

# National Assembly for Wales Rural Development Sub-Committee

RDC(3)-02-07(p2) 25 July 2007

## Farmers' Union of Wales Submission on the Independent Science Group's Final Report into Bovine Tuberculosis and the Implementation of the Recommendations of the Environment, Planning, and Countryside Committee's 2004 Inquiry into Bovine Tuberculosis

### The Report of the Independent Science Group (ISG) on Bovine Tuberculosis

#### 1. Introduction

1.1 The final report of the Independent Scientific Group on Cattle TB reiterates the fact that regular tuberculin testing (skin testing) of cattle, and the subsequent removal of reactors, had, by the early 1970s, reduced the prevalence of infection in cattle to the point at which the disease was considered to have been all but eliminated from the UK. However, despite the success that the intensive removal of reactor cattle had in other regions of the UK, this success was not mirrored in some parts of the UK, most notably in the southwest of England, and it became clear in the early 1970s that this was due to the presence of the disease in badgers. 1.2 Research into the relationship between the presence of bTB in badgers and cattle followed, the most significant early example of which was the Thornbury trial, where the gassing of badger setts resulted in the elimination of the disease, in cattle in an area where bTB was formerly a persistent problem, for a period of 10 years. 1.3 Despite the strong evidence of a link between bTB in badgers and cattle, there were those who remained sceptical about its relevance to bTB control. The work undertaken by the ISG includes the most comprehensive UK research into the link between the disease in both species, and demonstrates conclusively that that link is extremely significant. 1.4 It also highlights the potential problems that can arise when badger culling is carried out using the methodologies employed in the Randomised Badger Culling Trials, the most significant of which is the perturbation effect. 1.5 Thus, it is the view of the Farmers' Union of Wales that the ISG's final report represents an invaluable source of information for those considering future badger culling strategies. 1.6 However, notwithstanding the above, the Union has major reservations regarding some aspects of the report and its conclusions, and would question the motives that underlie many of these. Most notable among these is the conclusion that "...badger culling cannot meaningfully contribute to the future control of cattle TB in Britain", and the inclusion of an overly simplistic cost-benefit analysis in the final report. 1.7 In terms of the former, we believe that the RBC trials, along with previous strategies and research, show that badger culling "can" and has made a significant contribution to the control of bTB in Britain. 1.8 In terms of the latter, like Lord Rooker, the Minister for Sustainable Food and Farming and Animal Health, we believe that the ISG has gone outside its remit, and would therefore question the motives for doing this, as well as the validity of the cost-benefit analysis itself. 1.9 The FUW would emphasise that the RBCT constituted a scientific study and not a bTB eradication programme, and that, as such, analyses of the RBCT as an eradication programme are wholly inappropriate. 1.10 Thus, in conclusion, we would state that, while we regard the contribution made by the ISG to our scientific knowledge of the disease in badgers and cattle as invaluable, we disagree fundamentally with the conclusions of the Group, which, while acknowledging the significance of badgers as bTB vectors, portray the problem as insurmountable, rather than as a significant challenge that must be overcome. 1.11 In simple terms, while the FUW recognises that the problem of TB in badgers represents a significant and complex challenge, we do not believe that taking a defeatist attitude to the problem is beneficial; rather, we believe that the ISG has shown conclusively that by tackling all bTB vectors with equal ferocity, significant reductions in bTB levels can be achieved. 1.12 In terms of the changes to bTB controls in cattle advocated by the ISG, we do not believe that any significant changes should be made in the absence of measures that address the wildlife vector, the relevance of which has been clearly highlighted by the work of the ISG.

#### 2. The Randomised Badger Culling Trials (RBCT)

2.1 The average badger population density in RBCT areas prior to proactive culling was estimated to have been 3.92 badgers/km<sup>2</sup>, and it is believed that this figure was reduced to around 1 badger/km<sup>2</sup> during the five years of the trials. 2.2 Professor John Bourne, Chairman of the ISG, has described the Irish Four Areas trials as having effectively 'eliminated' badgers from those areas of Ireland; thus, it can be inferred from the available data that the density of badgers in RBCT areas, after 5 years of trapping, remained at relatively high levels - between 50% and 75% of the Irish badger population density levels before the Irish culling trials commenced. This emphasises the high badger densities in the English areas, and the relative inefficiencies of the trapping method employed during the RBCT. 2.3 Despite these shortcomings, in areas where the perturbation effect was considered to be negligible, the effect of culling was that bTB incidents in cattle were reduced by around 50%. 2.4 To paraphrase one senior Animal Health scientist, **this figure is what might be regarded as a lower limit for cattle TB of badger origin which can be applied to certain high incidence areas in the western part of GB.** 2.5 However, the figure of a 50% reduction in areas not subject to significant perturbation effects seems likely to be an underestimate in terms of the benefit following the fourth year of culling, as the net benefit for all culling areas (including those subject to perturbation) following the fourth cull were around 50% higher than the average benefit during the entire culling period. 2.6 Thus, we might conclude that the benefits of badger culling, as carried out in the RBCT, in an area not subject to perturbation, could be a 75% reduction in incidences in the period following the fourth year of culling, and that a more proactive approach would be likely to increase this percentage significantly over a shorter period of time. 2.7 The achievement of such a reduction in bTB incidences across the UK would be

the most significant step towards bTB eradication for a generation. 2.8 As expected, the RBCT also highlighted the negative affects that badger culling can have through the perturbation affect , whereby culling disrupts the social structure of badger populations in a way that increases the transmission of the disease between badgers and cattle in regions surrounding culling areas. 2.9 Thus, the RBCT has revealed the significant benefits that badger culling can bring in terms of bTB control, while emphasising the importance of taking steps that mitigate the perturbation affect. 2.10 As already alluded to, the FUW believes that the cost-benefit analysis undertaken by the ISG does little more than highlight the poor cost-to-benefit ratio inherent in the approach adopted during the RBCT. 2.11 Thus, we would conclude that badger culling has the potential to make a significant contribution to the control of bTB in the UK, but that the approaches employed during the RBCT should be either avoided, or significantly modified, in order to achieve (i) more efficient badger removal over a shorter period of time at minimum cost and (ii) minimum perturbation

### 3. Analysis of Farm Risk Factors

3.1 It is clear that the ISG's analysis of farm risk factors revealed no significant correlations between environmental factors/herd management and the risk of bTB.

### 4. Cattle Pathogenesis

4.1 As highlighted in the report, the tuberculin skin test has previously been used successfully to reduce bTB incidences from 40% to 0.06% during a thirty-year period. 4.2 Similarly, the skin test continues to be used successfully in countries that do not have a wildlife reservoir. 4.3 Nevertheless, like all diagnostic tests, the tuberculin test is not without its shortcomings, as highlighted by the ISG, and increased use of alternatives such as the gamma interferon test could have an appreciable impact on the spread of bTB. A range of such measures have already been adopted in Wales upon the recommendation of the TB Action Group. 4.4 However, given that some 80-90% of bTB incidences occur in 'hotspot' areas, where the ISG has shown that badgers could be responsible for at least 50% of breakdowns, it would be disproportionate to make significant changes to the current cattle testing regime without taking parallel steps to reduce the impact of the wildlife vector. 4.5 Thus, the FUW would continue to advocate an holistic approach that tackles all major bTB vectors.

### 5. Comments on the ISG's Recommendations and Conclusions

**Recommendation 1** The FUW believes, contrary to the ISG, that badger culling could contribute positively and cost effectively to the control of bTB in Britain **Recommendation 2** We agree that there is substantial scope for improvement of control of the disease through the application of heightened control measures directly targeting cattle, but disagree that this should be undertaken in the absence of parallel steps to reduce the impact of the main wildlife vector. **Recommendation 3** We agree that it seems unlikely that reactive culling, as practiced in the RBCT, could contribute other than negatively to future bTB control strategies **Recommendation 4** We agree that proactive culling, as carried out in the RBCT, is unlikely to contribute effectively to the future control of bTB. **Recommendations 5 to 10** We believe that the ISG's analysis of possible adaptations of proactive culling falls short of being comprehensive, and that a more detailed analysis would in fact reveal a range of possible adaptations that would be both beneficial and economical. **Recommendations 11 to 14** We believe that the ISG's analysis of possible adaptations of reactive proactive culling falls short of being comprehensive, and that a more detailed analysis could reveal possible adaptations that would be both beneficial and economical. **Recommendation 15** We disagree that culling badgers under licence is unlikely to be successful; rather, we believe that such an approach would be successful provided that it was carefully thought out. **Recommendations 16-19** While we agree with some of the comments made in recommendations 16-19, we note that this list is far from being exhaustive, and believe that a range of alternative approaches to badger culling should be investigated. **Recommendation 20** We note that the cost-benefit ratio of building badger-proof fences is likely to be prohibitive, but agree that research efforts into ways of keeping badgers and cattle apart be continued. We also note that successful separation of the two species would negate the perturbation affect. **Recommendations 21 to 31** We do not believe that significant changes to the current cattle controls should be introduced in the absence of measures designed to deal with the main wildlife vector in high-incident areas. **Recommendations 32 to 41** The FUW agrees with recommendations 32 to 41 **Recommendations 42 to 46** The FUW has no objections to recommendations 42 to 46 **Recommendation 47** In response to recommendation 47, we would state that successive governments have, by introducing legislation that prevents the humane and necessary control of badger populations, denied farmers the right to take full 'ownership' of the disease, resulting in an unprecedented increase in what the ISG has conclusively shown is a significant disease vector. It is therefore suggested that government and wildlife groups should take 'ownership' of what is a significant disease and welfare problem in badgers.

## B Implementation of the Recommendations of The Environment, Planning, and Countryside (EPC) Committee's Inquiry

### 1. Introduction

1.1 Notwithstanding concerns regarding a number of the recommendations made in the 2004 EPC report on bTB, the Farmers' Union of Wales recognises the document as having been a proactive move in response to a major disease epidemic in Wales.

### 2. Comments on the EPC's recommendations

**Recommendation 1** The FUW notes that a number of the actions outlined in paragraph 3.8 of the report have been taken. The FUW recently consulted members regarding possible changes to current parish testing intervals (PTIs), and members felt confident that

current PTIs were based upon valid risk assessment; as such, the majority did not believe that PTIs should be changed unless such a change was justified in terms of a change in risk. It is therefore the view of the FUW that a holistic approach should be taken to all aspects associated with bTB, as recommended, including wildlife vectors. **Recommendation 2** The FUW continues to support the principle of establishing Intensive Treatment areas, and would emphasise the need to address wildlife disease vectors in such areas. **Recommendation 3** The FUW continues to support recommendation 3. **Recommendation 4** The FUW continues to support recommendation 4, and would wish to see the important role of the TB Action Group extended.