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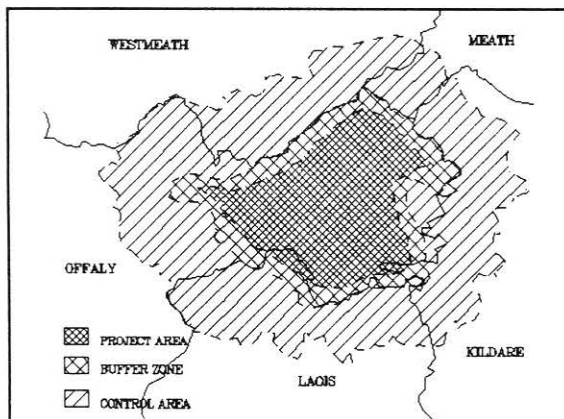
East Offaly Badger Research Project (EOP): Interim Report for the period, January 1989 to December 1992

L.A. Dolan, J.A. Eves and D. Bray

Introduction

The East Offaly Badger Research Project (EOP) is a project in which badgers are removed from a central project area and an outer buffer zone and the tuberculin testing data for the cattle in the Project Area are compared with that of the cattle in the surrounding Control Area where there is no badger control programme in place (Fig. 1).

Figure 1. The Project, Buffer and Control Areas of the East Offaly Badger Research Project.



Results

The badger trapping programme continued during 1992 and the results are presented in Table 1. The proportion of badgers trapped in the Buffer Zone remained high, at 40%, and most of the remaining badgers were trapped towards the periphery of the Project Area.

The tuberculin testing data showed that at the end of 1992, there had been a decrease of 63% in the APT (reactor animals per 1000 animal tests) in the Project Area compared to the 1988 figure. In the

same period the APT for the Control Area increased by 56% and then decreased to 15% less than the 1988 rate (Fig. 2).

The change in the percentage of total reactors identified was marginally higher than that observed in the APT rates (Table 2).

Table 1. The number of badgers trapped and the number found to be tuberculous in the Project Area and Buffer Zone of the EOP from 1989 to 1992, inclusive.

Year	Project Area	Buffer Zone	Total
1989	700 94(13)*	137 25(18)	837 119(14)
1990	197 24(12)	103 3(3)	300 27(9)
1991	117 13(11)	74 8(11)	191 21(11)
1992	108 7(6)	72 2(3)	180 9(5)
Total	1122 138(12)	386 38(10)	1508 176(12)

(*) number and percentage of badgers found to be tuberculous on gross post-mortem examination

Figure 2. APT

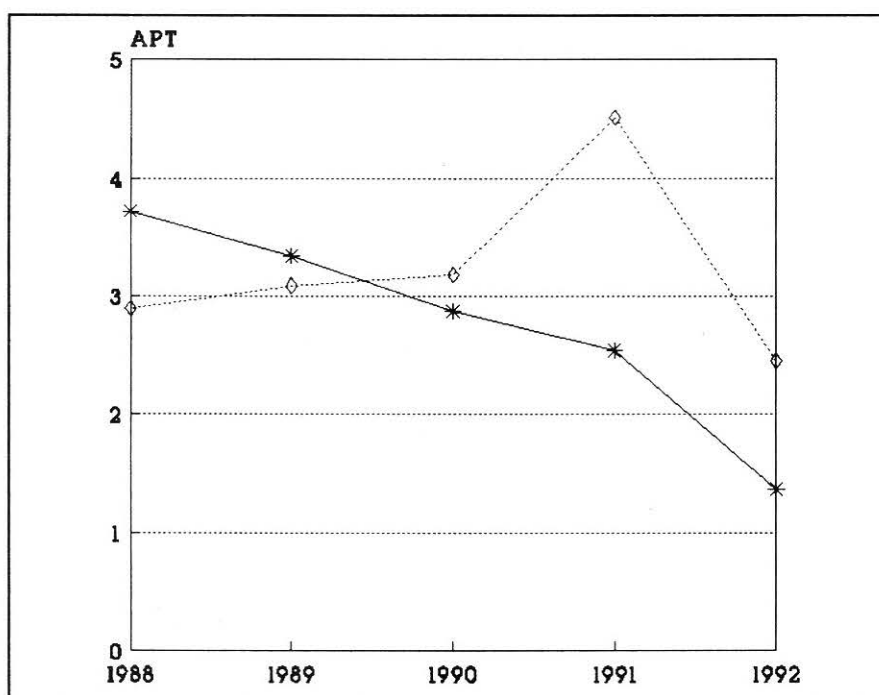


Table 2. The number of tuberculin reactors, APT and % change, by year, in the Project and Control Areas of the EOP

Year	Area	No. of Reactors/year	APT/year*		
1988		321	3.72		
1989	Project	343	3.34		
1990		281	2.87		
1991		176	2.54		
1992		102	1.37	(-68)	(-63)
1988		720	2.89		
1989	Control	829	3.09		
1990		789	3.18		
1991		966	4.51		
1992		567	2.45	(-21)	(-15)

* Reactor animals per 1,000 animal tests.

() % change from 1988 figure.

Discussion

The marked difference between the APT figures for the Project and Control Areas is further emphasised by the fact that the APT in the Control Area increased in each of the first three years, with a peak increase of 56%, above the 1988 figure, in 1991. In the same period the APT decreased each year in the Project Area.

An initial analysis of the tuberculin testing data from the Project and Control Areas, for the period 1982 to 1991, was carried out by the Department of Statistics, University College Dublin. This showed that there was a statistically significant difference in the herd breakdown rate in the two areas in 1991, the lesser rate being in the Project Area. This was a feature which had not occurred in any of the previous years (Williams and McClean, 1992, internal report).

Further analysis of the related data will be undertaken during 1993, this will include the use of Geographical Information System technology (G.I.S.).