclosed by small posts describing a circular structure and timbers were laid radiating out from the centre. Many of these timbers had complex joints and peg-holes, suggesting they derived from a re-used wooden structure. Most of the artefacts associated with the raft-structure can be dated to the tenth or early eleventh century A.D. The finds from the lowest layers, associated with the raft structure, included two iron socketed and riveted Viking spearheads, an iron bill-hook with a decorated socket, some nails, hones, a decorated bone comb plate, some wooden implements, a paddle and a large wooden tub. There was also a small carved and dowelled wooden 'knee', possibly from a plank-built boat. Finds from the next layers, also apparently below House 1, included a tenth-century bronze ring-headed pin, iron knives, some decorated wooden vessels, a possible wooden motif-piece and a possible pack-saddle. The most spectacular find was an ornately carved, yew-wood gaming board, decorated in a style now thought to reflect both Hiberno-Scandinavian and Anglo-Scandinavian styles (although it was probably made in Dublin). This gaming board probably dates to the tenth-century. A Viking battle axe was found outside the crannog and may have dated from these earliest layers. Human remains are also known from the site.

Hencken interpreted this raft-like platform (and the associated layer of peat, brushwood, animal bone and ash spreads which covered it) as the foundation for a subsequent large horseshoe shaped structure and, indeed, the entire crannog. This horseshoe-shaped structure was interpreted as the earliest house (House 1) for which the crannog was built. A large hearth was in use at its centre. The finds from the layers apparently comprising the floor of House 1 included a fine iron Viking sword, its handle decorated with silver and its blade inscribed with the letters *VLFBEHRT*. This sword is of a type produced in the ninth century in the Rhineland and exported throughout Europe; a yew bow, a type of weapon more typical of Viking warfare tactics than Irish, was also found on site. There were some objects found at this level, but outside the house, which included an iron plough coulter, iron rings, objects of

leather, lignite, bone and antler. There were also some wooden buckets and lathe-turned bowls.
Hencken believed that, after a brief period of occupation, House I sank into the lakebed sediments and it was covered by more layers of peat and brushwood. He believed that two further houses (Houses II and III, probably one house in reality) were then constructed at one corner of the site, but the central hearth continued in use. Finds from these layers included a Viking silver kite-shaped brooch, bronze pins, iron chain links, a millstone, bone comb fragments, a wooden dug-out boat and wooden tubs and hoops. The only find from the floor of House II was an iron knife. House III produced a bronze pin, a bone needle and a wooden dugout boat. Finds from the central hearth included a bronze pennanular brooch and pin, bone, iron, glass, wood and antler objects. The wooden quay structure outside the crannog produced an iron woodworking axe and a wooden tub.

The excavator believed that House II and House III then fell out of use and were covered with a layer of clay, some planks on this surface may indicate the construction of a fourth house (House IV). There were two hearths and ash spreads at this level. Finds from these strata included various objects, such as bronze pins, buckles, querns, and a large iron side-axe or hewing axe (probably of a medieval date), hones and bone combs and pins, and objects of wood and leather. The site was covered by a layer of gravel and another deep layer of soil. A hearth was found in this top layer, with finds of coins indicating seventeenth-century occupation. Ballinderry crannog No. 1 produced an interesting range of seventeenth-century objects, such as pottery, several coins dating to about 1690, a brass-button, glass linen smoothers, lead bullets, some of which were probably being made there, and several fragments of clay pipes. There was also a range of metal and organic finds from un-stratified deposits outside the palisade, the most important of which were a tenth-century copper-alloy hanging lamp and an array of wooden objects.

Lynn's re-interpretation
Chris Lynn's stratigraphical and structural re-interpretations of the early phases of the site indicated that it comprised two crannogs. In his opinion, Hencken's 'House 1' was itself the primary crannog (Lynn's 'Crannog 1'), defined by the horseshoe-plan area of timbers strengthened by small piles with a smaller, roughly circular wicker house (Hencken's 'hearth surround', measuring 5m in diameter). The horseshoe timbers were actually the open-air decking around the circular house. Lynn believed that the outer pile palisade derived from a later period of occupation and was not contemporary with this early crannog. This later period of occupation involved the construction of a second, larger crannog (Lynn's 'Crannog 2') directly over 'Crannog 1. 'Crannog 2' had a larger palisade, two rectangular houses built near the edge of the site while a large open-air ash spread accumulated across the centre (although Newman interpreted this as a house floor). This enlargement could have come shortly after the construction of his 'Crannog 1'.

Newman's and Johnson's re-interpretations
Newman came to a similar conclusion through his re-analysis of the site and the typological characteristics of its finds. He also proposed House 1 was itself a crannog and that the circular hearth was a roundhouse. In his opinion, the crannog had a pile palisade, which was later reinforced by plank palisade, at the same time as which one entrance was blocked up. Ruth Johnson has also recently carried out a detailed re-evaluation of the early layers of the site and has re-examined the finds, particularly in terms of their stratigraphical context. Ballinderry No. 1 will now be summarised in terms of its likely sequence of development.

Phase 1 – Pre-crannog occupation (late tenth century AD)
Phase 1 saw the building of a rectangular log platform (6m by 6m), defined at its edges by a circular palisade (7m in diameter) of posts. This earliest occupation was built on the lake gyttas at a time when lake levels were low, possibly during a dry period. The rectangular platform was constructed of planks and beams laid in a rectilinear and radial fashion, with layers of peat and brushwood (up to seven layers), consisting of a likely habitation deposit of accumulated bones and peats. It had a raised edge, of horizontal beams. There was a

possible entrance to the north, represented by a gap in the post ring. There were two superimposed hearths (layers of grey clay and charcoal). It is possible that this was actually a rectangular house, as the timbers were quite complex and skilfully worked, perhaps similar to timber houses in Hiberno-Scandinavian Dublin. There were enormous quantities of animal bone on the site. Finds from this phase included two socketed spearheads, a decorated iron bill-hook, an iron tub hoop, an iron staple, nails, knife-blade fragment, metalworking detritus, two stone hones, a decorated comb, wooden vessels, wooden carding comb, two wooden paddles. There was an assemblage of artefacts that were of a distinctively Viking character; including a Viking long bow, two iron Viking spearheads, an iron Viking sword, an iron Viking battle axe, two glass linen smoothers and an iron strike-a-light. There was also a collection of objects that could be described as Hiberno-Scandinavian (with good parallels from tenth-century Dublin), including a decorated yew-wood gaming board, motif pieces, a kite brooch, ringed pins, a hanging lamp, a wooden zoomorphic terminal and a copper-alloy strap end. Interestingly, the artefacts could be both interpreted as male (i.e. weaponry) and female (i.e. carding comb, linen smoothers) in character.

Phase 2 – Primary crannog (early to mid eleventh-century AD)

Phase 2 sees the building and occupation of a 'classic', but modestly sized crannog, with a circular palisade (15m diameter), a house and a surrounding timber decking. A deposit of sterile, black peat was laid over the previous occupation. At the centre of the crannog was a medium-sized, circular house (House 1), measuring 5m in diameter, constructed of vertical posts with a possible entrance facing towards the south. The house's floor was a brushwood layer, with a wattle screen and a thin layer of clay suggesting that it was renewed. The house was surrounded (and eccentrically placed within) by a pennanular area of timbers laid concentrically to it. This appears to have been a timber walkway or decking around the house (15m in diameter). Human bones were found in the substructure of Phase 2.

Finds from the *substructure* of Phase 2 included copper-alloy pin fragments, a plain-ringed, loop-headed pin, two tanged knives, a stone hone, a leather shoe and a pig-fibula pin, a decorated wooden motif piece, stave-built vessels, a wooden ladle, a boat fragment (probably a knee from a dugout boat) and paddle. Finds from the *occupation layer* of Phase 2 included a copper-alloy strip, a wooden tub, an iron plough coulter, a socketed pronged tool (probably used for leather working), two iron rings, a lignite bracelet fragment, a double-sided bone comb and a leather off-cut. Finds from the *earliest phase of the house* included a plain, copper-alloy, pennanular brooch (tenth century type), a bronze pin, hones, an antler tip and a blue glass bracelet. Finds from the *intermediate phase* of the house included a silver kite-shaped brooch, three ringed pins, two bone combs, a millstone, hones, wooden containers. Finds from the *final phase of the house* included an iron spearhead and a single-sided comb.

Phase 3 – Primary crannog (mid eleventh-century AD)

Phase 3 sees the construction of an enlarged crannog, with a massive pile palisade (26m by 32m), a defined entrance to the southeast, a quay and a brushwood floor. The internal area of the crannog saw the deposition of a sterile peat layer over the whole area, burying the previous, abandoned house. A wattle screen was laid down and the site was enlarged to the east with layers of peat and brushwood. Indeed, the crannog was prone to slumping towards the east and many more layers were added there. The entrance was quite elaborate, with a passageway of posts lining the entrance area on either side. There was also a gatepost with a bar-hole to the southwest, indicating the use of a gate.

Phase 4 – Reconditioning of site (mid to late eleventh-century AD)

Phase 4 saw the reconditioning of the crannog, with the use of two houses, the repair of the palisade, the blocking of the entrance and the growing importance of the quay (suggesting that the crannog was now surrounded by water). The interior of the site was levelled off with peat and branches. There were various hearths within the site which have been interpreted as the floor of houses. There was a large, centrally placed 'hearth' of ashes that developed in two stages. This could have been a rectangular house floor. There was also two hearths at the northeast edge of the site (Hencken's House II and House III), with rectilinear plank floors and fireplaces. An oak plank palisade was inserted in those places where the pile palisade was in need of repair, particularly on the eastern side of the site (where the piles

were tilting dramatically). Finds from this phase included (Hencken's group 2, 3, 4) an iron knife, a crutch-head ringed pin, a boat fragment, a bone pin and a wooden tub. It is also possible that a bronze hanging lamp was lost outside the palisade at this stage.

Phase5 – Site abandonment (late eleventh-century AD)
Phase 5 sees the abandonment of the crannog, with a dark humus developing over the late hearths. There was a layer of gravel over this, which was succeeded by a thick superficial layer. There was some transitory activity on the site in the late middle ages, with a thirteenth-century axe-head deposited outside the crannog near the quay.

References:

Hencken, H. O'N. 1933. A gaming board of the Viking Age. *Acta Archaeologica*, 4, 85–104.

Hencken, H. O'N. 1936. Ballinderry crannóg no. 1. *Proceedings of the Royal Irish Academy Section C*, 43C, 103–239.

Johnson, R. 1999. Ballinderry crannóg No. 1: a reinterpretation. *Proceedings of the Royal Irish Academy Section C*, 99C, 23–71.

Lynn, C. J. 1985-6. Lagore, County Meath and Ballinderry No. I, County Westmeath crannógs: some possible structural reinterpretations. *Journal of Irish Archaeology*, 3, 69–73.

Newman, C. 1986. The archaeology of Ballinderry Lough. Unpublished MA thesis, NUI.

O'Sullivan, A. 2003. The Harvard Archaeological Mission and the politics of the Irish Free State. *Archaeology Ireland*, 63, 20–3.

Clonfad, Co. Westmeath
Early Medieval Ecclesiastical Enclosure
Grid reference: **N40594059 (240599/240591)**
SMR No: **WM032-089**
Excavation Licence No: **A001/036**
Excavation duration/Year: **November 2004 – February 2005.**
Site directors: **P. Stevens (Valerie J. Keely Ltd.)**

Topsoil stripping and subsequent excavation prior to road construction uncovered a hitherto unknown ecclesiastical enclosure near to a disused graveyard and ruined church. The site was located on the eastern slope of a low hillside, just to the south-east of Lough Ennell, which formed the traditional western boundary of the kingdom of Meath.

At least two concentric enclosure ditches were revealed during excavation – the outer ditch (3m wide and 1.7m deep) enclosed an area 200-220m in diameter; and the inner ditch (2.8m wide and 1.3m deep) enclosed an area 100-110m in diameter. Radiocarbon dates show this ditch was backfilled before the ninth century (see below). A smaller enclosure (around 50m in diameter) surrounded the ruined church site, and this lay in the middle of the larger enclosures, suggesting that the early medieval site may originally have consisted of three enclosures, the innermost of which has survived around the upstanding church and graveyard (Fig. 313).

Excavation revealed a series of phases of occupation on the site. Phase 1, the early monastic phase, produced evidence for further subdivision of the enclosures, which may have been associated with controlling the flow of a stream through the site. This phase produced occupation remains such as postholes, refuse-pits, cobbled areas, a possible workshop, and wells. There was evidence for substantial industrial activity associated with this phase, e.g. bone-working (for combs), button/bead manufacture, and textile production. The most significant industry, however, would appear to have been metalworking, and 1.7 tonnes of waste was recovered from the site, giving evidence for both ironworking and bronze-working. Ceramic crucibles, stone/clay moulds, tuyères, and bog ore deposits were all found in the outer ditch fills, and in the vicinity of large furnace bowls located on the side of the stream which flowed through the site. The earliest furnace on site was radiocarbon dated to the seventh/eighth century (see below). Metalworking on the site appears to have been associated with the construction, and brazing, of ecclesiastical hand-bells.

The site carried on in use during the Anglo-Norman period (Phase 2), and through into the post-medieval period (Phase 3), when the church was abandoned and a walled graveyard created.

Over 600 finds were recovered from the site, including iron tools, iron blades, an iron ringed pin; a bronze ringed pin; coins; bone pins; rotary quernstones; and a lignite bracelet.



Fig. 313: Aerial photograph of Clonfad, Co. Westmeath, showing excavated outer and middle ditches and inner enclosure around ruined church (after Stevens 2007, 42).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
N/A	Fill of middle ditch.	N/A	**A.D. 803-856.**
N/A	Furnace	N/A	**A.D. 656-732.**

References:

Stevens, P. 2006. A monastic enclosure site at Clonfad, Co. Westmeath. *Archaeology Ireland*, 20.2, 8–11.

Stevens, P. 2007. Clonfad 3: a unique glimpse into early monastic life in county Westmeath. *Seanda*. National Roads Authority Magazine, 2, 42–3. Dublin. National Roads Authority.

Kilpatrick, Killucan, (Corbetstown townland), Co. Westmeath
Early Medieval Ecclesiastical Settlement
Grid reference: **N575558**
SMR No: **N/A**
Excavation Licence No: **N/A**
Excavation duration/year: **Six seasons between 1973 and 1982**
Site directors: **D.L. Swan (Research)**

Excavations at Kilpatrick revealed a large early medieval ecclesiastical earthen enclosure that surrounded a later medieval stone church and walled cemetery. Settlement, industrial, agricultural and burial evidence was identified which demonstrates that Kilpatrick was a thriving ecclesiastical centre during the early middle-ages. The site is situated at 91m OD in proximity to a low ridge. Marshland is located to the northeast which contrasts with the fertile and well-drained soils to the south of the site.

The late medieval stone ruined church and quadrantal-shaped enclosing wall (which demarcates a graveyard) is enclosed by an earlier oval-shaped earthen enclosure which measures 90m east-west by 80m north-south in diameter. The ditch was on average 4m wide and between 2.5m and 3m deep and traces of an internal bank with stone-lined façade were detected on occasion. Animal bone was recovered in large quantities from the ditch as it was across the site.

The vast majority of the excavation occurred outside the walled cemetery but one cutting close to the north wall of the church revealed occupational evidence in the form of trenches, a rectangular feature and postholes which were cut into the boulder clay. Artefacts from this area included a number of bone pins, three fragments of E ware, a portion of a copper alloy strip and a tiny copper alloy bird set on a ribbed tang. The features pre-dated the church and burials. A limited number of burials were revealed immediately adjacent to and outside the cemetery but – for the most part – they were confined within the walled enclosure.

Excavation within the interior of the oval earthen enclosure (but outside the quadrantal-shaped walled churchyard and cemetery) revealed domestic, industrial and agricultural features. At the southern section, occupational traces were noted by a layer of charcoal and ash. In the same area, the foundation trench of a circular structure was discovered beneath a series of cultivation furrows. It measured 7.4m in diameter and enclosed three large postholes but their relationship – if any – was unclear. Finds from this area included a clay mould, some worked fragments of antler, animal bone and charcoal. Artefacts outside the area of the circular foundation included a fragment of a penannular brooch with zoomorphic decoration, a finely made bronze needle and crucible fragments.

Cuttings closer to the centre of the church and walled graveyard, in badly disturbed ground, revealed a potential curving ditch that emerged from under the west wall of the churchyard and curved around the south-western corner. This may indicate the presence of an inner enclosure contemporary with the large outer oval enclosure. An iron hand-gouge and a bone pin, with an anthropomorphically carved head, were recovered from this area.

Agricultural features included the series of cultivation furrows which post-dated the circular structure (above). A stone-lined cereal-drying kiln was also present in this area (the south-western section of the oval enclosure) alongside numerous portions of brooch pins and ringed pins, iron knives, miscellaneous iron objects, pieces of worked bone and antler, some sherds of coarse ware pottery and another fragment of E ware. A second keyhole-shaped cereal-drying kiln was situated in the western part of the enclosure and it contained substantial deposits of grain and burned material. A series of very large well-defined curving trenches with associated postholes, close to the kiln, may indicate the presence of a large circular

structure. Further evidence for cereal processing included the recovery of four quernstone fragments and a large millstone fragment.

Industry and craft was abundant at Kilpatrick. Both iron smelting and smithing was practised as identified in the southern sector of the oval enclosure. A forging area consisted of a shallow heat-scorched oval-shaped depression that was surrounded by a trampled stone surface containing large quantities of iron residues. The recovery of *tuyères* further substantiates evidence for iron smithing at Kilpatrick. Close-by were two smelting furnaces, one of which contained an intact furnace bottom and iron slag. The metallurgical features lay south of the circular structure (above) but it is unclear if they were contemporary. Non-ferrous metallurgy is indicated by the presence of mould and crucible fragments. One almost complete clay mould was of a type used for casting bronze ring-headed pins. It seems that Kilpatrick was therefore a high-status site that manufactured copper-alloy pins and probably brooches while iron objects (such as knives, tools etc) were also made.

Evidence for crafts was evident from the artefactual assemblage at Kilpatrick. Seventeen iron objects were identified as tools or probable examples including gouges or chisels, punches, nails and knives. Worked antler and bone was present suggesting that these materials were shaped on-site.

Finally, the presence of E ware indicates that the imported pottery arrived on site through a network of trade and exchange with other high-status sites in the region and Brega further east. This indicates a sixth- to mid-seventh-century date for the primary use of the site as it was found in association with the circular structure that pre-dated the cultivation furrows. The structure was stratigraphically one of the earliest features on site but earlier activity cannot be discounted. Unfortunately, no radiocarbon dates are available. A small number of artefacts suggest the site was used in the tenth and eleventh centuries but it is not certain if it was continually occupied or re-used at this time. Later medieval and post medieval phases were also identified.

References

Swan, D.L. 1973:0036. Kilpatric (td. Corbetstown), Co. Westmeath, ecclesiastical enclosure. www.excavations.ie.

Swan, D.L. 1975:0036. Killucan (Kilpatrick), Co. Westmeath, religious enclosure. www.excavations.ie.

Swan, D.L. 1976 Excavations at Kilpatrick Churchyard, Killucan, Co. Westmeath, July/August 1973 and 1975. *Ríocht na Mídhe,* 6(2), 89–96.

Swan, D.L. 1980/84:0199. Corbetstown (Kilpatrick), Co. Westmeath, early ecclesiastical site. www.excavations.ie.

Swan, D.L. 1994/1995 Excavations at Kilpatrick, Killucan, Co. Westmeath, evidence for bone, antler and iron working. *Ríocht na Mídhe,* 9(1), 1–21.

Newtownlow, Co. Westmeath
Early Medieval Crannog
Grid reference: **N38063702 (238062/237020)**
SMR No: **WM038-011**
Excavation Licence No: **N/A**
Excavation duration/year: **1985; 1986.**
Site directors: **C. Bourke (Ulster Museum)**

The early medieval crannog of Newtownlow, Co. Westmeath was located in a small, former lake (250m by 500m) on a tributary of the River Brosna. The site is located 15-20m from the original gently sloping shoreline to the south, and 60-70m to the base of a steep esker (which runs east-west) to the north. The site was exposed during modern land reclamation in the early 1980s, when a hoard of Anglo-Saxon pennies was recovered from the spoil. The site was subsequently partly excavated by Cormac Bourke in the 1980s, but remains largely unpublished.

This was an early medieval crannog built of a cairn of stones, earth and timber in marshy ground at base of steep esker, probably occupied *c*. A.D. 950 to *c*. A.D. 1200 (contemporary with Ballinderry no. 1, Co. Westmeath, which was 16km to the west). It is part of an early medieval settlement complex, along with a large, univallate enclosure at Newtownlow situated on slightly elevated ground, 150m to the west at the narrow end of the lake. The crannog is also overlooked by a large, flat-topped earthen motte surmounted by a late medieval cylindrical tower ('Low's Castle') at Newtownlow, 300m to southeast. This may originally have been an early medieval raised rath, appropriated by Anglo-Norman settlers in the late twelfth century. There is also a probable late medieval parish church beside the motte, surmounted by a probable seventeenth-century church built on the earlier site, with an adjacent graveyard at Newtownlow. Palaeoecological studies from nearby Cornaher Lough indicate early medieval agricultural activities and woodland clearance *c*. A.D. 500. All sites are located south of a substantial esker that must have been an early route-way.

The crannog (17m by 17m, standing to a height of 1.5m) was built on a wooden substructure on the underlying peat, of a platform of substantial trunks, across which were laid light timbers and brushwood, interlocked by notches. This was covered with substructural layers of clay, peat and stones, buttressed by heavy timbers at the edge. The occupation surface may be represented by an organic, midden layer found in different areas of the site. A possible house on the site was represented by a hearth set on a flat stone, and two arcs of oak stakes (possibly remains of a wattle wall) from a sub-circular structure 6m by 4m in diameter. The occupation layer appears to have been covered by a layer of red/orange soil, interpreted as the burnt remains of a house. Otherwise, the occupation layer was sealed under a buff-tan clay, incorporating charcoal, crucible fragments, pieces of slag and a possible furnace, but no structures were found in this upper layer. The site was enclosed within an irregular palisade, including a cleft oak palisade on the east side (including two rows of planks with horizontals lying between) and an irregular roundwood post and plank palisade (with scatters of roundwood outside it) on the west. Some bone objects and comb fragments, datable to the tenth century AD, were found in association with this palisade, probably dating its construction *c*. A.D. 950. Finds from the machine-disturbed layers in the middle and edge of the site included a hoard of tenth-century Anglo-Saxon pennies (ranging A.D. 924-955, probably deposited *c*. A.D. 950), 20 bronze stick pins, a square-sectioned whetstone with copper-alloy fittings (probably a ceremonial sceptre). Finds from outside the palisade included two quernstones, a wooden bucket stave, wooden staves from a small waisted vessel, fragments of leather, a double-sided comb, a shafthole iron axe, an iron pan or ladle. A great quantity of animal bone (including cattle, sheep, pig, goat, horse, red-deer, hare and fox) was also found outside the palisade.

Towards the end of the site's life history (possibly after a period of abandonment as indicated by the rotten palisade planks), the palisade on the east and southeast was buried under a large cairn of stones and the mound was covered under a sterile layer of clay. This uppermost layer produced late twelfth-century green-glazed pottery sherds, an eleventh to twelfth-century stirrup ring, a copper-alloy plaque and cast crouching animal (twelfth-century date) and a fine jet cross of eleventh to twelfth century date, found in peat to the west of the site.

References:

Bourke, C. 1985:058. Newtownlow, Co. Westmeath. www.excavations.ie

Bourke, C. 1986:078. Newtownlow, Co. Westmeath. www.excavations.ie

Heery, A. 1998. The vegetation history of the Irish midlands: Palaeoecological reconstructions of two lake sites adjacent to eskers. Unpublished PhD thesis, Trinity College, University of Dublin.

Kenny, M. 1984. A find of Anglo-Saxon pennies from Newtownlow. *Ríocht na Midhe*, 7.3, 37-43.

Rochfort Demesne, Co. Westmeath
Early Medieval Settlement Enclosure
Grid reference: **N42774710 (242772/247101)**
SMR No: **WM026-051**
Excavation Licence No: **A006/003**
Excavation duration/year: **2005; 2006.**
Site directors: **J. Channing (Valerie J. Keely Ltd.)**

The site was located on top of a hillock, near to Lough Ennell. It had been identified as a 'ringfort' in the SMR, and was completely excavated in 2005 and 2006 due to future destruction by a road scheme.

Excavation revealed that the site consisted of three concentric sub-circular ditches, with the truncated remains of two banks (Fig. 314). The inner ditch (width 2.4m and depth 1.55m) enclosed an area with an internal diameter of 38.9m. This proved to be the earliest enclosure on site. The outer ditch (maximum dimensions of 3.95m wide and 1.82m deep) enclosed an area with an internal diameter of 50m. This seems to have been constructed soon after the inner ditch. The third ditch cuts through the outer ditch, and would appear to have been dug in the eighteenth century.

The interior of the site was damaged by later activity, and only a number of rubbish pits were identified within the area enclosed by the outer ditch. Artefactual remains from the site suggest a period of occupation stretching from the Iron Age through into the early medieval period. A swan-necked pin discovered in a pit near the entrance to the inner enclosure, has been identified with similar pins dated *c.* 500 B.C. – A.D. 400. A 'Dublin-type' ring-pin, found in the topsoil, has been dated to the tenth century A.D. Other finds included fragments of bone combs, bone and metal needles, and a blue glass bead.

Although there were no clear traces of structural remains, around 200 litres of butchered animal bone (largely sheep, cattle and pigs) were recovered from site. This led the excavator to suggest that the site may have been used for social/ritual feasting, rather than domestic occupation.

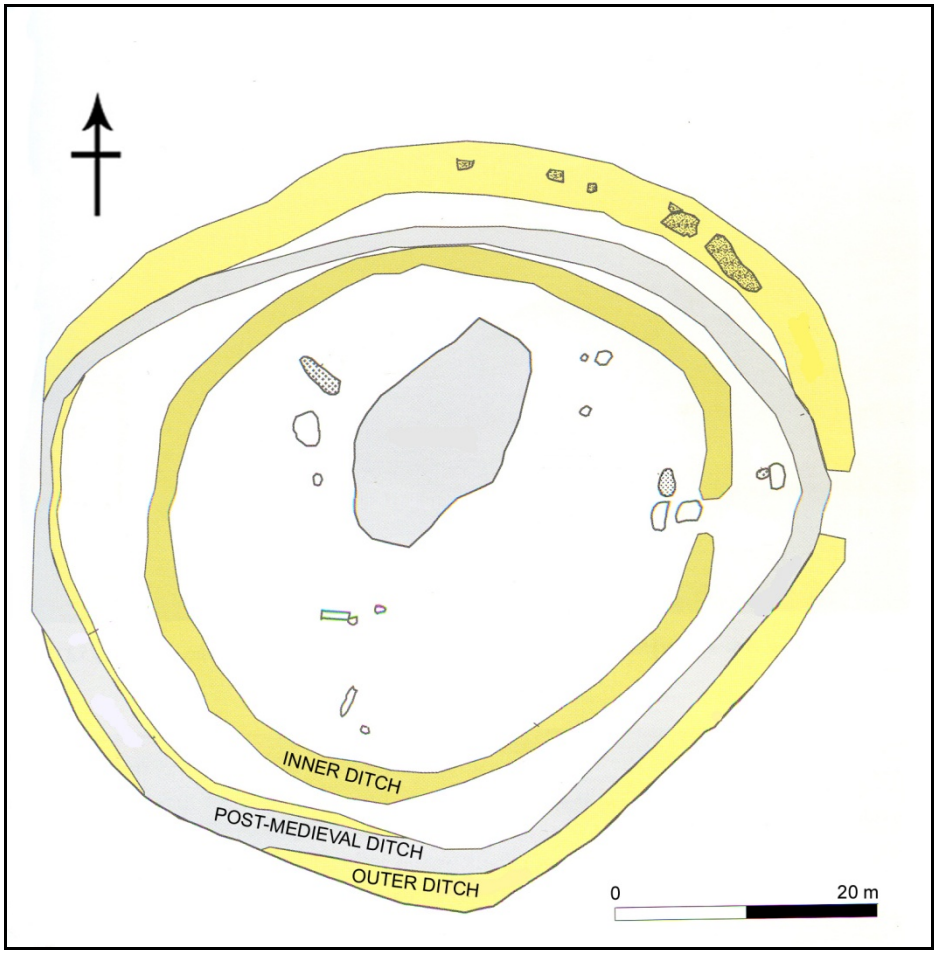


Fig. 314: Plan of enclosures at Rochfort Demesne, Co. Westmeath (after Channing 2007, 113).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	**Context**	**^{14}C Date**	**Cal. 2 Σ**
SUERC-8586	Cow mandible from inner ditch	1350±35 BP	**A.D. 620-719**; A.D. 742-769.
SUERC-8587	Cow mandible from outer ditch	1200±35 BP	A.D. 693-748; **A.D. 765-897**; A.D. 922-941.
SUERC-8588	Charcoal from pit in interior	1230±35 BP	**A.D. 688-754**; **A.D. 757-883**.

Reference:

Channing, J. 2007. Politics, wealth and expansion: the archaeology of a multiperiod enclosure at Rochfort Demesne, Co. Westmeath, in J. O'Sullivan & M. Stanley (eds.) *New Routes to the Past*. National Roads Authority Monograph Series 4, 111–21. Dublin. National Roads Authority. Wordwell.

Togherstown, Co. Westmeath
Early Medieval Settlement Enclosure
Grid reference: **N29514986 (229517/249864)**
SMR No: **WM024-028**
Excavation Licence No: **N/A**
Excavation duration/year: **August-September 1929; March-April 1930.**
Site directors: **R.A.S. Macalister & R.L. Praeger (University College, Dublin).**

The site consists of a central area, raised approximately 1.5m above the ground surface, with two concentric rings of banks and ditches (Fig. 315). Excavations on the outer ditch revealed a layer of stones at the base of the ditch. The outer face of the outer bank has a revetment of stones, but this appears to have been added after the outer ditch had been filled. A number of enigmatic structural features were located in the intervening space between the outer and inner bank-and-ditch. The inner ditch is a maximum of 1.8m deep and the outer face of the inner bank also appears to have had a stone revetment. The interior of the site was subdivided by cross-walls. A large fire pit – approximately 2.1m in diameter, with up to 0.6m depth of ash – was located in one of these courts. Un-burnt bone was associated with this layer of ash. A series of postholes presumably marks the location of a house and this appears to have been associated with access to one of the souterrains on site. This souterrain – the 'Greater Souterrain' – consisted of a number of chambers and creeps. An Anglo-Saxon saucer brooch was found in one of the chambers. No finds are recorded for the 'Lesser Souterrain'. The upper stone of a rotary quern was found on site, as was a socket-stone for a wooden door upright. Fragments of a bone comb and button were also found on site. As well as the saucer brooch, a bronze pin was recovered from the fill of the inner ditch; seven iron knife blades and an iron sickle were also found on site.

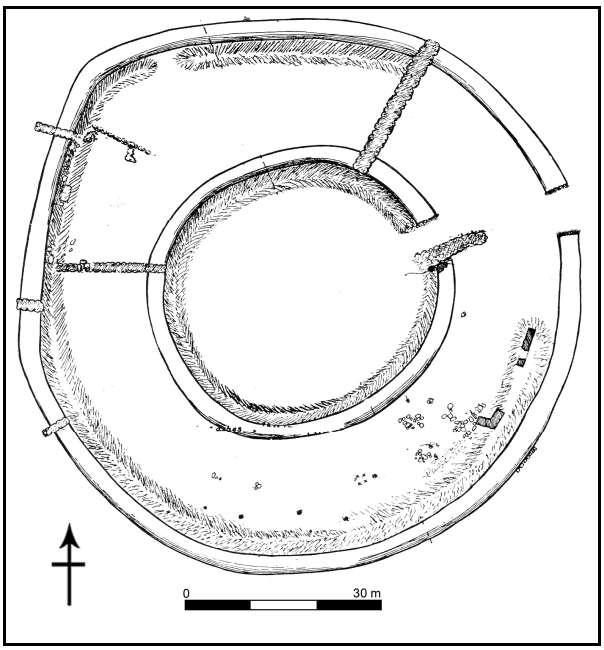


Fig. 315: Plan of Togherstown, Co. Westmeath (after Macalister & Praeger 1931-2).

Reference:

Macalister, R. A. S. & Praeger, R. L. 1931-2. The excavation of an ancient structure on the townland of Togherstown, Co. Westmeath. *Proceedings of the Royal Irish Academy Section C*, 40C, 54–83.

'Uisneach' (Rathnew td.), Co. Westmeath
Early Medieval Settlement Enclosure
Grid reference: **N29574875 (229572/248795)**
SMR No: **WM024-066**
Excavation Licence No: **N/A**
Excavation duration/year: **June 1925; August-September 1927.**
Site directors: **R.A.S. Macalister & R.L. Praeger (University College, Dublin).**

The site consists of two areas – the main circular enclosure and a semicircular annex. The main enclosure is further subdivided into three sections – western; central; and eastern (Fig. 316). Excavation revealed that the site had four separate periods of occupation.

Phase I is indicated by a ditched enclosure, approximately 47m in diameter. The ditch appears to have been allowed to silt-up gradually over a period of time. A stone wall appears to have been located on the outer lip of the ditch. Finds from this ditch consisted of a bronze pin, and a silver-inlaid pin of a penannular brooch. An outer ditch was also identified from this period.

Inside the area enclosed by the inner ditch, a number of pits, roughly 1.5m deep, were uncovered. A small iron knife was recovered from the fill of one of these pits. A scatter of postholes in the interior has also been placed to Phase I occupation.

Phase II witnessed a number of constructions, including a roadway up to the site. The souterrain on site is also placed in this occupation phase.

In Phase III the site took on most of its present shape. The internally-stone-revetted banks were created - including an intervening ditch – and the internal subdivisions were established. A circular earthen-walled structure - the 'Eastern House'- was attributed to this period. This building was subdivided into a number of chambers.

In Phase IV the western annex was added to the site. Within this was a stone-walled house of indefinite form – the 'Western House'- and an associated souterrain which must have been entered from the house.

The site was totally aceramic, but fragments of four jet bracelets; four bronze pins; as well as a large number of iron objects (not necessarily contemporary with occupation), were found. Animal bones were recovered for cattle, sheep, pig, horse, red deer, dog/wolf, cat, fox, rabbit, stoat, hedgehog, frog and birds.

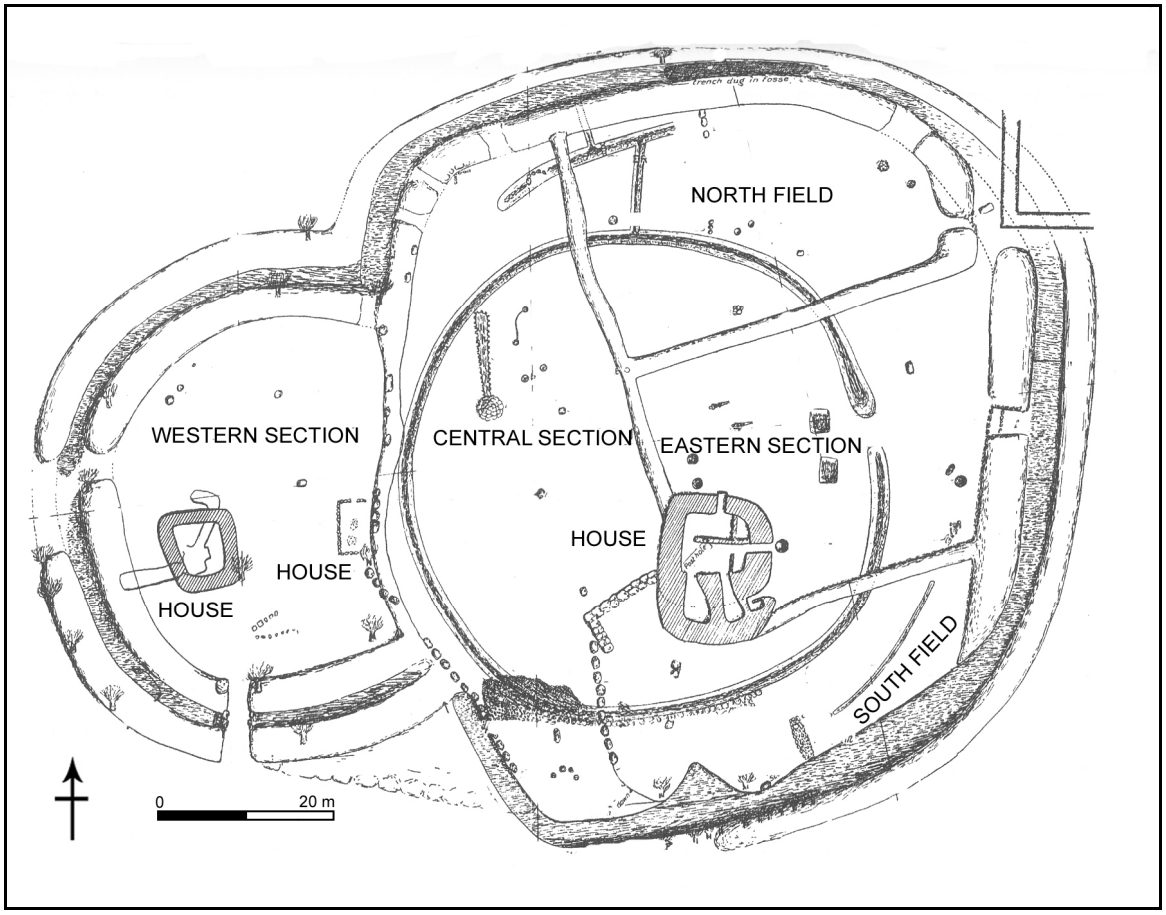


Fig. 316: Plan of enclosure of Uisneach. Co. Westmeath (after Macalister & Praeger 1928).

References:

Macalister, R. A. S. & Praeger, R. L. 1928. Report on the Excavation of Uisneach. *Proceedings of the Royal Irish Academy Section C*, 38C, 69–127.

County Wexford

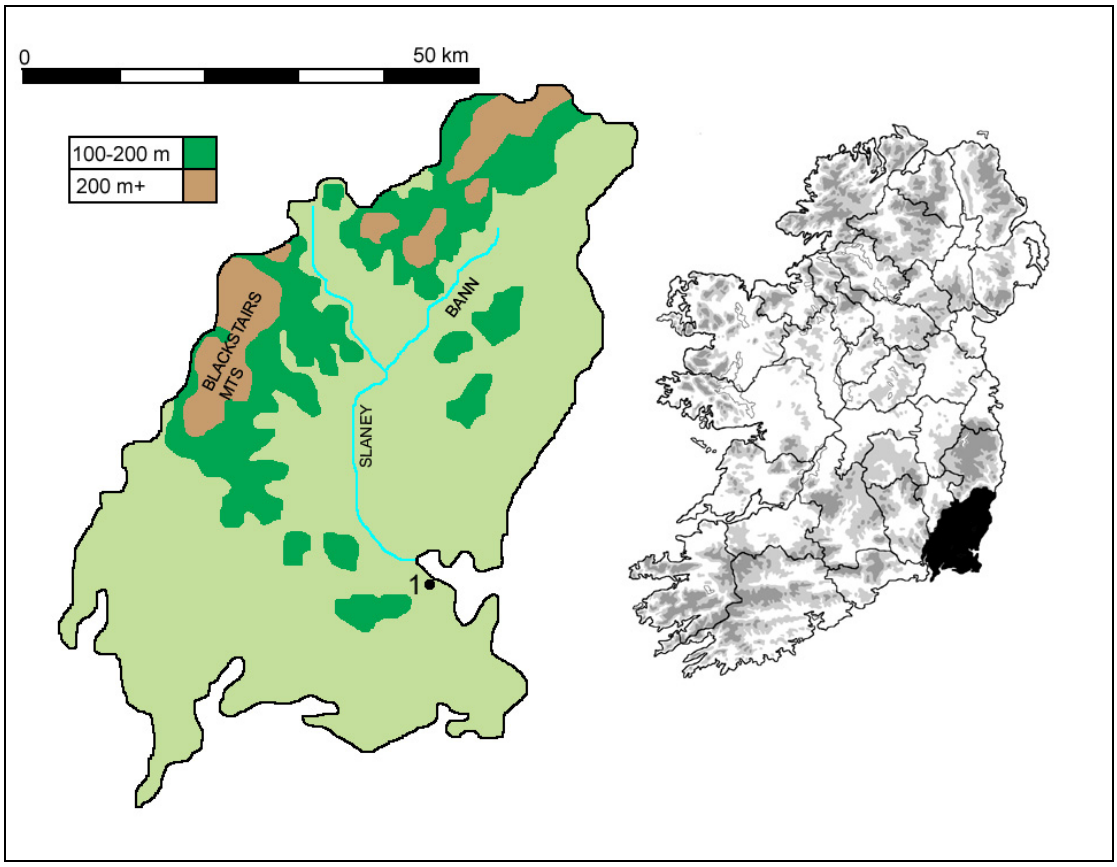


Fig. 317: Significant early medieval excavations in Co. Wexford.

1	**Wexford**		

Bride Street, Wexford, Co. Wexford
Scandinavian Urban Settlement.
Grid Ref: **T04902130 (30490/12130)**
SMR No: **WX037-032**
Excavation Licence: **E000438**
Excavation Duration/Year: **1980s**
Site Directors: **E.C. Bourke (Office of Public Works)**

A number of Scandinavian houses were uncovered in the Bride Street area of Wexford. These were predominantly composed of three-aisled, sub-rectangular, wattle-and-daub walled houses (Fig. 318). The one exception (House 1a) was plank-built, with sharpened boards driven into the marl. This building had an attached lean-to structure, built in the same way, which appears to have had a wicker internal dividing wall. A bone pendant, dated *c.* A.D. 1050, was found in the back yard of this structure. The remainder of the Bride Street houses consisted of a centre aisle with a central hearth, and two side aisles, each containing a bedding area and storage areas. On average they measured 7.6m by 5.6m, and would appear to have been demolished and replaced after 20 or 30 years. The houses all appear to have had enclosed yards at the rear. These seem to have been used for industrial or food-rearing purposes, for example one yard showed evidence for a small pen (possibly for pigs), as well as leather-working debris. Finds from the houses, and their yards, included bronze pins, bone pins, sherds of un-glazed pottery, and iron slag. A bone pendant with Ringerike/Urness design, dated stylistically to *c.* A.D. 1050, was found in one of the structures.

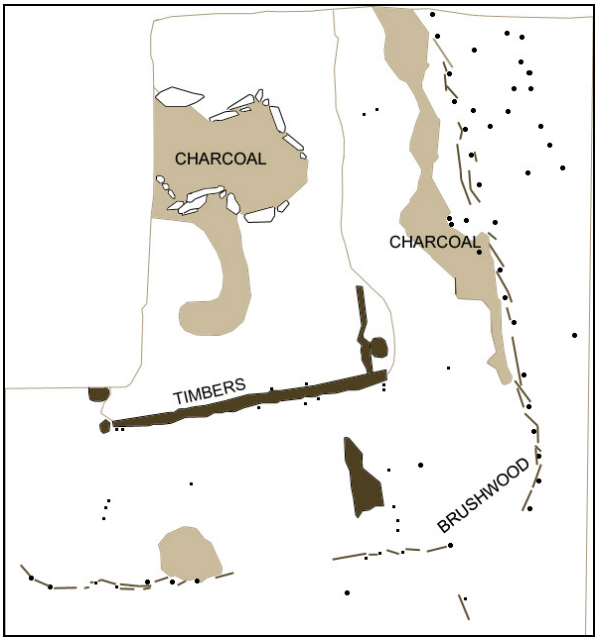


Fig. 318: Plan of house at Bride Street, Wexford (after Bourke 1995, 33).

References:

Bourke, E. M. 1988-9. Two early eleventh century Viking houses from Bride Street, Wexford, and the layout of properties on the site. *Journal of the Wexford Historical Society*, 12, 50–61.

Bourke, E. M. 1995. Life in the sunny south-east: housing and domestic economy in Viking and medieval Wexford. *Archaeology Ireland*, 9(3), 33–6.

County Wicklow

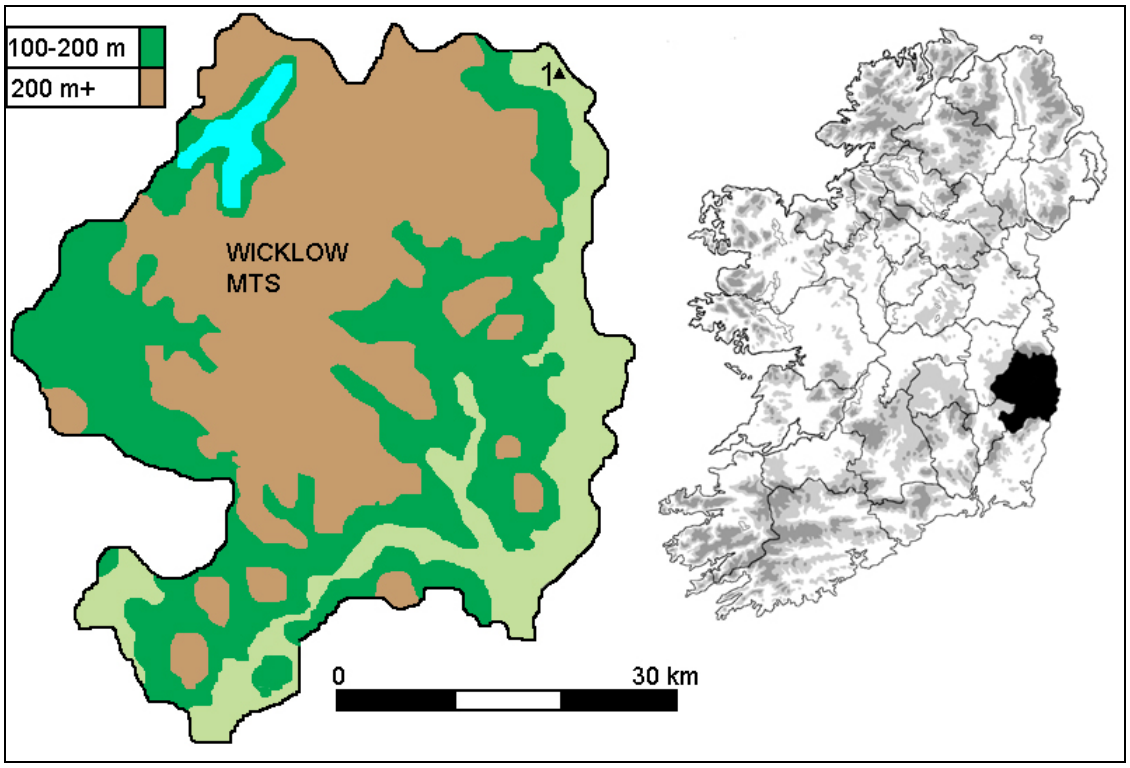


Fig. 319: Significant early medieval excavations in Co. Wicklow.

1	Giltspur		

Giltspur, Co. Wicklow
Early Medieval Unenclosed House.
Grid Ref: **O25281598 (325287/215981)**
SMR No: **WI008-005**
Excavation Licence: **04E1201; 04E1324**
Excavation Duration/Year: **September 2004**.
Site Directors: **A. Cryerhall & C. Moriarty (Margaret Gowen & Co. Ltd)**.

An area of archaeological potential was uncovered during pre-development topsoil stripping. This area, sited on a gradual slope, was found to contain a keyhole-shaped corn-drying kiln, a sub-rectangular post-built structure (Fig. 320), and two associated cut features.

The sub-rectangular structure (5m by 4m) was built on a terrace cut into the hillside. Three of the walls were defined by postholes, and the fourth wall appears to have consisted of a horizontal sill beam supported by stone foundations. Some of the larger structural postholes were re-worked, evidence for posts being replaced. A post-built 'porch', with eighteen stakeholes (presumably for a wicker-wall), was located at the entrance to the house; and an internal division, interpreted as a wicker-screen, was represented by a linear slot trench with postholes at either end. The interior of the structure had a metalled surface and a hearth.

Radiocarbon dates suggest that the corn-drying kiln (which appears to have been largely associated with oats) and the structure may have been synchronous (see below). The lack of artefacts recovered from the structure led the excavator to interpret the building as a possible *saball* or barn. This interpretation may be supported by a pit with charred barley grains located just inside the entrance to the structure, however the internal division and the hearth located in the structure equally suggest that structure may have had a domestic function.

Of the two cut features, one would appear to have been an old field boundary; and the second, located up-slope from the house and kiln, would appear to have functioned as a drain to deflect rainwater.

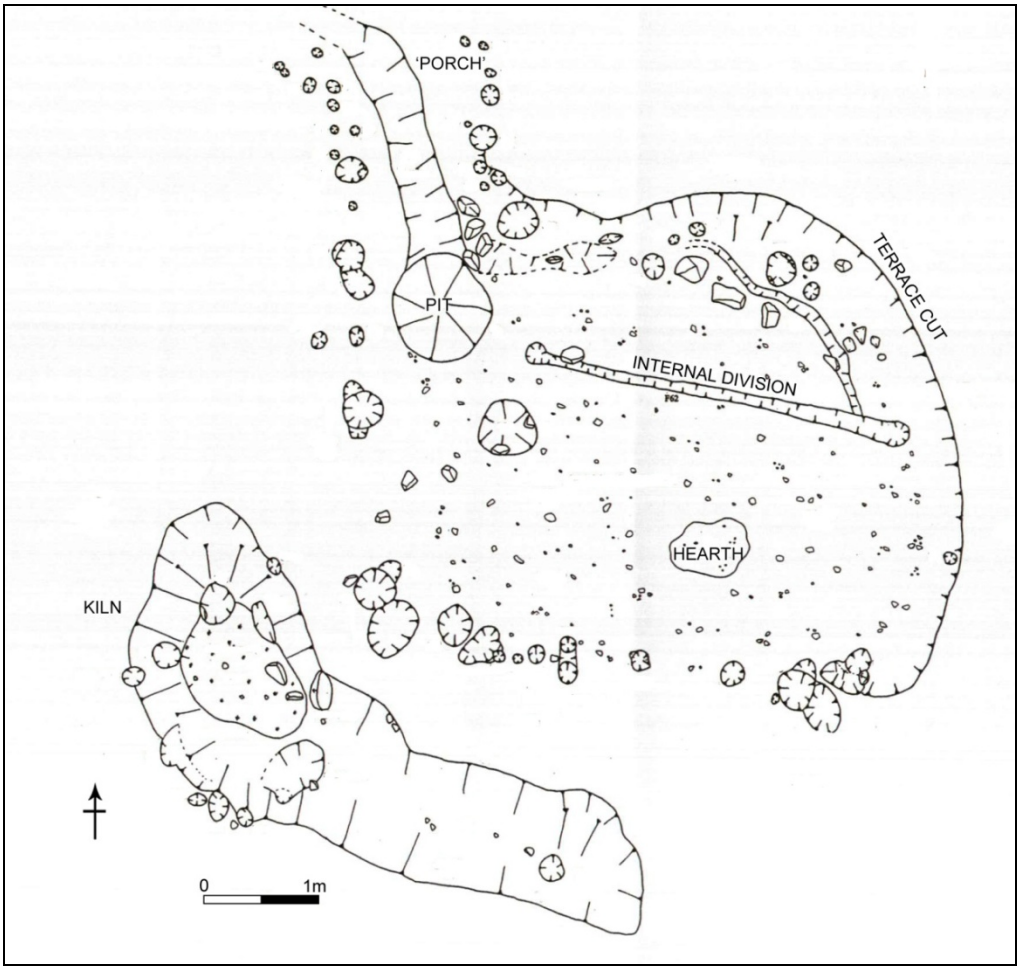


Fig. 320: Plan of sub-rectangular structure and kiln at Giltspur, Co. Wicklow (after Cryerhall & Moriarty 2006).

Radiocarbon Dates:

(PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), *Radiocarbon* 46:1029-1058).

Sample No.	Context	^{14}C Date	Cal. 2 Σ
N/A	Charcoal from burnt kiln	N/A	A.D. 940-1040*
N/A	Charcoal from post-hole in structure	N/A	A.D. 860-1000†
N/A	Charcoal from pit with charred barley	N/A	A.D. 780-990‡

- *84.7% probability.
- †94.3% probability
- ‡95.4% probability

Reference:

Cryerhall, A. & Moriarty, C. 2006. Archaeological Monitoring and Excavation Report, Giltspur, Co. Wicklow. Unpub'd Report, Margaret Gowen & Co. Ltd.

UCD School of Archaeology

An Chomhairle Oidhreachta
The Heritage Council

Queen's University Belfast

Irish National Strategic Archaeological Research
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