



Ulster Wildlife response to MCL Consulting Strategic Environmental Assessment for bovine TB

Ulster Wildlife response to **MCL Consulting** concerning the Strategic Environmental Assessment (SEA) and Habitat Regulations Assessment (HRA) regarding the proposed bTB eradication strategy and alternatives.

This response will be solely concerned with the potential impact of the proposed cull on the ecology of the badger population and on the wider impacts on other wildlife species and habitats. However Ulster Wildlife, in its initial response to the *Department's Proposed Implementation and next Steps of the bTB eradication strategy for Northern Ireland* made it clear that it's favoured action to deal with the issue was the trap, test, vaccinate and release/cull (TVR) option rather than an indiscriminate cull. It presented sound scientific and environmental evidence to support this stance.

Statutory position and current status

The badger is an iconic native species and a key component of Northern Ireland's biodiversity and, as such, is protected by law. It does not bear this designation lightly. It is widely distributed throughout all predominant ecosystems, exhibits strong territorial behaviour and plays an important role in trophic webs and food chains.

In relation to the Article 13 Order to carry out a badger intervention, we do not agree with DAERA's interpretation of the legislation as evidence indicates that at least 4 out of 5 of the badgers culled will be healthy. This method of control is therefore disproportionate and will have at best a modest impact on the levels of bTB in most cases. Each case should be considered on its merits taking into account the specificity and sensitivity of the DPP test coupled with individual compliance in the farm unit with best TB practice and likely source of infection. We feel it would be of benefit rather than applying the criteria to an area, to apply an agreed approach to a farm basis or small defined geographical location grounded on an evidence base provided by TVR. Unless the farmer is fully compliant with the core standards for bTB control, any wildlife intervention will not deliver any long term benefits. We would stress that it is important to stress just how emotive and unpopular this strategy will be with the public and there will need to be a clear and transparent process underlying any wildlife intervention. Current estimates of the badger population in NI are approximately 33,500 with unequal distribution across habitats and regions.

Culling estimates

From the information provided in the consultation it is not possible to accurately estimate the number of badgers that would be culled across the 1200 km sq area proposed, however since DEFRA estimates that a 70% kill rate is necessary and the programme runs for 7 years, the number of badgers culled will be substantial. The 2007/8 Badger survey estimated the density in the higher density areas (ie those likely to be selected for the cull) was 3.79 (95%CI 1.83- 5.75) badgers per km². At this density the numbers culled in the proposed area would be (on a 70% removal basis) 3184 (1538-4830) presumably on declining annual basis over 7 years.

Potential impacts of culling

The culling process.

Shooting animals will involve major countryside and habitat disturbance from indiscriminate trampling and noise, both of which will have much wider impact than solely on the badger population. There is no restriction on the culling period so it is highly likely that there will be disturbance to breeding birds. Currently some of our key breeding bird species are in serious decline, many of these in are in areas where badgers are readily found. We know from examples of illegal badger baiting in the Glenwherry area (which recently resulted in successful ASBO designations) that open moorland -where birds such as Curlew and snipe breed, have badgers present, can be SACs or SPAs and these attract unregulated and illegal hunting activity. The noise disturbance of random gunshots will certainly cause disturbance in the bird population - as clearly demonstrated in the design of irregular-pattern bird scaring devices.

Impact on the badger population

The potential annual decimation rate as indicated above (1538-4838 badgers per year initially over a 7 year period in the target area alone) could result in a substantial impact on the wildlife population. Maintaining a viable population is the most significant issue – with multi-year culling, it would be easy to overstep the mark unknowingly and drop below the critical level for community viability. Removal of significant numbers will, in all likelihood, have a major impact on the balance of ecosystem diversity and function of which badgers are currently a key component. It is particularly galling to note that there is every likelihood that approximately 80% of those badgers culled will be healthy and non-infective, especially set against the backdrop of by far the greatest majority of infections coming from the cattle-cattle route rather than badger-cattle.

It is our view that any wildlife intervention needs to be proportionate, humane and provide a long term sustainable solution. Indiscriminate culling poses the risk of perturbation which remains unknown within Northern Ireland. The only reliable local information available on perturbation is through the Test Vaccinate or Remove Pilot Project where social groups remained largely intact therefore no perturbation was experienced.

Perturbation

There is evidence from other studies that removal of the leading badger causes significant perturbation around the perimeter of target areas. In some studies this has been linked to immigration of badgers (some of which may be infected) in to fill gaps in the cull area. Carter et al (2007) following a reanalysis of

earlier data found that culling badgers may result in increased immigration into culled areas, disruption of territoriality, increased ranging and mixing between social groups. Their analysis showed that some measures of sociality may remain significantly disrupted for up to 8 years after culling. This may have epidemiological consequences because previous research has shown that even in a relatively undisturbed badger population, movements between groups are associated with increases in the incidence of *Mycobacterium bovis* infection. This is consistent with the results from a large-scale field trial, which demonstrated decreased benefits of culling at the edges of culled areas, and an increase in herd breakdown rates in neighbouring cattle.

In the case of the proposed NI cull, delimiting clear boundaries of target areas serves to increase boundary length and therefore area of potential perturbation

Public acceptance and ethical position

Badgers are a protected species and indiscriminate culling by shooting free - roaming badgers, often in habitat-designated areas is emotive and will be viewed as unacceptable by a large proportion of the public especially as species is protected primarily due to persecution. It will raise particular public concern, exacerbated by the awareness that there are ethical alternatives which have been shown to be effective in reducing the level of badger TB from 14% to 2% within the 5 year period through the TVR pilot conducted by AFBI which also eliminates the risk of perturbation.

Evidence from other culls in the British Isles

Culling is not an exact science and often does not deliver the anticipated results. Despite the widespread cull in England, the overall level of bTB across the country during the 12 month period to 31 March 2020 did not demonstrate an overall reduction in bTB. This is illustrated by the earlier graph from the DEFRA quarterly statistics on bTB and corresponding statistics which can be located in the same report. Whilst a reduction of bTB in High Risk areas occurred, there was a corresponding increase of the disease in Edge Areas.

Within the UK, Wales has consistently out-performed other regions in controlling bTB without culling. This approach has not been included within the NI bTB consultation strategy and in our view this is a serious omission that needs to be rectified.

There is anecdotal evidence of local extinctions of badgers in selected areas in England. There is evidence from some areas (eg Wicklow) that that other wildlife species eg deer can be the main wildlife transmission species.

Effect on public engagement with the countryside

The public is encouraged by the medical profession, health agencies and wildlife organisations to take exercise outdoors and to engage with wildlife and the countryside in open spaces where possible. This is inherently good for human and societal wellbeing. Encountering an active cull will discourage public engagement with the countryside and become an interface for conflict and public outcry. It will act as a public deterrent to sporting and leisure interaction with the countryside and flies in the face of encouraging a positive aspect of public health. Inherent in most statutory habitat designations is the

stated benefit of public access and use of the designated area. The proposed badger cull will act directly against this and will be in contravention of one stated benefit of wildlife protection and designation legislation.

Costing issues

The efficacy and efficiency of any cull will depend partly on the funding invested in the cull process. Within the wildlife intervention proposals the cost differential is not substantive equating to £6.5m across 7 years if restraints and TVR is deployed rather than indiscriminate culling through controlled shooting. The latter results in the slaughter of large numbers of healthy badgers which potentially may destabilize the population for a cost reduction of £928,570 per annum. It also sends the wrong message to consumers especially in the midst of a global and local biodiversity crises.

Due to the level of badger baiting in NI, our preference is trapping with TVR as the preferred methodology. As costed this is the most expensive option, however if farmers were trained to assist with trapping badgers annually and with TVR conducted by local vets, this could offer a value for money solution consistent with their role as custodian of the countryside. This would certainly be a better option than farmer led companies shooting free roaming badgers and we would ask that further consideration is given to different ways of delivering this approach.

Factual basis and monitoring of culling

In relation to the Department determining which areas badgers may be playing a significant role in the maintenance of bTB in cattle before proceeding to make an Order and in doing so it will take account of local cattle, badger and bTB data. After many years of discussion, there are clearly different views on the role and contribution of badgers on the issue of bTB and as outlined above there needs to be a clear transparent process based on fact rather than personal opinion – TVR results seem to be the only acceptable objective methodology on which to base this decision. As covered earlier in our consultation we would like to see a risk assessment with traffic light system applied to each farm business based on audit for the purposes of helping farmers move toward a robust risk rating over time. This could be completed by the farmer in partnership with his Private/DAERA vet supported through regional partnership groups and capacity building initiatives with on farm best practice demonstrations.

The wider picture - Projected changes in farming practice and food production

The calculation on location of target areas and severity of the cull is based on current farming infrastructure and cattle density being maintained over a 7 year period. Given the impact of higher fertiliser costs, fragility of dependence on imported feed and export and trade agreements in an unstable global trading environment outside the EU, there is every likelihood that there will be significant changes in farming practice and stock densities over medium to long term. This will be exacerbated by reaction to the climate crisis and the need for restructuring to meet emission targets set, for example, within the Green Growth Strategy.

All of this supports the need for a more measured, reasoned and cautious approach as advocated by the TVR strategy. This would be a more logical approach to follow as it would more readily allow the bTB eradication strategy to evolve more gradually and in tune with the predicted changing farming practices.

This would act as a cushion to change without having gone through the process of killing and disturbing large numbers of wildlife and the inevitable public outcry this will cause-as has been shown for other regions of the UK. The potential for and likelihood of such internal change in the industry should be factored into the SEA through distribution and intensity of the proposed cull and on the impact on SPA and HRA. Similarly, this would put TVR costing on another footing.

Carter S. P. *et al* (2007) Culling-induced social perturbation in Eurasian badgers *Meles meles* and the management of TB in cattle: an analysis of a critical problem in applied ecology *Proc Royal Soc Series B*