WOODLAND TRUST

Position Statement

Bovine Tuberculosis in cattle and badgers

Background

Bovine Tuberculosis (bTB) was a major problem in cattle herds during the last 100 years but was virtually eradicated by tuberculin testing and slaughter of infected cattle. It persisted in southwest England, some parts of Wales and the West Midlands, and is now increasing in other parts of Britain. Since the mid-1970s tens of thousands of badgers have been culled in response to bTB outbreaks, because of circumstantial evidence that they spread the disease but bTB has continued to increase in cattle. While it can be a serious problem for farmers with affected herds, bTB is still relatively rare in the UK: in 2002 19,792 bTB reactors (cattle that gave a positive tuberculin skin test result) were slaughtered, compared to 4,189,000 animals (including 590,000 cattle) slaughtered during the FMD outbreak[1]. Each year, 90,000 cattle are culled due to mastitis, 31,000 due to lameness and 125,000 due to infertility[2].

Recent history

In December 1997, a Government review, chaired by Professor John Krebs, concluded that "the sum of evidence strongly supports the view that, in Britain, badgers are a significant source of infection in cattle, although evidence is all indirect" but noted that the effectiveness of badger culling as a control measure could not be quantified with the data then available. It recommended that the relevant Government department (now DEFRA) should set up an experiment to quantify the impact of culling badgers[3]. In 1998 the Government set up the Independent Scientific Group on Cattle TB (ISG), chaired by Professor John Bourne to advise on implementation of the Krebs report recommendations. The ISG, announced a randomised badger culling trial (RBCT or Krebs trial) and an array of research related to diagnosis, pathogenesis, dynamics and control of TB in cattle and badgers. [4]

The Krebs trial began in December 1998, aiming to establish if culling badgers is effective or sustainable for bTB control. It was carried out in 30 areas of around 100km² where the recent incidence of bTB had been relatively high. The areas were grouped into 10 sets of 'triplets' each part of which was treated differently:

- 'Proactive' culling of all badgers: area to be kept clear for the rest of the trial.
- 'Reactive' culling of all badgers associated with farms where bTB confirmed.
- 'Survey only' where no badger culling took place.

While the ISG's work was in progress, the House of Commons Agriculture Committee, examining the Government's implementation of the Krebs Report, upheld the need for field trials to test the link between badgers and cattle[5]. and recommended:

- More research into cattle to cattle transmission .
- More research into developing a cattle vaccine
- More research into the cause of the rising incidence in bovine TB, other possible transmission routes and the role of trace elements in susceptibility to the disease.
- Identification of husbandry practices that could reduce cattle infection
- Dates of the last bTB test to be included in cattle passports.

In 2003, the Environment, Food and Rural Affairs Committee also recognised the need for a broader approach to the problem and recommended :[6]

- Tighter controls on livestock movement
- Financial support to improve husbandry
- Effective pre- & post-movement testing
- Research and investment in husbandry and biosecurity
- No badger culling outside Krebs trial areas
- A holistic bTB strategy from Government

Whilst awaiting the outcome of the Krebs trial, DEFRA acknowledged that farm practices should be modified to manage bTB in cattle[7]. Cattle-based measures designed to tackle the disease were introduced and included: pre-movement testing of cattle, increased bTB testing frequencies, movement restrictions on herds with overdue tests, and farm management action such as introduction of herd health plans and quarantine facilities for new stock.

Reason for doubt?

Bovine TB cases were increasing before badger culling became limited to Krebs trial areas[8],[9].,[10]. The evidence suggests several reasons behind the rise:

- The bTB test is not accurate enough. Evidence suggests the current test does not always identify the infection[11]
- FMD confined large numbers of cattle together for months allowing undetected infection to spread. bTB testing was suspended during the FMD outbreak.
- Restocking after FMD resulted in infected cattle being inadvertently transported to previously unaffected areas.

This well documented increase in bTB occurred at a time when badger numbers remained relatively stable. Before the Krebs trial, more than 80 per cent of badgers culled and post mortem examined by MAFF were found to be disease-free , and in some areas infected with bTB in cattle the infection was found in low levels or not at all in local badger populations[12]. It is just as likely that it is the cattle that are responsible for infecting badgers with bTB as the reverse[13].

Research into cattle-based bTB control is not adequately prioritised. Only 17% of funding for bTB research focuses on alternatives strategies to killing badgers[14].

The current situation

In his overview of the final ISG report published in 2007[15] Professor Bourne states: "While badgers contribute significantly to the disease in cattle, cattle-to-cattle transmission is also very important in high incidence areas and is the main cause of disease spread to new

areas". The study found that reactive culling actually increased levels of bTB infection within the culled area. Proactive culling brought a modest reduction in TB infection in cattle within the culled area, but an increase just outside the area. In both cases, these effects reflect culling-induced changes in badger ecology and behaviour (the "perturbation" effect).

Proactive culling will only have a positive effect on infection rates if carried out in a sustained and coordinated way over a very large area. The ISG found that even then, this would be both uneconomic and impractical. DEFRA data suggests that culling 100 per cent of badgers in an area is virtually impossible. Only 80 per cent would be caught using cage traps. The Government cannot compulsorily gain access to land , and more than 30 per cent of landowners refused access for the Krebs trials. Past badger culls have also been sabotaged through direct action.

The report also concluded that while other approaches to culling could be considered, available data suggested that none was likely to generate benefits substantially greater than those recorded in the RBCT, and many were likely to cause detrimental effects. It states: "Given its high costs and low benefits we therefore conclude that badger culling is unlikely to contribute usefully to the control of cattle TB in Britain, and recommend that TB control efforts focus on measures other than badger culling."

In his response to the publication of the ISG's final report, Secretary of State for Environment, Farming and Rural Affairs David Miliband accepted the need for cattle-based measures, saying the following had all been introduced: zero tolerance regime for overdue tests; changes to the compensation system; a new requirement for pre-movement tests from high risk herds; and the extension of the use of the gamma interferon test, and pointing out the potential cost of further measures.

Defra ministers in England asked their Chief Scientific Adviser, Prof. Sir David King (at the time), for an assessment of the scientific evidence in the ISG report and elsewhere that needs to be taken into account in reaching future policy decisions on bovine TB. The King report was published on 22 October 2007 to help inform an inquiry by the Environment, Food and Rural Affairs (EFRA) Select Committee on bovine TB. King concluded that that the removal of badgers could make a significant contribution to the control of cattle TB in those areas of England where there is a high and persistent incidence of TB in cattle, provided removal takes place alongside an effective programme of cattle controls. Whilst questioning the conclusion of the ISG report, he produced no new data and was not specific as to the scale. Two reports were submitted to the EFRA Committee in November from the ISG and Prof. Denis Mollison. Both stated that there were fundamental scientific errors in how King interpreted the ISG results.

In England on July 7th 2008, Hilary Benn the Environment Minister announced that based on the evidence, there would be no cull of badgers, and that there would be £20 million invested in development of vaccines and efforts would be made to strengthen cattle-based measures. Trials of a badger vaccine are to begin in 2010. In Wales, the National Assembly has introduced legislation that will allow it to carry out culling in an Intensive Action Pilot Area in north Pembrokeshire, beginning in 2010.

The Woodland Trust view

The Woodland Trust is sympathetic to the impact that bTB has on farmers' livelihoods. However, we believe the ISG's work shows that culling badgers is not the solution to bTB in the UK. Localised culling has been shown to be ineffective, and sustained and widespread

culling is uneconomic, impractical and publicly unacceptable. It could also cause local extinction of badgers, contravening The Bern Convention on the Conservation of European Wildlife and Natural Habitats, to which the UK Government is a signatory, and which requires any exploitation of certain animals, including badgers, to be regulated to keep the population out of danger (Article 7). Exceptions are allowed to prevent damage to livestock (Article 9) but only when there is no other satisfactory solution. In this case, cattle-based measures should therefore be fully investigated as an alternative to badger culling.

What the Woodland Trust will do:

The Woodland Trust will:

- Continue to refuse access to sites in our ownership for the purpose of culling badgers unless required by law to allow it
- With partner organisations, continue to lobby against badger culling as a method of controlling bTB, and in favour of further research into cattle-based solutions and increased biosecurity to keep badgers and cattle apart

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[5] Agriculture Committee (1999) 5th Report. Badgers and Bovine Tuberculosis. www.parliament.the-stationery-office.co.uk/pa/cm199899/cmselect/cmagric/233/23302.htm
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