

TB, Badgers and Cattle in The UK: A Campaign Ripe For A Re-boot

Campaign Strategy Blog Post December 2020 Chris Rose chris@campaignstrategy.co.uk

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The Sorry Saga of Badger Culling Continues

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What do you do with a long-running campaign that's got stuck ? The English civil war over badger-culling and TB in cattle is one such case: an issue trapped in attrition and trench-warfare.

It's a long running struggle, going back at least to 1971 when a dead badger was found in the West of England, infected with bovine TB. Because culling (shooting, trapping or gassing) badgers was proposed very quickly, animal welfare groups soon adopted an anti-cull position, and farmers a pro-cull position. Each side has since tried to prove themselves right, leaving fewer and fewer people in 'the middle ground'.

Politicians immediately detected a tricky public communications issue: it could boil down to a popularity contest between farmers and badgers; a competition they did not want to have to oversee. So they looked to 'Science' to decide. A series of 'Scientific Reviews' were held

– at least seven major ones to date and many Parliamentary and other Inquiries (see Chronology).

Scientists found it was all very complicated and the narrow question that politicians wanted answers to – ‘can badger culling stop TB in cattle’ ? – was not at all easy to answer because it was not clear how much TB was passing from cattle to badgers and vice-versa and within the cattle herds and within the badger population, and what effect that had on cattle TB. These questions have arguably still not been completely answered but scientific opinion is overwhelmingly that culling cannot eliminate TB, whereas cattle movement and health controls and biosecurity measures probably can, and only perhaps 0-6% of TB in cattle is directly passed to them by badgers (see supporting documents and particularly Science).

As a result, the battling factions of farmers on one side, and animal welfare groups, and conservationists on the other, have fought almost to a standstill over an issue which converts in the media to ‘who is to blame for TB in cattle: is it farmers or badgers?’ Both lobbies exchange fire using scientific research as ammunition. Often the same research has been used to draw diametrically opposed conclusions.

Involved scientists include those who believe they could yet sort it out if only politicians and the opposed lobbies stayed out of things, and those who plaintively try to tell politicians that it’s a question of value-judgements, which science as such cannot answer. Politicians of course know this but it’s not something they want to hear, and not something governments have to hear, so the various independent expert panels have been set up and then abolished. In this respect it is very like long-running science-heavy arguments over subjects such as GMOs or even aspects of contemporary Covid strategy.

So almost every year (see Chronology), the two sides mount new offensives and counter-offensives but like opposing armies deadlocked on the Western Front of World War One, neither scores a decisive victory.

Change of Strategy

Barring a sudden technical breakthrough such as widespread deployment of effective vaccines for cattle or badgers, neither of which looks imminent, unless there is a change in strategy, the stalemate seems likely to continue.

In this post (more detail in supporting papers) I argue that the best option for wildlife groups is to ‘go up a scale’ and refocus and reframe their efforts on not just on TB in badgers and cattle but in terms of the de-escalation of conventional (intensive) cattle farming itself.

In particular this means dairy farming, which has become progressively more intensive, larger-scale and more polluting, over the period of the cattle-badger TB issue. Strangely, although it is accepted that many elements of intensification are causes of higher TB in cattle (such as contaminated slurry, larger herds kept indoors, maize growing for feed, leaking silage and frequent movements of large numbers of cattle with inadequate testing), this has hardly been considered as a cause of England’s ‘intractable’ cattle TB

problem. Successive Conservative Ministers and the National Farmers Union have fixed on attacking badgers as the cause instead.

Many aspects of those intensive farming elements are undisputed causes of damage to public goods' such as healthy air, soil or water as well as known risk factors for TB. The global imperative to cut climate-heating gases from livestock farming and cattle provides an additional imperative to downsize cattle farming in favour of rewilding, biodiversity, ecosystem regeneration and a more plant-based diet.



Badgers were gassed with cyanide by the Ministry of Agriculture until it was ruled inhumane when it was discovered that they did not die quickly like rabbits – cover from ECOS magazine 1981. Shooting them with rifles above ground was substituted, and continues despite the fact that a scientific appraisal found it also to be inhumane (see Chronology).

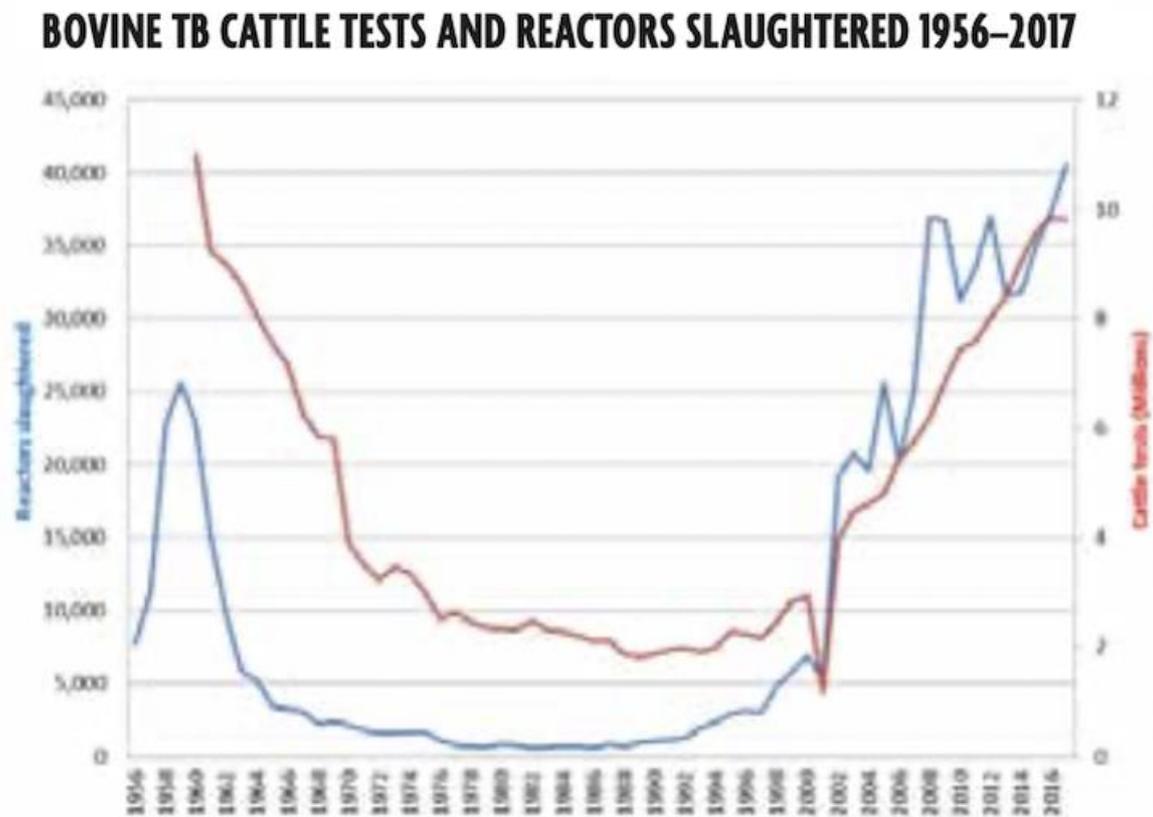
A Long Running Policy Failure

England's country's chronic bovine TB problem has eluded government attempts at eradication since the 1930s. It almost succeeded when by using the agricultural equivalents of 'test track trace and isolate' now familiar with coronavirus (only with slaughter thrown in for infected livestock, which is frustrating and upsetting for farmers) all of the UK was declared free from cattle TB in 1960. The disease fell to just 0.6% in 1965.

Transfer of TB from cattle to the human UK population was effectively stopped by meat inspection and milk treatment by the 1960s but TB was never eliminated from the national cattle herd. Controls were relaxed and it slowly started to regrow from a small chronically infected areas including but not only at West Penwith, near the SW tip of Cornwall.

Figure 1: bTB cattle testing and slaughter data 1956–2017

(Based on AHWBE 2012 and extrapolated to 2017)



Slaughter of TB-infected UK cattle 1956 – 2017 ([Source RSPCA](#)) ‘reactors’ = cattle reacting to a test. Numbers slaughtered blue line, testing positive red line.

Then in 1971, vets discovered a dead badger with TB in Gloucestershire. Badgers were suggested as a ‘maintenance reservoir’ of the disease in wildlife, which might be infected-by and reinfect cattle. Many farmers and landowners had long regarded badgers as pests and vermin, and from 1973 fell in behind killing (‘culling’) badgers, often with enthusiasm. It was widely assumed that badgers must be the reason why TB in cattle had not been eliminated, and while the previously conventional tools of movement control, testing and sanitation on farms were never completely forgotten, culling badgers became the default ‘missing ingredient’ of policy.

So what had been seen as a human health and agricultural disease problem, became reframed as a farming and wildlife problem. The current campaign battle-lines were established.

A research and management policy community developed in which farm vets, animal disease epidemiologists and microbiologists were joined by academic ecologists and zoologists. Government began what would become a long series of badger culls and research projects to establish whether or not culling ‘worked’ or could work but the meaning of the results was contested. One reason for this was that most of the ‘research’

projects served a political dual purpose of also being badger 'control' and so very few were designed in such a way as to be properly controlled or rule out 'confounding' factors or auto-correlations.

Some government scientists and most politicians became implicit or explicit proponents of culling. They saw research as a way to test how culling could best work, as opposed to whether it worked at all or alternatives might be better.

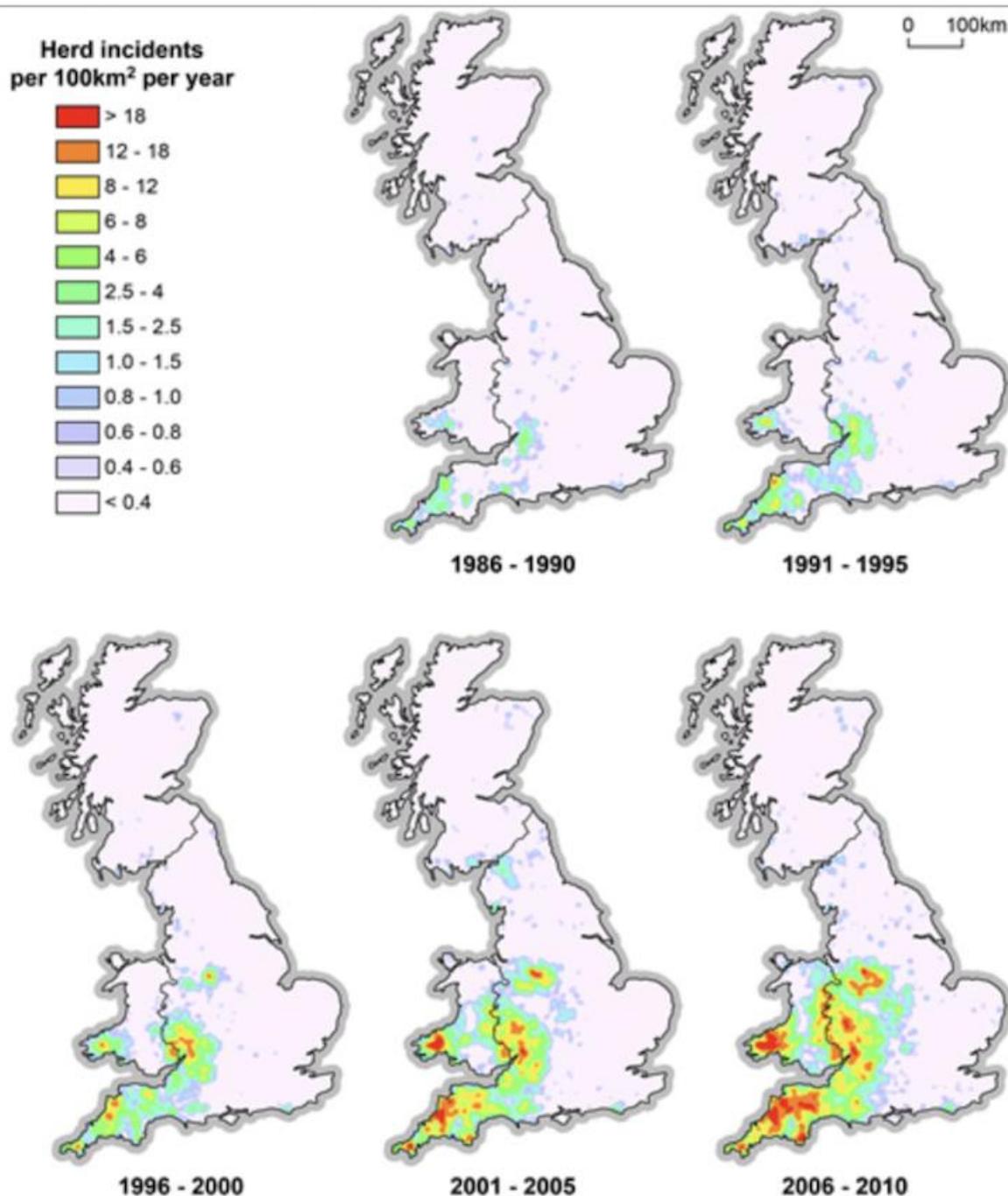
To begin with the default was 'reactive' culling, meaning culling in response to problems with TB in cattle herds. Nevertheless, TB rates in cattle increased. A 1997 review led by ecologist Professor John Krebs recommended what became a ten-year scientific trial to test the effectiveness of reactive or proactive badger culling against non-intervention controls: the RBCT or Randomized Badger Culling Trial. An 'Independent Scientific Group' (ISG) led by Professor John Bourne ran the RBCT and it was soon found that 'reactive' culling made matters worse not better because it disrupted badger society and increased TB. In 2007 the ISG reported:

"badger culling can make no meaningful contribution to cattle TB control in Britain" and 'scientific findings indicate that the rising incidence of disease can be reversed, and geographical spread contained, by the rigid application of cattle-based control measures alone'.

Bourne later told researchers [Stephen McCullough and Michael Reiss](#):

'There was a very definite view from the outset that future policy was going to be the reactive culling. That was it. And when it was shown that it was not gonna work there was all hell let loose''.

Culling itself was shown to disrupt badger communities ('perturbation'), and although rates of infection in badgers fell inside the cull area, they went up outside it. Meanwhile TB rates in English cattle went on rising and the 'pro-badger' camp started to promote badger vaccination, which had first been raised as an idea by vets back in 1971.



TB in cattle spread after the 2001 Foot and Mouth Disease epidemic, when cattle carrying TB were used to restock areas such as the Midlands and Cumbria ([Source](#))

After many twists and turns (see Chronology), by a process of campaign focus, political polarisation (with Britain's Labour Party becoming pro-vaccine, anti-cull and Conservative governments resolutely pro-cull), fierce pro-cull lobbying by the NFU as the champion of the farming side, and media simplification, 'the issue' was boiled down to the current bipolar framing of 'culling versus vaccination'. Positions became entrenched, deadlocked like the Western Front of WWI.

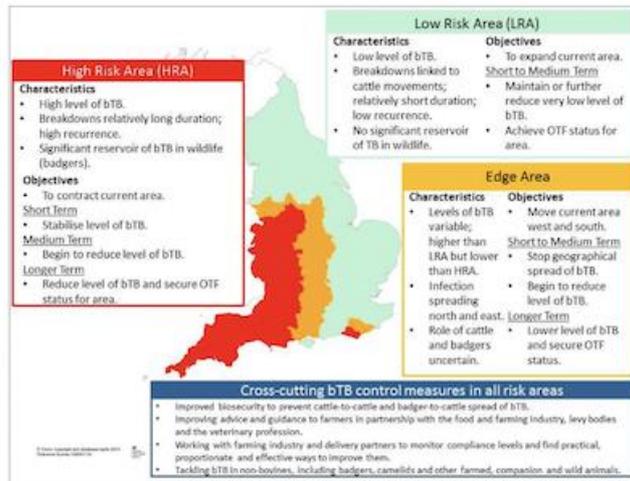


Figure 3.1 Summary graphic of the England TB Eradication Strategy

The Western Front in WWI left and English battle lines on TB in 2016 right. Derbyshire, the site of one of the latest clashes, is at the top right corner of the ochre coloured zone (Wikipedia and [APHA](#)).

Over time, the weight of scientific opinion among first ecologists, and then vets, shifted against the idea that badger culling could be effective and humane in eliminating TB in cattle. Many studies continued to show that most transmission was down to TB spreading within cattle herds and by cattle movements but the political influence of farmers on Conservative governments meant that culling continued on the grounds that badgers played *some* role, even if this was hard to quantify, and any subsequent reduction in cattle TB was even harder to pin down.

Alternatives to culling have been side-lined by the pragmatic government imperative of trying to suppress the disease while appeasing both sides of the debate in public. Aside from a short interlude under a Labour Government which favoured vaccination over culling, government has bowed to farming pressure and continued killing badgers.

The stand-off has gone on so long that the issue now also has its own historians. Many have pointed out, as did the government-commissioned 2018 Godfray Review, that the fixation on badgers has largely excluded policy options of sanitation, biosecurity and husbandry which successfully controlled cattle TB in other countries (and until the 1970s, in the UK).

Currently the government policy is to intermittently cull badgers, back development of a usable cattle vaccine, and allow but not seriously pursue badger vaccination, leaving that to mostly to NGOs such as the Wildlife Trusts. There is little TB in Scotland, and Wales has switched to badger vaccination, while England's government (confusingly the 'UK' Westminster government) has steered itself into an uncomfortable no-man's land between the two dug-in camps. Because culling and vaccination are often in conflict, this has sent conflicting signals and led to criticism of the government and legal actions against it by both sides.

Badgers are popular animals in the UK and the issue is sometimes hard to ignore. In 2019, Prime Minister Boris Johnson himself got involved and intervened to restrict a cull in Derbyshire after being lobbied by his now wife, conservationist Carrie Symonds, because of a Derbyshire Wildlife Trust vaccination project (see document on vaccination).



Carrie Symonds: Controversy has been caused by her alleged involvement with ending the badger cull
(Image: EXPRESS)

Carrie Symonds, Boris Johnson and badger, [Image: Daily Express](#)

In March 2020 Johnson's government announced a 'shift' in policy to phase out culling in favour of cattle vaccination, and in July 2020 it hailed a 'scientific breakthrough' of a test which could enable a cattle vaccine to be used (a test is needed which can distinguish between infected and vaccinated cattle, otherwise they cannot be exported). Then in September, it suddenly announced a new and much larger cull of over 60,000 badgers, taking the number sanctioned to be killed since 2013 to 170,000, or 35% of all badgers in the UK. Unsurprisingly, it was accused of a u-turn.

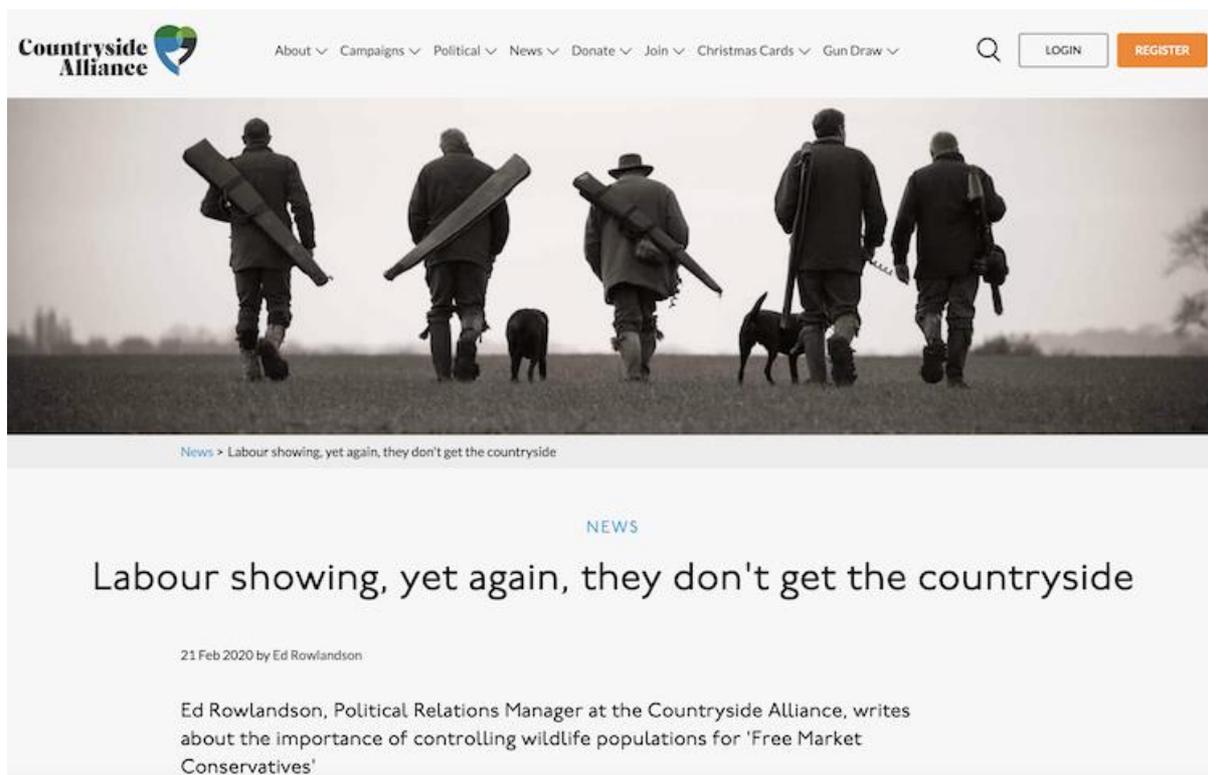
A 'Cultural Divide'

The badger-cattle issue splits opinion across an ancient English cultural divide, about who has the right to determine what happens to wildlife in the countryside: landowners or the public? It's a proxy conflict for a well-financed but numerically weak landowning and hunting lobby which promotes a largely mythical idea that England divides into 'rural' and 'urban' tribes with irreconcilably different values (see supporting document on Rural Politics).

In the court of public opinion, the pro-badger lobby wins easily, and politically, farmers are electorally insignificant in population terms, so why hasn't culling been abandoned or reduced to a relatively minor tool of policy? For several reasons.

First because farming and landowning interests are heavily over-represented in the policy-making corridors of Whitehall and Westminster. Second, because the 'popular vote' counts for nothing in the English electoral system, and in a sprinkling of Britain's first-past-the-post geographic constituencies, the farming vote is important. Third because the 'rural' vote is very important electorally to the Conservative Party and although only 17% of the population live in what are classified as rural areas, they elect all the MPs who can claim to speak on and for 'rural' issues. (Polling actually shows that 'rural people' are slightly more likely to see 'animal welfare' as important than 'urban' people but the 'countryside' lobby claims the opposite).

This makes for a stand-off of complementary strengths and weaknesses in which the NGOs have mostly won the air war and lost the ground war but neither side has proved able to achieve an outright win. To make matters worse (see Conclusions in the supporting papers), the larger NGOs are shy of taking on agri-business and perhaps intimidated by the NFU, which exploits the myth of rural-urban divides for its own purposes.



The image is a screenshot of the Countryside Alliance website. At the top left is the logo for Countryside Alliance, which includes a stylized green and blue globe icon. To the right of the logo is a navigation menu with links for 'About', 'Campaigns', 'Political', 'News', 'Donate', 'Join', 'Christmas Cards', and 'Gun Draw'. Further right are search and user options: a magnifying glass icon, a 'LOGIN' button, and a 'REGISTER' button. Below the navigation is a large photograph showing five people from behind, walking across a field. They are carrying long wooden poles or logs over their shoulders. Two dogs are walking with them. The scene is set in a rural landscape under a clear sky. Below the photograph is a breadcrumb trail: 'News > Labour showing, yet again, they don't get the countryside'. Underneath that is the word 'NEWS' in blue. The main headline of the article is 'Labour showing, yet again, they don't get the countryside'. Below the headline is the date '21 Feb 2020 by Ed Rowlandson' and a short bio: 'Ed Rowlandson, Political Relations Manager at the Countryside Alliance, writes about the importance of controlling wildlife populations for 'Free Market Conservatives''.

Advocating their right to 'control' wildlife as a political ideology - the 'Countryside Alliance' promotes field sports and badger culling and revels in accentuating perceptions of a rural-urban divide

What Next ?

The pro-badger faction could opt to continue the battle of attrition and hope that a majority Labour government is elected in 2024 (the last one stopped culling and brought in six vaccination trials, five of which were cancelled by an incoming Conservative-Liberal Democrat coalition) but there is no guarantee of that. So is there a way to fix the pro-badger campaign?

The Opportunity

I suggest that the opportunity for the 'pro-badger' side is to step up a scale, shift the battle ground and change the players by putting the badger-TB-cattle issue into a wider frame around the sustainability-or-not of intensive farming and specifically, dairy farming, for three reasons.

First, the progressive narrowing of focus so that TB in cattle is seen as a choice of badger culling v badger vaccination excludes an array of cattle-focused measures which worked before in the UK and abroad. No convincing evidence has been produced to show why the involvement of badgers means these measures cannot work now. They need to be revisited.

Second, the same restricted political lens means that 'the badger/ cattle TB issue' also routinely excludes a nexus of intensification factors which changed farming fundamentally. The UK joined the EU in 1973, and farm intensification was encouraged by government in order to cash in on the Common Agricultural Policy of the time. At the same moment, bovine TB had just started to bounce back (see Farm Intensification and Science and TB papers). Land use change and farming practice very possibly made cattle farming, and especially dairy farming, more susceptible to TB. Geographically, dairy intensification has involved specialisation and concentration. At a farm enterprise level it has brought conversion of hay meadows to silage, indoor and ever larger herds, massive slurry production and maize-growing. (See paper on Farm Intensification). All these are known risk factors encouraging TB but by default, are little investigated because egged on by the National Farmers Union, badgers have been nailed as the villains of the TB story by politicians.

Third and perhaps most important, the cattle TB issue is isolated in its own little silo. It's not being 'joined up' to other issues where there are bigger and urgent political imperatives in play which at least nominally, are now accepted by the current UK Government. The top one is that acting on climate targets demands a radical change in farming and diet, including less dairy and less beef, meaning fewer cattle, and requires land for carbon sequestration.

In addition many Conservatives and others support more rewilding, a shift from farm subsidy to payment for delivering public goods (eg clean rivers, in which respect farm pollution is a current disaster in England), rather than just paying farmers to produce more crops and meat, or simply exist as a farm. These aims have been advocated by influential Cabinet Minister Michael Gove since 2018, and are now expressed in new Environment and Agriculture Bills and a Plan to overhaul farming.

In short, the 'productivist' model which lives on as the assumed purpose behind both subsidising cattle farming and culling badgers is, to put it in political terms, already subject to radical revision. It's a weak door, if NGOs have the nerve to kick it.

Strategic elements that could be drawn into this include:

- The policy imperative, already embraced by the UK Government, of achieving net zero carbon by 2050, which requires radical changes in farming practice and diet, particularly regarding beef and dairy
- The COP26 climate meeting in Glasgow in 2021
- The parallel commitment to 'rebuilding biodiversity' and the popularity of rewilding, which could quickly take high risk areas with persistent recurrences of TB out of conventional dairy farming altogether
- The chronic and extreme river, groundwater caused by large volumes of slurry from livestock and particularly intensive lowland dairy farms, which have been getting bigger and fewer
- Severe damage to soils and to rivers and even the sea (as soil runoff), resulting from heavy machinery and crops such as maize, which is grown either for silage, particularly for dairy cows (replacing hay), or for subsidised AD (Anaerobic Digestion) for renewable energy but which has disputed green credentials
- The growing importance of air pollution from intensive farming, particularly from ammonia emissions from dairying and poultry, which is damaging to public health
- The government's radical plans to reform farming so that subsidy is only paid for 'public goods, ie public benefits such as flood reduction, clean air and water, increased biodiversity and cutting climate change emissions (dairying is one of UK farming's most profitable sectors but it is still heavily subsidised)
- The shift in consumer demand from liquid milk and beef to plant-based alternatives

All of these points are already actively in play in other policy fora and communities. Put together, they could redefine the political question from 'how do we eliminate bovine TB in badgers and cattle to help the cattle industry produce more cheap meat and milk?' to 'how do we maximise public goods from the land currently used for cattle farming?'. The underlying predicate switches from 'we need to promote cattle farming' to 'we need to reduce cattle farming'.

In 2020 former DEFRA Chief Scientist Ian Boyd (a sceptic of badger vaccination) argued (see Chronology) that the UK needs to convert half its farmland to other uses such as carbon storage for climate reasons, for health and recreation and biodiversity recovery and that half of all farming is not viable without subsidy. "Moving to the Lancet Diet" (a 50% cut in meat) will "have to be done" and on current trends and with these drivers we would "take most cattle farming out of production". So, he asked, given that bovine TB is a disease of cattle and people are "the transferers of the disease" through moving cattle, "if the whole point is to protect cattle and [very few] cattle [will be] left, then why are we culling badgers?" In these circumstances "living with TB is a much more attractive option".

Campaigning on elements such as those above could reframe the issue so that it exposes the assumptions that still underly current policy, such as the idea that dairying is an essentially a benign activity and that farm intensification is in the public interest.

In terms of the long-running stalemate involving the small policy community immersed in arcane arguments about cattle/badger TB transmission, it would lend heavyweight reinforcement in the shape of bigger policy drivers and engage a wider community.

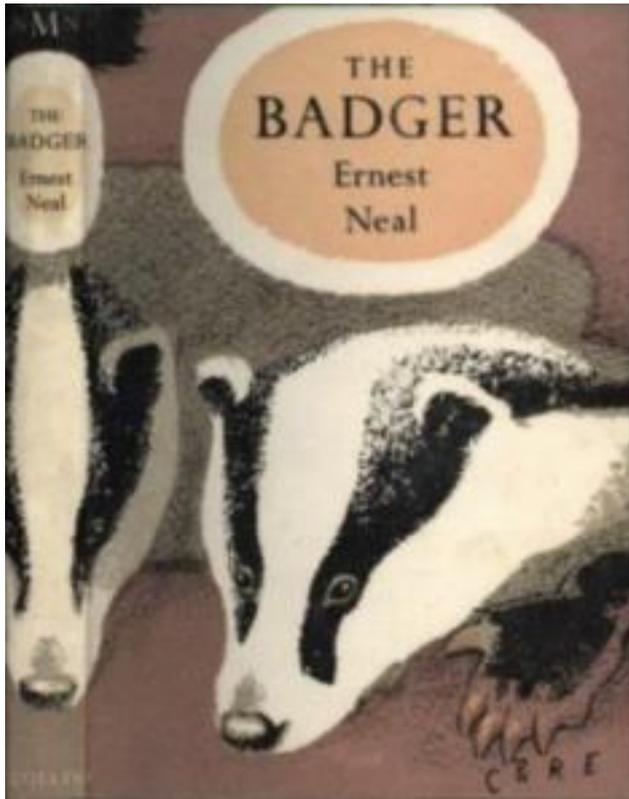
Many of the above elements could be directly translated into specific tactical objectives which campaigns could use as specific 'can-openers'.

Finally, for campaigners who struggle to convert the techy world of improving agricultural sustainability into terms that can immediately engage the public, the opportunity to do so in ways that also stop the unjustified slaughter of thousands of badgers – the closest Britain has to living Teddy Bears – could also be interesting.



Culled – ie shot – Eurasian badgers in the UK [Photo](#) @BadgerCrowd

Account of a badger funeral, from The Badger, Ernest Neal, Collins New Naturalist, 1948:



It would appear however that on certain occasions at any rate badgers will bury their dead in specially excavated holes away from the set in which they have been living. Brian Vesey-Fitz-Gerald (1942) gave an amazing account of how in June he witnessed a badger's funeral. In this instance the sow had lost her mate. She came to the set entrance and let out a weird unearthly cry; then she departed for a rabbit warren not far distant. There she excavated a large hole in preparation for the body of her mate. She worked at this over a long period, the time being broken up at intervals by journeyings between warren and set. After some hours a second badger appeared, a male. The sow stood still with nose lowered to the ground and back ruffling agitatedly, and the male slowly approached with nose also lowered. Then the female moving her head swiftly up and down, uttered a whistling sound "as though the wind had been sharply expelled through the nostrils"; at the same time she moved forward with two tiny jerky steps. When she stopped the male went through a similar motion, his nose to the ground like the sow's. This was repeated. The ritual over, they both retired down the set. After some time they reappeared, the male dragging the dead badger by a hind leg and the sow somehow helping from behind. They reached the warren, interred the body, and covered it with earth. Then the male departed and the sow returned to her set and disappeared. One wonders if all badgers are buried in this way or whether these rites are characteristic only of such special occasions as when a sow loses her mate.

Supporting document downloads

[Chronology of the issue](#)

[Vaccination of cattle and badgers](#)

[Science TB and Badgers](#)

[Farm Intensification](#)

[Rural Politics TB and Badgers](#)

[Role of the NFU](#)

[Conclusions](#)

Acknowledgements

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