



Welsh Assembly Government Bovine TB Eradication Programme

Consultation on Badger Control in the Intensive Action Area

(Response from RSPB Cymru)

RSPB Cymru welcomes this opportunity to comment on the Welsh Assembly Government's (WAG's) proposal to introduce the draft Badger (Control Area) (Wales) Order 2010, to allow for a Government-managed cull of badgers (*Meles meles*), alongside additional cattle surveillance and control measures, in an identified Intensive Action Area (IAA) in West Wales.

The RSPB is Europe's largest wildlife charity, with over one million members in the UK, including more than fifty thousand resident in Wales. The Society manages one of the largest conservation estates in the UK, covering more than 130,000 hectares, of which 19,000 are in Wales.

We note the livestock management and financial context in which this proposal has been made, with bovine tuberculosis bTB infection having caused the slaughter of more than 11,500 cattle in Wales in 2009, and with nearly £120M paid out in compensation to farmers by WAG since 2000. We also note the commitment in the *One Wales* coalition policy agreement of 2007 to 'vigorously pursue a programme of bTB eradication'.

Much of the RSPB's reserve land in Wales is farmed, with cattle as a valuable element in land management; we, therefore, understand and are sympathetic towards the concerns of the farming community over the impacts of bovine TB.

We do not believe that the proposed culling of badgers is defensible under current wildlife legislation, because of the availability of alternative satisfactory solutions. We also do not believe that it constitutes a sustainable, publicly acceptable science-led policy, which is the basis for our approach to this issue.

The Ethical Objection

Killing members of native wildlife species will sometimes be justified when not to do so will put at risk the wellbeing, health and survival of members of our own species or, indeed, the survival of other wildlife species. This perspective is represented in European species legislation: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979) protects a number of animal species, including the badger. Under this Convention, badgers can be killed to prevent serious harm to livestock, but only where there is no other satisfactory solution, and where control measures will not be detrimental to the overall survival of the species population. Therefore, there must be high confidence that the action, such as the proposed badger cull, will prove effective in

achieving its aim; and, moreover, it should be clear that there is no alternative option that could deliver a similar outcome in terms of disease control in cattle.

We do not believe that these conditions are met in the case of the proposed WAG culling of badgers.

The Policy Objection

The report to DEFRA in June 2007 of the Independent Scientific Group on Cattle TB (ISG)¹ concluded, on the basis of its nine-year Randomised Badger Culling Trial (RBCT) and other research data:

‘Given its high costs and low benefits, we 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.’

This conclusion was influenced, along with other considerations, by the RBCT research finding that a reduced incidence of cattle TB in the culling areas was offset by an increased incidence of the disease in surrounding un-culled areas, a consequence of badger ‘perturbation’ and dispersal in response to the impacts of culling.

It is noted that the proposed Intensive Action Area in West Wales has been chosen in part because its boundaries include coast, estuaries, rivers and upland open hill, with the aim of reducing badger movement into and out of the culling area. We acknowledge that the 28% of the boundary that is coastline will prevent badger movement, but we are not aware that the benefits of the river and upland areas in limiting movement can be adequately quantified. We recognise that the WAG has taken steps to identify an area for badger culling with boundaries that may limit perturbation of the badger population but there remains a risk that these measures will not work.

Whether or not this choice of location is successful in limiting badger movement, its outcome, in terms of reducing the incidence of cattle TB infection in the area following the cull, is likely to have limited or no applicability elsewhere in Wales.

More recent research², which looked at the duration of beneficial effects following the cessation of culling in the RBCT areas, found that:

‘Beneficial effects inside culled areas were greatest shortly after culling had ended, but then declined over time and were no longer detectable four years after the last annual cull...On adjoining lands, the effects of culling were estimated to be beneficial only for the first 18 months of the post-trial period but never significantly so.’

The study found that, while badger culling can achieve reductions in the incidence of cattle TB, the financial costs of conducting the culling ‘substantially exceed’ the overall benefits accrued.

There are other significant factors to consider:

1. The enhanced cattle surveillance and controls introduced on 1 May 2010 in the IAA.

¹ Bourne J, Donnelly C, Cox D, Gettinby G, McInerney JP, et alia; *Bovine TB: the scientific evidence* (2007). London, DEFRA.

http://www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/isg/report/final_report.pdf

² JENKINS, H E., WOODROFFE, R & DONNELLY, CA. 2010 The duration of the effects of repeated widespread badger culling on cattle tuberculosis following the cessation of culling. PLoS ONE. 5(2): e9090, DOI:10.1371/journal.pone.0009090

2. The availability now of a badger vaccine and the prospect of a BCG vaccination for cattle becoming available in 2015.
3. The atypical nature of the pilot IAA.
4. There are significant risks associated with culling badgers that do not apply to vaccination.

In relation to the first of these, we would recommend that adequate time be given to assess the impact of the IAA cattle control measures – ie, increased frequency of cattle testing, stricter control on cattle movements and veterinary advice to farmers on biosecurity - before resorting to the culling of badgers. It was, after all, the conclusion of the ISG that more effective cattle control measures – in the absence of badger culling – are ‘likely to reverse the increasing trend in cattle disease incidence’, and that cattle-to-cattle disease transmission was a ‘very important’ factor alongside badger transmission, and indeed the ‘main cause’ of transmission to new areas.

Any benefits from the enhanced cattle control measures will also, of course, obscure the impacts of culling on the incidence of cattle TB. This would become a major difficulty for the Assembly Government in assessing the benefits of the cull should it propose at a later date to introduce culling as a principal bovine TB eradication measure elsewhere in Wales.

We recognise, however, that restrictions on the movements of cattle can be only one part of an overall approach to bovine TB control; nevertheless, it would be of value to the industry to have some measure of the extent of TB reduction that could be achieved by this means alone.

In the meantime, we believe the use of the available, injectable badger vaccine, in conjunction with enhanced controls on the movement of cattle, holds the potential to offer a satisfactory alternative to badger culling that is both sustainable and publicly acceptable. We believe that both the consultation document and the submission made to the Minister³ were unduly negative about the value of badger vaccination. The papers presented to the Minister do not appear to include a clear cost-benefit analysis of badger vaccination against culling. In terms of the overall strategy in Wales, vaccination is an approach that does not risk making the disease situation worse and is more widely applicable across the rest of Wales.

The risks associated with a badger cull relate to the practicality of achieving an efficient cull over a substantial area and the potential for impacts on other wildlife species. The proposed area of the cull is considerably larger than the areas covered by the RBCT; this will represent a significant logistical challenge to ensure a simultaneous cull over the whole area. There is a significant risk that the cull will attract opposition from animal rights protesters, which could disrupt the cull, effect the efficiency of operations and/or add to the costs.⁴ The same opposition is unlikely to occur for a programme of vaccination. The Ecological Impact Assessment⁵ for the cull highlights a number of potential impacts on other native wildlife from a badger cull. It identifies that there is considerable uncertainty over these impacts and outlines a programme of monitoring that should be undertaken. This adds to the costs of badger culling. Due to the uncertainty of the impacts it is not clear what mitigation may be

³ Anon (2010) Wales Bovine TB Eradication Programme – Intensive Action Area. <http://wales.gov.uk/docs/drah/publications/100920tbconsubmissionen.pdf>

⁴ The RSPB does not support or condone such activities but we think that this risk needs to be acknowledged.

⁵ WAG (2009) Potential ecological consequences of a badger removal operation (BRO) in the ‘Intensive Action Pilot Area’ (IAPA), South-west Wales. <http://wales.gov.uk/docs/drah/publications/100916tbconannex20en.pdf>

required to minimise adverse impacts or how much this will cost. Again, neither of these costs are associated with badger vaccination.

Taking these points together, we would suggest that the Assembly Government should not embark upon the culling of badgers now proposed, given that other effective disease control measures are already available – vaccination of badgers. The scale of the exercise is a puzzle. Does the Assembly Government see the proposed cull in West Wales as a ‘one-off’ measure, or does it see it as preparatory to similar culls elsewhere in Wales? Any sustainable all-Wales bovine TB eradication programme would, in our view, best be achieved by means of both cattle and badger vaccination programmes rather than by any extended repetition of the IAA approach.

Conclusion

RSPB Cymru does not believe that the Assembly Government has made a sufficient case for the culling of badgers in the IAA. It is clear that badgers contribute to the overall levels of bovine TB in cattle. However, we do not believe that the WAG has clearly demonstrated that badger vaccination is not a satisfactory alternative to badger culling. We consider that, coupled with the cattle and biosecurity measures being trialled in the IAA, badger vaccination would be a more sustainable means of reducing the incidence of TB in cattle.

If the Assembly Government is serious about addressing now the TB reservoir in badgers, we believe it should be putting in place a targeted programme of badger vaccination to start to build disease immunity, whilst an oral badger vaccine and a cattle vaccine are under development, to be used later when available. This would be a sustainable solution that all opinion across Wales should be able to support.

Consultation Questions

1. Do you object to the culling of any wildlife for the purposes of controlling disease in farm animals? If yes, please explain why?

No, but RSPB Cymru is strongly of the view that the culling of wildlife for the purposes of controlling disease in farm animals should always be a policy of last resort, to be adopted only when there is no effective and sustainable alternative. The Bern Convention permits the killing of protected species for disease prevention where no other satisfactory solution exists. We do not object to the killing of small numbers of animals under these circumstances, as long as four tests are met:

i/ that the seriousness of the problem has been established;

ii/ that non-lethal measures have been assessed and found not practicable;

iii/ that killing is effective in addressing the problem;

iv/ that killing will not adversely affect the conservation status of the target or other non-target species.

In this case, other satisfactory, non-lethal solutions, in the form of vaccination, exist.

2. In view of the fact that a licence for an injectable vaccine for badgers is now available, do you think that vaccination of badgers in bovine TB endemic areas is a viable alternative to culling to prevent disease transmission? If yes, please explain why?

Yes. The vaccination of badgers in bovine TB endemic areas offers both a viable and more ethical approach to disease control in cattle than badger culling. The RSPB believes that the consultation

document and associated papers significantly understate the potential of badger vaccination in disease control, and do not properly reflect the results of recent research into the effects of vaccination on bovine TB in badgers.

Laboratory studies have shown that badger vaccination significantly reduces the progression, severity and excretion of the bacteria responsible for bovine TB infection. Reducing the severity of the disease in badgers and the quantity of bacteria that they shed should, therefore, reduce the disease risk in cattle.

The results of a field study of badger vaccination⁶ have been published since officials made their submission to the Minister. This demonstrated a 74 per cent reduction in the proportion of wild badgers testing positive to the antibody blood test for TB in badgers. The paper concluded 'BCG vaccine for use in wildlife could provide a new and important component of a comprehensive programme of bovine TB control for cattle in the UK and Ireland' It is unfortunate that this conclusion was not reflected in the paper to the Minister.

Recent modelling⁷ has found that vaccination on its own in a control area would prevent only 'slightly fewer breakdowns' in terms of affected cattle herds than culling. Over an area of 300km² (150km² core and 150km² ring) the difference between culling and vaccination 'appeared to be less than one herd breakdown a year.' These results should be treated as a guide rather than a prediction. However, we believe that vaccination is a more sustainable, long-term solution to the disease problem than culling. It is very unlikely that TB in badgers can be eradicated through culling, whereas vaccination holds this out as a possibility. The RBCT study showed that the incidence of TB in the remaining badger population was increased following culling because of the effects of perturbation, although this may be limited if the boundaries of the cull area prevent badger movement. Moreover, culled badger populations in time recover their numbers, together with the continued presence of bovine TB among them, thus retaining the potential to infect cattle. However, badger vaccination, alongside cattle control measures, holds out the possibility of disease reduction in both badgers and cattle. In addition, badger vaccination avoids the crucial risk of inducing perturbation of the badger population that is likely to occur with culling over most parts of the country.

The submission to the Minister points out that vaccination will take some time to have an effect because it will take time to build herd immunity in the badger population and for infected animals to die off (3-5 years). However, it is also the case that culling badgers also takes time to have an impact. Data from the RBCT show a slow decline in the number of infected badgers over several years, with 3-5 years of annual culls, on average, needed to halve the number of infected badgers caught⁸.

3. Do you believe that culling badgers can achieve a reduction in bovine TB incidence in cattle, to justify its use? If no, please explain why?

Culling badgers might achieve a reduction in bovine TB incidence in cattle. However, there is a risk that if perturbation of the badger population is not significantly reduced by the location of the IAA, or

⁶ Chambers M A et al (2010) Bacillus Calmette-Gue' rin vaccination reduces the severity and progression of tuberculosis in badgers. *Proc. R. Soc. B* published online 1 December 2010 doi: 10.1098/rspb.2010.1953

⁷ The Food and Environment Research Agency; *Comparing badger (Meles meles) control strategies for reducing bovine bTB in cattle in England* (2010). York.

⁸ Table 4.9 from Bourne et al (2007) Bovine TB the scientific evidence. http://www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/isg/report/final_report.pdf

if practicalities prevent the cull from being carried out efficiently, it could be neutral or even increase the level of TB in cattle. Vaccination does not have the same costs or risks and we therefore believe this offers a satisfactory alternative.

We consider that the WAG should be pursuing measures within the IAA that have relevance to dealing with TB in other parts of Wales and measures that can lead towards a sustainable solution. Vaccination should therefore be favoured over culling.

We believe that allowing a badger cull to proceed when another satisfactory solution exists would set a very concerning precedent for other wildlife management issues.

4. Do you agree that the Intensive Action Area has a high incidence of bovine TB in cattle which needs to be dealt with? If no, please explain why?

RSPB Cymru accepts that there is a high incidence of bovine TB in cattle in the IAA. Clearly, however, bovine TB needs to be dealt with wherever it occurs, for the health and welfare of both cattle and badgers.

As we have made clear above, RSPB Cymru does not believe that the culling of badgers provides an acceptable or sustainable solution to the problem, whether in the IAA or more widely. More effective controls on the movement of cattle, together now with badger vaccination and, in due course, use of the oral vaccine and cattle vaccination, would appear to hold out a more practicable and sustainable solution.

5. Do you believe that access to land for culling badgers should be enforced? If not, why not? Please give reasons for your answer.

Given our objections above to the case for culling badgers, we do not feel this should be necessary. According to the submission to the Minister, it is expected that 70% of badgers in the IAA will be killed. This submission also suggests that the difference in the results for land access of 100% rather than 70% was small. If this is the case, why is compulsory access necessary?

6. On balance, do you think the benefits of culling outweigh the harm caused to the badger population in the Intensive Action Area? Please give reasons for your answer. Would you include other factors in the balance of harm and benefits? If so why?

Culling will not reduce the incidence of bovine TB in the surviving badger population and will not provide a sustainable solution to the incidence of TB in cattle within the IAA or more widely in Wales. The question should be about the choice between badger culling and vaccination and what we can learn about the control of bovine TB throughout Wales.

7. Do you agree with the prohibitions under the draft Badger (Control Area) (Wales) Order 2010? If not, why not?

Our response to this question is from the same position that informs our response to the previous questions above.

RSPB Cymru, December 2010

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