

Bovine TB

Chief Veterinary Officer's advice on the outcome of the 2016 badger culls

Effectiveness of industry-led culling:

1. The outcome of this year's culls indicates that industry-led culling can deliver the level of effectiveness required to be confident of achieving disease control benefits:

- a. Good progress continued to be made in Area 2-Somerset and Area 3-Dorset, with the cull companies successfully applying an appropriate level of targeted effort across the respective cull areas.
- b. The previous improvements made in Area 1-Gloucestershire were maintained, with the cull company also successfully applying an appropriate level of targeted effort across the cull area.
- c. The seven new areas effectively applied lessons learned from previous cull areas to make a successful start to their culls, applying an appropriate level of targeted effort across the cull area. This year, adjustments to the minimum and maximum numbers were made as evidence on the ground suggested that the initial estimates, based on the National Setts Survey, did not reflect the variation in badger abundance in these cull areas. A consistent methodology was used to update the minimum and maximum numbers, based on the cumulative effort applied and numbers of badgers culled over 35 days in six areas and over 33 days in one area.

2. In the eight areas continuing with intensive culling, the success achieved this year must be reproduced for at least the next three years (at least two years in the case of Area 3-Dorset). There is a need to carry out comprehensive surveys of sett activity early in 2017 to estimate the minimum and maximum numbers for licensing purposes and to inform operational planning. All companies must plan to continue to deliver a high level of targeted effort across the accessible area to maintain effectiveness.

3. Area 1-Gloucestershire and Area 2-Somerset have completed four years of intensive culling. I am content that the cumulative level and spatial distribution of their culling effort across the accessible land in each area has delivered an effective cull as the reduction in active sett density at the start of 2016 and the numbers of badgers removed per km² per year are consistent with those achieved in the proactive areas during the RBCT. In order to ensure that the disease control benefits of the intensive culls are maintained in the longer term, there is a strong case to allow these two areas to maintain the badger population at the low levels achieved. This will still require planning, consistent effort across the cull area and continued compliance with Best Practice Guidance.

4. For all areas continued action is needed to provide confidence in the effectiveness of any future culls, for example through contractor training and assessment, robust operational planning and implementation and high levels of compliance with Best Practice Guidance.

Humaneness of controlled shooting:

5. The proportion of badgers retrieved after an accurate shot provides a measure of the likelihood of suffering due to a prolonged time to death. The retrieval rate recorded in 2016, based primarily on observations of shooters in the seven new areas, was consistent with that in Area 1-Gloucestershire, Area 2-Somerset and Area 3-Dorset in 2015.

6. Based on the accumulated evidence from culling in ten areas, my view remains that the likelihood of suffering in badgers culled by controlled shooting is comparable with the range of outcomes reported when other culling activities, currently accepted by society, have been assessed, such as deer shooting.

7. In order to maintain high levels of accuracy, rigorous training and compliance monitoring will continue to be required.

Conclusions on disease control benefits:

8. The badger population reductions achieved in the ten areas have been evaluated on the basis of the numbers and locations of badgers culled and Natural England's assessments of the level and spatial distribution of culling effort deployed.

9. Given the level of badger population reduction achieved in Area 1-Gloucestershire and Area 2-Somerset cull areas, we can expect that the anticipated disease benefits will be realised.

10. Given the level of badger population reduction estimated in Area 3-Dorset over the past two years, the benefits of reducing disease in cattle in this area over the planned four-year cull can also be expected to be realised. The level of reduction achieved should be at least maintained to maximise these benefits therefore culling should continue there for at least two further years.

11. The seven new areas have achieved an acceptable level of population reduction in 2016, and applied an appropriate level of targeted effort across the accessible land area. Population levels need to be confirmed by sett surveys in 2017 and further effective culls carried out in 2017 and subsequent years.

Future of culling

12. Action to prevent infection of cattle from the significant reservoirs of TB infection in local badger populations is an essential component of the Government's 25-year strategy to eradicate bTB in England. Proactive badger culling is currently the best evidenced available option and the licensing of further cull areas is necessary to realise disease control benefits at regional rather than at local levels. This requires a systematic, reliable and reproducible culling delivery model which draws on the

experiences of the expansion to seven new areas this year, and which is scalable to enable a more extensive level of deployment in further years.

13. We also need to consider how to address the disease risk from badger populations in areas that have successfully completed an intensive cull. It is likely that the disease risk from badgers will increase in a former cull area as the population recovers. Consideration should therefore be given to maintaining the badger population within cull areas at or below that achieved at the end of a four year intensive cull period.

14. It must be stressed that the maximum disease control benefits from badger culling will only be realised if comprehensive cattle controls are also applied rigorously within each cull area. This would include both more sensitive testing regimes to clear disease from infected herds and effective measures to prevent re-introduction of disease via inward cattle movements into these areas.

December 2016