



## **Leicestershire & Rutland Wildlife Trusts' concerns over badger cull expansion September 2020 – MP Talking Points**

To help you prepare for a meeting with your MP we have pulled together some key points to give you the background to our concerns, which may help you frame your questions.

### **Background**

The UK Government is due to make an announcement of new areas for badger culling this September and there is great concern that Leicestershire and neighbouring counties will be among those areas where shooting of badgers will be allowed in an attempt to control the spread of bovine TB in cattle.

The licensing of a cull in Derbyshire was successfully opposed last year after over 4,500 residents contacted their MPs to voice their concerns. This campaign was led by our sister Wildlife Trust in Derbyshire.

Bovine tuberculosis is a highly infectious disease of cattle which devastates thousands of farming businesses annually. Since the mid-1980s the incidence of bovine TB in cattle has increased substantially, creating an economic burden on the taxpayer and the farming industry as infected cattle must be culled. Last year over 30,000 cattle had to be killed (1). We are very conscious of the hardship that bovine TB causes in the farming community and the need to find the right mechanisms to control the disease. However, we believe that a badger cull is not the answer and have been vaccinating badgers as a positive alternative.

### **The Leicestershire perspective**

In 2013, we began undertaking badger vaccination on two of our landholdings. Since 2018, we have been working in partnership with Nottinghamshire Wildlife Trust to continue this vaccination work focussing on the northernmost landholding to complement and expand the Nottinghamshire Wildlife Trust Vale of Belvoir vaccination project.

Badgers only form one dimension of the ecology of the disease. The evidence now shows that badgers are not the primary cause of the spread of bovine TB in cattle: the primary route of infection is via cow-to-cow contact (Research by Donnelly & Nouvellet (2) – see below).

We have long advocated for a long-term solution and along with many others, were pleased to see the recent Government commitments to developing cattle vaccines, improving bio-security on farms, expanding badger vaccination programmes and phasing out the culling of badgers (3).

### **The Science**

In 2007, a huge scientific culling trial, the Randomised Badger Culling Trial or RBCT, was commissioned by the government to assess the role of badgers in transmitting bovine TB to cattle (4). It was overseen by an Independent Scientific Group (ISG) over nearly 10 years with the killing of 11,000 badgers. Whilst they did find that badgers do contribute significantly to the disease in cattle, they recommended that '***Given its high costs and low benefits we therefore 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***'. They also showed that as the result of disruption to the social groups of badgers through culling (something called 'the perturbation effect'), levels of bovine TB in cattle may increase in certain areas.



Cattle to cattle transmission is considered the main cause of bovine TB spread in cattle, and in the second half of the last century a bovine TB epidemic in UK was controlled solely through cattle-based measures of preventing disease transmission from cattle to cattle. Lapse in these control measures has contributed to the current epidemic.

In recent years, an injectable vaccine for badgers has been licensed for use as a non-lethal intervention in the control of bovine TB in badgers. Large scale vaccination has been undertaken in Wales by the Welsh Government and increasingly has been used selectively in the field by a number of groups in England, including by the Badger Trust and some Wildlife Trusts such as ours.

### **Scientific analysis since the RBCT**

Continuing from the RBCT, the work of Donnelly & Nouvellet (2) significantly indicated that fewer than 1 in 17 (6%) bTB outbreaks in cattle are the result of badger-to-cattle transmission and that the remainder are within or across herds of cattle, or lapses in biosecurity. Equally importantly, Carter *et al.* (5) revealed that vaccinating badgers reduces the risk of a badger showing bTB infection by more than 50% and that when 1/3<sup>rd</sup> of a social group has been vaccinated then the risk of unvaccinated cubs showing bTB is reduced by 79%. Vaccination, then, would further reduce the risk of badger-to-cattle transmission of bTB.

In 2018, a major Government-sponsored review of its policy of controlling bovine TB in cattle, conducted by Oxford University Professor Sir Charles Godfray (6), concluded that it is wrong to over-emphasize the role of wildlife in the spread of the disease. It suggested that culling (or possibly a non-lethal intervention, currently vaccination) of badgers can have a 'modest impact'. In particular, the review emphasized the limitations in the current cattle-testing regime and the poor take-up of on-farm biosecurity measures to reduce the spread of bovine TB on farms.

### **The need for urgency**

We were extremely disappointed, then, to hear of the potential for culling licenses to be issued in areas covered by our vaccination programme – which is part-funded by DEFRA. The risk of vaccinated badgers being shot in a cull was one of the many reasons Derbyshire Wildlife Trust's campaign received the media attention and public support that it did. Nothing has changed in 2020, and this risk is just as acute here in Leicestershire.

For a cull to be justified in the Government's terms, bovine TB has to be shown to be endemic in badgers in the area. Derbyshire Wildlife Trust has published a scientific review of the Government's Animal and Plant Agency (APHA) evaluation of causes of bovine TB in cattle and badgers in their county (7). It showed that the methodology used to estimate the source of infection in outbreaks of bovine TB in cattle is subjective and biased, without clear evidence to support the claims. The analysis also showed that APHA's methodology and data neglected cattle-based risks such as persistent infections, as well as shortcomings in testing and the contribution of cattle movements to the spread of bovine TB. There was no data at all on bovine TB incidence in badgers in Derbyshire.

Our assessment of similar data for Leicestershire brings similar concerns. As with so much relating to the badger cull, the evidence is waning.



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In their response to the Godfray Report (6), which reviewed bovine TB control, the Government said that it wanted to move from lethal to non-lethal forms of disease control in badgers. It also said that one way to do this would be to establish a “Cordon sanitaire’ in defined at-risk parts of the Edge Area...”

Our vaccination programme focusses on an Edge Area and is ideally placed to put this policy goal into action. Having a cull in Leicestershire and Nottinghamshire would undermine progress towards achieving that goal.

Aside from the needless killing of an iconic species, one of the worst aspects of all of this is how poorly served the farming community has been by weak evidence and half-hearted policy changes. The livelihoods and wellbeing of farming communities are severely damaged by bovine TB outbreaks; they deserve more clarity and better leadership than what has been offered to date.

Should culling be approved within our Badger Edge Vaccination Scheme project area, it would be the first time in England where culling is permitted within an established badger vaccination project. Culling badgers in this area would therefore represent a huge waste of taxpayers’ money, not to mention the financial contributions from the local farmers and the donations from the general public, or the massive investment of local volunteer time.

## References

- 1) Department for Environment, Food and Rural Affairs (2020) Quarterly publication of National Statistics on the incidence and prevalence of tuberculosis (TB) in Cattle in Great Britain – to end March 2020  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/892569/bovinetb-statsnotice-Q1-quarterly-17jun20.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892569/bovinetb-statsnotice-Q1-quarterly-17jun20.pdf)
- 2) Donnelly, C. A., & Nouvellet, P. (2013). The contribution of badgers to confirmed tuberculosis in cattle in high-incidence areas in England. *PLoS Current Outbreaks*, 5, 1–11
- 3) <https://www.gov.uk/government/publications/a-strategy-for-achieving-bovine-tuberculosis-free-status-for-england-2018-review-government-response/executive-summary>
- 4) Department for Environment, Food and Rural Affairs (2007). *Bovine TB: The Scientific Evidence: Final Report of the Independent Scientific Group on Cattle TB*.
- 5) Carter et al. (2012) BCG Vaccination Reduces Risk of Tuberculosis Infection in Vaccinated Badgers and Unvaccinated Badger Cubs  
<https://doi.org/10.1371/journal.pone.0049833>
- 6) Department for Environment, Food and Rural Affairs (2018). *A strategy for achieving Bovine Tuberculosis Free Status for England: 2018 review*.
- 7) Critical evaluation of the Animal and Plant Health Agency report: ‘Year End Descriptive Epidemiology Report: Bovine TB Epidemic in the England Edge Area – Derbyshire 2018’.  
The Full APHA report can be found here.  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/894433/apha-epid-report-edge-area-derbyshire.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/894433/apha-epid-report-edge-area-derbyshire.pdf)

<https://www.derbyshirewildlifetrust.org.uk/cy/node/2958>

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