## KEY FACTS

### Objectives of the pilot culls

The stated objective of the pilot badger culls is to test the Government's assumptions about a new method of badger control: 'controlled shooting' or shooting of free-ranging badgers at night under specific rules issued by the Government. This approach has never been used by Government as a means of badger control in the UK before, but the Government is confident that controlled shooting will be effective, humane and safe (with reference to the public) given that there is widespread shooting of other species in the UK.

However, given the concerns of experts and the general public about the lack of actual evidence for any of these points in relation to badgers, the Government has decided to take a 'precautionary approach' – hence the two pilot culls.

### The pilot culls will specifically test the following:

- **Whether badger cull targets for each pilot area can be met within six weeks with at least 70% of the badger population removed in each cull area;**
- **Whether shooting 'free-running' badgers at night is a humane way of killing badgers;**
- **Whether shooting at night is safe with reference to the general public, pets and livestock.**

### Future objectives

If the pilots are deemed successful, badger culling will be rolled out elsewhere in England. Under the Government's new policy, up to 39,000 km2 (or c. 30%) of England is eligible for badger culling under licence. Up to 10 licences a year could be issued, each covering a minimum area of 150 square kilometres.

If culling takes place in all the areas proposed by the farming industry up to July 2011 covering nearly 11,000 km2 in total, estimates provided to Defra by Natural England in 2011 suggest that between 70,000 to over 100,000 badgers could be culled over four years.

**In other words, up to nearly 50% of England's badgers may be removed. Given that up to 39,000 km2 of England is potentially eligible for badger culling under the present policy, the actual proportion of badgers removed over time may be even higher, depending on how many licenses are eventually granted and the actual total area culled.**

Additionally culling will move into the hands of farmers, rather than trained Defra operatives.

## Concerns

There are many areas of the Government's badger control policy that are open to criticism and some of the key areas are as follows:

## The science

**Badger culling is not the answer to solve the tuberculosis issue in cattle because there is overwhelming scientific evidence that it will not reduce disease prevalence; in many instances culling can exacerbate the problem.**

The authors of the Randomised Badger Culling Trial (RBCT), the largest experiment on bovine TB ever undertaken in the world, concluded that culling could make no meaningful contribution to the control of bTB in cattle in Britain because the well-documented 'perturbation' effects of disease spread when badger populations are disturbed, and also because the costs of implementing the badger cull outweigh the economic benefits gained due to a reduction in bTB.

**In October 2012, over 30 eminent scientists with considerable knowledge of wildlife and disease wrote to The Observer to explain why the Government's proposed badger cull is very unlikely to work and risks making things worse. Why?**

Crucially, the Government's plans for culling differ from the original RBCT in three fundamental ways that expert opinion believes will probably increase its negative impacts:

- **Culling will be industry-led rather than conducted by trained professionals;**
- **It will be conducted primarily by shooting 'free-running' badgers instead of trapping and shooting (to save on cost);**
- **It will be carried out over a period of six weeks rather than 12 days.**

The strict criteria imposed by the RBCT ensured minimum disturbance to the badger population and hence minimisation of the negative impacts of the perturbation effect, and humanness in terms of reducing the suffering of killed badgers. Defra has argued that these deviations from the RBCT methodology will not be detrimental but they have no evidence to support this view.

## Economics

The costs are likely to exceed the benefits, indeed farmers have been warned that they will probably spend more than they can expect to save, even under the government's most optimistic assumptions.

**Population estimates**

- Inaccuracy and variability in the badger population estimates, and the fact that calculations are apparently to be based on population censuses taken at different times of year than the culls, spell potential disaster.
- If the culls go ahead, there is a likelihood that the number of badgers to be killed, as set by Natural England, could well result in a greater number killed than intended, and populations in some places could be wiped out altogether (this would be in breach of the Berne convention)
- If less than 70% of badgers are removed results from the RBCT suggest that this will make the perturbation effect (and hence the level of bTB in cattle) worse

**Animal welfare:**

- Shooting of free-running badgers has never been carried out before and is likely to be extremely difficult for the marksmen involved, especially at night, resulting in injured live badgers
- Live but injured badgers that move underground will be impossible to find and humanely euthanase, they will die underground. These badgers, who are the ones that suffer the most, will not be recorded as part of the assessment of humaneness.
- In spite of the best efforts by Humane Society International/UK to gain insight, DEFRA has refused to reveal exactly how humaneness is to be defined or assessed. Initially merely saying that some badger carcases will be examined and the results assessed by an Independent Expert Group. They have now issued a very heavily redacted 28 page policy which is suggesting that their cries will be measured and compared to harpooned whales.

- Defra have not indicated who will be assessing the quality of shooting, who will select the carcases for further examination, who will examine these animals and how those badgers that are shot, injured and retreat underground will be assessed.
- Data compiled at Secret World Wildlife Rescue, show that dependant badger cubs will die underground at either end of the proposed culling season.
- The welfare of remaining badgers whose communities have been devastated has not been considered. The effect of the cull on non-target species has not been evaluated nor have other environmental impacts of the cull
- Use of dogs – on twitter defra have said that dogs will be used to locate injured badgers, but will not be allowed to track them underground.

## Political issue

It is difficult to diagnose, protect against, and treat bTB. No simple single policy, including culling badgers, is the answer and any such suggestion does no favours to farmers struggling with the disease in their cattle. Politicians like simple answers and find it hard to accept that solutions are complex, and potentially expensive. So what is their answer?

A statement reported in the Veterinary record made by Professor John Bourne in 2008 to the annual conference of the Association for Veterinary Teaching and Research Work aptly summarises the situation. He said "I think the most interesting observation was made to me by a senior politician, who said, 'Fine, John, we accept your science, but we have to offer farmers a carrot. And the only carrot we can possibly give them is culling badgers'"

Nothing has changed. The badger cull is still considered the carrot to dangle in front of farmers in order to persuade them to accept more stringent cattle controls.

## Alternatives to the badger cull

There is no easy answer to the TB problem, but there are several other measures at the Government's disposal to control recognized risk factors.

- Control cattle movements and apply vigorous pre-movement testing as most outbreaks of cattle tuberculosis arise from introduction of infected cattle to previously clean herds; the extent of this was illustrated following restocking during the Foot and Mouth Disease outbreak in 2001.
- Improved testing of cattle - bTB incidence has increased as testing frequency has increased, suggesting cases were previously being missed. Relaxation of testing in recent years has now been followed by an increase in cattle TB cases as testing frequency is increased. Leaving cases undetected in herds is the biggest reason for breakdowns in high TB areas
- TB risk can also be reduced by improving farm biosecurity – avoiding badger-cattle transmission – and biocontainment – avoiding cattle-cattle transmission. There is much recently-published evidence that simple biosecurity measures are extremely effective and cost effective in preventing badger-cattle contact around farmyards, yet few farmers employ such methods.
- The licenced Badger BCG vaccine should be used immediately. The vaccine is effective in reducing the incidence of bTB in both individual animals and on a population basis, for example by protecting new-born cubs. Such protection of badgers is likely to have a positive impact upon the disease incidence in cattle. The current vaccination method by injection is not ideal, as individual badgers must be caught and vaccinated, and there is urgent need for on-going research on the production of an oral baited vaccine to be prioritised
- Government support for the licencing of a cattle BCG vaccination and improved diagnostic tests for both cattle and badgers.