

Wildlife and Countryside Link Statement on Bovine TB

May 2004

1. Wildlife and Countryside Link (WCL) brings together voluntary organisations concerned with the conservation and protection of wildlife and the countryside. Our members practise and advocate environmentally sensitive land management and food production practices and encourage respect for and enjoyment of natural landscapes and features, the historic environment and biodiversity. Taken together, our members have the support of almost seven million people in the UK.
2. WCL believes that the Government must adopt a science-based, strategic approach to disease control. Disease outbreaks in Britain, such as foot and mouth (FMD) and BSE, have had a disastrous effect on the rural economy including the farming industry and tourism. Many diseases also cause significant animal welfare problems. For example, in 2002 90,000 cows were slaughtered due to mastitis and 31,000 due to lameness [1]. WCL therefore supports Government plans to introduce an Animal Health and Welfare Strategy. A vital part of such a strategy must be to address the growing problem of bovine TB in cattle.
3. Bovine TB has increased in the national herd by 88% since 1990 [2, 3] and in 2003, 23,546 cattle were slaughtered [4]. WCL believes that bovine TB can be brought under control and reduced. The challenge for the Government is to implement a control strategy that both enhances farm animal welfare and conserves wildlife. WCL believes that this will only be possible with improvements to the scientific basis of animal health and welfare strategies. This requires improved disease surveillance that facilitates epidemiological analysis of data and the implementation of a wide-ranging and rigorous research programme that can inform Government policy.
4. WCL is concerned that a misplaced focus on badger culling to try and reduce the incidence of bovine TB has misdirected efforts to control the disease in the past.
5. WCL believes that a future bovine TB control strategy must be based on four key principles:
 - 5.1. effective disease surveillance;
 - 5.2. targeted and rigorous scientific research;
 - 5.3. development, implementation and monitoring of policy; and
 - 5.4. rigorous analysis of economic, social, and environmental considerations.



6. However WCL notes that there is already sound evidence to indicate that the spread of bovine TB between cattle is significant [5]. Therefore, controlling the spread of disease between cattle must be the first priority of a bovine TB control strategy. WCL believes that, in the short term, bovine TB could be brought under control and reduced through the implementation of the following measures:

6.1. improved cattle testing, including use of the gamma interferon test;

6.2. stricter movement restrictions;

6.3. improved husbandry and biosecurity.

7. Improved cattle testing

7.1. The tuberculin skin test is increasingly recognised to be unable to detect a significant number of infected cattle. However, the gamma interferon test is able to identify infected cattle that the skin test misses [6, 7]. WCL is concerned by the Government's failure to implement a gamma interferon TB testing strategy which could revolutionise bovine TB control in the UK. EU regulations allow for the introduction of more advanced TB testing regimes, such as the gamma interferon test, but so far the Government has not properly assessed either the benefits of an improved testing regime or the advantages of the gamma interferon test over the current skin test. Gamma interferon has been extensively researched and utilised in other countries, including Ireland, for more than a decade. The Government's own gamma interferon field trial is progressing very slowly and is not being carried out as recommended by the Independent Scientific Group. The trial will not assess the test's specificity and sensitivity and, therefore, the trial will not effectively inform policy options.

7.2. WCL believes that the following measures would more quickly and accurately identify cattle infected with bovine TB:

7.2.1. Improved cattle testing, including more frequent testing in high risk areas and low risk areas in the event of a TB breakdown, and compulsory pre- and post-movement testing;

7.2.2. Improved diagnosis using the more reliable gamma interferon test, in conjunction with the skin test;

7.2.3. Incentives and penalties for farmers, including penalties for failing to have cattle TB tested.



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8. Stricter movement restrictions

- 8.1. EU regulations mean that cattle must be routinely tested for bovine TB. Cattle testing positive – ‘reactors’ – are slaughtered and movement restrictions are placed on affected farms until they are clear of the disease. However, due to the FMD crisis, most TB testing was suspended and the number of overdue TB tests peaked at 26,936 herds. In breach of EU regulations, DEFRA failed to impose movement restrictions on these herds while they were overdue for a test, resulting in TB being spread to new areas as farmers restocked after FMD.
- 8.2. The UK remains in breach of EU regulations because herds that are overdue for their TB test do not have movement restrictions imposed on them immediately, but only after they have been overdue for three months. WCL believes that it is critical that cattle which could have contracted TB from other cattle should be traceable and tested. WCL proposes that this could be achieved through improved regulation and recording of livestock movements, including TB test dates on cattle passports.

9. Improved husbandry and biosecurity

- 9.1. There is a positive correlation between the incidence of bovine TB and herd size, possibly because existing testing regimes do not identify all reactors in larger herds, allowing the disease to persist [8]. Reform of the Common Agricultural Policy (CAP) is likely to lead to significant changes in the structure of the dairy and beef industries in the UK with implications for the spread and persistence of bovine TB amongst cattle. The number of farms larger than 100 hectares in size is forecast to increase, leading to a corresponding increase in herd size [9]. Improved husbandry and biosecurity on farms is therefore critical to reducing cattle to cattle transmission, within and between herds.
- 9.2. WCL believes that this could be achieved through:
- 9.2.1. Improved husbandry and biosecurity, to include better cattle welfare standards and inspections, compulsory herd health plans and adequate isolation facilities;
- 9.2.2. Grants to support expensive husbandry and biosecurity measures such as isolation facilities and properly ventilated buildings.

10. Bovine TB Vaccine development

- 10.1. WCL believes that a vaccine – for cattle, wildlife or both - may represent a long-term measure in reducing and controlling bovine TB in Britain. A vaccine scoping study published in 2003 reviewed the progress made to date with bovine TB vaccines [10]. However, it concluded that a suitable candidate vaccine is not yet available for use in cattle, due to scientific questions and policy issues needing to be



addressed first. It was recommended that research in this area continues to be funded.

- 10.2. Similarly, the authors concluded that significant scientific hurdles need to be overcome before a badger vaccine may be used. One key issue is that a vaccine would only be effective if most cattle TB is derived from badgers. This is being investigated by the Krebs trial. Other issues that need to be resolved with a badger vaccine relate to safety, efficacy, ethics, economics and practicalities.
- 10.3. WCL therefore agrees with the authors of the vaccine scoping study that the option of the use of vaccines be retained. We also urge the Government to ensure that the research and development of vaccines is properly funded.

11. Wildlife and Bovine TB

- 11.1. WCL is concerned by the widespread belief that badger culling reduces the incidence of bovine TB. Historic bovine TB control strategies in the UK, which combined the testing and slaughter of cattle with killing badgers, have been re-analysed by the Government's Independent Scientific Group on Cattle TB (ISG). It found that killing badgers gave no demonstrable benefits [11]. A further analysis of research data has cast serious doubt on the efficacy of targeted badger culling: it is not possible to identify infected badgers, culling has a disruptive effect on badger social organisation and badger populations can rapidly recover [12]. More recently, the 'reactive' randomised badger culling experiment (the 'Krebs trial') has shown an average 27% increase in the incidence of cattle TB [13]. Although the recent Godfray review sought to question the statistical validity of this particular figure, even their interpretation made it clear that there was strong evidence that the number of herd breakdowns in reactive areas was greater than in control areas [14]. This may be further evidence that badger culling is not an effective control policy, although the data have not been comprehensively analysed.
- 11.2. It is claimed that the 'Four Areas Badger Study' in Ireland has shown that badger culling can reduce bovine TB in cattle by up to 90% [15], other sources have stated that the effect is a 50% reduction. However, it is known that badger removal operations also took place in the scientific control areas of the study (the so-called 'Reference Areas') and that varying levels of badger culling had taken place in the study areas before it began. It remains to be seen how reliable results can be drawn from the study, given these apparently limited scientific controls and large variables. The results of that study have not yet been published.
- 11.3. The UK is a major stronghold for the European badger, which is in serious decline in much of its range [16]. Badgers play an important role in the environment as a predator and seed disperser. They also modify the landscape at a local level through excavations that can be extensive. Badger setts provide hibernacula for



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great crested newts, which are also protected by legislation. A badger culling strategy would be obliged to disregard the existence of highly valued nature conservation designations, such as Sites of Special Scientific Interest and National Nature Reserves. Extensive badger culling would breach the UK's commitment to its international nature conservation obligations. The Bern Convention, to which the UK is a signatory, prohibits the 'widespread disappearance' of a protected species and 'indiscriminate methods of trapping' such as snares [17]. Although derogations can be made for the control of disease, this is only permissible when there are 'no other satisfactory solutions'. It should also be noted that the use of snares to kill or take badgers is prohibited by the Wildlife and Countryside Act (WCA) 1981 as amended. The use of snares is of concern to WCL as there is evidence that non-target species are regularly caught in snares, including otters, wildcats, pine martens, red squirrels, mountain hare, owls, black grouse and capercaillie [18, 19, 20]. In 1968 MAFF (Humane Traps Panel) conducted a trial to compare the efficiency of types of snare. Results of snaring included 155 foxes and 132 non-target animals [21]. The Burns Inquiry also reported "...about half of the captures made by snares are of non-target species... [22].

- 11.4. Bovine TB control must be seen in the context of a wider range of stakeholders than farmers and conservationists alone. Badgers are one of Britain's most popular mammals. Indeed, in a country where most large predatory mammals have been eliminated, the badger remains one of the few animals widespread enough to excite people about 'wild' places. WCL believes that extensive badger control, particularly involving snares, would prove immensely unpopular and risks harming important rural industries such as tourism. Badger culling would also erode public confidence in farming at a time when closer relationships between farmers and consumers are increasingly important.

This statement is supported by the following organisations:

Environmental Investigation Agency

Herpetological Conservation Trust

National Federation of Badger Groups

Royal Society for the Prevention of Cruelty to Animals

The Wildlife Trusts

Woodland Trust

World Society for the Protection of Animals



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References

- [1] Sibley, R (2003). Rethink health strategies. *Farmers Weekly*. 28 February 2003.
- [2] HMSO (1990). *Animal Health 1990*. Report of Chief Veterinary Officer. Ministry of Agriculture, Fisheries and Food.
- [3] DEFRA TB statistics at www.defra.gov.uk/animalh/tb
- [4] DEFRA (2004). Overview of national bovine TB statistics for 2003. TB Forum paper TBF 101. February 2004. www.defra.gov.uk/animalh/tb/
- [5] ISG (2001). An epidemiological investigation into bovine tuberculosis. Third Report of the Independent Scientific Group on cattle TB. July 2001. www.defra.gov.uk/animalh/tb/
- [6] Wood, P. R. and Jones, S. L. (1998). Bovigam an internationally accredited diagnostic test for bovine tuberculosis. United States Animal Health Association. 1998 Proceedings.
- [7] Monaghan, M. L., Doherty, M. L., Collins, J. D., Kazda, J. F. and Quinn, P. J. (1994). The tuberculin test. *Veterinary Microbiology*, 40, 111-124.
- [8] Green, L and Cornell, S. (2002). Investigations into risks of bovine tuberculosis breakdowns in cattle outside the badger trial areas. TBF73. 'As herd or test size increased, the risk of a positive test and the number of reactors also increased'. www.defra.gov.uk/animalh/tb/forum/findex.htm
- [9] Silcock, P. *et al* (2003). A long-term policy perspective for sustainable agriculture: the potential environmental impacts of CAP Mid-Term Review proposals. Final Report for DEFRA. 22 August 2003. www.gfa-race.co.uk
- [10] Development of vaccines for Bovine Tuberculosis. Report of the Independent Scientific Group Vaccine Scoping Sub-Committee. July 2003. www.defra.gov.uk/animalh/tb/publications/index.htm
- [11] EFRA Committee (2003). Badgers and Bovine TB. Seventh report of session 2002/3. April 2003. Professor John Bourne: 'We also revisited old data from previous BROs [badger removal operations] to see if this would shed any light on the potential for culling in a localised situation outside trial areas. We found we could not add to what Krebs had said that there was no evidence that localized culling had any impact on cattle TB incidence'. www.publications.parliament.uk/pa/cm200203/cmselect/cmenvfru/cmenvfru.htm#reports
- [12] Delahay, R. J. *et al* (2003). Bovine tuberculosis in badgers: Can culling control the disease? *Conservation and Conflict*, pp 165-171, Westbury Publishing.
- [13] Donnelly, C. A. *et al* (2003). Impact of localized badger culling on tuberculosis incidence in British cattle. *Nature*, 426, 834 - 837 Letters to Nature (18 Dec 2003).
- [14] Godfray, H. C. J. *et al* (2004). Independent Scientific Review of the Randomised Badger Culling Trial and Associated Epidemiological Research.
- [15] Leigh Corner, BBC Radio 4 Farming Today, 31 May 2003.
- [16] Griffiths, H.I. and Thomas, D. H (1997). The conservation and management of the European badger (*Meles meles*). *Nature and Environment*, No. 90. Council of Europe.
- [17] Convention on the Conservation of European Wildlife and Natural Habitats. www.nature.coe.int/english/cadres/bern.htm
- [18] SSPCA 2002, Scottish Society for the Prevention of Cruelty to Animals (2002) Field experience and information provided for the NFBG report on snares 2002



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[19] RSPCA 2000, Royal Society for the Prevention of Cruelty to Animals (2000) Submission to the Hunting Inquiry.

[20] Cosgrove P & Oswald J. (2001) Western Capercaillie in snares. Scottish Birds. Vol. 22: Part 1.

[21] Forestry Commission (1997) Foxes and Forestry. Technical paper 23.

[22] Burns *et al* (2000) Final Report of the Committee of Inquiry into Hunting with Dogs in England and Wales. HMSO.



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