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SCOTTISH BADGERS

Badgers and Bovine TB in Scotland

Badgers and Bovine TB

Introduction

There has been a considerable amount of media coverage of this topic over the past two years. Badger Groups in Scotland have kept a watching brief on the situation knowing that most of the statements being made referred to the situation in England and Wales and did not apply in Scotland. However, members started reporting that many people were confused about the issue and about the way in which the position in Scotland differs from that in England and Wales. This publication presents a very brief statement. It is not meant to be a new definitive work on the subject but merely briefing material for anyone interested to obtain a rapid, factual review.

Human TB and bovine TB are caused by different organisms. In humans, the usual cause is *Mycobacterium tuberculosis*. There has been an increase in the occurrence of this disease around the world in recent years. In cattle, the cause is *Mycobacterium bovis*. However, this organism can also cause disease in humans and badgers. In 1998, there were 25 cases of *M. bovis* infections in humans in the UK and 11 of these were in Scotland. However, none of these cases had links to cattle.

The Kreb s Report

In 1996 the Government commissioned the third independent scientific review of bovine tuberculosis in cattle and badgers. The review was chaired by Professor John Krebs and the final report on the work was published in 1997. This is a large and thorough document costing £35. It has proved difficult for many people interested in badgers to find a copy that they can have access to. Try asking your local library to obtain a copy. The Government then formed an Independent Scientific Group to advise on the implementation of the recommendations in the original report. This work was chaired by Professor Bourne. The Government finally announced its plans for controlling tuberculosis in cattle in the Bourne Report published in 1998.

The National Federation of Badger Groups issued a briefing paper to its members in 1998 indicating that it endorsed the majority of the recommendations in the Krebs report. They also indicated that they were wholly opposed to the badger culling trial that had emerged as a key plank of the implementation strategy- on the grounds of ethics, badger welfare, practicality and economics . The plan involved the experimental culling of about 20,000 badgers, including lactating sows. The Scottish Badger Committee made no pronouncements since the work was scheduled to take place in England and Wales only.

In 1999 a program entitled The Culling Fields was shown on television. . This included a map purporting to show the accurate distribution of outbreaks of TB in cattle. The map showed widespread infestation of the Borders, central Scotland and much of the East Coast. Around that time, our membership started reporting concerns about the lack

of information about the situation in Scotland and more frequently expressed hostility to badgers by farmers.

Tuberculosis in Cattle in Scotland

The compulsory testing of cattle for *M. bovis* was initiated in 1950. Monitoring in Scotland is carried out by the State Veterinary Service on behalf of the Scottish Executive. According to the official figures given to Scottish Badgers by the Scottish Executive, the number of outbreaks of TB in cattle in Scotland over the last ten years shows a range of between three and sixteen cases annually. There are over 13,000 cattle holdings hence the incidence in Scotland is very low. The Executive has confirmed that here is no evidence of any increased incidence. In 1998, testing of 32,573 herds took place in the UK. *M. bovis* was confirmed present in 740 herds, only 4 of which were in Scotland.

Tuberculosis in Badgers in Scotland

At one time there was regular monitoring of badgers killed on the roads in Scotland for TB. During the period 1972 to 1993, forty-eight badgers were examined and only one tested positive for TB. The work has now stopped. There have therefore been no recent records. Currently, the only reliable way of proving the existence of TB in badgers is by post mortem examination and culture. Attempts to develop a method based on blood samples have so far been unsuccessful.

The issues

a) Do badgers cause TB in cattle?

The debate that has raged on this subject for many years now is beset by arguments founded on emotion and a lack of hard objective evidence. The Krebs report, in attempting to set out both sides of the argument, has been criticised for failing to make a sound case for the actions recommended. In addition there has been a tendency for different interest groups to pick selectively from the document in order to advance their case. This highlights the difficulty of providing a summary. Some quotes will demonstrate this point further.

The sum of evidence strongly supports the view that, in Britain, badgers are a significant source of infection in cattle. Most of this evidence is indirect, consisting of correlations rather than demonstrations of cause and effect .

b) If they do, how should they be controlled?

We recommend that MAFF should set up an experiment to quantify the impact of

culling badgers. Although the route of transmission from badgers to cattle is not known, simple husbandry methods to separate badgers and cattle could have a significant role in reducing risk.
The report points out that the number of badgers to be culled in the experiment is unlikely to differ much from the numbers being culled under the existing policy.

c) Are the proposed controls morally acceptable?

The Independent Scientific Group advised that there be a close season to spare lactating sows and this was implemented in the culling trial. Nonetheless, there has been concern that lactating females may be being killed. This has enraged many people, especially those involved in animal welfare groups. There is a wide spectrum of views on how we should regard wild species that have an adverse economic impact on food production. There is also a considerable degree of ambivalence depending on the species involved. For most people, mammals and birds are accorded a sympathy that does not extend to fish or insects.

d) Is the experiment well designed?

Given the very complex inter-relationships that may be involved, the number of variables that might affect the results, the scale of the cull, the possibility of other species being involved, and the possibility of the work being upset by the activities of those not wishing the trial to be successful, many questions have been raised along these lines. It is only fair to point out that several eminent scientists and their teams will have professional reputations at stake and that they will have to be able to justify the design and the interpretation of the results to a much wider scientific audience.

Some facts to hold on to!

The incidence of TB in cattle in Scotland is very low and there is no sign of an increase.

The incidence of TB in badgers in Scotland is negligible.

The economic impact of an outbreak of TB on a farm can be disastrous despite compensation arrangements.

Killing of badgers, unless done under licence, is illegal.

Moving badgers from an area where TB is known to occur to one where it does not is wholly unacceptable.

Further information

The Ministry of Agriculture Fisheries and Food has a web site which devotes pages to the badger culling programme as well as providing statistics on the occurrence of *M. tuberculosis* and *M. bovis*. Try starting at http://maff.gov. uk/animalh/tb/default.htm.

The National Federation of Badger Groups issues a continuous series of press releases and news bulletins about this issue. They can be contacted at 2 Cloisters Business Centre, 8 Battersea Park Road, London SW8 4BG. Telephone 0171-498-3220.

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The contents of this paper have been checked by both Scottish Natural Heritage and the Scottish Executive Rural Affairs Department..