



NFYFC Response to Defra's Bovine tuberculosis: consultation on proposals to help eradicate the disease in England

The National Federation of Young Farmers' Clubs (NFYFC) heads a nationwide body of 598 Young Farmers' Clubs (YFCs) located throughout England and Wales dedicated to supporting young people in agriculture and the countryside. Their memberships comprise nearly 20,000 members. NFYFC represents a diverse group of people who share an interest in a vibrant and sustainable countryside. YFC members also play an active part in future food production, farming and land management. Future career opportunities within the food, farming and allied industries are of great importance and significance.

The current bTB situation is recognised as having multiple detrimental effects for wildlife, cattle, farmers and wellbeing. An increased workload for vets and farmers as well as a continual expense for tax-payers. The NFYFC Agriculture and Rural Issues (AGRI) group, made up of regional young farmer representatives, stated in last year's Defra consultation that vaccination has a place within the eradication strategy but not in areas of high density of disease. It was also stated that NFYFC AGRI plays an active role in advertising Defra and industry's agreed [preventative measures](#) to help combat bTB. Next generation farmers understand the importance of these measures that need to be applied to help with eradication of the disease, but that all measures should be evidence-based. Next generation farmers are particularly vulnerable to effects of a bTB breakdown within a herd.

Next generation farmers and new entrants need optimum working and productivity conditions to succeed in these challenging and transitional times and welcome another opportunity to express views in response to Defra's latest bovine TB consultation. We understand that the aim of this consultation sets out in more detail proposed changes to the bTB policy originally discussed in the Defra response to the Godfray Review as follows:

- accelerating work to develop a deployable cattle vaccine in the next five years
- evolving the wildlife control policy, by beginning to phase out intensive badger culling in the next few years and gradually replacing this with government-supported badger vaccination and surveillance. Culling would remain an option where epidemiological assessment indicates that it is needed
- improving diagnostic testing to root out bTB more effectively, with deployment of more sensitive tests for surveillance supported by greater use of on-farm restriction of cattle with inconclusive test results.

Before answering the current consultation questions, we wish to reiterate points highlighted within our response to last year's Defra bTB consultation:

- The evidence shows that, where TB is present in badgers, there is an increased risk of the disease spreading from badgers to cattle. The scientific consensus, summarised in Professor Charles Godfray's independent restatement of the evidence base in 2013, is that TB spreads within and between populations of badgers and cattle. The disease spreading from badgers to cattle is an important cause of herd breakdowns in high-incidence areas. (Supported by an eLife [study](#)¹ released in 2019.)
- A report by Downs et al. published in October 2019 showed that intensive culls are reducing the incidence of bTB in cattle. Detailed analysis of the effect of the current culls has shown that culling implemented by the farming industry can result in statistically significant reductions in the incidence of bTB. They found that culling was associated with reductions in herd bTB incidence of 66% and 37% in the first two intensive cull areas over the first four years relative to matched comparison areas with no culling.
- Lab-based studies were carried out to enable the licensing of BadgerBCG10 in 2010. These studies found that vaccination of badgers reduced the severity of disease. A study using vaccine in the field also suggested that vaccination reduces the severity and progression of TB in badgers. An indirect protective effect (akin to a "herd immunity" effect) was also demonstrated in this study. The level of indirect protection to unvaccinated cubs increased with the proportion of vaccinated adults in the social group. (However, an Animal & Health Plant Agency 2019 [study](#)² summarises that badger vaccination had no effect on bTB incidence within cattle.)
- Models investigating different policies for badger control suggest that trapping and vaccinating 70% of the population is required to give long-term decreases in cattle incidence when accounting for the efficacy of BCG.
- Badgers in undisturbed populations within England live in territorial social groups: social group and territory size varying according to the environment. This population structure restricts the distance that badgers generally move each day. After culling takes place, it has been demonstrated that the territorial social structure is disrupted, and the distances badgers move each day increases and increased trap rates are seen within 200m of un-culled areas.³

¹ eLife: Combining genomics and epidemiology to analyse bi-directional transmission of *Mycobacterium bovis* in a multi-host system: <https://elifesciences.org/articles/45833>

² A&PHA: A descriptive analysis of the effect of badger vaccination on the incidence of bovine tuberculosis in cattle within the Badger Vaccine Deployment Project area, using observational data: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/548140/bvdp-badger-vaccine-report.pdf

³ Defra: Bovine TB: consultation on proposals to manage the delivery of both badger vaccination and culling in Edge counties <https://consult.defra.gov.uk/animal-health-and-welfare/badger-no-cull-zones-edge-area/>
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We support the NFU stance that: "any transition away from badger culling must be completed at the appropriate time within the eradication strategy and be supported by evidence. No changes should be considered before alternatives are thought out and clear. Wildlife culling is vital to protect and enhance this crucial eradication strategy - until such point as proven and viable alternative tools are available".

There is a noted increase in the badger population, particularly in the Edge areas which makes preventative measures more challenging. In our previous consultation response, there was no support for the proposed measure of protecting vaccination areas with the Edge area through no cull buffer zones. Increased badger populations pose increased risk despite effective prevention measures. Evidence⁴ from the Roslin Institute states that "tuberculosis in cattle and badgers passes between members of the same species at least twice as often than between cow and badger." Another concern regarding the increase in badger numbers is the potential for human infection with *M. bovis* which is discussed in Phil Robinson's paper⁵ on Farmer and veterinarian attitudes towards the risk of zoonotic *Mycobacterium bovis* infection in Northern Ireland.

A paper⁶ from Allen et al (2018) on the challenge of bTB control compared the comparative success of EU countries with the situation currently experienced in Britain and Ireland. It attempts to address the current impasse in bTB control by adopting a novel perspective for likely multi-factorial problems afflicting our national eradication programmes saying: "Against this backdrop of successful eradication is the contrasting situation observed in the islands at the western fringe of the European continent – Britain and Ireland. Despite dramatic initial success in controlling bTB, England, Wales and Northern Ireland have suffered increasing incidence since the late 1980s. The Republic of Ireland experienced a relatively less dramatic initial reduction in incidence and continues to exhibit an ongoing problem in eradicating bTB, however, recent figures suggest that the situation has stabilised. Scotland is the notable exception, having been granted OTF status in 2009 (4)."

"Undoubtedly, despite widespread standardisation in the basic diagnostic approach of using injectable tuberculins, there are individual differences in the application of eradication programmes subject to the variations of differing national policies, politics, behaviours and country specific factors."

⁴ [Genetic clues of TB spread revealed | The University of Edinburgh](#)

⁵ Robinson, PA Farmer and veterinarian attitudes towards the risk of zoonotic *Mycobacterium bovis* infection in Northern Ireland(2019): <https://hau.repository.guildhe.ac.uk/id/eprint/17437/1/Philip%20Robinson%20Farmer%20and%20veterinarian%20upload.pdf>

⁶ Allen et al (2018) on the challenge of bTB control: <https://www.frontiersin.org/articles/10.3389/fvets.2018.00109/full>

We note that Defra will undertake badger vaccination pilots (during this transitional period) and develop the future badger vaccination policy, as well as develop a policy which enables culling in exceptional circumstances, where supported by epidemiological evidence. It is envisaged that development of future culling policy will build on the adaptive approach taken in response to bTB outbreaks in the LRA of England.

Views following the launch of this current Defra consultation were highlighted in Farmers Weekly⁷:

Stuart Roberts, NFU deputy president

"A science and evidence-based approach must continue to drive government's approach to TB eradication in cattle. At this critical time, we cannot have eight years of progress undermined."

James Russell, president of the British Veterinary Association

"It's essential that any next steps are evidence-based before any of the proven tools are phased out. We would like to see prioritisation of research to evaluate the impact of badger vaccination on cattle as part of any 'exit strategy' from intensive badger culling."

Phil Latham, Cheshire dairy farmer and Nuffield scholar

"If we don't keep the badger population down, we will return to where we were. The benefits that we can see from the current cull strategy are entirely derived from a reduction in badger population density. It seems odd to give up on that without a proven alternative strategy."

Responding to the launch of the government's Bovine TB Partnership, NFU Deputy President Stuart Roberts said: "It's critical that the government continues to consult with British farmers on its 25-year bovine TB eradication strategy and I'm pleased that the NFU has been invited onto this group.

"The impact of bovine TB on farming families across the country is enormous, with thousands of farms experiencing the emotional, mental and financial strain it places on families and businesses. That's why I'm pleased that there are several farmers on the group who have first-hand experience of the impacts of this terrible disease.

"With the government currently consulting on the future direction of its strategy, it is important that the progress made to date in reducing bovine TB on farm is recognised. The strategy must remain focused on effective measures that can ultimately deliver a TB free England."

NFYFC AGRI supports the stance of the above industry quotes as its farming members and their families face considerable business, animal welfare and emotional repercussions from decisions taken regarding a future strategy. With pressure of trade (and pandemic) volatility, policy and legislative transition, we are grateful for all industry support to help with the feasibility of expressing our views.

⁷ Next phase in Defra bovine TB strategy explained - Farmers Weekly (fwi.co.uk)

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Within the consultation⁸ document Defra states: "By implementing and gradually adjusting cattle and wildlife controls since the introduction of the bTB Strategy, we are making progress in tackling the disease. Overall herd incidence and prevalence in England is stable with the long-term trend beginning to show a downward turn. We are seeing particularly encouraging progress in the High-Risk Area (HRA). We now need to bank the benefits of our approach to date and build on that momentum. We can do that by making the very best use of our primary disease control tools – i.e. more and better TB testing and stronger biosecurity to improve herds' resilience to the threat of bTB. And we can do more to develop and then deploy relatively new ones that are now much more within reach – such as the already available badger vaccine and a cattle vaccine which we hope is now on the not-too-distant horizon."

For this reason, we have referred to research and liaised with industry bodies to express our concern and support the NFU. We particularly support the NFU's rationale that: *"Ultimately any transition away from badger culling must be completed at the appropriate time within the eradication strategy and be supported by evidence. No changes should be considered before alternatives are thought out and clear. Wildlife culling is vital to protect and enhance this crucial eradication strategy - until such point is proven and viable alternative tools are available."*

NFYFC AGRI considerations from a selection of consultation questions asked

Proposals: TB testing and wildlife control: Extending Post-Movement TB testing to parts of the Edge Area

Q1a: Do you support the proposal to introduce mandatory post-movement testing of cattle moving from higher TB risk regions of Great Britain (the HRA, Edge Areas on six-monthly surveillance testing and Wales) into those parts of the Edge Area where herds are on annual surveillance testing?

Q2a: Do you agree with the assumptions and the assessment of costs and benefits in the Regulatory Triage Assessment on introducing post-movement testing to parts of the Edge Area?

Next generation farmers, in line with many other farmers, are supportive of measures to further promote the eradication of bTB whilst supporting the livestock industry. However, we feel that necessary detail is lacking within the proposal. As for all policy engagement events or consultation feedback given to date, we reiterate the additional difficulties (due to trading time-scales for business start-up, cash flow, available time, finance or lack of capital) when faced with additional work and associated costs. This also includes consideration for animal and wildlife welfare as well as ecological conditions for wildlife.

⁸ Defra: Bovine TB: consultation on proposals to manage the delivery of both badger vaccination and culling in Edge counties

<https://consult.defra.gov.uk/animal-health-and-welfare/badger-no-cull-zones-edge-area/>
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We refer to Defra's cost/benefit analysis⁹ within the consultation that demonstrates a negative return for the costs incurred which is of concern and that the figures in the regulatory impact assessment are based on 0.042% of post-movement tests finding a positive. This creates a significant amount of additional cost and bureaucracy for industry for modest benefits for disease eradication. Also the total net present value¹⁰ for the proposal is -£1.39 million over ten years and at this stage it is not clear the introduction of post-movement testing in the suggested areas would deliver best value.

There are also concerns regarding assumptions made within the regulatory impact assessment. The levels of bTB and transmission routes within the annual testing parts of the Edge area and LRA are very different, with the latest Defra epidemiological evidence highlighting several areas of localised infection within the annual testing parts of the Edge area. As a result, this creates a confusing policy picture for farmers of moving testing frequencies to replicate the LRA, while the local epidemiological information illustrates a very different picture. We therefore support industry questioning whether this proposal is being implemented at the correct time within the eradication strategy.

Q3a. Do you agree that Defra should revise the current policy for using the more sensitive IFN-γ test in the HRA and Edge Area, so that in addition to persistent breakdowns, use of the test is mandatory where the below criterion is met?

- **TB breakdowns in the HRA and six-monthly testing Edge Area counties that occur within 18 months of the herd regaining TB free status following a previous OTFW breakdown.**

We have consulted with the NFU and agree that support for additional testing is reliant on the need for a continued holistic approach to the TB eradication strategy, which includes diseased wildlife control.

Many farmers remain concerned that the IFN-Y Gamma test continues to display high levels of false positive results and continues to present a range of deliverability issues on farm. Some examples of deliverability challenges include having to re-sample herds because of incorrectly stored blood samples or due to the mistiming of collection. These delivery issues cause substantial costs to the farm businesses they affect and often result in severe delays to herds being able to successfully tackle bTB and as a result re-obtain OTF status.

There is support for a more targeted criteria for interferon-Gamma testing, but more detail is required. Detecting disease is imperative, but all suggested measures should be thoroughly researched and agreed with industry. A more targeted criteria for interferon-Gamma testing is supported but with robust research for method and implementation.

⁹ [2021 bTB Consultation .pdf \(defra.gov.uk\)](https://www.gov.uk/government/publications/2021-tuberculosis-consultation) p36

¹⁰ [2021 bTB Consultation .pdf \(defra.gov.uk\)](https://www.gov.uk/government/publications/2021-tuberculosis-consultation) p39

Proposal 3 - Do you agree with the proposal to cease the issuing of new Badger Disease Control (intensive cull) licences after 2022?

Reasons and research evidence have been provided in the introduction to our response which supports our stance on supporting the continuation of culling, under the current policy, across the remaining parts of the HRA and Edge Area where appropriate. Therefore, we do not agree with the proposal to cease the issuing of new Badger Disease Control (intensive cull) licences after 2022. We understand that in 2019¹¹ nearly 20% of all new TB incidents were within the Edge area. There has been a continuous and steady increase in TB incidence between 2010 and 2019 within the edge area. We reiterate that stopping a procedure that has proved to be delivering the intended, positive results for disease prevention seems counter-intuitive.

We do not agree with the proposal that new Badger Disease Control (intensive cull) licences issued in 2021 and 2022, could after two years of culling, be revoked after a progress evaluation by the CVO. As mentioned, next generation or new entrant farmers face risks when establishing a business and continuing business growth. Additional uncertainties of disease (or lack of control for a known disease and the consequences of this on herd, human and animal health and wellbeing) add unreasonable conditions for business viability.

Proposal 5: Reduce the initial financial commitment of cull companies to three years funding

To mitigate the risk of areas not coming forward before the 2022 deadline due to the financial commitment currently required under the Guidance, we propose to reduce the initial financial commitment required from the companies to the cost of three years of culling.

Q6a. Do you agree with the proposal to reduce the initial financial commitment required from the companies prior to application for a Badger Disease Control licence to the cost of three years of culling?

No, we do not agree as this action seems counter-intuitive for all the reasons given in tackling eradication of the disease. There is no element of the suggestion that make disease-prevention, financial or business planning sense.

Proposal 6: Restrict SBC licences to a maximum of two years, from the current five. Prohibit issuing of SBC (or Badger Disease Control) licences for areas that have previously been included in one of these licences or areas licensed for Badger Disease Control after 2020.

Q7a. Do you agree with the proposal to restrict SBC licences to a maximum of two years, and to prohibit the issuing of SBC licences for previously licensed areas or areas licensed for Badger Disease Control after 2020?

¹¹ [Bovine TB in England 2019: epidemiological analysis of the 2019 data and historical trends \(publishing.service.gov.uk\)](https://www.gov.uk/government/statistics/bovine-tb-in-england-2019-epidemiological-analysis-of-the-2019-data-and-historical-trends) p45



No, we do not agree as this action seems counter-intuitive for all the reasons given in tackling eradication of the disease. There is no element of the suggestion that make disease-prevention, financial or business planning sense.

Conclusion

The eradication of bTB is of utmost importance for the industry, wildlife, ecology and the members we represent. It has far-reaching effects on animal welfare, health and safety for vets and farmers, livestock and business. We do not have the resources to provide more detailed information, but we support the evidence referred to and organisations consulted with. We also support the continuation of future joint-action to develop a realistic and successful plan to continue the progress made of eradicating bTB and diseased wildlife to help combat the disease.

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