

Bovine Tuberculosis (bTB) Consultation on the Department's Proposed Implementation and Next Steps of the bTB Eradication Strategy for Northern Ireland

Comments by

Northern Ireland Environment Link

10th September 2021

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These comments are made on behalf of Members, but some members may be providing independent comments as well. If you would like to discuss these comments further, we would be happy to do so.

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1. Do you agree with the criteria for selecting herds to receive interferon gamma testing?

NIEL has no specific comment to make in relation to this and supports the position taken by Ulster Wildlife (UW) in relation to the criteria for selecting herds to receive interferon gamma testing.

2. Do you agree with the proposal to introduce testing of non-bovines as deemed necessary by the Department?

Yes, but only in addition to improved testing of cattle, and removal should be limited to infected animals. There is no justification for killing healthy animals.

3. Do you agree with the Department's preferred option for Wildlife Intervention?

No.

Despite the fact that the UK government has chosen to phase out non-selective badger culls in England from 2022, that is the option the department is proposing to pursue in NI. NIEL has not seen any clear, robust evidence that non selective badger culls eliminate bovine TB. There is some evidence that badger culls can reduce levels of bovine TB, though there is also evidence that badger culls do not reduce bovine TB rates and can even increase the levels of bovine TB, as discussed in more detail below.

As the NI Audit Office report on eradicating bovine TB in NI says¹ in relation to bovine TB

“Successful eradication depends upon tackling all sources of infection concurrently”

Given that the level of transmission of bovine TB from badgers to cattle can be only 5.7%, or even as low as 0%², there is a particular need for a multi-faceted strategy to combat bovine TB, particularly in relation to on farm bio-security measures. The review of the government’s 25 year bovine TB strategy³, the Godfray report, for example, found that the lack of on farm bio-security measures was severely hampering bovine TB control measures. The lack of detail on how the many other factors in bovine TB transmission are to be tackled means the proposals from DAERA in this consultation document fall well short of the type of multi-faceted approach that will be necessary to tackle bovine TB in NI. In this context, the proposal to randomly kill an unspecified and possibly unlimited number of badgers as part of an approach (culling) that has not been successful elsewhere and which has been evaluated by leading experts in animal disease as risking “increasing cattle TB rather than reducing it⁴.”, is not something that NIEL supports. Consequently, NIEL would urge the department to

review the proposals for tackling bovine TB. The main shortcomings of the department's proposals are outlined below.

- **The UK government has chosen to move away from a randomised badger cull.**

In 2020, the UK government announced the controversial cull of badgers across England, reported to have involved killing at least 100,000 badgers since 2013, was to be phased out in the next few years and gradually replaced by government-supported badger vaccination and surveillance⁵ with vaccination of the animals being ramped up instead. In this context, the rationale for DAERA proposing to initiate an approach which has been shown to be unsuccessful elsewhere and which the UK government is moving away from is unclear.

- **Previous badgers culls have failed and in some cases have contributed to an increase in rates of bovine TB in cattle**

It is likely that a factor in the UK government's decision to move away from a non-selective badger cull is the dispute about the success, or otherwise, of the government sanctioned badger cull. For example, in a letter to The Guardian⁶ (14th October 2012) 31 prominent animal disease experts said

"As scientists with expertise in managing wildlife and wildlife diseases, we believe the complexities of TB transmission mean that licensed culling risks increasing cattle TB rather than reducing it."

According to the Guardian⁷, Lord John Krebs, one of the UK's most eminent scientists and the architect of the ten year culling trials that ended in 2007, described the government's cull policy as "mindless", saying

"The scientific case is as clear as it can be: this cull is not the answer to TB in cattle. The government is cherry-picking bits of data to support its case."

In that same Guardian article⁸ another signatory of that letter Lord Robert May, a former government chief scientist and president of the Royal Society, is quoted as saying

"It is very clear to me that the government's policy does not make sense."

NIEL is therefore unclear why DAERA proposes to pursue a similar type of badger cull to that which the UK government has decided to phase out in England.

The claims made by the UK government about the success of the badger cull in England are further challenged by, amongst other things, the findings of the research published in 2015 in the Journal of Stochastic Environmental Research and Risk Assessment⁹ that, based on numerical computer modelling, investment in increasing the frequency of cattle testing would be a more effective strategy than badger culling in dealing with the spread of bTB. The report concludes that

“of the available control strategies it is the frequency of TB testing and whether or not winter housing is practised that have the most significant effects on the number of infected cattle, with the effect of winter housing becoming stronger as farm size increases”

In 2018 a letter^{10,11} to DEFRA Minister George Eustice signed by a group of 15 vets including Iain McGill, the former government vet who helped expose the BSE cover-up, Adam Grogan, head of wildlife at the RSPCA, and Mark Jones, head of policy at the Born Free Foundation strongly challenged the Minister’s claim that

“Reductions in TB cases in Somerset and Gloucestershire are evidence that our strategy is delivering results.”

The vets said in that letter that the agriculture ministry’s claims are based on the “incidence rate” - calculated by examining the number of new cases of TB in cattle herds - and claimed this approach, using “complex and sometimes obscure calculations”, is wrong. The vets suggest the focus should be on the percentage of cattle herds in badger culling zones which have the disease at a specific point in time. The letter states:

“Examination of that data ... demonstrates no reduction in the prevalence of bTB (bovine TB) infected herds in Gloucestershire or Somerset as a result of culling.”

“The prevalence in cattle is no lower than it was before culling, despite the killing and removal of 1879 badgers in Gloucestershire and 1777 in Somerset. A total of 3656 badgers have been killed with no perceivable disease control benefits.”

“Put simply, there are approximately the same proportion of bTB affected herds now, as there were before culling started. Badger culling has not resulted in a decrease in bTB in cattle in cull zones, for the prevalence remains unchanged. Any statement made to the contrary is simply untrue.”

According to the Final Report of the Independent Scientific Group on Cattle TB¹² in 2007

“After careful consideration of all the RBCT and other data presented in this report, including an economic assessment, we conclude that badger culling cannot meaningfully contribute to the future control of cattle TB in Britain”

- **The lack of scientific evidence presented in the consultation document in relation to badger culls**

The consultation says on page 23

“However, the Department believes that it is necessary to reduce the infection load in the badger population first in order to enable follow-up vaccination to be effective. This is consistent with veterinary and scientific advice that badger culling in high cattle TB incidence areas, where badgers are implicated as a reservoir of infection, will reduce the weight of bTB infection in badger populations more quickly than vaccination alone. It will therefore have a greater and more immediate beneficial impact on the incidence of infection in cattle.”

No supporting evidence has been provided to back up this statement. This claim, for example, does not appear to agree with the findings of the 2016 report by the TB Strategic Partnership Group¹³ which concluded that

“In the long term, a strategic programme of badger vaccination would significantly improve the disease situation in both badgers and cattle.”

In fact, according to the DAERA report “Bovine TB in NI 2019”, research by AFBI¹⁴ based on a five year project which started in in 2014 in a 100km² area of Northern Ireland, has shown that the Test and Vaccinate or Remove approach (TVR) can significantly reduce *M. bovis* (Bovine TB) prevalence in badgers by just under 40% (39.1%) per annum suggesting this option could be considered in future TB control strategies. The Zoological Society of London¹⁵ also concluded that

“Badger vaccination, assisted by volunteers, is currently the cheapest control option.”

Not only has DAERA not provided evidence in the consultation to support the claim made on page 23 that random culling of badgers will reduce the bovine TB levels in the badger population by more than vaccination alone but it appears that other evidence, including that published by DAERA, suggests different approaches to reducing the level of infection in badgers will likely be more successful and less expensive than culling. As such it appears that DEARA may not have given this issue an appropriate level of attention and NIEL would ask DAERA to explain why these other approaches were not explored in more detail in this consultation.

- **Only around 20% of badgers have bovine TB so the vast majority of badgers killed in a random cull are likely to be healthy**

According to the research by AFBI¹⁶ referred to above, the prevalence of bovine TB in badgers is 17.1%. If fewer than 20% of badgers have bovine TB then in a random badger cull, around 80% of the badgers killed are likely to be bovine TB free and healthy. This in itself is a very strong argument against a random badger cull of the type DAERA is proposing.

- **Cattle to cattle transmission of bovine TB is a bigger problem than badger to cattle transmission so other steps are necessary, especially improvements in on farm biosecurity. The failure to adequately address this as part of this consultation is a serious omission.**

Many scientists throughout the UK believe that whilst the badger may be one route of transmission of the disease it is unlikely to be the primary pathway and there is likely to be a greater risk of spread of bovine TB through cattle movement and nose to nose contact within and between herds and inadequate biosecurity measures on farm. In fact, there is good reason to believe that cattle-to-badger transmission is higher than badger-to-cattle transmission (not least because badgers forage in cow dung) so presence of bTB in badgers does not prove badger-to-cattle transmission is significant. For example, according to research in to the contribution of badgers to confirmed bovine TB in high-incidence areas in England by Donnelly and Nouvelle¹⁷

“the average percentage of transmission to cattle herds that was badger-to-cattle spanned from 0 to 100%.”

Furthermore, according to the analyses presented in the Donnelly and Nouvelle paper, although a complete absence of transmission from badgers from the system is predicted to halve the incidence of TB in cattle (with a 38% reduction being a robustly estimated lower bound), only 5.7% of transmissions to herds were estimated to have been badger to cattle. This figure is in line with the findings of the Zoological Society of London¹⁸ which said that the focus on badgers

“should not eclipse the overwhelming importance of tackling cattle-to-cattle transmission, which is estimated to account for 94% of new herd infections.”

If approximately 94% of bovine TB transmission to herds is from cattle to cattle then it seems clear that not only are many other actions necessary, but other actions would likely be much more effective and so should be a higher priority than badger culling. For example, the review of the government’s 25 year bovine TB strategy¹⁹ led by Sir Charles Godfray (the Godfray report) which was commissioned by the Environment Secretary to inform future

strategies around the government's goal of eradicating bovine TB by 2038 also found that the lack of on farm bio security measures was severely hampering bovine TB control measures. It said

“A very unfortunate consequence of the controversy around badger culling and the politicisation of the debate has been a deflection of focus from what can be done by the individual farmer and by the livestock industry to help control the disease. In particular, the poor take up of on-farm biosecurity measures and the extent of trading in often high-risk cattle is, we believe, severely hampering disease control measures. All the industry bodies we spoke to recognised this as an issue and saw the need for industry to take more ownership of the problem. Implementing better control measures on the livestock side will mean short- to medium-term costs to the industry to achieve the greater goal of bovine TB elimination. The degree to which the industry as opposed to the state or the consumer bears these costs is a decision for ministers but it is wrong, we believe, to over-emphasise the role of wildlife and so avoid the need for the industry to take measures that have in the short-term negative financial consequences.”

As the Godfray report concluded²⁰

“Moving from lethal to non-lethal control of the disease in badgers is highly desirable.”

In its 2009 report, The NI Assembly Public Accounts Committee stated²¹ that

“poor boundary fencing appears to have played a significant role in the spread of bovine TB”

According to the recently reviewed Bovine TB eradication Strategy 2021 to 2030 in the Republic of Ireland²²

“Addressing cattle-to-cattle transmission remains a critical element of the bTB Programme particularly in the context of residual infection on farms and in movements.”

As such it seems clear that much more needs to be done in NI in terms of on farm biosecurity before culling badgers. The importance of tackling cattle-to-cattle transmission, which the ZSL has estimated to account for 94% of new herd infections is not appropriately accounted for in this consultation and this is a serious omission.

- **The current testing regime is not sufficiently accurate or reliable**

There is also the issue of the reliability of the current testing regime. According to Dr Mark Jones, Head of Policy at Born Free²³, the Godfray report suggests that the standard cattle skin test picks up roughly 8 in 10 infected cattle, whereas the true figure, according to published research, is probably as few as 5 in 10. According to Dr Jones

“This is a critical issue because when farmers who have experienced a TB breakdown in their herds are told their cattle are clear, there is a high chance of undetected infection remaining in the herd, which can then be responsible for future outbreaks on the same farm, or other farms to which infected cattle have been moved. Badgers are being wrongly blamed for many of these outbreaks.”

In a letter to the Prime Minister in February 2020²⁴ a number of veterinary scientists, naturalists and others stated

“The routine skin test in cattle is ineffective: The main reason for Defra’s failure to control bTB is the dire sensitivity of the single intradermal comparative cervical tuberculin (SICCT) test when used to identify individual infected cattle, which according to Government scientists is approximately 50%”

- **A lack of detail on the approach in other regions with lower bovine TB rates**

Despite all of the above, the Department is proposing a badger intervention based on a cull. NIEL believes the case for choosing this option in the absence of convincing evidence for such an option and of detailed proposals for a range of other measures, particularly on farm biosecurity measures, has not been convincingly made by the department in this consultation and therefore regard the proposals from the department as inappropriate and unacceptable.

It appears that the scope of the recommendations is inappropriately limited as there is no option proposed by DAERA that does not involve a cull. For example, in the review of the approach by other jurisdictions, only the approaches taken in England and the Republic of Ireland were highlighted, both of which have used non selective badger culls. The Republic of Ireland recently announced an expanding programme of badger vaccination to replace its established policy of widespread culling, but this is not referred to in the consultation. There was no reference to the approach taken in Wales which according to the NIAO has a similar level of bovine TB to NI²⁵ and where the approach to bovine TB is based on not culling badgers or the situation in Scotland which has been declared bovine TB free since 2009²⁶. NIEL would be interested to know why other regions which adopted a different approach to the approach the department is recommending were not referred to even if they have a lower prevalence of bovine TB? This would appear to be similar to the situation described by

Lord Krebs, as referred to previously, of government ‘cherry-picking bits of data to support its case.’²⁷. According to the NIAO 18 EU member States are bovine TB free, yet there was no in depth exploration of the approach to bovine TB in those countries in the consultation document.

In light of many evaluations of the impact of the government’s previous badger culls on the prevalence and spread of bovine TB that have shown either no reduction in bovine TB or even that “licensed culling risks increasing cattle TB rather than reducing it”²⁸ NIEL opposes the department’s proposed badger cull. DAERA is proposing to proceed with an option which many experts regard as a flawed and failed approach, which the UK government has chosen to move away from after years of implementation and the rationale for the department’s preference for such an option is not supported by the available evidence. As such NIEL regard the department’s proposals as unacceptable.

4. Do you agree with the Department’s preferred funding model for wildlife intervention?

No, on the basis that NIEL does not support this option.

5. Do you agree with the Department’s proposal for the introduction of a £5,000 cap on compensation?

NIEL has no set position on this proposal but notes the proposed £5,000 cap on compensation, which was previously recommended by the TB Eradication Partnership (TBEP) in 2019²⁹. This proposed cap on compensation should have minimal impact on the agricultural industry with the exception of pedigree breeders who have a higher risk of transmission as they regularly import animals to improve the genetics of the herd. However pedigree breeders should be able to take steps including good biosecurity, careful planning and pre and post movement testing to minimize this risk and should be given assistance to take those steps. In relation to the maximum level of compensation, NIEL also recognises that some pedigree stock may have a value above the current compensation limit and depending on an appropriate assessment of factors such as the level of on farm bio-security, which would be the responsibility of DAERA to evaluate, as explored in our response to question 6, there is an argument for allowing some measure of flexibility in the amount of compensation paid, on a case by case basis.

6. Do you agree with the Department’s proposals for a reduction in compensation?

The NI Public Accounts Committee (PAC) had previously argued that compensation should be linked to adherence with appropriate biosecurity measures. In its 2009 report, the NI Assembly Public Accounts Committee stated³⁰ that

“As regards the enforcement of fencing requirements, the Committee recommends that the Department acts on its intention to link non-compliance with biosecurity codes to the level of compensation awarded and expects this to be taken forward as a priority issue.”

Ulster Wildlife has also argued that compensation cuts should only apply where farmers have not followed core standards agreed between the industry and DAERA or adopted risky behaviour and that risk-based audits should be included as part of the annual bTB test with clear recommendations discussed with farmers as to how they further reduce the risk of infection. NIEL supports the Ulster Wildlife position.

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