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INDUSTRIALLY HARVESTED PEATLANDS AND AFTERUSE POTENTIAL: UNDERSTANDING LOCAL STAKEHOLDER NARRATIVES AND LANDSCAPE PREFERENCES

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Abstract

Recent years have witnessed much debate on the turn towards community within landscape management and planning. This is particularly evident in the European Landscape Convention which asserts the legitimacy of local preferences and citizen involvement in policy processes. This paper explores a bottom-up perspective on people-place relationships in a changing landscape, through assessing the afteruse potential of industrially mined peatlands in Ireland and the rehabilitation of degraded landscapes. The mining of the peatland resource has a longstanding tradition in Ireland, however, significant attention has now focused on exploring market and non-market uses of remains after harvesting has finished resulting in a cutaway landscape. We argue that local people's everyday experiences of the landscape is a legitimate form of knowledge and should provide a key input into deliberative planning and management processes. Drawing largely on an interpretive research approach, we assess key local narratives in relation to harvested peatland landscapes and explore local people's afteruse preferences. There appears to be strong support among the local community for amenity/biodiversity afteruses, which are currently not reflected in public policy debates. We review people-place relationships and discuss the role of ethnographic research in a peatland context as well as defining the relevant stakeholders. Finally, conclusions are developed to identify wider lessons for people/place relationships within the context of landscape management and planning.

Keywords: industrial peatlands; stakeholder perceptions; ethnographic research, people-place narratives.

Introduction

Recent years have witnessed an increased emphasis given to involving communities and stakeholders in issues surrounding landscape planning and biodiversity action. This perspective suggests that if local citizens are involved in the policy or planning process, decisions and actions will be better in two respects: they will command greater respect from local residents and hence carry more legitimacy and secondly, they will benefit from the insights and local knowledge brought by local residents acquired through living in the local area (Burton et al., 2006). This paper explores the community dimension of landscape management in an area hitherto dominated by state economic interests and biodiversity 'experts' – the afteruse of harvested peatlands. Peatland harvesting has a long history in Ireland and is closely connected to the natural, social, cultural, artistic, political and archaeological 'soul' of rural Ireland (Moore & Bellamy, 1974; Bellamy, 1986; Feehan & O'Donovan, 1996). Within the last seventy years, increasing industrial harvesting of Irish peatlands has resulted in habitat loss and highly degraded landscapes. However, this harvesting has had significant positive social effects (electricity generation and employment) especially during the early years of the newly established Irish State. Today, there is concern for the future of these industrial peatlands when harvesting has been completed and deemed to be 'cutaway', specifically from those worried that the abandoned land may be utilised for (locally) undesirable activities such as waste disposal or forestry. With the increase in concern for, and global and institutional commitments towards, biodiversity conservation, 'stakeholders' are now seen as being important for the conservation of biodiversity particularly in damaged and degraded areas (UN, 1992). When it comes to the afteruse of degraded areas, such as Irish peatlands, forestry and agriculture have been the preferred (market) options until recently. However, commercial forestry is no longer sustainable, either commercially or socially (Clinch, 1999) and incentives for the agricultural afteruse options have diminished with the reform of the EU Common Agricultural Policy.

Now the opportunity has arisen for local resident stakeholders to participate, for the first time, in maximising the ecological potential of cutaway peatlands whilst, at the same time, recognising the social and cultural importance of peatlands, intact or harvested, especially to local communities (Barron et al., 1994). Despite over fifty years of research into commercial, market-driven afteruse options for cutaway peatlands the non-

market options have rarely been explored to any practical extent. In those peatland areas that have been fully harvested, spontaneous and / or managed regeneration has been shown to promote new nature which infers that cutaway areas have the potential to be used to augment biological diversity (Foss & O'Connell, 1996; O'Connor et al., 2000; Rowlands & Feehan, 2000; Trodd, 2003). There is some evidence that local communities may place a high value on non-market afteruses of regenerating peatlands (Barron et al., 1994; Egan, 1994; Foss & O'Connell, 1996; Egan, 1999; Anon., 2006), but a working blueprint to realise this has not yet been established nor has there been an audit of community perceptions of peatlands either intact or harvested. One community group in the North Midlands of Ireland has proposed the creation of what they call a National Wetlands Wilderness Park on cutaway peatlands, and this has received tacit approval from the Irish Government (Anon., 2005). The opinions of small groups may represent a vested interest and thus it is vital that the wider community be consulted on this matter.

The purpose of this paper is to report on research that has recently been undertaken to firstly, gather insight into perceptions of local residents into the industrial peatlands, and secondly to establish lay or non-expert narratives on the future of cutaway peatland landscapes. In combination, these aims require both a positivist paradigm (describing and categorising opinions) and an interpretative paradigm (seeking to understand how local stakeholders view their peatland surroundings) (Rydin & Thornley, 2002). Interpretive analysis is increasingly used in policy studies that use broadly textually oriented approaches and have been applied in fields related to, for example, urban analysis (e.g. Hastings, 1999; Murtagh, 1999; 2001), planning policy (Forester, 1993; Healey, 1996; 1999), environmental policy (Hajer, 1995), rural development (Scott, 2004) and natural resource management (Rydin & Falleth, 2006). So, because of the multidisciplinary nature of the topic as well as the lack of previous surveys, a site- and study-specific research instrument needed to be designed. In effect this took the form of an initial analysis of key stakeholders followed by focus groups and the purposive sampling that is reported here. Thus, we utilise less of a traditional approach to ethnographic research and, instead, we use a more 'applied' ethnography (Fetterman, 1989) in that the research findings may have a wider contribution on how new landscapes may be viewed and the resulting policy implications. This paper will first review people / place relationships and the role of ethnographic research in this area

including a discussion on what we mean by stakeholders in this case. It will then report on the survey itself including how a pre-survey mapping process enabled a site-specific research method to be devised. Finally, the data will be discussed with reference to afteruse planning and management.

People / Place Relationship

The interrelationship between people and place differs between cultures and changes over time. Studies of the relationship between communities and the landscape have largely focused on conflict resolution, capacity building and collaborative planning in an effort to manage extant natural resources in a sustainable manner (Porter & Salvesen, 1995; Healey, 1999; Bishop & Phillips, 2004). This is primarily carried out in ecosystems that are under significant threat from development that can have global as well as local significance, though it is becoming more common within productive landscapes such as those in the British Isles (e.g. Moore-Colyer & Scott, 2005), or North America (e.g. O'Brien, 2006). However, the involvement of local communities in conservation planning has difficulties (Antrop, 2001), none the least of which is the notion of creatively combining scientific knowledge with cultural knowing (O'Riordan, 2002; Turner & Berkes, 2006) and the role that discourses and narratives can play in landscape research depending on where ones concept of landscape originates (Jones, 2003). Nature conservation practitioners also struggle to adapt to social and political influences as much as local communities cope with the complexities of landscape ecology (Groves, 2003). This has been addressed, to some extent, by Habermasian ideas of communicative rationality, which suggests that both technical, instrumental rationality and experiential knowledge have equal validity within deliberative policy processes. Today, people-place relationships are being examined in more detail with the advent of international policies for biodiversity conservation and carbon sequestration because it is widely recognised that local communities can play an important role in conservation successes (UN, 1992: Article 8,j). From practice, there are many examples of successful restoration projects that are driven by communities (Hagen et al., 2002). This is indicative of a more widespread move towards local governance which sees the broad notion of stakeholder-driven conservation as being more effective socially (Folke et al., 2005) and, specifically in relation to peatlands, ecologically (Joosten & Clarke, 2002).

International opinion now places higher values on new (Burel & Baudry, 1995), restored (Gilbert & Anderson, 2005; van Andel & Aronson, 2006) or former industrial (Ling et al., 2007) landscapes, but stakeholder perceptions and preferences are often culturally embedded making it difficult for unified research methods. In an Irish context, perception studies often use sociological methods. Though it is common in this kind of research to use blind questionnaires and interviews to map social values (e.g. Tyrväinen et al., 2006), those few that have been carried out in the Irish landscape have taken a more anthropological approach, where the researcher is embedded in the community for some time (O'Rourke, 2005). Still others favour targeted interviews with key stakeholders such as farmers (Curry, 1997). However, there are very few studies that focus on specific social-ecological topics such as hedgerows in England (Oreszczyn & Lane, 2000) and turloughs in Ireland (Visser et al., 2007). To date research internationally on stakeholder attitudes to ecological issues has tended to focus on the conservation of *existing* habitats in either natural landscapes (Streever et al., 1998; Bonaiuto et al., 2002; Durrant & Shumway, 2004; Cihar & Stankova, 2006) or urbanised landscapes (Lindström et al., 2006) or the impact of development upon them, rather than stakeholder opinions on the restoration or recreation of new landscapes. Perhaps this may be influenced by the potential for conflict that may arise from consultation despite the degree of importance that restoration ecologists place on social importance of habitat restoration (Jordan, 2000; Higgs, 2003; van Andel & Aronson, 2006; Hobbs, 2007). For the creation of new landscapes, very little information exists on their potential effects, on mechanisms for their planning and management, on the needs of local stakeholders within new landscapes or even how to elucidate local opinion accurately and constructively. The literature on stakeholder participation in restoration projects derives largely from urban regeneration studies (Maginn, 2007) and it is argued that much of the research into post-industrial landscape usage derives from socio-economics (Ling et al., 2007).

Few studies have been carried out into stakeholder attitudes to peatlands. Johnston and Soulsby (2000) look at attitudes to Scottish peatlands utilising historical data to show that extreme habitat damage has occurred leading to modern concern among current stakeholders. Sirin and Minaeva (2001) also look at historical attitudes to peatlands and show that policy instruments often ignore local opinion, which can vary greatly

among communities as well as other sectors. A recent survey of peatlands in central and eastern Europe stresses, as one of its main conclusions, the importance of informing and involving stakeholders in peatland usage but says little that would have local stakeholders involved in afteruse consultations or other activities (Bragg & Lindsay, 2003). This is further examined in Finland where one of the few surveys of stakeholders revealed that forestry had the highest re-use preference (Selin, 1999). In Scotland, community attitudes to upland peatlands were positively correlated to a project that restored peat functions (MacPhearson & Macleod, 2006). However, potential non-market after-use preferences have not been examined for cutaway peatlands and neither quantitative or qualitative peatland attitudinal surveys appear in the literature. Indeed, there are few mechanisms for establishing the relationships between stakeholders and their 'stake' in a landscape context.

It is important that local stakeholders are included in planning for the management of the landscape in which they live (Selman, 2006) particularly to gauge the level of interest in the future of harvested peatlands at a local level. It is often difficult to define exactly who a stakeholder is (Maginn, 2007; Vogel et al., 2007) and what their actual stake might be (Mitchell et al., 1997), especially when discussing large areas of landscape, emotive habitats (such as Irish peatlands) and new landscapes or 'futurescapes' (RSPB, 2001; Choi, 2004). In addition, when developing a research instrument for the study reported here, there was an additional requirement to both gather data on opinions and, simultaneously, inform stakeholders about harvested peatland afteruse options. The notion of 'new nature' is relatively novel, and in this case it may be unique in its potential scale. Thus in order to gain insight, we used an ethnographic approach (Hammersley & Atkinson, 1995) because this methodology can be useful in examining individual behaviour in everyday contexts by gathering data from many sources. By using a relatively 'unstructured' approach (that is, data collected in a raw form, not to a preconceived plan) which is carried out intensively at a micro-scale, such ethnographic methods can be used to focus on one group or locale and, in analysing the data, stress the interpretation of meanings and functions of human action. It has been shown that when seeking to identify social processes and / or actions the most effective sampling strategy may be focused or judgmental sampling (Arber, 1993), and this is the case with this study.

Before continuing with a description of the survey it is important to elaborate on the meanings of stakeholder, especially as it applies in this study. Many commentators have discussed the use of the word ‘stakeholder’ which has probably overused, presumptuous and under-defined. According to Schmitter (2000) a ‘holder’ may be seen as someone who can participate in a process (such a planning process) because they have some form of expertise or other quality that gives them a reason to participate. Using Schmitters’ definitions, there are several ‘holders’ in cultural landscapes in Europe as shown in table 1, though there may be numerous overlaps between them. These labels are slightly cumbersome but are ideal for descriptions in the context of this study.

[Insert Table 1 about here]

Research approach

Pre-survey mapping

Prior mapping of stakeholders was conducted in great detail, including right-, interest- and knowledge-holders, but this paper wishes to report on the opinions of space-holders as they reside in the landscape that would be highly affected by policy changes (i.e. peatland afteruse policies). Initially, focus group sessions were conducted in urban centres within the case study area (which will be described later). The aims of these sessions were to identify explicitly *local* stakeholder issues relating to the afteruse of industrially harvested peatlands and, at the same time to gauge stakeholder opinion on peatlands in general. The sessions contained randomly selected participants of an even age spread and evenly represented in gender. Although focus groups are widely used in social sciences, there is generally less discussion in relation to the analysis of data (Kidd & Parshall, 2000; Wilkinson, 2004). A useful method for analysis is to separate the data into two elements – content analysis and ethnographic or discourse analysis (Morgan & Spanish, 1984). For the pre-mapping study, both types of analyses were performed in order to reveal local communities’ opinions of peatland landscapes and potential futurescapes. Analysis of discourses revealed six key narratives, shown in table 2.

[Insert Table 2 about here]

Analysis of focus group content yielded a number of key words that reflected attitudes specific to peatlands and harvested peatlands. These words were a combination of specific or colloquial words and the meanings implied. These key words were then used in the preparation of the survey sheet that is discussed in the next section.

[Insert Figure 1a about here]

Main survey

A sample area was selected in the peatland mining landscape of Counties Longford and Roscommon in the Irish Midlands as shown in figure 1a. This is an area where the residents live in close proximity to peatlands and many of whom have strong connections with the State peatland mining company or the peat-powered electricity generating station. Five transects were identified in the field which were, in essence, ‘third class’ roads traversing areas of peatland currently being industrially harvested (Transect 1 can be seen in Figure 1b as an illustration). These roads were selected using Ordnance Survey (OS) maps and were deliberately targeted. The transects varied in length from 10 to 25 kilometres and were, for the most part, quiet and infrequently used. Besides occasional local traffic the main usage was by peat harvesting workers and / or contractors. Housing is mostly clustered nineteenth century residences as well as single, dispersed, more recent bungalows, which has resulted in a local population that is widely distributed along these transects. The population density of this region is deemed to be low with the majority of the residents being fifty years or older (CSO, 2006). This sample population are classed here as the ‘space-holders’ described in table 1.

[Figure 1b about here]

Data were gathered by engaging people along these transects via an accidental or “grab” sampling, purposive procedure. This involved entering the case study areas in random locations at sporadic times over eight weeks throughout the summer months of 2006. Often this was carried out in the evenings or at weekends and on days with good weather conditions, thus increasing the chances of encountering the study group. The sampling essentially involved engaging individuals or small groups (i.e. couples) in directed conversations. Having established that the interviewee was indeed a ‘space-holder’, the researcher initially explained to the interviewee(s) that research was being carried out into the future of peatlands in Ireland. Being semi-structured, the researcher introduced specific topics into the interview to prompt the interviewees, though they were not restricted to the main area of discussion. Table 3 shows the main issues prompted for discussion by the researcher and an example of the kind of prompt used. The majority of the interviews were, in effect, conversational in nature and some of the interviews were carried out while the researcher assisted the interviewee in, for example, gathering turf or repairing stone walls – a common occupation at that time of the year.

[Insert Table 3 about here]

Having earlier described this field research as ethnographic, it should be pointed out that some aspects are non-ethnographic in that the researcher was clearly identified, was not a passive, non-interfacing individual and was visibly taking notes and photographs, ostensibly of the landscape and not of the interviewee. Each interviewee was informed that they were speaking to a research scientist who was investigating peatland afteruse strategies that may, in time, lead to the creation of new landscape. Research paraphernalia (notebook, camera, binoculars) were visible at all times and, upon completion of the interview, the researchers’ business cards were distributed if an interviewee desired to know more. However, it may be taken that the interviewee was unaware that the researcher was, *de facto*, engaged in research on the interviewee themselves, therefore ethnographic research may be deemed to have taken place. This was deliberately planned so as not to alert the interviewee and potentially skew their opinions or alienate the local population and to preserve the field for later (triangulation) research. It is widely known that individuals may alter their behaviour when approached

by a researcher and that data can be misleading or uninformative (Sarantakos, 2005). In many instances the interviews were instigated by the interviewees themselves approaching the researcher out of curiosity.

The principal components of the interviews were then recorded by the interviewer manually, using a specially designed data recording sheet (figure 2) and verbally, using a digital recorder (and later transcribed to the data sheet within a few minutes of each interview). This enabled rapid, in-field recording and initial analysis of the interviewees' genuine opinions or perceptions of the landscape. Data on the location of the interview were recorded as OS co-ordinates and notes of the conditions were taken. Other data such as gender and approximate age were also entered (often the interviewee volunteered their age), as was the activity in which the person was engaged at the time they were encountered. The proximity of the interviewee's house to the nearest peatland area was derived from the conversation. The interviewee's name or any of their private details were neither sought nor, if this was volunteered, recorded.

[Insert Figure 2 about here]

The data sheet shown in figure 2 also contains a list of 31 key words which are either specific words that an interviewee may utter or a descriptive indicator of a more generalised idea. These key words are thus codings, in effect, and derive from focus group content analysis described earlier. The key words were used to assist the researcher in recording data, and to simplify and standardise the analysis. If the interviewee used these words, and / or the sense that these words convey, a mark was made in the box beside the key word. The researcher noted as many of the key words as possible, thus capturing key sentiments of the interviewee and building a picture of the content of the interview. In the adjoining box (in grey in figure 2.) the interviewee's strongest opinion was noted in order to best describe the overall opinion of the interviewee on the topic. Finally, following prompts during the interview, the level of interest in peatland and other issues was noted using a sliding, likert scale from 0 (no expressed interest) to 4 (very high expressed interest). This scale was interpolated by the researcher based on the interviewees' reaction to prompts. On some occasions the researcher made note of these issues with the interviewees' permission though they did not see the data sheet.

As mentioned, the interviews took place over a relatively short period during the summer of 2006. The short period was intentional to minimise 'word-of-mouth' communication that may occur within these small communities and so later interviews may not be as spontaneous or unprompted. The interviews lasted from 15 minutes to, in several cases, over an hour with the average length of 25 minutes. This, combined with the 'accidental', purposive sampling technique (within a relatively low population density) and the vagaries of the Irish weather, meant that a limited number interviews could be carried out, with many sampling days passing without any interviews being carried out. Little encouragement was necessary as all interviewees who could spare their time were very willing to converse with the interviewer, a trait which is often commented upon by visitors to the Irish countryside. Therefore this methodology is highly suited to the Irish landscape.

Research Findings and Discussion

Sixty-two interviews were carried out and recorded using the data sheet. Forty-six of these will be considered here – twenty were male, twenty-six were female. The remaining sixteen were either incomplete, interrupted and / or failed to adequately engage with the interviewee – though some data such as quotations were recorded. When 'grab' sampling, some interviewees did not fully engage with the interviewer and thus a full interview did not take place. These interviews could not be standardised on the data sheet and thus comparison may be misleading.

General discussion

All of the interviewees lived within a 5 kilometre radius from the nearest industrial peatland with the majority (38) living within 2 kilometres. This shows that the sampling methodology was successful in 'grabbing' the 'space-holders'. Most of the interviewees (37) were estimated to be over 50 years old the rest (9) being between 30 and 50. None of those interviewed in the 46 reported here, or from the 16 remaining partial interviews, were aware of any plans for afteruse of the nearby peatlands. This has significance for those members of the wider community (stakeholders) who are proposing a wetlands park concept in degraded peatlands. However, when the interviewees were informed about the National Wetlands Wilderness Park proposal there was a very high level of interest with most interviewees supporting the idea in principle. This

may not be surprising, as the potential creation of new amenities ought not to be rejected by space-holders in the same way, say, that a landfill might. However, many of the quotations noted during the interviews were supportive of such a venture on a personal level.

“...it will be good to let them [the harvested peatlands] have life again... I suppose it’s only fair to let them live again.” Interviewee T4/023

“They [the peat extraction company] have taken the colour [vegetation] away, and that is how it was. They should be let to grow again, though.” Interviewee T2/01

Such comments were common and may be seen as indicative of the years of harvesting, both manual and industrial, as well as a recognition of the socio-economic importance of peat. These comments also indicate knowledge of natural processes. All interviewees were clearly aware of the industrial nature of the peatlands with many indicating personal involvement or employment with the State peat mining company or in the local peat power station, some for two or three generations. Most of the interviewees indicated that they “barely noticed” (Interviewee T5/043) the harvesting activities and it would appear that mining is a background activity:

“...you wouldn’t know they [the extraction machines] were there.” Interviewee T5/043

Many of the interviewees had their own plots from which they harvest annually, with one interviewee still cutting turf by hand in a traditional manner (this is very rare in modern times). Indeed, many of the plots are adjacent to the industrial mining land, being part of the same peatland complex and benefiting from the drainage systems put in place by the extraction company. Interestingly, those who were interviewed whilst engaged in personal peat gathering (six people) were not using it as the primary source of domestic heat (as was common in the past) and when asked specifically why they still engage in harvesting (which is quite labour-intensive and difficult) there was clearly a sense that they wished to continue with traditional rural activities and to pass them on. As one person commented:

“I can’t leave the bog uncut [not harvested]; that would be a waste. My father would turn in his grave if he thought nobody was cutting turf anymore.” Interviewee T3/019

It may therefore be suggested that peatland areas were viewed as purely utilitarian areas providing fuel for energy production and employment, cultural associations intermixed with land rights. At no time did any interviewee express dissatisfaction with the activities of mining company, though three interviewees thought that there was some danger associated with large vehicles, and often the interviewees expressed gratitude towards the mining company – especially in former times of harsh economic difficulties.

“We never went hungry working the peat. We certainly never went cold!” Interviewee T3/11

It is clear that there has been a largely positive relationship between the community and the State peat mining company, there may have been a high degree of (linking) social capital built up over the years surrounding the exploitation of the local natural resource and the support of local communities (in employment for example). Perhaps this is one reason why interviewees appear to accept the landscape in its present form in that it is a working landscape much in the same manner as a farmer might view the agricultural landscape – one of productivity, dependence and one that has cultural meaning and connectivity. The industrial harvesting of peat in this case does have negative connotations for local people in the same manner that knowledge-holders might perceive. This may be a remnant of the views generally held in Ireland that the harvesting of peat, historically, is seen as an improving activity and the notion that wet bogs (i.e. intact peatlands) have been portrayed (linguistically and physically) as having negative associations (Feehan & O'Donovan, 1996).

Key narratives

The key word analysis can be seen in figures 3a and 3b. Forty-three interviewees discussed matters relating to amenity using key words such as ‘healthy’, ‘amenities’, ‘recreation’, ‘tourism’ and ‘walking’. This narrative indicates that the interviewees placed a very high value on amenity issues. This may not be surprising because

all of the interviewees were engaged in some outdoor activity at the time of the interview (which is how much of the sample was 'grabbed' in the first place). Thirty-four were walking for leisure / exercise or bicycle riding, three were working on the land and six were gathering peat from personal plots. From the transcribed notes we see that twenty-nine interviewees viewed the future cutaway peatlands in their area as ideal locations for recreational activities of one kind or another *prior to being prompted by the interviewer*. At the time of annotation, the interviewer was cognisant of this issue and was keen to note if the interviewee voluntarily mentioned an afteruse opinion unprompted. That almost one third of the interviewees did is of note. It is clear that afteruse issues are indeed being considered by 'space-holders', on an individual level, and that afteruse preferences appear to be leaning in the direction of non-market re-use. Some interviewees specifically quizzed the interviewer on the possibilities of creating fishing lakes and other wished to know if other countries had examples of possible 'futurescapes' (Choi, 2004). Of further note, the forestry and agricultural options for afteruse (once pervasive in the Irish landscape) did not surface in this study. Interestingly, since interviewees were in an industrial landscape, there was very little use of the key words 'development' and 'employment' and no mention of 'opportunity', i.e. narratives relating to new or further industrial activity and the ensuing employment opportunities. So, there is a clear indication that there is a strong awareness of amenity issues and this was also noted as a key theme arising from earlier focus groups. Further, amenity development and usage is not equated with employment or that it is an industry in itself. This is despite the fact that tourism is one of Ireland's largest industries.

[Insert Figures 3a and 3b about here]

Forty-one interviewees were aware of the environmental importance of peatlands and environmental issues in general. The key words used here included 'wildlife', 'pollution', 'air quality', 'biodiversity' (1 person), 'nature' and 'wildness' which is a narrative indicating a high value is associated with wildness. It should be remembered that the interviewer represented themselves as a research scientist and thus it may not be surprising that the interviewees would offer opinions on these matters. In addition, just prior to the research period, a number of peat storage areas were set alight by a combination of bacterial activity and strong winds

and the resulting weeks of poor air quality. This might have added to environmental awareness of the interviewee, though, interestingly, none mentioned fire or smoke specifically. Perhaps this can be seen as another indicator that harvesting activities are accepted and ingrained in the social landscape. As mentioned, the average age of interviewees was mainly over fifty years and nearly half of the interviewees (21) reported that they could remember some of the local peatlands prior to major harvesting. All of the interviewees had harvested peat for domestic, private use either by hand or, more commonly, using small-scale machinery. There was good general knowledge of the flora and fauna of peat bogs and in nearly half of the interviews (19) the interviewee mentioned specific species when asked directly. Birds were the main animal species mentioned and bog cotton (*Eriophorum angustifolium*) was the principal plant species. Interestingly, birds and bog cotton are only to be seen on wet (intact) peatland systems, few of which remain in the landscape of the interviews. However, interviewees appeared to be aware of the timescale of regeneration – that they may even witness regeneration in their lifetime. This is summed up more succinctly by the comment of one of the interviewees when she said:

“When they’re spent, they [peatlands] should be allowed to be at peace; they’ve given us a lot so we should let them be. It’ll be nice to see them grow back. I miss the [bog] cotton.” Interviewee T2/016

This lack of knowledge of the time reality of restoration may prove problematic at the planning phase after harvesting is completed. Figures 3a and 3b also show that there is an absence of the use of the word ‘wilderness’. However, there is wide usage of the word or notion ‘wildness’ which for many has the same connotations (Jordan, 2000; Higgs, 2006). The use of the word ‘biodiversity’ is rare as is the idea of bogs having ‘spirituality’ associations. Indeed the data for both these key words was derived from a single interviewee who was a priest by profession. Of note throughout this study was the fact that no new key words / themes arose in the field in relation to perceptions of peatland landscapes. Thus, the earlier focus group analysis has been shown to have identified key narratives in the peatland landscape as the targeted sampling also captured these narratives.

Interest analysis

Interest levels (Figure 4) in amenity or biodiversity afteruse was very high, reflecting earlier focus group discourses. This may be deemed a welcome indicator to those ‘knowledge-holders’ who promote the amenity / biodiversity cutaway afteruse option (Egan, 1994; Rowlands, 2001; Feehan, 2004). Planning, quality of life and water quality issues also feature strongly in both figures 3a and 3b. Wider landscape and countryside issues (such as hunting for example) did not feature among the interests. This may be due to the ‘focussed’ nature of the sampling in that interviewees were mainly speaking about the peatlands. Though farming and livelihood issues also feature low on the list of interests, many of the interviewees lamented the decline of farming in Ireland and a common comment was that “soon there will be no farmers left” (paraphrased) or that farmers will soon be “extinct” (Interviewee T1/ 08). Few of the interviewees described themselves as farmers but the comments appear to view farming, as well as peat harvesting, as having significance for the wider community in that they are culturally and socially important. As none of the interviewees proposed that an afteruse option might be conversion of the cutaway peatland to farmland (which would, in fact, be technically difficult in this location in particular with much of the land being below water level), it may be the case that these ‘space-holders’ have a more practical knowledge of harvesting and its resulting landscape, as well as the current realities of farming in the EU.

[Insert Figure 4 about here]

One unusual recurring theme of note is that four interviewees in this study, as well as two others not included in these data, were convinced that the nearby peat-burning power station may have been secretly refitted to accommodate a nuclear generator and that the spent peatlands would be the water storage areas for this. There is no explanation for this as it has never been reported nor has the station owners any plans for such an endeavour. Ireland has no policies that recognise nuclear energy development and there is a long history of public antagonism against it. However, energy issues featured strongly in the news media at the time of the survey, and there was some mention of the nuclear energy debate in the national media just prior to the summer of 2006.

Concluding Remarks

With a renewed interest in community participation in landscape management and planning, there is a clear need to explore people's relationship with landscapes. This is core to the European Landscape Convention (Anon., 2000), and as Jones (2007) argues, for policy-makers this:

‘... implies that the views of all groups should be included, not just the views of an academic or political elite. Landscape protection, management and planning are hence to be concerned with the characteristics of the landscape that the involved population wish to give recognition to in their surroundings’ (p. 615)

Rather than focus on political institutions or civil society actors, this paper has attempted to explore lay discourses of rurality, biodiversity and sustainability among local residents in a changing rural landscape – that is, people's everyday interpretations of places and landscape. Jones (1995) suggests that close attention should be paid to how lay narratives and policy/expert discourses link conceptually. This perspective recognises the legitimacy of ‘local knowledge’ against that of the modernist tradition of universalising, academic knowledge. Therefore, this paper provides a counterbalance to well-documented expert knowledge with local and cultural knowing, providing a key input into future deliberative policy-making processes for the creation of new landscapes and land-use management.

It was found that ‘space-holders’ were intimately aware of the social and ecological landscape and, as others have demonstrated, curious about potential changes (Wagner & Gobster, 2007). The data presented here seem to imply that perceptions of industrial peatlands are that they have non-market potential and that there is a local willingness to see amenity feature strongly in any afteruse plans. Thus the non-market usages of cutaway peatlands appear to be more valued locally than any potential market (after)usage, as there does not appear to be a desire for any further industrial activity on these sites, though amenity is a re-use with many benefits. Similarly, those who were interviewed also appear to place a high intrinsic value on wildness (here understood to indicate what is commonly referred to as biodiversity) and environmental quality and, when prompted, they desire to see this incorporated in afteruse policy instruments. This is supported by high

interest levels in matters relating to quality of life and to rural planning issues as well as water quality. While perceptions of the peatland landscapes are clearly associated with their function, few interviewees had given much active thought to their future (after)use and new landscapes. The strongest issues for the local stakeholders are in the areas of amenity, environmental issues, quality of life and planning.

One weakness of ethnographic research is that it can be viewed as unreliable, lacking objectivity and thus invalid (Sarantakos, 2005). This is because of the selectively disclosed nature of the interviewing technique; though the interviewee is aware that they are speaking to a researcher there may not be any concern on the part of the interviewee that the researcher may reveal private data. Because the interviewee volunteers the information, it is unlikely that they are trying to confound or interfere with any research that may affect the area in which they live. Researchers carrying out environmental impact assessments often find this to be the case, especially when the project is a locally undesired or controversial one that may impact on property prices and residential amenity (Hubbard, 2005).

It has been shown here that applied ethnographic methodology was useful in elucidating perceptions and opinions in an informal manner that suits the (physical and social) landscape in which the data were gathered. The use of key words and in-field analysis proved very useful in capturing stakeholder opinions without alerting them to the research aims. This methodology, while used principally to gather data, may have simultaneously facilitated the awareness raising aspect of the study objectives similar to other studies on social learning (Toderi et al., 2007). As this is the first time that this methodology has been utilised further testing of the methodology may be necessary, possibly utilising another interviewer, location or topic. However, it is clear that the manner in which the interviews were carried out may be ideally suited to a productive landscape, though there may be research design issues with time, terrain and cost. On another level, this method may be utilised to show that action research can be, in some way, validated and that it may be verified by other researchers using the same technique and to triangulate with data from complementary qualitative or quantitative studies on the same topic. It will be interesting to establish if this form of research can be effective in stimulating community participation in ecological restoration projects.

There is a limit to the level of detail that could be recorded by a single researcher. From the outset, it was felt that obvious recording devices such as microphones may negate the flexibility of this methodology and may arouse mistrust or suspicion and so not give an accurate or honest opinion of the interviewee. Indeed, there are technical difficulties of recording outdoors, and this is a further reason why the methodology was designed as described. Another possible limitation of the methodology is that the perceptions of the interviewee are represented in key word having being analysed in the field by the researcher. But, by standardising responses the data can be compared and a thorough picture of the discourses can be conveyed. A factor analysis may then be carried out, but in this case the number of respondents were too small for this and the study wished to shed light on landscape perceptions and probe the nature of the respondents. However, because the data here are presented in a linear manner (thus quantitative in appearance) it should not be assumed that qualitative data has been obtained.

It may be possible to replicate this data in other peatland landscapes. This may yield further information, verify or clarify data, and may show changes in perceptions over time. More importantly, this method may also be used to prepare a blueprint for the afteruse of cutaway peatland areas throughout Ireland or, perhaps, in other cultural landscapes. It is clear from the data above that the purposive, 'accidental' or 'grab' sampling technique, combined with a non-structured, conversational methodology, acquired the correct sample population and yielded valuable data on local stakeholders perceptions of industrial peatlands. The next stage in the process will be to carry out quantitative surveys in order to further triangulate results and to explore in more detail the relationship of the Irish to the peatland landscape – an area which has never been examined. This will be carried out in late 2007 via a large scale randomised, nationwide survey.

Narratives such as those reported here give some insight into people-place relationships in productive landscapes, such as industrial peatlands which offer insights for those proposing new landscapes. There are obvious implications for both planning and management of these new landscapes. The method for extracting these narratives (purposive and targeted) also offers an opportunity for planners seeking to have more

meaningful engagements with ‘space-holders’ and thus overcome issues at the early stages of planning. New landscapes can present local communities with a *tabula rasa*; an area where further landscape research may find more challenges. As has been suggested by others (Ling et al., 2007) landscape multifunctionality is now both desirable and practical; here we show that, at a local level, this multifunctionality is equally desirable.

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