



Department
for Environment
Food & Rural Affairs

Bovine TB: consultation on proposals to introduce licensed badger control to prevent the spread of bovine tuberculosis in the Low Risk Area (England)

A consultation exercise contributing to the delivery of the government's strategy for achieving Officially Bovine Tuberculosis Free (OTF) status for England

February 2018



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Part A: Background

1. Purpose of this consultation

- 1.1 This consultation is part of the government's Strategy for achieving Officially Bovine Tuberculosis Free (OTF) status for England, published in April 2014¹. We are consulting on a proposal to extend the Strategy to include badger control in the Low Risk Area of England² (LRA) in the rare event that disease is present in badgers and is linked with infection in cattle herds. We set out options for badger control, which includes culling, in these circumstances, in order to re-establish a disease-free badger population in the LRA. We invite views in Part C on the principle of introducing this type of badger control, and any other options which could be considered, and on the proposed revisions to the Guidance to Natural England on licensed badger control (see Annex B for the draft revised Guidance).
- 1.2 Bovine TB is the most pressing and costly animal health problem in the UK. It threatens our cattle industry and presents a risk to other livestock, wildlife, pets and humans. Dealing with the disease is costing the taxpayer over £100 million each year. The latest official statistics show that in the 12-month period ending 30 September 2017, more than 31,000³ cattle had to be slaughtered in England to control the disease, causing devastation and distress for hard-working farmers and rural communities.
- 1.3 The Strategy aims to eradicate TB whilst maintaining an economically sustainable livestock industry. This complements Defra's strategic objectives of supporting and developing British farming and encouraging sustainable food production, enhancing the environment and biodiversity, managing the risk of animal disease, and the government's overarching objective of supporting economic growth. In developing new disease control interventions we need to find the right balance between managing disease risks and managing impacts on businesses.
- 1.4 The TB Strategy is an adaptive, evidence-based, long-term approach to disease control, including badger control in areas where the disease is widespread in cattle and in badgers to complement other measures. Its aims include using all available tools to rapidly find and eliminate TB in cattle wherever it occurs and reduce and eliminate the spread of TB from wildlife, including badgers. There is a case that badger control measures should also be made available in TB low risk areas where disease is identified in the badger population to stop the disease spreading further.

¹ A strategy for achieving Officially Bovine Tuberculosis Free status for England:

<https://www.gov.uk/government/publications/a-strategy-for-achieving-officially-bovine-tuberculosis-free-status-for-england>

² Counties subject to four yearly TB testing intervals are described collectively as the Low Risk TB Area of England

³ Defra TB statistics: <https://www.gov.uk/government/statistics/incidence-of-tuberculosis-tb-in-cattle-in-great-britain>

- 1.5 It is vital that we are able to deal swiftly and decisively with any incursion of TB in the LRA which involves both cattle and badgers to make sure that the special status of this area is protected, to support the sustainability of local farm businesses and to disrupt the disease transmission within the badger population. We are consulting on a rational disease control extension of the Strategy which will ensure timely and effective action can be taken in response to these situations.
- 1.6 Our initial economic assessment of the proposals can be found in Section 5.
- 1.7 TB policy is devolved and this consultation applies to England only. Details of the proposal are set out in Part B. Responses to the questions in Part C are invited by 15 April 2018. You can submit your response online: <https://consult.defra.gov.uk/bovine-tb/badger-control-in-low-risk-area-england>.

Part B: Proposal to introduce badger control in the Low Risk Area (England) to prevent the spread of bovine TB

2. Rationale, evidence and current disease control measures in the Low Risk Area

Rationale

- 2.1 The government's TB Strategy has a strong emphasis on strengthening cattle testing and movement controls, and improving biosecurity. Controlling TB in badgers in areas where it is endemic is an important aspect of the strategy, and there is a strong case that this tool should be available in low risk areas on the rare occasions when infection is confirmed in badgers. The presence of infected badgers poses an increased risk of badger-to-cattle infection and the geographic spread of the disease. Even though the presence of infected badgers in the LRA may be a rare occurrence, if left unchecked, this could lead to the development of new areas in the LRA where TB becomes endemic in the local cattle and badger populations. In this situation it would be more difficult to contain the outbreak, leading to more TB herd breakdowns, increased cattle testing, costs for farmers and taxpayers, and social impacts.
- 2.2 Importantly, the confirmation of TB infection in badgers in the LRA puts the objective of achieving and maintaining regional OTF status at risk⁴. Increases in TB herd incidence in the LRA, as a result of a reservoir of disease in badgers, would prevent the whole region meeting the minimum level of incidence for OTF status⁵. In addition,

⁴ See Annex A for the objectives for each TB risk area in England.

⁵ For the LRA of England to be recognised as an OTF region of the UK, the percentage of cattle herds with newly confirmed cases of bTB must not have exceeded 0.1% for six consecutive years.

countries seeking OTF status that are found to have residual pockets of TB infection in wildlife must have robust plans to deal with such occurrences.

- 2.3 In areas where TB is established in badgers, cattle controls on their own are unlikely to eradicate the disease locally. The government is proposing to allow badger control in the LRA only when all other cattle and biosecurity measures have been put in place (as set out in Annex A) and there is epidemiological evidence that the disease is present in badgers. Badger control covers culling and vaccination.

Evidence

- 2.4 The examples of Scotland, the Isle of Man, and the majority of EU Member States show that in regions and countries without a substantial reservoir of endemic *M. bovis* infection in wildlife it is possible to eradicate TB and keep the disease at bay by applying the traditional approach of cattle herd testing and cattle movement restrictions supplemented by slaughterhouse surveillance.
- 2.5 East Sussex and Staffordshire demonstrate what can happen where incursions of TB in a previously low incidence area become established in badgers. This can be seen by the persistence of TB of the same genetic type (called a genotype) in badgers and cattle in these two counties. Although the East Sussex outbreak has remained small but persistent over the last 20 years, Genotype 25a present in Staffordshire has since spread into Cheshire, Derbyshire and Shropshire. The reason for this difference in the rate of spread are not clear but these two examples show the risks of allowing TB to become established.
- 2.6 The evidence shows that, where TB is present in badgers, there is an increased risk of the disease spreading from badgers to cattle⁶. The scientific consensus, summarised in Professor Charles Godfray's independent restatement of the evidence base in 2013⁷, is that TB spreads within and between populations of badgers and cattle and that disease spread from badgers to cattle is an important cause of herd breakdowns in high-incidence areas. While the risk of disease spread between badgers and cattle is lower in the LRA, it nonetheless remains if infected badgers are present, and is likely to increase if the infection is left unchecked.
- 2.7 Spread of TB between badger social groups is relatively slow where the density of badgers is high and stable⁸. Rapid geographical spread of infection is likely to occur

⁶ Donnelly, C.A., Nouvellet, P (2013). The Contribution of Badgers to Confirmed Tuberculosis in Cattle in High-Incidence Areas in England: <http://currents.plos.org/outbreaks/article/the-contribution-of-badger-to-cattle-tb-incidence-in-high-cattle-incidence-areas/>

⁷ H. Charles, J. Godfray, Christl A. Donnelly, Rowland R. Kao, David W. Macdonald, Robbie A. McDonald, Gillian Petrokofsky, James L. N. Wood, Rosie Woodroffe, Douglas B. Young, Angela R. McLean (2013). A restatement of the natural science evidence base relevant to the control of bovine tuberculosis in Great Britain. *Proc. R. Soc. B* 2013 280 20131634; DOI: 10.1098/rspb.2013.1634.

⁸ Delahay R.J., Langton S., Smith G.C., Clifton-Hadley R.S. & Cheeseman C.L. (2000). The spatio-temporal distribution of *Mycobacterium bovis* (bovine tuberculosis) infection in a high density badger population. *J. Anim. Ecol.*, 69 (3), 428-441. doi: 10.1046/j.1365-2656.2000.00406, and Vicente J., Delahay R.J., Walker N. & Cheeseman C.L. (2007). Social organization and movement influence the incidence of bovine tuberculosis in an undisturbed high-density badger *Meles* population. *J. Anim. Ecol.*, 76 (2), 348-360.

when social groups are disrupted or at lower densities. Much of the LRA has a lower density of badgers and rapid geographical spread is likely to be more of a risk.

Disease control measures in the LRA

- 2.8 The LRA covers large parts of the north and east of England. It has a low incidence of TB and no recognised significant reservoir of the disease in wildlife. Consequently, the objective in the LRA is to continue to protect it from the ingress of disease through the movement of cattle and the possible resulting infection of wildlife vectors. Sporadic cases of bovine TB do occur in the LRA, mostly due to movements of TB-infected cattle that escape detection through routine and pre-movement testing⁹. The current LRA cattle policy includes implementing enhanced cattle and other controls when the disease is disclosed in herds through surveillance and other types of testing (see Annex A)¹⁰.
- 2.9 Biosecurity remains an important part of the TB Strategy in the LRA, where the focus is on preventing transmission from cattle to cattle and from cattle to badgers. Defra and industry continue to deliver actions in the joint Defra/industry Biosecurity Action Plan¹¹. Poor biosecurity on farms, including as regards potential wildlife-cattle interaction, environmental risk factors and how rented grazing and shared housing is used, can contribute to an increased TB risk. Implementing proportionate biosecurity measures therefore plays a crucial part in stopping the spread of TB within and between herds, and between cattle and badgers. In areas where badgers are suspected or confirmed as having TB, biosecurity risk assessments and implementation are re-examined to ensure that they also focus on preventing badger to cattle transmission.

3. Licensed badger control to date and applicability to the Low Risk Area

- 3.1 Natural England (NE) issues licences under section 10 of the Protection of Badgers Act 1992 and section 16 of the Wildlife and Countryside Act 1981 to enable the culling or vaccination of badgers for the purpose of controlling the spread of TB, where TB is present in both the badger and cattle populations. Defra's statutory

⁹ See the detailed epidemiological reports for the LRA, published six monthly: <https://www.gov.uk/government/publications/bovine-tb-area-epidemiology-reports-2016>. These reports provide a detailed analysis of the TB situation in the area, including an assessment of the likely source of breakdowns and local risk factors that may contribute to the spread of disease in each county.

¹⁰ Defra's Strategy for achieving Officially TB Free status for England, 3 April 2014: <https://www.gov.uk/government/publications/a-strategy-for-achieving-officially-bovine-tuberculosis-free-status-for-england>

¹¹ Cattle biosecurity: a joint Defra/industry action plan for improving herd resilience to bovine TB <https://www.gov.uk/government/publications/cattle-biosecurity-action-plan-for-improving-herd-resilience-to-bovine-tb>

Guidance to NE¹² currently allows licences to be issued for areas that are subject to annual TB testing (i.e. the High Risk Area and Edge Area¹³).

- 3.2 The conditions for licensed badger control in the High Risk Area (HRA) and Edge Area are underpinned by the Randomised Badger Culling Trial (RBCT)¹⁴. These conditions are in place to mitigate the perturbation effect (herd breakdown caused by perturbation) that is caused by culling. The perturbation effect is associated with infected badgers outside of the cull area increasing their roaming into territories of neighbouring badgers.
- 3.3 There is no evidence which points to widespread infection in the badger population across the LRA and therefore the risk of the perturbation effect is different from and much lower than that in the HRA and Edge Area. We consider therefore that the conditions in place for licensed badger control in the LRA should not be the same as those in the HRA and Edge Area, but rather need to be specific to the particular circumstances of the LRA.
- 3.4 The aim of badger control in the LRA would be to remove and/or vaccinate badgers from an estimated minimum infected area, based on epidemiological and ecological advice, **and** from a buffer zone surrounding this as a precaution, to ensure that all infected badgers are removed and/or vaccinated.

4. Proposals to introduce licensed badger control in the Low Risk Area of England

- 4.1 Any decision by the Secretary of State on introducing licensed badger control in the LRA will be informed by the scientific evidence and veterinary advice available, experience from the licensed badger control operations to date and responses to this consultation. Responses are invited in Part C to questions on the principle of introducing badger control in the LRA in order to prevent the spread of TB, and any other controls which could be considered, and on the proposed revisions to the Guidance to Natural England on licensed badger control, in particular the new section on Low Risk Area Badger Disease Control licences (see Annex B for the draft revised Guidance).
- 4.2 The **aim** of introducing badger control in the LRA would be to secure disease control benefits by reducing the potential for infectious contacts between badgers and cattle, to prevent further geographic spread of TB in badgers and to re-establish a disease-free badger population in the LRA.

¹² Guidance issued to Natural England by the Secretary of State under section 15(2) of the Natural Environment and Rural Communities Act 2006 (NERC), July 2017 <https://www.gov.uk/government/publications/guidance-to-natural-england-preventing-spread-of-bovine-tb>

¹³ Counties subject to annual TB testing intervals are collectively described as the High Risk Area of England. The Edge Area describes the counties that form the boundary between the HRA and LRA counties

¹⁴ Final Report of the Independent Scientific Group on Cattle: TB
<http://webarchive.nationalarchives.gov.uk/20081107201922/http://defra.gov.uk/animalh/tb/culling/index.htm>

From a disease control perspective, there are **two objectives**:

1. Containment – prevent geographic spread to cattle herds within and adjacent to the affected area.
2. Control – reduce and then eradicate infection in cattle herds within the affected area.

- 4.3 The aim would be achieved by lowering the badger population of the affected area sufficiently to reduce the risk of infection of cattle from badgers (whether through direct or indirect contact), and ideally substantially reduce or even eliminate it. The Animal and Plant Health Agency (APHA) defines an area in the LRA as a ‘hotspot’ where further investigations and enhanced measures are required in order to identify and control the outbreak. The definition of a hotspot area can differ from case to case, and is based on expert veterinary judgement and epidemiological assessments. Where TB-positive wildlife is found the Chief Veterinary Officer’s advice is that all options to control the transmission between wildlife and cattle should be considered to stamp out the disease quickly. The low level of disease in the LRA and the objective of achieving OTF status justifies taking a precautionary approach, with direct and robust intervention involving both cattle and wildlife controls where necessary.
- 4.4 In this section, we explain the principles which would apply to any badger control operation in the LRA, so that we can build in a level of flexibility to ensure a proportionate disease control response on a case-by-case basis.
- 4.5 Once a decision has been made by government that badger control is necessary based on all the evidence available, an effective operation needs to be implemented as quickly as possible to prevent any further geographic spread. While in some cases this could be industry-led, in other cases a government-led operation may be required.
- 4.6 Industry-led badger control would be licensed by Natural England, and government-led badger control would be carried out under licence, where required, from either Natural England or the Secretary of State¹⁵. Natural England would licence industry-led badger control in the LRA having regard to Defra’s statutory Guidance. Draft revised Guidance with a new section on Low Risk Area Badger Control Disease licences is at Annex B and we are seeking views on the revisions to the Guidance. The revised Guidance would only be confirmed and published if the proposal is taken forward after consideration of the consultation responses and other evidence, as explained in paragraph 4.1.

¹⁵ The Protection of Badgers Act 1992 does not apply to the Crown, so government employees would not require a licence under that Act in order to undertake badger control operations. Licences may, however, still be required under the Wildlife and Countryside Act 1981.

- 4.7 The geographic area where badger control would be undertaken would be determined by an epidemiological and wildlife ecology assessment undertaken by APHA and operations would be undertaken wherever access is granted within the boundary of the affected area.
- 4.8 There are different control measures which could be implemented depending on the scale and nature of the TB outbreak, the estimated size and structure of the local badger population, and the way in which the farming industry is structured in an affected area. These measures could be implemented in isolation or as a combination and include:
- Removing as many badgers as possible from the affected area;
 - Deploying injectable vaccination of badgers in and/or around the control zone¹⁶;
 - Where appropriate, enhanced surveillance testing and cattle controls, and;
 - Improving on-farm biosecurity measures, which may be sufficient to address the disease risks without badger control.
- 4.9 The decision on which control measure, or combination of measures, would be appropriate in each situation would take into account the benefits and constraints of each. The constraints include the risk of not removing all infected badgers, and the fact that vaccination does not cure infected badgers.
- 4.10 In accordance with the TB Strategy, fundamental safeguards would remain to ensure the welfare of the local badger population. Operations would not be permitted during the closed seasons¹⁷. Culling methods would be restricted to cage trapping and shooting, and controlled shooting.
- 4.11 Given that the objective of any culling operation would be to lower the badger population of the affected area sufficiently to reduce the risk of infection of cattle from badgers (whether through direct or indirect contact) and ideally substantially reduce or even eliminate it, we need to assess the risk to local extinction. When determining the appropriate operation in any particular area, our responsibilities under the Bern Convention would be taken into account.
- 4.12 Badger control is unlikely to remove all the potentially infected badger population or vaccinate the majority of the badger population without repeated campaigns, therefore badger control operations are likely to need to continue for several years in order to achieve eradication of infection in both the local cattle herds and badgers. As prevalence in an affected region of the LRA is likely to be unique, the number of years that control is carried out is also likely to be different than the standard set for the HRA, and needs to be decided on a case-by-case approach. Whilst we would

¹⁶ Licensed injectable badger vaccination has a role to play in preventing the spread of TB into disease-free badgers, as the BCG vaccine does not provide complete protection or cure infected animals.

¹⁷ The closed seasons for licensed badger control are: 1 December to 31 May for cage-trapping and shooting or vaccination, and 1 February to 31 May for controlled shooting.

want to make sure we had culled or vaccinated sufficiently to achieve eradication of infection, we would not want control to last for longer than required.

- 4.13 It may be appropriate to monitor badgers across and around the control zone for infection for a number of years after any badger control operation finishes as this would help to evaluate the impact of the policy, alongside data on cattle TB incidence and other indicators.
- 4.14 Badger control would be undertaken wherever access is granted within the affected area, with the aim to cover as much land as possible within this. NE would have discretion to decide what constitutes a sufficient extent of access for industry-led licensed badger control, taking into account advice from APHA.
- 4.15 Access for badger control operations would be provided by an agreement with each participant. This will grant access for government and industry contractors to carry out control activities.
- 4.16 Focused communication and engagement activities would be carried out in a hotspot area with local farmers and landowners, and government would work closely with county-level TB eradication groups.
- 4.17 This proposal supports our objectives of maintaining or reducing the incidence of TB in the LRA, and of achieving Officially TB Free status for the LRA in the near future. Achieving OTF status will provide tangible benefits for the cattle industry, rural communities and government. These include significant savings in combating the disease both to government and to industry, increasing the ability to trade within the EU and internationally¹⁸ and alleviating the social impacts of the disease on farmers and their businesses.

5. Summary of economic impacts

Economic assessment

- 5.1 The aim of deploying targeted badger control in the LRA is to contain and eliminate TB hotspots. This action will avoid future breakdowns and reactors in the affected hotspot area and so deliver an economic benefit to both industry and government.

Benefits:

- 5.2 Defra estimates the cost of an average breakdown at £18,745 with £9,950 falling on industry and £8,795 falling on government¹⁹. This includes the costs of removing

¹⁸ The World Organisation for Animal Health's (OIE) Terrestrial Animal Health Code lays down animal health standards for international trade. These include requirements for qualifying for official freedom from TB. <http://www.oie.int/en/international-standard-setting/overview/>

¹⁹ Defra's Badger Control in the HRA VFM analysis, 2017 <https://www.gov.uk/government/publications/bovine-tb-badger-control-policy-value-for-money-analysis>

reactors, paying compensation, sourcing replacement cattle, conducting additional TB testing, the productivity losses to farmers of being tested, administration costs and movement restrictions. Every breakdown avoided as a result of swift and effective badger control action represents avoided cost for both farmers and government.

- 5.3 In addition to avoiding breakdown costs, rapidly dealing with a TB hotspot in the LRA would reduce the length of time enhanced TB control measures were active in a hotspot. When a hotspot is identified these measures are deployed under existing policy and impose additional costs to industry and government. These measures include increased cattle testing for all herds in the hotspot (eight times as many tests; from four yearly in the LRA to six monthly) and a wildlife survey to identify the source of the infection. The deployment of badger control to resolve hotspots would reduce the length of time farmers in the area are subject to six-monthly testing, as doing nothing would lead to on-going enhanced surveillance. Any reduction in test frequency provides a cost saving to industry and government.
- 5.4 An important benefit of deploying targeted measures to control TB in badgers in the LRA, is the ability to achieve and retain OTF status for the county affected. The new bespoke measures are being proposed to prevent the development of new hotspot areas of endemic infection. This will allow the county to return to a stable, low rate of bovine TB incidence in cattle as fast and efficiently as possible. This in turn means a reduction in testing and associated breakdown costs for farmers and inevitably taxpayers. As a result cattle farms will be able to return to their normal operations as promptly as possible without the burdens which TB imposes on them and their local community.

Costs:

- 5.5 The costs of targeted badger control will depend on the nature of the TB hotspot, so it is very difficult to estimate the costs in advance, and the costs will vary depending on whether it is a government- or industry- led operation. Factors such as size, accessibility of land, badger population and weather can all have a significant impact on a potential badger cull zone. The costs will be dependent on the TB hotspot area and a range of external variables, but will scale up for larger cull areas.

Value for Money

- 5.6 Defra's 2017 Badger Control in the HRA Value for Money (VfM) analysis²⁰ estimates that each new cull area in the HRA will deliver benefits of approximately £1.09m over eleven years. This is based on the cost of industry-led culling versus the benefit of avoiding further TB breakdowns. While this analysis is useful in demonstrating the positive VfM of badger culling to control TB in the HRA the differences in LRA badger control mean we cannot assume the same VfM will apply. Factors such as the

²⁰ See footnote 19.

different size of area where control would take place and delivery body undertaking the culling make it difficult to quantify the exact VfM.

Case Study: East Sussex

- 5.7 The long running 'enclave' of endemic bovine TB infection in the HRA area of East Sussex can be used as an example of the scale of benefits that tackling a wildlife reservoir in the LRA may deliver. It illustrates the costs if TB in an LRA hotspot isn't dealt with swiftly and decisively. The East Sussex case is a relevant example because it is a relatively small isolated area where infection in badgers has maintained TB in cattle even though the surrounding counties have lower levels of TB. It is not however classified as a hotspot because it is not in the Low Risk Area and so would not be a candidate for badger control as outlined in this consultation.
- 5.8 In the last 10 years there have been 93 breakdowns in this infection area (an average of 9.3 a year). Using Defra's estimate of the cost of a breakdown of £19k the recurrent infection has imposed **estimated costs on industry and government of £1.74m over ten years, or £174,000 a year**. If rapid action is taken in a similar hotspot area of the LRA where there is a wildlife reservoir of disease we could expect benefits to farmers and industry similar to the costs faced in this area.
- 5.9 The introduction of enhanced cattle controls in the East Sussex area would have imposed additional cattle testing costs on industry and government. East Sussex is in the HRA, so is subject to annual skin testing and has around 156 herd tests a year²¹. An LRA area with similar characteristics would be subject to four-yearly testing (before being declared a hotspot), implying around 39 herd tests a year. After being put on six-monthly testing as part of enhanced cattle measures, this would increase to 312 herd tests a year (an increase of 273 herd tests a year). The cost to Defra of providing this increased testing would be approximately £103,000²² p.a., and the productivity loss to farmers of being tested (using Defra's estimated loss per test of £2.56²³) would be an estimated £90,000²⁴ p.a. **A total estimated cost of £193,000 per year for each year enhanced cattle controls remain in place (£1.93m over 10 years).**
- 5.10 If the TB in badgers in the East Sussex example had been dealt with rapidly and decisively by industry, for example by culling, **the benefits to industry and government would have totalled £3.67m** over a 10 year appraisal period. This suggests that badger control in a similar area will deliver a similar level of benefits.

²¹ Data on the south-east by county published at: <https://www.gov.uk/government/statistical-data-sets/tuberculosis-tb-in-cattle-in-great-britain>. Over the past 10 years there has been an average of 168 herds in this area, on which 156 herd tests were done (with an average herd size of 132).

²² Based on the Veterinary Delivery Partnership contract pricing.

²³ Pre-movement testing review (2008 prices) - see Table 14 p.90. Value used is inflation adjusted.

²⁴ Approximately 40,000 additional cattle tests would take place with an estimated productivity cost of £2.56 a test.

Part C: Tell us what you think

6. Your comments invited

- 6.1 **Our proposal is designed to implement swift and effective disease control in order to prevent the spread of TB in the LRA, where the disease is present in the local badger population and is linked with infection in cattle herds. We invite views on this proposal. We would particularly welcome views on the following specific issues:**
- 6 (a):** The principle of controlling the risk from badgers with TB in the LRA.
 - 6 (b):** The principle of a government-led badger control operation where required.
 - 6 (c):** The principle of taking a precautionary case-by-case approach, dependent on the local conditions and situation, including as regards the number of years in which culling is carried out.
 - 6 (d):** The principle of using culling or vaccination or a combination of the two to control risks from badgers with TB in the LRA.
 - 6 (e):** In relation to cases where culling is deployed, the principle of lowering the badger population of the affected area sufficiently to reduce the risk of infection of cattle from badgers (whether through direct or indirect contact), and ideally substantially reduce or even eliminate it.
 - 6 (f):** On the proposed revisions to the Guidance to Natural England on licensed badger control. Draft revised Guidance can be found at Annex B. See the new section on Low Risk Area Badger Disease Control. The new section header and other revisions to the Guidance have been highlighted in yellow for ease of reference.
 - 6 (g):** Any additional comments or approaches which you feel are relevant but not captured by the questions above.
- 6.2 Animal health policy, including TB, is devolved. This consultation therefore applies to England only²⁵.
- 6.3 This consultation is about badger control policy. The deadline for responses is 15 April 2018.

²⁵ Further information is available on TB policy in Northern Ireland, Scotland and Wales can be found at: Northern Ireland <https://www.daera-ni.gov.uk/topics/animal-health-and-welfare/animal-diseases-diseasesaffect-cattle/bovine-tuberculosis>, Wales <http://gov.wales/topics/environmentcountryside/ahw/disease/bovinetuberculosis/?lang=en> and Scotland <http://www.gov.scot/Topics/farmingrural/Agriculture/animal-welfare/Diseases/disease/tuberculosis>.

6.4 We have written to principal organisations that we believe have a direct interest to raise awareness about this consultation and inviting them to respond. We hope this will help ensure a wide range of informed views can be considered. Anyone else who would like to respond to the consultation is free to do so. Each response will be considered in its own right and on its own merit.

6.5 You can respond in one of three ways:

- **Online** by completing the questionnaire at:
<https://consult.defra.gov.uk/bovine-tb/badger-control-in-low-risk-area-england>
- **Email** to: bTBengage@defra.gsi.gov.uk
- **Post** to:

Bovine TB Programme

Nobel House

17 Smith Square

London

SW1P 3JR

6.6 **Our preferred method is online** because it is the fastest and most cost-effective way for us to collate, analyse and summarise responses. If you require a different format, please let us know.

6.7 We intend to publish a summary of responses to this consultation. It will not be practical to describe every response in detail.

6.8 The summary will not include your personal name (unless you have asked us to include it) or other personal data such as contact details. The summary may contain the name of your organisation, if you are responding on an organisation's behalf.

6.9 Defra will retain copies of responses for a suitable length of time. Please note that a member of the public can ask to see copies of information held. If you need to keep any part of your response confidential, please tell us when you respond. Please note that confidentiality disclaimers automatically added to e-mails do not count.

6.10 **Important:** We will take your reasons into account if someone asks for information. Because we must comply with the law, including access to information legislation, we cannot promise that we will always be able to keep details that you provide to us confidential.

Annex A: overview of the surveillance regime and control measures for bovine TB in the Low Risk Area of England

The Strategy describes the characteristics of each TB risk area in England. For the LRA these are: a stable and low level of the disease; sporadic herd breakdowns of relatively short duration and with a low likelihood of recurrence that are usually linked to movements of cattle from higher risk areas of GB; and no significant reservoir of TB in wildlife.

Overall target:

- to secure Official TB Free (OTF) status recognition for the whole area by 2025. Achieving OTF status will provide tangible benefits for the cattle industry, rural communities and government. These include significant savings in combating the disease both to government and to industry, increasing the ability to trade within the EU and internationally²⁶ and alleviating the social impacts of the disease on farmers and their businesses.

Policy objectives:

- to maintain or further reduce the very low herd incidence and prevalence of TB below the thresholds set out in Council Directive 64/432/EEC for achieving OTF regional status
- to protect the LRA by introducing risk-based cattle trading, compulsory post-movement testing and other measures and halting the spatial spread of TB in the Edge Area
- to deal quickly and effectively with any incursions of TB in the area

To support these objectives we have already put in place a number of measures to enhance TB surveillance and breakdown controls in the LRA and protect the area from incursions of the disease without the need for costly annual herd testing.

Main TB surveillance and control measures:

Surveillance

- Four-yearly screening of herds (routine herd tests) with the comparative tuberculin skin test
- Annual testing in a small proportion of herds that regularly import cattle from higher risk areas (including the Republic of Ireland and Northern Ireland), dealers, 'heifer rearers'

²⁶ The World Organisation for Animal Health's (OIE) Terrestrial Animal Health Code lays down animal health standards for international trade. These include requirements for qualifying for official freedom from TB. <http://www.oie.int/>

and bull hirers' herds, and herds retailing raw cows' drinking milk and unpasteurised dairy products.

- Targeted TB surveillance of herds situated within a 3km radius of a new Officially Tuberculosis Free Status Withdrawn (OTFW)²⁷ breakdown, followed by a herd test 6 months later and a final test 12 months thereafter (radial testing)
- On-farm surveillance supplemented by slaughterhouse surveillance, i.e. ante- and post-mortem meat inspection of all cattle slaughtered for human consumption
- Scanning TB surveillance in non-bovine domestic species, by compulsory notification to APHA and investigation of suspected cases detected during post-mortem meat inspection or post-mortem examination in veterinary laboratories, as well as any isolations of *M. bovis*

Management of cases (TB herd breakdown control measures)

- Repeat skin herd testing at 60-day intervals to regain OTF herd status, using the severe test interpretation in OTFW herds (and in some higher-risk Officially Tuberculosis Free Status Suspended (OTFS)²⁸ herds since April 2016)
- Mandatory interferon-gamma blood testing of all OTFW breakdown herds (any exemptions require policy approval and must be backed by a favourable veterinary risk assessment)
- Enhanced epidemiological investigations & data analysis
- Wildlife surveillance around OTFW incidents of obscure origin ('potential hotspots' policy)

Preventive measures

- Compulsory pre-movement skin testing of cattle entering the LRA (to live) from higher risk (annual and six-monthly testing) areas of England and Wales since March 2006. Since 6 April 2016, this has been supplemented with mandatory post-movement testing
- Most pre-movement TB testing exemptions abolished in 2014-15
- Cattle Tracing System (CTS) links between holdings in the LRA and higher TB risk areas of England and Wales removed
- APHA-Approved Finishing Units for negative-testing cattle from TB-restricted herds (AFUs) cannot be set up in the LRA. The same prohibition applies to beef finishing units for cattle exempted from pre-movement TB tests (EFUs)
- Strict biosecurity conditions for licensed beef finishing units that wish to remain exempt from TB surveillance testing (Licensed Finishing Units or 'LFUs')
- Voluntary, government-funded check testing scheme for farmers looking to sell four-yearly tested herds ('herd dispersal' sales): available since 6 April 2016
- Promote risk-based trading of cattle (currently voluntary) and greater herd biosecurity
- Local disease awareness events and establishment of local TB Eradication Boards

²⁷ A breakdown will become Officially Tuberculosis Free Withdrawn (OTFW) when: one or more reactors are visibly lesioned (VL) or one or more reactors are culture positive or there is a culture positive slaughterhouse case.

²⁸ Where one or more reactors have been disclosed at a TB test in an unrestricted (OTF) herd, a new breakdown will be initiated and the herd's OTF status will be suspended. To regain its OTF status, the affected herd will be subject to repeat tuberculin skin testing using Short Interval Tests, occasionally preceded or supplemented by Check Tests where necessary. Following restoration of OTF status, the herd will have to undergo six month check tests where appropriate, and 12 month check tests.

- More information available to farmers – interactive online map of herd breakdowns in England & Wales (‘iTB’): <http://www.ibtb.co.uk/>

More information on these measures can be found at the ‘TB Hub’ website: <http://www.tbhub.co.uk/>. The TB Hub is a joint industry-government initiative, supported by the Agriculture and Horticulture Development Board (AHDB), the Animal & Plant Health Agency (APHA), the British Cattle Veterinary Association (BCVA), Defra, Landex and the National Farmers Union (NFU).

Annex B: draft revised Guidance to Natural England



Department
for Environment
Food & Rural Affairs

DRAFT Guidance to Natural England

Licences to kill or take badgers for the purpose of preventing the spread of bovine TB under section 10(2)(a) of the Protection of Badgers Act 1992

The additions are highlighted in yellow throughout.

February 2018



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Scope of this guidance

1. This guidance is given by the Secretary of State to Natural England under section 15(2) of the Natural Environment and Rural Communities Act 2006 (NERC Act), and represents the Secretary of State's considered views, based on current scientific evidence, about what is required for any cull of badgers for bovine tuberculosis (TB) control purposes to be effective, safe and humane.
2. Section 15(6) of the NERC Act requires Natural England to have regard to this Guidance in discharging its functions. The Secretary of State has consulted Natural England and the Environment Agency in accordance with section 15(3)(a) and (b) of the Act and, in accordance with section 15(3)(c) of the Act, has also consulted more widely through public consultation.²⁹
3. An agreement under section 78 of the NERC Act was entered into with effect from 1 October 2006 authorising Natural England to carry out various Defra functions including those relating to licensing under the Protection of Badgers Act 1992 and the Wildlife and Countryside Act 1981.
4. This Guidance relates only to licensing functions under section 10(2)(a) of the Protection of Badgers Act to kill or take badgers for the purpose of preventing the spread of TB, and any associated licensing functions under section 16(3)(g) and (h) of the Wildlife and Countryside Act 1981 in relation to any activity that (in the absence of such a licence) would be prohibited under section 11 of that Act. Guidance for all other licensing relating to badgers is given in a separate document.
5. TB policy is devolved. With the exception of paragraph 41, this guidance relates to England only.

The policy

6. The government's policy is to enable the licensed culling or vaccination of badgers for the purpose of controlling the spread of TB, as part of the Strategy for achieving

²⁹ Defra consultations: 2011 The government's policy on bovine TB and badger control in England <https://www.gov.uk/government/publications/the-government-s-policy-on-bovine-tb-and-badger-control-in-england>; 2015 Bovine TB: updating the criteria for badger control licence applications <https://www.gov.uk/government/consultations/bovine-tb-updating-the-criteria-for-badger-control-licence-applications>; 2016 Bovine TB: supplementary badger disease control <https://www.gov.uk/government/consultations/bovine-tb-supplementary-badger-disease-control>

Officially Bovine Tuberculosis Free status for England.³⁰ There are three types of culling licence. Which is applicable will depend on the phase of the proposed culling operations and the TB risk area in England concerned:

- A **Badger Disease Control licence** is required where culling is to take place for the first time in the High Risk or Edge Area of England, or where Natural England considers that a Supplementary Badger Disease Control licence is not the appropriate form of licence.
- A **Low Risk Area Badger Disease Control licence** is required where culling is to take place in a zone of the Low Risk Area (LRA) of England specified by the Animal and Plant Health Agency, where there is evidence that infection with *Mycobacterium bovis* is present in badgers and linked with infection in cattle herds.
- A **Supplementary Badger Disease Control licence** is required where culling is to take place to prevent the recovery of the badger population following the completion of annual culling that has lasted at least four years under a Badger Disease Control licence

7. Throughout this document, where the term 'completed' or 'prior' cull is used this describes a cull that was carried out under a Badger Disease Control licence for a minimum duration of four years. A Glossary can be found at the end of this Guidance.

Culling policy requirements

8. Applications for **Badger Disease Control licences** must meet the following **criteria**.
- a. All participating farmers are complying, and for the duration of any licence continue to comply, with **statutory TB controls**.
 - b. Reasonable **biosecurity** measures are being, and for the duration of any licence will continue to be, implemented by participating farmers on their land to provide a strong protection against the spread of infection. For this purpose 'reasonable measures' means measures that in the particular circumstances are practicable, proportionate and appropriate, having regard to the Bovine TB Biosecurity Five-Point Plan.³¹

³⁰ The Strategy for achieving Officially Bovine Tuberculosis Free status for England (PB 14088).
<https://www.gov.uk/government/publications/a-strategy-for-achieving-officially-bovine-tuberculosis-free-status-for-england>

³¹ <http://www.tbhub.co.uk/biosecurity/protect-your-herd-from-tb/>

- c. The application must cover an area of at least 100km².³²
- d. The area must be composed of land wholly within the **High Risk** or **Edge Areas** at the time of application.³³
- e. The size and number of areas of **inaccessible land** within the application area should be minimised for the purposes of effective disease control, with approximately 90% of the land within the application area either accessible or within 200m of accessible land. The variance from 90% which will be accepted will be decided by Natural England on a case-by-case basis, taking into account such specific circumstances as Natural England considers relevant, e.g. topography, land use and badger sett surveys or any other matter that Natural England considers relevant. Natural England should have regard to any advice on the application from the UK Chief Veterinary Officer (CVO).
- f. Applicants must **put in place reasonable measures to mitigate the risk to non-participating farmers and landowners** of a potential increase in confirmed new incidents of TB in vulnerable livestock within the culled area and in the 2km ring surrounding the culled area; and consider whether any measures are needed to protect the interests of any non-farming interests that may be affected by badger control.
- g. For this purpose ‘reasonable measures’ means measures that in the particular circumstances are practicable, proportionate and appropriate. When assessing the reasonableness of measures, applicants and Natural England should take into account the cost of measures relative to the potential cost to non-participants of the anticipated increase in TB incidence.
- h. Applicants must enter into an agreement with Natural England under section 13 of the NERC Act (the “Badger Control Deed of Agreement”) requiring them to comply with the requirements contained in this guidance and any additional licence conditions for the purpose of ensuring that –
 - i. an effective cull is carried out each year for a minimum of four years; and
 - ii. the financial deposit (see paragraphs 8k and l) is sufficient and is managed appropriately.
- i. All land holders, unless the agreement states otherwise, must enter into agreements with Natural England under section 7 of the NERC Act (the “TB

³² Paragraphs 3.13 and 3.14 of the 2015 consultation on revised licensing criteria for Badger Disease Control explain the rationale for this area size: <https://www.gov.uk/government/consultations/bovine-tb-updating-the-criteria-for-badger-control-licence-applications>.

³³ These areas are currently subject to a minimum of annual herd testing.

Management Agreement”) requiring them to permit access to their land for culling (including by government) and to take appropriate biosecurity measures (as required in paragraph 8b), and agreeing that government can recover any additional costs of culling.

j. Where land is tenanted, the freeholder owners (or landlords) must generally also sign an undertaking appended to this agreement agreeing to permit access to the land for culling (including by government). Natural England may permit dispensations in certain cases, provided it considers that the likelihood of the total accessible land falling below an acceptable level (approximately 90% of the control area either accessible or within 200m of accessible land, see paragraph 8e above) as a result of the termination of any tenancy for any reason would still be very low. This may depend on:

- i. the margin of accessible land above 90% that is accessible or within 200m of accessible land;
- ii. the proportion of accessible land where the freehold owner is not participating, and
- iii. the length of the tenancies to which the accessible land is subject.

k. Applicants must have arrangements in place to **deposit sufficient funds** in a reputable bank to cover the total cost of a four-year cull, plus a contingency sum of 25%. This deposit must be made before culling begins into an account held by the applicants. Applicants will need to provide evidence to support the cost estimates and confirmation from the bank that the deposit has been made.

l. The funds must be managed in line with the requirements set out in the Badger Control Deed of Agreement, including the requirement to ensure that at all times the amount remaining in the account is sufficient to ensure that culling is carried out in accordance with the licence and the Badger Control Deed of Agreement.

9. Further, applicants must satisfy Natural England that they are able to deliver an **effective cull** in line with this policy and have arrangements in place to achieve this. To deliver an **effective cull**, the following requirements must be met.

- a. Culling must be **co-ordinated** on accessible land across the entire control area.
- b. Culling must be **sustained**, which means it must be carried out annually (but not in closed seasons) for the duration of the licence (minimum of 4 years). The culling of badgers must commence during the culling season, on or after the date specified by Natural England in its letter of authorisation, and will continue until Natural England requires it to cease in all or part of a control area. The duration of the cull needs to achieve a balance between sufficient intensity to

achieve effective disease control and what is realistically deliverable by a cull company.

- c. Culling will not be permitted during the following **closed seasons**:
 - i. 1 December to 31 May for cage-trapping and shooting badgers;
 - ii. 1 February to 31 May for controlled shooting; and
 - iii. 1 December to 30 April for cage-trapping and vaccination.
 - d. Culling must remove a minimum number of badgers in each year as specified below:
 - i. in the first year of culling, a **minimum number of badgers** must be removed which must be carried out throughout the land to which there is access, until the licensee is notified by Natural England that culling should be discontinued for the remainder of the culling season. This minimum number should be set at a level that in Natural England's judgement should **reduce the estimated badger population of the application area by at least 70%**;
 - ii. a **minimum number of badgers** must also be removed in subsequent years of culling carried out throughout the land to which there is access, until the licensee is notified by Natural England that culling should be discontinued for the remainder of the culling season. This minimum number should be set at a level that in Natural England's judgement should maintain the badger population at the reduced level required to be achieved through culling in the first year.
10. Further, applicants must satisfy Natural England that they are able to deliver the cull as safely and humanely as possible. The following requirements must be met in that respect.
- a. In order to ensure humaneness, only two **culling methods** will be permitted (which can be used in combination, or alone):
 - i. cage-trapping followed by shooting; and
 - ii. controlled shooting of free-ranging badgers ('controlled shooting').
 - b. Those licensed to cull badgers must be able to demonstrate a level of **competence** appropriate to the method they will be licensed to use. Successful completion of a training course approved by government will be taken as proof of competence.

c. Culling must be in line with the relevant Best Practice Guide.

11. Natural England should aim to ensure that culling will “not be detrimental to the survival of the population concerned” within the meaning of Article 9 of the Convention on the Conservation of European Wildlife and Natural Habitats, and for this purpose in considering applications for a licence should have regard to the guidance of the Standing Committee on the interpretation of Article 9 of that Convention. For that purpose Natural England should:

- a. determine appropriate area-specific licence conditions; and
- b. set a maximum number of badgers to be removed from the licence area.

Defra considers that this approach is sufficient to be confident that culling will not be detrimental to the survival of the relevant population of badgers.

12. Further, Natural England should take into account conservation considerations for designated sites, for example Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), and Special Protection Areas (SPAs). Under the Conservation of Habitats and Species Regulations 2017, (SI 2017/1012), an “appropriate assessment” must be carried out before granting a licence which might have a significant effect on a **European protected site** (principally SACs & SPAs).³⁴

Supplementary badger disease control requirements

13. Applications for **Supplementary Badger Disease Control licences** must meet the following **criteria**.

- a. The application must relate to the whole of an area in relation to which, in the view of Natural England, an effective cull has been carried out under a licence for a period of at least four years.
- b. Supplementary Badger Disease Control will commence in the year after the end of a successful completed cull, to provide continuity of badger population control.

³⁴ Where the assessment concludes that the grant of a licence might result in an adverse effect on the integrity of a European protected site, the licence must not be granted unless there are no alternative solutions and the rationale for the policy can be relied upon as an imperative reason of overriding public interest (pursuant to regulation 64 of those Regulations). Where the European protected site hosts habitat which for the purposes of the Habitats Directive is a priority habitat or a species which is a priority species, any such overriding public interest cannot be relied upon except pursuant to advice from the European Commission that it may be.

- c. All participating farmers are complying, and for the duration of any licence continue to comply, with **statutory TB controls**.
 - d. Reasonable **biosecurity** measures are being, and for the duration of any licence will continue to be, implemented by participating farmers on their land. For this purpose 'reasonable measures' means measures that in the particular circumstances are practicable, proportionate and appropriate, having regard to the Bovine TB Biosecurity Five-Point Plan.³⁵
 - e. The area to which the application relates must lie wholly within the **High Risk or Edge Areas** at the time of application.
 - f. All land holders must permit Natural England access to their land for **compliance monitoring**.
 - g. The duration of a Supplementary Badger Disease Control licence will be **limited to 5 years**. (The licence may, however, be revoked if appropriate following a progress evaluation or on reasonable grounds.) This does not preclude an application in due course for a further licence to take effect at the expiry of the period in question.
14. Applicants must satisfy Natural England that they are able to deliver an **effective cull** in line with this policy and have arrangements in place to achieve this. Natural England should assess whether applicants meet this requirement having regard to the following criteria -
- a. The application must be submitted by an experienced company or group considered capable of **co-ordinating and overseeing** effective control activity in the area.
 - b. To be effective, culling should **maintain the population** at the level achieved after the prior cull, by removing each year the minimum number of badgers set by Natural England and not exceeding the maximum number set.
 - c. Culling must be **co-ordinated** on accessible land across the control area and the resources deployed in culling must be such as are assessed by Natural England to be sufficient to ensure the supplementary control operation will be effective.
 - d. Culling must be **sustained**, which means it must be carried out annually within the open season for the duration of the licence (unless wholly discontinued

³⁵ See footnote 3.

before the expiry of the licence), and for a limited duration of such period as Natural England permits in the year in question.

- e. Culling will not be permitted during the following **closed seasons**:
 - i. 1 December to 31 May for cage-trapping and shooting badgers;
 - ii. 1 February to 31 May for controlled shooting; and
 - iii. 1 December to 30 April for cage-trapping and vaccination.

15. Applicants must satisfy Natural England that they are able to deliver the cull as **safely and humanely** as possible. The following requirements must be met in that respect.

- a. In order to ensure humaneness, only two **culling methods** will be permitted (which can be used in combination, or alone):
 - i. cage-trapping followed by shooting; and
 - ii. controlled shooting of free-ranging badgers ('controlled shooting').
- b. Persons to be authorised to carry out culling pursuant to the licence must be able to demonstrate a level of **competence** appropriate to the method they are licensed to use. Successful completion of a training course approved by government will be taken as proof of competence.
- c. Culling must be carried out in accordance with the relevant Best Practice Guide.

16. Natural England should aim to ensure that Supplementary Badger Disease Control will "not be detrimental to the survival of the population concerned" within the meaning of Article 9 of the Convention on the Conservation of European Wildlife and Natural Habitats, and for this purpose in considering applications for a Supplementary Badger Disease Control licence should have regard to the guidance of the Standing Committee on the interpretation of Article 9 of that Convention. For that purpose Natural England should:

- a. determine appropriate area-specific Supplementary Badger Disease Control licence conditions; and
- b. set a maximum number of badgers to be removed from the licence area.

17. Licensees must complete a sett survey where NE, on the CVO's advice, deems it necessary after taking into account all appropriate information.

18. Natural England should take into account conservation considerations for designated sites, for example Sites of Special Scientific Interest (SSSIs), Special Areas of

Conservation (SACs), and Special Protection Areas (SPAs). Under the Conservation of Habitats and Species Regulations 2017, (SI 2017/1012), an “appropriate assessment” must be carried out before granting a licence which might have a significant effect on a **European protected site** (principally SACs & SPAs).³⁶

***NEW* Low risk area badger disease control requirements**

19. Applications for **Low Risk Area Badger Disease Control licences** must meet the following **criteria**.

- a. The application must relate to a **specific area** affected by bovine TB in which the Animal and Plant Health Agency (APHA) has found evidence that infection is present in both badgers and in cattle herds³⁷. The application should cover a ‘minimum affected area’ and a buffer zone, where applicable, as defined by an epidemiological assessment of bovine TB and a survey of badger activity in the area, carried out by APHA.
- b. All participating farmers are complying, and for the duration of any licence continue to comply, with **statutory and (where applicable) temporary additional TB control measures** introduced as part of APHA’s response.
- c. The size of any inaccessible land within the application area should be minimised for the purposes of effective disease control. Natural England will make decisions on the level of **accessible land** on a case-by-case basis, taking into account such specific circumstances as Natural England considers relevant, e.g. topography, land use and badger sett surveys or any other matter that Natural England considers relevant. Natural England should have regard to any advice on the application from the APHA and the CVO (UK).
- d. Reasonable **biosecurity** measures are being, and for the duration of any licence will continue to be, implemented by participating farmers on their land. For this purpose ‘reasonable measures’ means measures that in the particular

³⁶ See footnote 6.

³⁷ Such areas are commonly known as bTB ‘hotspots’. APHA can sometimes implement additional TB testing of cattle herds and TB surveillance of found-dead badgers and wild deer following the detection of one or more cattle herds with lesion- and/or culture-positive TB breakdowns of obscure origin in the LRA of England. This is a long-standing policy and the extent and duration of the enhanced TB surveillance in such areas (‘potential hotspots’) will differ from case to case, based on expert veterinary judgement and epidemiological assessments. Of the 21 ‘potential hotspot’ zones set up in the LRA of England between 2004 and 2017, only in one of them was *M. bovis* infection eventually confirmed in the local badger population surveyed and thus became a confirmed ‘hotspot’.

circumstances are practicable, proportionate and appropriate, having regard to the Bovine TB Biosecurity Five-Point Plan.³⁸

- e. The area to which the application relates must lie wholly or mostly within the **Low Risk Area** at the time of application.
- f. All land holders must enter into agreements with Natural England under section 7 of the NERC Act (the “Low Risk Area Badger Control Access Agreement”) requiring them to permit access to their land for culling including by government.
- g. All land holders must permit Natural England access to their land for **compliance monitoring**.
- h. The duration of a Low Risk Area Badger Disease Control licence will be determined by Natural England’s assessment of all the available evidence, including monitoring of the badger population, and on a case-by-case basis. The licence may, however, be revoked if appropriate following a progress evaluation or on reasonable grounds. This does not preclude an application in due course for a further licence.

20. Applicants must satisfy Natural England that they are able to deliver an **effective cull** in line with this policy and have arrangements in place to achieve this. Natural England should assess whether applicants meet this requirement having regard to the following criteria -.

- a. culling should **lower the badger population** of the affected area sufficiently to reduce the risk of infection of cattle from badgers (whether through direct or indirect contact), and ideally substantially reduce or even eliminate it.
- b. Culling must be **co-ordinated** on accessible land across the control area and the resources deployed in culling must be such as are assessed by Natural England to be sufficient to ensure the control operation will be effective.
- c. Culling must be **sustained**, which means it must be carried out annually within the open season for the duration of the licence (unless wholly discontinued before the expiry of the licence). The culling of badgers must commence during the culling season, on or after the date specified by Natural England in its letter of authorisation, and continue until Natural England requires it to cease in all or part of a control area.
- d. Culling will not be permitted during the following **closed seasons**:

³⁸ See footnote 3.

- i. 1 December to 31 May for cage-trapping and shooting badgers;
- ii. 1 February to 31 May for controlled shooting; and
- iii. 1 December to 30 April for cage-trapping and vaccination.

21. Applicants must satisfy Natural England that they are able to deliver the cull as **safely and humanely** as possible. The following requirements must be met in that respect.

- a. In order to ensure humaneness, only two **culling methods** will be permitted (which can be used in combination, or alone):
 - i. cage-trapping followed by shooting; and
 - ii. controlled shooting of free-ranging badgers ('controlled shooting').
- b. Persons to be authorised to carry out culling pursuant to the licence must be able to demonstrate a level of **competence** appropriate to the method they are licensed to use. Successful completion of a training course approved by government will be taken as proof of competence.
- c. Culling must be carried out in accordance with the relevant Best Practice Guide.

22. Natural England should aim to ensure that Low Risk Area Badger Disease Control will "not be detrimental to the survival of the population concerned" within the meaning of Article 9 of the Convention on the Conservation of European Wildlife and Natural Habitats, and for this purpose in considering applications for a Low Risk Area Badger Disease Control licence should have regard to the guidance of the Standing Committee on the interpretation of Article 9 of that Convention. For that purpose Natural England should:

- a. assess the risk of local extinction from a badger control operation; and
- b. where necessary, determine appropriate area-specific Low Risk Area Badger Disease Control licence conditions.

23. Natural England should take into account conservation considerations for designated sites, for example Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), and Special Protection Areas (SPAs). Under the Conservation of Habitats and Species Regulations 2017, (SI 2017/1012), an "appropriate assessment" must be carried out before granting a licence which might have a significant effect on a **European protected site** (principally SACs & SPAs).³⁹

³⁹ See footnote 6.

Vaccination policy requirements

24. It is possible to apply to Natural England for a licence to trap badgers for the purpose of TB vaccination. The vaccine may only be used under veterinary prescription. Vaccination must be carried out either by someone who is sufficiently competent (either by a trained and accredited lay vaccinator, or by a practising vet with access to personnel with adequate trapping experience).
25. Vaccination may be used independently of culling as part of a package of measures to prevent or control TB, or it may be used in combination with culling, for example as a buffer for areas where vaccination may help reduce the risks to vulnerable livestock of increased TB incidence, both within and surrounding a control area, as a result of perturbation of the local badger population.
26. Where the use of vaccination in combination with **any** type of culling licence is proposed **in the HRA or Edge Area**, the following best practice is recommended:
- a. where vaccination is to be used as a buffer, it should be used at active badger setts found on, or adjacent to, land where vulnerable livestock are present and which fall within 2km of the edge of a control area;
 - b. vaccination should take place at least 4 weeks prior to culling to allow immunity to develop in uninfected vaccinated animals;
 - c. to mitigate any ongoing perturbation effect and begin to build up “herd immunity”, vaccination should be carried out annually, continuing for at least the same length of time as any culling on adjacent land; and
 - d. where culling and vaccination are taking place on adjacent land, applicants should take reasonable steps to negotiate an agreed approach to badger control operations along the relevant boundary with that landowner/occupier.

Implementation

27. Before granting a culling licence, Natural England should be satisfied that the application meets the licence criteria and the policy requirements. Natural England, on behalf of the Secretary of State, will determine applications for culling and vaccination licences on a case-by-case basis.
28. To enable Natural England to assess licence applications, it will require applicants to demonstrate how they will meet the culling policy requirements, including details of contingency plans in case the chosen culling strategy proves ineffective.

29. Natural England should keep the duration of a cull in each year under review. The review will allow Natural England to consider whether or not to take action to terminate operations on a case-by-case basis. Natural England may take into account factors such as the CVO's advice on disease control; the latest evidence and advice on the remaining badger population; and whether any immediate action is appropriate.
30. In considering whether operations should be terminated, Natural England should take into account the extent to which the licensee's annual operational planning is being complied with and the licensing criteria continue to be met (for example, in the case of a Badger Disease Control licence, whether the extent of access has been reduced since the licence was granted) and, if so, whether this is likely to adversely affect the effectiveness of operations in reducing badger numbers.
31. A maximum of ten new Badger Disease Control areas may be licensed each year unless there are compelling reasons to increase or decrease that number. Applications will be prioritised according to the extent to which they best meet the primary aim of the policy (i.e. to eradicate TB). **(NOTE: we are holding a separate consultation on the number of licensed badger control areas. This closes on 15 April 2018. You can find this consultation here: <https://consult.defra.gov.uk/bovine-tb/bovine-tb-badger-control-areas>).**
32. Each Badger Disease Control licence will be granted for a period of not less than four consecutive years or such other period as Natural England may determine is appropriate to ensure that the proposed cull achieves the policy aim.
33. Each Supplementary Badger Disease Control licence will be granted for a period of not more than five consecutive years following on directly from the conclusion of a successful completed culling operation.
- 34. Each Low Risk Area Badger Disease Control licence will be granted for a period which Natural England determines is appropriate to ensure that the proposed cull achieves the policy aim.**
35. Natural England should give the public an opportunity to comment on any licence applications that are made.
36. Natural England will seek advice from local police forces on whether additional licence conditions are required to protect public and operator safety.

Monitoring

37. As part of its licensing operation, Natural England should monitor compliance with licence conditions and agreements in place for culling and vaccination. The use of site visits will be in accordance with a risk-based approach that complies with Better Regulation principles and the Regulators' Code for Compliance. Natural England should maintain sufficient oversight of the progress of each cull area to ensure that removal of badgers and/or the level of effort deployed is consistent with that set out in operational planning, allowing cull companies or groups to flexibly manage their resources and approach to deal with changing circumstances. Natural England should be ready to advise the CVO on progress at regular intervals, reporting on effort across each cull area, progress with badger removal and compliance issues.

Reporting and disclosure of information

38. Natural England should disclose as much information as practically possible. Each year, or more frequently if appropriate, Natural England should, as a minimum, publish on its website the numbers of applications received and licences granted, and for each licence issued:

- a. the county or counties included within the licensed area;
- b. the size of the licensed area;
- c. the number of badgers reported culled by each method; and
- d. the number of non-target species caught and culled.

Enforcement

39. Natural England should apply its published Enforcement Policy Statement to breaches of licences that it has issued. Wildlife offences that are not breaches of licences may be reported to the police for investigation.

40. In relation to operations carried out under a Badger Disease Control licence, government intervention will be considered where, in particular, in the judgement of the Secretary of State, any of the following circumstances apply:

- a. where culling has not taken place at all during any year after the culling commenced in year one (applicants should detail in the operational planning the dates during which culling will be carried out);

- b. where in any of the four years of the Badger Disease Control licence the minimum number of badgers to be culled during the cull period (specified by Natural England for the year in question) is not attained;
- c. where the area of accessible land in relation to which the Badger Disease Control licence is granted has dropped below the acceptable level (approximately 90% of the control area either accessible or within 200m of accessible land);
- d. where there has been any other breach of the Badger Disease Control licence which the licence holder has been asked to remedy and has failed to remedy within a reasonable period; or
- e. where there is an Event of Default as defined in the Badger Control Deed of Agreement.

Welsh and Scottish border

41. Natural England and the Devolved Administrations should consider on a case-by-case basis any licence applications in respect of areas which cross the Welsh or Scottish border. If an application relates to an area which is solely within England but within 2km of the border, Natural England should determine the licence application in the normal way but will consult the Welsh or Scottish Government.

Glossary

Access/accessible land: land within a control area that is participating in the application and accessible for culling to take place.

Applicants: those persons named as the applicant(s) on the licence application.

Application Area: land included in an application, including both access land and non-participating land.

Badger Disease Control: a form of badger control which lasts for a minimum of 4 years.

Biosecurity measures: measures to reduce the risk of transmission of infectious disease.

Controlled shooting: the shooting of free-ranging badgers in the field (as distinct from shooting those that have first been trapped in cages).

Control Area: land included in the licence, once granted, including both land that is participating and land that is not participating in culling.

CVO: Chief Veterinary Officer (UK). Advises on the programmes necessary to control, and, where appropriate, eradicate disease.

Effective Cull: a cull that meets the requirements set out in paragraph 8.

Habitats Directive: Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna (OJ L 206, 22.7.1992. p.7).

Herd immunity: an epidemiological term that refers here to the protection of sufficient susceptible individuals through vaccination in a population as a means of protecting remaining susceptible, unvaccinated animals in that population from infection.

High Risk Area, Edge Area, Low Risk Area: three geographical TB management zones defined in the Strategy for achieving Officially Bovine Tuberculosis Free status for England.

Low Risk Area Badger Disease Control licence: a form of badger control in a zone of the Low Risk Area (LRA) of England specified by the Animal and Plant Health Agency, where there is evidence that infection with *Mycobacterium bovis* is present in badgers and linked with infection in cattle herds.

***Mycobacterium bovis* (M. bovis):** the bacterium that causes tuberculosis (TB) in cattle (bovine TB) and can also infect and cause TB in other species of mammals.

Non-participating land: land within a control area that is not participating and where access has not been permitted for culling to take place.

Participating farmers: all freehold owners and tenants of accessible land who are in occupation of that land and have signed the TB Management Agreement.

Supplementary Badger Disease Control: a form of continuing badger control which follows an effectively completed Badger Disease Control operation.