The history of bovine TB (bTB) in the UK over the past fifty years is deeply contested and has been endlessly rehearsed by various groups and individuals involved in today’s debate, usually to tactically support their view of how bTB should be managed by politicians and policymakers. Over this time, bTB in Britain went from a well-controlled disease, with regulatory policy driven by public (human and animal) health agendas, to a resurgent, poorly understood epidemic, with policy contested between animal health and conservation/animal welfare interests.

The key aim of this submission is not to subject the Working Group to further rehashing, but instead to draw upon my longstanding research on the subject to outline what the recent history of bTB can tell us about:

i) how the current situation has come about
ii) what new strategies and approaches to bTB control could be constructively explored in future

My project has provided a critical historical analysis of the badger/bovine TB controversy in the UK since the mid-1960s, drawing upon interviews, archival and media sources. As part of this work I have created a ‘timeline’ designed to orient the reader in the intersecting events relating to the case since the middle of the last century, which I hope will be of assistance to the Working Group. It can be best viewed in an online, annotated form: https://time.graphics/line/83803.

i) “How did we get into this mess?”

Since tuberculous badgers were first found by government veterinarians in the early 1970s, the classic “policy failure” of badgers and bTB has been the responsibility of nine prime ministers, fifteen government administrations, and twenty-one cabinet ministers. The 2018 bTB Strategy Review will be the ninth government commissioned, expert led report on bovine TB since Lord Solly Zuckerman’s in 1980. Many of these reviews have been commissioned by politicians on the expectations that the views of authoritative experts and/or new scientific evidence will act to resolve the political controversies around bTB control. However, often the opposite has happened, whereby the review in question has been criticised as a biased ‘whitewash’ (Zuckerman); or ‘the science’ invested in by government turned out to produce unexpected, uncertain and unwelcome findings (Krebs/ISG). Often the outcome has been to drive media coverage of the problem, opening the issue up to wider public debate but also inflaming controversy. In the longer term, the repeated building and breaking of expectations between scientists, policymakers, politicians, campaigners and publics has contributed to an atmosphere of mistrust and the politicisation of ‘evidence’ both in and beyond the badger/bTB debate.

Given this repetitive and unproductive cycle, casting the current review in terms of bTB strategy and policy rather than ‘evidence’ is most likely a helpful starting point for the Working Group. **My key recommendation - rather than calling for reviews at politically strategic moments, government should instead review the complex and changing evidence relating to bTB on a regular basis, with a clearly established route for policy outcomes.** It should also create clearly established and open routes for research and policy activity on the subject to feed into one another. The framing of what counts as ‘evidence’ should be broadened to include work from multiple STEM disciplines; quantitative and qualitative social science; humanities scholarship; the experiential expertise of professionals and volunteers closely involved with the situation; and should transparently take account of the contrasting and conflicting views of multiple publics. This would enable politicians and policymakers to take a broader view of the situation and mitigate against the strategic redefinition and elision of evidence by actors on all sides.

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1 This programme of research has been supported by fellowships from the UKRC Rural Economy and Land Use Programme (RES-229-27-0007-A) and Wellcome Trust (101540/A/13/2). See (Cassidy, 2012, 2015, 2017; Cassidy, Mason Dentinger, Schoefert, & Woods, 2017) for outputs to date: this briefing also draws upon a monograph currently in preparation (Cassidy, forthcoming).

2 For historical research and what it can contribute to policymaking in the present, see, e.g. (Neustadt & May, 1986; Reynolds, 2016).

3 On policy failure in animal health see, e.g. Dunlop (2017); Grant (2009); Van Zwanenberg & Millstone (2003)


5 Cassidy (2015, 2017); for expectations, evidence, science and policy, see e.g. (M. B. Brown, 2015; N. Brown & Beynon-Jones, 2012).
I also suggest that properly supported mechanisms for regular, in-person contact between the various interests concerned with bTB policy be re-instituted, at national and local level. The creation of policy ‘insiders’ and ‘outsiders’, whereby the opposing sides in the debate mostly communicate via the mass media and legal cases, has contributed to the polarisation of bTB and makes it very difficult to explore potential “diplomatic spaces” around the issue.6

ii) Wildlife conflicts

My research has uncovered evidence of a longstanding ‘wildlife conflict’ (conflict between humans and animals as well as between humans about animals) involving badgers in Britain, which has been ongoing for many centuries before badgers were connected with bTB. These animals have gradually shifted from occupying a traditional role in British society as a ‘vermin’ animal – dug out, hunted and made to fight with dogs – towards a newer role as loved ‘charismatic wildlife’. These dichotomous understandings – of the newer Good Badger and the older Bad Badger – have been strategically mobilised by interests lobbying for and against badger protection since the late 19th C. I also found strong continuities between how people argued about badgers in the past and how they argue about badgers and bovine TB in the present, suggesting that the underlying wildlife conflict precedes and drives today’s policy controversy over bovine TB.7

Wildlife conflicts are an expanding area of interdisciplinary research, increasingly applied by conservation and development NGOs globally to improve relationships between local communities and endangered charismatic species. I recommend that government further explore applying human/wildlife conflict frameworks to help mitigate badger conflict issues such as crop damage, foraging and undermining, beyond the current focus on biosecurity. This should help mitigate a key driver of the controversy, enabling public policy debates to engage with the broader complexities of bTB control, rather than continuing the current unproductive focus on the polarised and divisive culling controversy.

iii) New technologies and their application to bTB control

The past few years have seen rapid developments in biomedical technologies for diagnosis and vaccination against infectious diseases, including bTB and MTB, which are being trialled and promoted by alliances of academics, NGOs and private companies.8 While these new developments should be welcomed and it is widely acknowledged that improvements in TB diagnostics in humans and animals are desperately needed, the history suggests it would be unwise to expect that they will act as a panacea, resolving current controversies via technological solutions. For example, during the late 1980s and early 1990s, scientists, politicians and policymakers together built expectations that then newly developed ELISA testing techniques could be applied to create a ‘live’ field test for bTB in badgers, enabling MAFF to trace and eliminate the disease more accurately. When trials suggested that the test was not sensitive enough, MAFF’s policy approach collapsed, ultimately leading to the Krebs report and a new phase of bTB policy.9 I would recommend that new technologies for managing and preventing bTB should absolutely be explored, whilst also anticipating that they may not succeed, or bring with them new uncertainties and regulatory challenges.

iv) TB in humans and other animals

Until well into the 20th C, our understanding of the relationships between mycobacteria and clinical disease in humans and other animals was characterised by uncertainty, public controversy and particularly in the UK, regulatory paralysis. These debates turned upon whether TB in people and in animals was one disease or two; as well as whether infection could be passed from cattle to humans through meat and milk.10 Since these questions were settled, scientific, policy and historical attention to the disease has divided into separated human and veterinary medical domains. Just as scientists and veterinarians increasingly advocate a ‘One Health’ approach, I believe there is value in thinking more broadly across humans and animals about tuberculosis. This has potential not just for biomedical topics such as diagnostics and vaccination; but for public health and policy problems such as co-infection; and for the more political aspects of TB such as living conditions, stress, nutrition, inequalities and economic factors.11 If TB in humans has long been considered as the classic ‘social disease’, why would this not also be the case for TB in other animals?

7 For wildlife conflicts see, e.g. (Cassidy, 2017; Delahay et al., 2009; Hill, 2015); for charismatic species see (Lorimer, 2007).
8 (Barkham, 2017; McCallan et al., 2017; Swift, Convery, & Rees, 2016; WHO, 2017)
9 MAFF (1990, 4-5); Smith, Cheeseman, Wilkinson, & Clifton-Hadley (2001). See also the elusiveness of reliable cattle vaccines for bTB.
10 (Atkins, 2016; Olmstead & Rhodes, 2015; Waddington, 2006)
11 (B. Bynum, 2008; H. Bynum, 2012; Engelmann & Kehr, 2015; McMillen, 2015)
Bibliography


