

WILDLIFE INTERVENTION

What evidence is coming out of the GB and ROI culling programmes?

It is widely accepted that in GB, NI and the ROI there is definitive evidence that badgers act as a wildlife reservoir for bTB in cattle.

Regarding controls in the ROI, an article from Simon More (2024) in the Irish Veterinary Journal <https://irishvetjournal.biomedcentral.com/articles/10.1186/s13620-024-00282-z> highlighted the success and efficacy of controlled badger trapping. The commentary stated that wide-scale badger vaccination had proved logistically challenging. According to the analysis, it is unlikely that badger vaccination, in addition to current cattle controls, will be sufficient to achieve bTB eradication in the ROI, therefore a level of badger culling in response to severe bTB breakdowns would still be required in places. Ultimately the plan is to replace culling with badger vaccination. DAFM has noted that vaccination is much more costly than culling and for that reason badger vaccination has been rolled out incrementally and is constantly reviewed.

A significant development in the evidence base for pro-active culling has been Birch's paper in Nature (2024), <https://www.nature.com/articles/s41598-024-54062-4>, which examined the impact of the Badger Control Policy (BCP) on bTB in England. The study highlighted that persistent TB in cattle is linked to infection exchanges with badgers, which act as a wildlife reservoir for the disease. The BCP aimed to reduce TB incidence in cattle by controlling badger populations and the analysis found that there was a significant reduction in TB incidence rates in cattle herds—up to 56% by the fourth year of BCP interventions. The largest declines occurred in the second and third years, and there was insufficient evidence to determine further reductions beyond four years, as the analysis limited the conclusions drawn to a four-year window, however it was noted that badger populations recovered very quickly to pre-cull levels.

How many badgers are there in NI and how many are infected?

Estimates for the prevalence of bTB in badgers in NI have been made based on road traffic accident post-mortem analyses. These showed that the confirmed level of bTB in badgers was approximately 15%. The true disease prevalence is likely to be much higher, indeed the infection prevalence in badgers within NI is likely to be at least 15 times greater than that in cattle.

Why are badgers a protected species?

Historically badgers were made a protected species in law, under the Wildlife (NI) Order 1985, to prevent badger baiting. This legislation is in place to prevent interference with badgers and setts (obstructing access to the sett or disturbing a badger while in a sett, killing or controlling a badger).

Does disturbing badgers spread bTB?

Research carried out in the ROI indicates that culling has been a significant factor in reducing the prevalence of TB in badgers and in cattle. Concerns were raised around the risk of perturbation following the Randomised Badger Culling Trial in England, however these observations were subsequently challenged. In follow-up analysis it was shown that any measurable perturbation effect waned quickly, with a modest overall reduction in bTB in cattle

in areas adjoining cull zones after culling had finished. It was speculated that the effects of culling, which were more modest in this trial compared to the four areas trial in Ireland, may have been due to: the likelihood that in the ROI land occupier compliance was higher; the use of stop restraints, rather than cage traps, may have allowed a higher proportion of badgers to be captured; and the culling areas were selected to have geographical barriers such as coastline and rivers which would impede badger re-colonisation. Another model suggested that perturbation can be avoided provided there is sufficient animal population reduction sustained over an adequate time period.

What is the Bern Convention?

The Bern Convention dates from 1979 and is a legal instrument that aims to conserve wildlife (plants and animals) and natural habitats. The UK agreed to the Bern Convention in 1982 and translated it into UK law: in Northern Ireland this was transposed into the Wildlife (NI) Order 1985. Badgers are listed under Appendix 3 of the Convention, which means that they are protected; some regulated exploitation may be permitted under certain circumstances, however the 'exploitation' must be regulated to keep populations out of danger. Population levels must correspond to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements and the needs of sub-species at risk. This means that badger populations must not be driven to extinction.