

CIRENCESTER SCIENCE AND TECHNOLOGY SOCIETY

The November lecture on “The Ecological Consequences of Removing Badgers from an Ecosystem” was given by Dr Ian Trewby from the Woodchester Research Station which is part of the Central Science Laboratory, an agency of DEFRA.

The direct cost of monitoring and compensation related to bovine tuberculosis in cattle is currently running at about £15 million per year. Badgers are susceptible to bovine TB and may sometimes spread the disease. Dr Trewby's research involves monitoring the impact of DEFRA's Randomized Badger Culling Trials (RBCT) on the populations of foxes, rabbits, hedgehogs and hares, and also on two species of ground-nesting birds, skylark and meadow pipit. His research compared population density of these species in areas of (1) proactive badger cull (culling all the badgers whose setts can be located in an area of 100 square kilometres), (2) reactive cull (where there has been an outbreak of bovine TB) and (3) control areas. It is difficult to estimate population density of these species . Dr Trewby's methodology was rigorous and replicated, ensuring that the statistical significance of the results can be assessed and that future management policy can be based on factual rather than anecdotal evidence. His results were presented in graphs and histograms.

One specific conclusion was that badger culling is associated with an increase in fox populations. Dr Trewby's general conclusion was that culling a large carnivore has significant impact on other components of the ecosystem, some predictable, some less so.

In answer to a question about the impact of RBCT on the incidence of bovine TB, Dr Trewby indicated some of the reasons why DEFRA had now terminated their trials in England.

This was an excellent, factual account of a highly controversial subject which has major implications for nature conservation and livestock husbandry.