

## Chapter 4

# BADGER- HUMAN CONFLICT

## An Overlooked Historical Context for Bovine TB Debates in the UK

Angela Cassidy

Department of Politics, University of Exeter

Email: [a.cassidy@exeter.ac.uk](mailto:a.cassidy@exeter.ac.uk); [angela.cassidy@gmail.com](mailto:angela.cassidy@gmail.com)

Since the early 1970s, the question of whether to cull wild badgers (*Meles meles*) in order to control the spread of bovine tuberculosis (bTB) infection in British cattle herds has been the source of public controversy. Bovine TB is caused by *Mycobacterium bovis*, a microorganism that can in principle infect any mammalian species including humans, although its main host is the domestic cow. In the United Kingdom *M. bovis* was a major cause of tuberculosis in humans until well into the twentieth century, as it can be transmitted zoonotically via infected meat and milk in particular. The gradual recognition of this link by scientists, veterinarians and public health authorities led to the establishment of many modern systems for regulating food risks, including the pasteurization of milk, meat inspection and routine TB testing of cattle herds (Atkins 2000; Waddington 2006). Due to the success of these systems, in many countries bTB no longer poses a serious public health threat; however, on a global scale it still contributes to human disease, particularly in several African countries, and in specific populations worldwide (Müller et al. 2013). Despite this, bTB is still a major economic problem in the United Kingdom, as cattle testing positive for the infection are slaughtered and farmers must be compensated by government for such losses. Furthermore, herds containing infected animals are placed under movement restrictions, meaning farmers also suffer significant disruption to their livelihoods, and associated stress and emotional fallout from this disruption and the loss of their animals (Mort et al. 2008; Farm Crisis Network 2009). Despite the near eradication of the disease by the late 1960s, bTB infection rates in British cattle slowly crept back up through the second half of the twentieth century, accelerating steeply following the 2001 outbreak of foot and mouth disease (DEFRA 2014).

While the full reasons for this resurgence remain unclear, veterinarians and farmers have pointed to the existence of a 'reservoir' of infection in wild badger populations, and have lobbied for bTB management policies to include badger culling to remove this source. At the same time, conservation and animal welfare groups have contested the importance of wildlife reservoirs, pointing instead to farming practices as a potential cause, and have campaigned against culling policies. Following a review of the scientific evidence (Krebs 1997), the UK government commissioned the Randomised Badger Culling Trial (RBCT), designed to test the effects of badger culling on bTB rates in cattle through a systematic field trial. After nearly ten years of intensive research carried out over about 100 km<sup>2</sup> of the British countryside at a cost of about £50 million, the multidisciplinary research team

conducting the study concluded that some forms of culling appeared to facilitate the spread of bTB, and that 'badger culling cannot meaningfully contribute to the future control of cattle TB in Britain' (ISG 2007: 14). However, the RBCT findings failed to resolve the controversy, and instead these conclusions were publicly contested by veterinary and farming associations, as well as the government's own Chief Scientific Adviser at the time (see Cassidy 2015 for further analysis). The long-term effects of the RBCT culls, alongside their significance and implications for both disease ecology and bTB policy, continue to be hotly debated in the scientific literature (e.g. McDonald 2014; Boyd 2015; Donnelly and Woodroffe 2015). In policy and the wider public sphere, we now see a situation where advocates both for and against badger culling argue that their positions are supported by 'sound science'; as have the full spectrum of policies implemented across the United Kingdom since 2008 (Spencer 2011; Lodge and Matus 2014; Robinson 2015).

This chapter presents findings arising from a broader research programme investigating the history of bTB in the United Kingdom since the 1960s as a case study of public scientific controversy – where controversies between scientists take place in the wider public sphere (e.g. Cassidy 2006). It takes a step back from questions of animal health policy to focus instead on the wild animals at the centre of this debate. Bovine TB is a global disease problem, and several countries have both reservoirs of infection in wildlife and active culling policies without attracting the degree of public opposition experienced in the United Kingdom (More 2009; Hardstaff et al. 2014). The European badger (*Meles meles*) is a member of the mustelid family (alongside weasels and otters), although historically it was thought to be a bear (see figure 4.1; also Pease 1898). Badgers are omnivorous, nocturnal foragers that in Britain live underground in large family groups; these groups defend well-defined, stable territories. The range of *Meles meles* extends all the way from Spain in the west to Iran in the east; and south to north from Spain to the Arctic Circle in Finland (Roper 2010: 12).



**Figure 4.1. Anti-cull graffiti, Leamington Spa, United Kingdom, July 2015. Source: author's own photograph**

Despite the coexistence of both badgers and bTB across much of this area, it is only in the United Kingdom and the Republic of Ireland that direct causal links have been drawn between these wild animals and infections in domestic cattle. This suggests that a specific combination of ecological, economic, social and cultural factors contribute to the disease ecology of bTB in these countries (Woodroffe et al. 2009; Roper 2010: chap. 7; Byrne et al. 2012; O'Connor, Haydon and Kao 2012; Atkins and Robinson 2013a, 2013b; Fitzgerald and Kaneene 2013). Across much of Europe, population densities are low and in some countries badgers are hunted animals; however, in Britain and Ireland populations are thought to be much higher. The United Kingdom and Netherlands are the only two countries where badgers benefit from specific legal protection, alongside a network of local groups concerned for their welfare and conservation (Griffiths and Thomas 1997; Runhaar, Runhaar and Vink 2015). Despite this, in the United Kingdom these animals continue to be subject to (illegal) human practices of 'badger baiting' (fighting for sport), digging (digging out a sett and/or sending dogs in to hunt the animals) and 'control' activities from farmers and gamekeepers (Roper 2010: 39–41; Enticott 2011a). Alongside the similarly conflicted fox (Woods 2000; Marvin 2001) and otter (Allen 2010; Syse 2013), badgers are highly culturally significant in Britain, appearing in popular folklore, fiction, poetry and visual imagery throughout the twentieth century.

This chapter provides an analysis of these cultural sources, alongside contemporary media coverage of debates around badger culling to ask why proposals to cull this wildlife species have

provoked such intense and sustained controversy in the United Kingdom of the late twentieth and early twenty-first centuries. Existing social science investigations of the UK bTB problem have focused upon animal health policy and governance (Wilkinson 2007; Grant 2009; Spencer 2011; Maye et al. 2014), the roles of scientific knowledge (Enticott 2001), farming (Enticott 2008), veterinary (Enticott 2011b) and public (Enticott 2015) perspectives on the issue. A few studies have addressed the wildlife aspects of the debate and/or how the issue has played out in the broader public sphere of media and popular culture (Lodge and Matus 2014; Naylor et al. 2015). In common with many environmental controversies, mass media have provided a central arena for debating badgers and bTB, where the various actors involved in the controversy have engaged with wider publics alongside policy makers and politicians (Lester 2010: 37–58). As Molloy (2011) and Corbett (2006: chap. 7) point out, animals often play important roles in developing engaging and appealing mass media content; in turn these media representations contribute to broader public discourses and understandings of animals' roles in human societies. This work has also drawn upon the developing field of animal studies, where researchers working across a range of social science and humanities disciplines have investigated many aspects of human-animal relations, from pet-keeping, farming and sport through to eating (see, e.g. Buller 2013, 2015). The animal studies literature has seen a particular emphasis on direct interactions with 'companion species' including many domesticated animals (Haraway 2007). Therefore, this research has also drawn upon the literature on human-wildlife conflict (e.g. Knight 2000a; White and Ward 2010; Redpath, Bhatia and Young 2014; Hill 2015) and cultural representations of wildlife (e.g. Buller 2004; Lorimer 2007) to understand the particular, peculiar role of the badger in British society and how this has shaped public debates over bTB.

### **Historical and Cultural Framings of British Badgers**

We know that epidemiological links between bTB in domestic cattle and wild badger populations were not made until 1971, when a dead badger was found on a farm in Gloucestershire undergoing an anomalous outbreak of bTB (Muirhead 1972; Muirhead, Gallagher and Burn 1974). But what led the veterinarians investigating the case to make the connection to bTB and carry out a postmortem on the carcass? Furthermore, what led to a full-scale badger-culling policy being adopted by the UK government as early as 1975 (Grant 2009)? While a fuller historical investigation of this period is now underway, aimed at answering these questions in depth (see, e.g. Cassidy, Mason Dentinger, Schoefert and Woods, in press), examining the historical and cultural roles played by badgers has provided a productive starting point. Human languages and cultures are saturated with representations of animals that provide a rich source of information about the roles played by animals in society at a particular place and time (Corbett 2006: chap. 7).

Badgers were named and legally designated as 'vermin' in England under the Tudor Vermin Acts of 1532 and 1566, which listed those animals the Crown believed to interfere with human activities, particularly around food production, and offered financial rewards for their dead bodies. In this listing, badgers fetched a generous bounty of twelve old pence per head: a high price only shared by one other animal – the fox. In his study of churchwarden records of the payment of these bounties, Roger

Lovegrove (2007: 230) intriguingly reports that despite this high reward, relatively few badgers were killed under this and later systems of vermin control, often implemented by landowners and gamekeepers. Traditionally, badgers were also eaten, and parts of their bodies were used by humans (e.g. in magical charms, hair for shaving brushes and badger fat as a liniment) (Hardy 1975; Lovegrove 2007). At least some of these practices continue in parts of continental Europe today (Griffiths and Thomas 1997; Roper 2010: 33).

This initial impression of a wildlife species with a long-standing conflict-ridden relationship with humans can be confirmed by looking at how badgers are discussed in the *London Times* newspaper's online archive, which covers 1785–1985. The earliest references found occur as part of the newspaper's routine sports reporting in the early nineteenth century:

#### EASTER MONDAY SPORTS

The first symptoms of sporting amusement that caught our observation appeared in the neighbourhood of Hampstead and Kentish-town. The Sun had scarcely surmounted the horizon, and – “tinged with gold the village spire,” the sportsmen of Kentish-town had assembled at the Bull and Gate, to prepare for a badger hunt; and fortified by their morning draughts, they set out for the field, not with Deep-mouthed hounds, and mellow toned horn, but keen scented terriers, and high-bred bull-dogs, to assail the grizzly savage in his den, situated in a field between Highgate and Hampstead. (*The Times Archive*, issue 8271, 16 April 1811, p. 3, col. C)

While the bloodsport of badger baiting was made illegal in the United Kingdom in 1835, the related practices of digging and hunting for badgers continued throughout the nineteenth century, and discussions of these as routine and popular activities continue in *The Times* up until as late as 1911, after which the coverage shifted towards a more modern mode of disapproval and/or concern for animal welfare (see also Pease 1898).

It is not until 1877 that more positive representations of badgers started to appear, in the first of several sets of exchanges on the letters page of the newspaper:

#### 'THE BADGER' (LETTERS TO THE EDITOR)

On fine evenings we can watch them dress their fur-like coats, or do kind office for each other, and search for parasites after the manner of monkeys. No creature is more cleanly in its habits [ ]...they scrape their feet in dirty weather, and keep their house inodorous by depositing their excrement at one place for many months and covering it with earth. (Ellis, *The Times Archive*, issue 29081, 24 October 1877, p. 5, col. E)

This depiction of a clean, gentle, sociable and civilized animal was subsequently riposted in another letter, describing instead a vicious predatory animal that makes a persistent nuisance of itself to farmers:

#### 'BADGERS' (LETTERS TO THE EDITOR)

That badgers dig out and eat young rabbits is a fact that can be documented beyond doubt in this district during the summer months to anyone who is incredulous on the subject. . . . In the early part of this year I was told by a farmer – whose veracity I have no reason to doubt – that he had been so annoyed by badgers treading down his crops in passing from one earth to another that he determined to dig them out, so that he could trap them. (Barnes, *The Times Archive*, issue 29102, 17 November 1877, p. 4, col. F)

Similar exchanges, often between amateur (and later professional) natural historians or zoologists and farmers or landowners, occurred in *The Times* every few years up until the early 1940s. As well as the above emphasis on cleanliness and sociability, in the early twentieth century people who liked badgers saw them as brave, strong, family-oriented, 'ancient' and quintessentially British in character:

#### 'MEN AND BADGERS' (EDITORIAL)

The badger's kin may have lived in that spot centuries before there were any human beings there. Like the best people of ancient breeding, they had kept themselves to themselves, hiding by day, coming inoffensively out by night, resisting only – and then to the death – the attempts of the upstarts and interlopers to make of them either sport or shaving-brushes. (*The Times Archive*, issue 44567; 28 April 1927, p. 15, col. E)

Badgers were also lauded for making themselves 'useful' to people in many ways, particularly by eating rabbits (a major agricultural pest at the time; see Bartrip 2008), small rodents and nuisances such as wasps' nests. They were also considered to make excellent pets. Alongside their habits of digging and crop destruction, badgers' detractors also accused them of taking ground-nesting birds (including pheasants), chickens and even young lambs. Badgers were also considered to be a problem due to their perceived interference with foxes and by extension the elite (and economically important; see Bresalier and Worboys 2014) practice of foxhunting:

#### 'THE BADGER: DAMAGE CAUSED IN THE HUNTING COUNTRIES' (LETTERS TO THE EDITOR)

In a hunting country, besides adding largely to the poultry claims, he does great damage by opening earths which have already been stopped. He will take possession of foxes' earths and evict the rightful owners, in many cases driving them out of the coverts with which those earths are situated. (Lascelles, *The Times Archive*, issue 46226, 31 August 1932, p. 6, col. B)

Over time, these negative arguments became rarer, and this kind of correspondence gradually stopped. Badgers hardly ever appeared in *The Times* through the middle of part of the twentieth century, until public campaigns to legally protect the animals got into full swing during the mid-1960s, culminating in the passing of the Badgers Act of 1973. Further legislation followed in 1992, making it a serious offence to 'kill, injure or take a badger', or to damage or interfere with a badger sett without a government-issued licence (Roper 2010).

This broad trajectory, from routinely hunted vermin animal, through societal conflict over badgers, to a valued and protected wildlife species, can also be traced in British cultural representations of badgers. In particular, it can be seen in the development of the most famous of these, Mr. Badger from Kenneth Grahame's 1908 novel *The Wind in the Willows*. Grahame's book is a classic of British children's fiction: as well as undergoing multiple reprints, it has been adapted for the stage, radio and television many times and has an enduring popularity. Mr. Badger is antisocial, living in the depths of the Wild Wood: he is intelligent and wise, brave and a fierce fighter in the defence of his friends, Toad, Water Rat and Mole, whom he acts as a father figure to. Visual representations of Mr. Badger have changed over the century since the book was first published: while the earliest illustrated edition of the book, published in 1913, showed Badger and the other animals in a naturalistic style (Graham and Branscombe 1913), it is the anthropomorphized illustrations of E.H. Shepard (who also illustrated A.A. Milne's *Winnie the Pooh*) that are most widely known (Grahame and Shepard 1931). This image of Badger as country gentleman then transformed into the stern, grandfatherly, spectacle-wearing character voiced by Michael Horden in a 1980s television adaptation (Hall and Cosgrove 1984–1987), and can be seen, for example, on the cover of the current Walker Illustrated Classics edition, showing the other animals gathered around Badger in storytelling mode (Graham and Moore 2009).

These characteristics can be traced back to an Anglo-Saxon riddle poem<sup>1</sup> dating back to the tenth century, which tells the story of an animal that lives underground in a hill, fighting and defending his family against digging invaders (Nelson 1975). This theme was picked up by the British romantic poet John Clare during the early nineteenth century in his vividly written poem *The Badger* – written from the point of view of the animal being baited (Clare, 2008)<sup>2</sup> – and was reprised by the First World War poet Edward Thomas in *The Combe* (1917). Following *The Wind in the Willows*, a more academic, less heroic version of the character appears in T.H. White's *The Sword in the Stone* (1938), a children's novel about the young King Arthur, while more martial versions can be seen in C.S. Lewis's Narnia novel *Prince Caspian* (1951), and fantasy author Brian Jacques's *Redwall* series (1986–2010; e.g. Jacques 1988). Colin Dann's *Animals of Farthing Wood* series (1979–1994; e.g. Dann 1979) reinterpreted the character with a more environmental angle: Badger became a leader of a group of animals evicted from their home woodland by a housing development; this series was also turned into a children's animation during the 1980s. While environmental politics became more explicit at this time, these sources all share a common theme of reflection on human relationships with the British natural environment and countryside.

Another aspect of Badger's character can be seen in the association of badgers not only with British national identity in general, but also with the idea of rootedness and a specific sense of place. This can be seen in the usage of 'badger' or older, reputedly 'Celtic' versions such as 'brock' in place names (e.g. Broxbourne, see figure 4.2). Badgers also feature in real coats of arms, the fictional heraldry of House Hufflepuff in J.K. Rowling's *Harry Potter* novels (e.g. Rowling 1997) and 'heraldic' commercial imagery such as that employed by the Dorset-based Hall and Woodhouse brewery chain (brewers of 'Badger' branded beer). These kinds of deep-rooted connections between animals, place, landscape and

British national culture have also been documented for several other wildlife species, including foxes (Marvin 2001), otters (Syse 2013) and wild birds (Moss 2004; Cammack, Convery and Prince 2011).

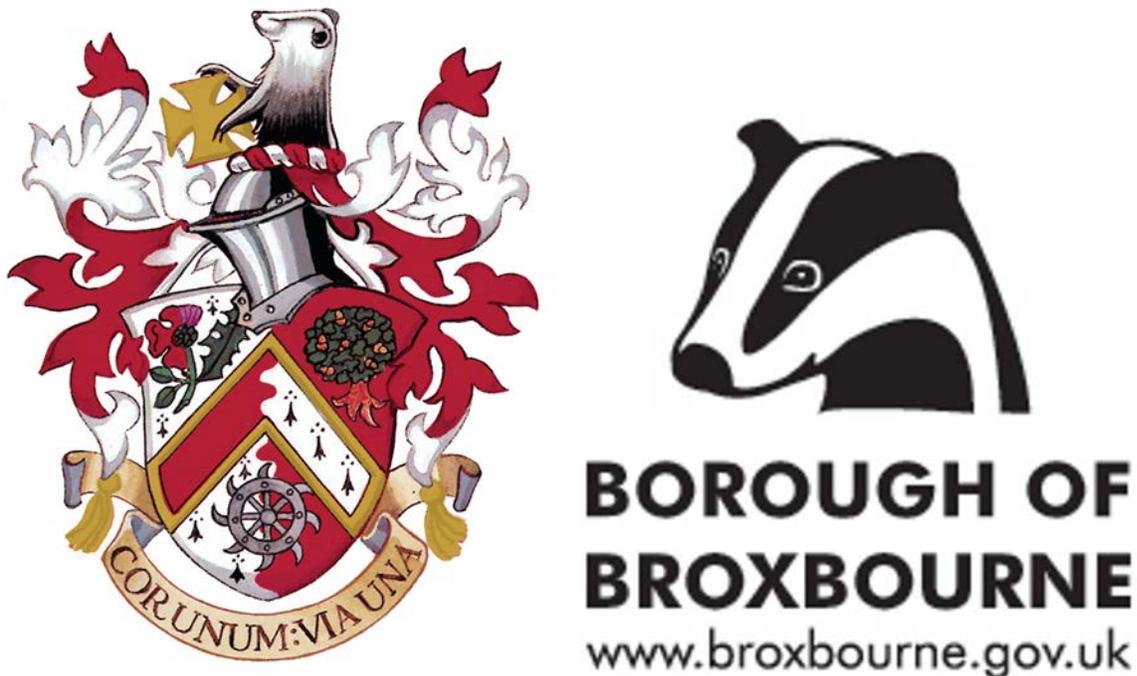


Figure 4.2. Traditional coat of arms and modern corporate logo of the UK borough of Broxbourne, located in the southeast of the country. Source: reproduced by kind permission of Broxbourne Borough Council.

Badgers have also played a significant role in histories of popular natural history and zoology in the United Kingdom from the mid-twentieth century onwards. *The Badger* (1948) was one of the earliest publications in the influential Collins *New Naturalists* book series (Neal 1948; Marren 1995). As the write-up of one of the first systematic field studies of badgers, *The Badger* acted simultaneously as a major scientific monograph as well as an exceptionally popular natural history book of the postwar period. It was republished as a mass-print Pelican paperback in 1958 and subsequently stayed in print until 1977. Its author, Ernest Neal, worked as a schoolmaster, but was also an amateur naturalist and pioneer of nature photography, capturing the earliest still colour and video film footage of wild badgers, and eventually gaining his PhD in 1960.<sup>3</sup> Via this work, he became closely involved in the early development of the BBC Natural History Unit (Marren 1995; Neal 1994), and thereby played a role in the mutual constitution of wildlife documentary and the sciences of animal behaviour during the twentieth century (Davies 2000). He worked in collaboration with amateur natural historians and professional zoologists, having a profound influence on subsequent research in field biology (Roper 2010), and influenced policy via membership of the Badger Consultative Panel for many years (Neal 1994). *The Badger* (1948) is a compelling combination of scientific monograph, first-hand narrative and 'how-to' manual for the aspiring amateur natural historian, clearly explaining how to conduct your own field

studies of badgers if you should so wish. It describes badgers as clever, sociable, clean, civilized and family-oriented animals: terms immediately familiar from the above discussions in *The Times*.

In more recent popular cultural contexts, badgers have become increasingly abstracted: they often appear as part of a revolving cast of what Tess Cosslett describes as 'human beings with animal heads' (2006: 181) in children's television and books: essentially stories about humans (usually children) who act as humans, but just happen to be depicted as animals. Particularly since the 1990s, this tendency towards abstraction has accelerated into surrealism and comedy, with even the word 'badger' being seen as simply funny, featuring in wordplay and stand-up comedy routines in the United Kingdom.<sup>4</sup> Badgers have even had their own Internet craze: the *BadgerBadgerBadger* animation, which simply involves animated badgers doing star jumps, followed by a mushroom and a snake, to the accompaniment of a catchy tune (Picking 2003). It is clear that in these contexts the badger's strikingly striped, monochrome face plays an important role. Indeed, visual representations of badgers often appear: from coats of arms through commercial and campaign logos, book illustrations, nature photography and documentary, visual arts, television programmes, and of course countless soft toys. The face lends itself to abstraction, and is adopted beyond badger-specific issues into broader environmental and conservation campaigning, as can be seen in this logo of the national Wildlife Trusts (figure 4.3), a conservation NGO (Non-Governmental Organization).<sup>5</sup>



Figure 4.3. Logo of the UK Wildlife Trusts. *Source:* reproduced by kind permission of the Wildlife Trusts.

These highly positive images and ideas stand in sharp contrast to one of the few negative portrayals of badgers in British popular culture: Beatrix Potter's *The Tale of Mr. Tod* (1912). Like Kenneth Grahame, Beatrix Potter wrote children's books in the first decades of the twentieth century, similarly featuring humanized, clothed animals adventuring across a specifically English countryside. Unlike Grahame, whose work tended towards the allegorical and surreal, Potter's many animal tales were intended to teach children basic biology and natural history (Cosslett 2006). Famously, Potter even upbraided Grahame for his lack of realism when portraying animals: 'Did he not describe Toad as combing his hair? A mistake to fly in the face of nature – A frog may wear galoshes; but I don't hold with toads having beards or wigs!' (Potter 1942, in Potter and Taylor 2012).

To modern eyes, *The Tale of Mr. Tod* is a grim (but very biological) tale of predation: the badger, Tommy Brock, uses guile to kidnap a nest of baby rabbits, which are then in turn stolen from him by the fox, Mr. Tod. The two fight, and in the confusion the babies' relatives (Peter Rabbit and Benjamin Bunny) manage to rescue them. While Potter's claims to realism are clearly somewhat overstated, badgers do indeed predate on young rabbits by digging them out of their protective burrows. While this behaviour is well-known by biologists (e.g. Roper 2010: 116–120), it caused a minor sensation when accidentally recorded by BBC cameramen during the 'reality TV' natural history series *Springwatch* several years ago (Scoones 2009). Potter's Tommy Brock is a deeply unpleasant character, who as well as being sly and predatory is smelly, dirty, uncouth and carries a spade (much like baiters and diggers), as seen in figure 4.4. He is also portrayed as an agricultural labourer in contrast to the 'gentleman' Mr. Tod, the fox. This reflects the class politics of animal hunting in the United Kingdom. While foxhunting was developed by the landed gentry during the nineteenth century into an iconic feature of British country life (Marvin 2001) and otter hunting was associated with a broader spread of participants including the middle classes (Allan 2010), with some overlaps badger hunting and baiting in particular were and still are associated with working-class people (Griffin 2007: 84–85).



Figure 4.4. 'Tommy Brock', illustration from Beatrix Potter's *The Tale of Mr. Tod* (1912: 21) Source: copyright © Frederick Warne & Co. 1912, 2002; reproduced by permission of Frederick Warne & Co.

### Framings of Badgers in Contemporary bTB Debates

Having surveyed the roles played by badgers in British historical and cultural sources, we now return to the contemporary bTB controversy. How have badgers been framed in mass media coverage and contribution to these debates, and are there any commonalities or continuities to be found with earlier representations of the animals? The principle data source for this analysis has been the LexisNexis UK national newspaper online archive, which was searched over the period 1995–2010 for 'badger' and 'TB'. This produced a core sample of newspaper articles, which were analysed using grounded theory (e.g. Strauss and Corbin 1998) – an iterative process of questioning, reading and qualitative coding, which continued until the analysis stabilized. The core sample was then supplemented with material from online sources, social media, specialist agricultural press, parliamentary proceedings, government publications and relevant TV and radio programmes. Framing analysis, a widely used methodology for media analysis, was also employed to investigate how actors involved in the debate have understood the problem and what should be done about it. This coverage has had a very tight focus on badgers and the associated question of whether they should be culled, with less attention paid to other factors involved in the bTB issue such as cattle movement, farming practices or bTB testing regimes. The issue was also framed in one of two ways: either bTB as a chronic agricultural problem, or badger culling as a

potential environmental risk. For many British people, it is likely that their first (or only) encounter with this famously nocturnal and retiring animal is via the fictional and popular cultural sources described above. Fictional badgers have therefore played a central role in this process by providing journalists with a series of easily recognizable 'hooks' from which a complex and relatively obscure science/policy issue could be discussed without losing audiences' (and editors') interest in the story. These contemporary representations take the form of 'good' and 'bad' badgers, broadly corresponding with the environmental and agricultural framings of the bTB problem; but also displaying some striking continuities with the historical and cultural sources described above.

### **'Good Badger'**

While *The Wind in the Willows* was not the only cultural source to be referenced, it was by far the most prominent and frequently mentioned one. The book's status as a touchstone for the bTB controversy is illustrated well by a satirical cartoon in *Private Eye* magazine published when the Coalition government announced their culling policy. Drawn in the style of the Shepard illustrations, it depicts Toad, Mole and Ratty with guns pointed at Mr. Badger, with the caption "It's nothing personal Badger, it's just we've been paid to cull you" (Longstaff, 2010). *The Wind in the Willows* and/or 'Mr. Badger' were referenced, directly or indirectly, during discussions of the good features of badgers and/or why they should not be culled. These 'good badgers' were often described as being mysterious/shy/averse to (human) social contact; intelligent/wise; and a brave or strong fighter when attacked:

SUPER FURRY ANIMAL OR CATTLE-KILLING, TB-RIDDEN VERMIN?

People don't just love them because they are cuddly, but because they are so full of mystery. You see the size of their claws, and their teeth, and how quick they are, you don't want to mess with them – I suppose that was the challenge for badger baiters. (Adams, *Observer Magazine*, 4 May 2008, p. 24)

When people do encounter badgers in the wild, this seems to confer a special sense of connection with wildlife and the natural world:

IF YOU GO DOWN TO THE WOODS TODAY

The first time a young badger bounced down the garden to greet me, I felt a flush of pride. Presumably it had mistaken me in the dark for a fellow badger – it bolted the second it realised its error. But it was still gratifying, as if its snuffling at my feet conferred some kind of seal of approval from the natural world. (Askwith, *The Independent*, 13 June 2003)

The relative rarity for some people of experiencing such connections may in part account for the popularity of 'badger watching' as a leisure activity in the United Kingdom.<sup>6</sup> While people rarely encounter badgers by accident, due to their nocturnal lifestyle, a combination of poor eyesight, routine foraging habits and an omnivorous diet means that given the right conditions it can be relatively easy for an amateur to seek out and observe them.<sup>7</sup> This happens along a continuum with people feeding badgers visiting their gardens on an ad hoc basis at one end, and organized holiday breaks at the other:

#### TEA FOR TWO, PLEASE

'SAT under a beech tree in the cow field behind the cottage and waited,' reads an entry in the visitors' book at Westley Farm in the Cotswolds. 'At about 9.20pm a large badger came across the field towards me. He came up to the tree and sniffed around the roots on which I was sitting. Wow! Then something I will never forget – he sniffed at the leg of my jeans, stopped, looked up, our eyes met.' (Ellis, *The Times (Weekend)*, 6 July 2002, p. 6)

While initially it seems contradictory for dairy farmers (often hard-pressed due to bTB) turning to people's love of badgers as an alternative income source, this coverage suggests that farming attitudes to the badger/bTB situation may be more variable than the stereotype:

#### TEA FOR TWO, PLEASE

There is irony in the badger becoming a farm's best friend, particularly in Gloucestershire, where the incidence of bovine TB has been relatively high. 'Many farmers are terrified of TB and are anti-badger,' Julian says. 'But not the small farms in this valley.' The Usbornes believe that wider issues, such as feed, animal husbandry and cattle controls, need to be explored. Why, they ask, are some herds free of TB while others in the same area are infected? (Ellis, *The Times (Weekend)*, 6 July 2002, p. 606)

As described above in relation to their appearances in place names and heraldry, badgers' habit of living in family groups in one place over the long term in the United Kingdom is often linked to descriptions of 'good badgers'. These animals are still seen as holding intimate and long-standing connections with the land; also as a 'native' species they are seen as ancient residents of the country, and are highly symbolic of British national identity:

#### LEADING ARTICLE: IN PRAISE OF . . . BADGERS

'The most ancient Briton of English beasts,' wrote the poet Edward Thomas of the badger, a justified verdict on a black-and-white creature that has always added colour to the nation's life. The appearance of one sett in the Domesday Book merely marks the start of the current chapter in a tale stretching back a quarter of a million years. Despite their elusive nature, their inquisitive face is still one of the most recognisable symbols of British wildlife. (*The Guardian*, 15 May 2007, p. 28)

This is often underlined by pointing out connections with place names, terms such as 'brock' and 'Briton', and attributions of age and gender ('Mr.' or 'Old' Brock). As the above quote suggests, this national symbolism is closely connected to ideas about a specifically British form of wildlife/countryside/nature. Despite their clear coexistence in human spaces (farms, gardens), 'good badgers' tend to be discussed as if they spend most of their time in the 'natural' space of the Wild Wood.

An overlapping, but distinct set of characteristics involves discussions of badgers as sociable (with other badgers), family oriented and with evocatively humanlike characteristics<sup>8</sup>:

#### TB OR NOT TB?

They have young ones to feed at this time of year, ablutions to perform and family grooming duties, as well as house cleaning and repairs to do. It is a furiously hectic life below ground. In fact, on still frosty nights you can see a plume of steam lifting from an air vent built by the badgers at the back of their sett, like the warm white billows drifting upwards from sidewalks above the New York subway. And these animals are our deadly enemy? (Mitchell, *Daily Telegraph (Weekend)*, 4 Mar 2006, p. 1)

Although badgers are omnivores, whose diet includes small mammals (including baby rabbits and hedgehogs), birds and eggs, 'good badger' framings tend to emphasize the more innocuous aspects of this diet such as worms, insects, snails and nuts:

#### BLACK AND WHITE AND BRED ALL OVER

On a good night, badgers suck worms out of the ground just like children eat spaghetti. (Beardsall, *Daily Telegraph*, 9 August 2003, p. 12)

Unsurprisingly, framings of badgers as victims (of humans) have been particularly prominent in this coverage, directly referencing the continuing practices of baiting and digging. At times, the 'badger as victim' framing places these practices into a broader context of historical relations between humans and wildlife in general:

#### STOP PICKING ON MR BROCK: IT'S THE SILLY COW WITH TB YOU SHOULD BE BLAMING

Death is always the soft option – at least, it is for those not doing the actual dying. The badger cull is all of a piece with the slaughter of predators that was all the rage in the nineteenth century and still continues in some places, illegally, today. When in doubt, blame a wild creature; and then kill it. Job done. (Barnes, *The Times*, 7 October 2006, p. 23)

Finally, the badger as victim is discussed in unambiguously human terms, placing the reader directly into the shoes (paws?) of animals facing death from impersonal authorities. This is particularly clear in the repeated use of headlines such as 'The Culling Fields' (e.g. Brown 2005: 30; Fricker 2015: 25), descriptions of culling as 'mass slaughter' and references to past culls and gassing: immediately evoking the (human) horrors and holocausts of the twentieth century:

## TB OR NOT TB?

There must be an immediate 'blitz cull' of as many as 100,000 badgers – massed gassings, total elimination zones extending across swathes of Devon, Somerset, Cornwall and any other seriously affected county. No more waiting. Push the red button. Do it now. (Mitchell, *Daily Telegraph (Weekend)*, 4 March 2006, p. 1)

This 'victim' mode is underlined by depictions of badgers as female, as children, or by likening their situation to that of refugees:

MOTHER BADGERS ARE SNARED IN RUSTY CAGES, PARTED FROM THEIR SCREAMING CUBS AND COLDLY SHOT IN THE HEAD . . . ALL WITH THE GOVERNMENT'S BLESSING

TRAPPED in a small, rusting cage this despairing badger paws at the bars and pushes her snout through the bars as she struggles to escape. Somewhere in the darkness a cub screams for its mother. (Weathers, *Daily Mail*, 3 June 2003, p. 11)

## A CULL BY ROYAL APPOINTMENT

A cull – by its nature incomplete – 'would have a profound effect on the lifestyle of survivors. It might well cause changes in their immune systems which make them less resistant to disease. With their society in turmoil, bereaved badgers would almost certainly traverse the country far and wide, infecting more badgers and more cattle.' (Hattersley, *The Times*, 22 December 2005, p. 18)

This set of discourses, framing badger culling in terms of human war and its victims, provides an interesting appropriation and reversal of a set of widely used metaphors of 'the battle against disease' (Nerlich and James 2009). Rather than utilizing the bellicose language of waging war, it instead invokes anti-war rhetoric to draw attention to the potential consequences for badgers of 'eradicating' bTB.

## 'Bad Badger'

Given the prevalence of positive cultural representations compared to the single negative example of *The Tale of Mr. Tod*, it is striking that in contemporary media coverage of badger/bTB, negative framings of badgers are not just prominent but considerably outnumber discussions of the 'good badger'. Most obviously, 'bad badgers' spread disease by transmitting bTB to domestic cattle, and potentially to humans:

## BADGER THE GOVERNMENT

Until it was brought under control in the 1960s, TB was a serious danger in Britain. So there is cause for concern that, in the past decade, cases of this disease in cattle have soared. An expanding badger population is blamed. These animals carry TB though they themselves appear unaffected by it. One mouthful of grass on which a diseased badger has urinated is believed to carry sufficient tubercle bacilli to infect a cow. The worry is that humans could contract the illness through consuming unpasteurised milk products. (*The Times*, 5 May 1999)

In contrast to the human-like 'good badger', 'bad badgers' tend to be discussed in the plural, and in a depersonalized way. This plays into discussion of links between rising badger populations and the spread of disease (Veterinary Association for Wildlife Management 2010).

In turn, this forms part of a complex of characteristics depicting badgers as an undesirable underclass: violent, disruptive, criminal and far too numerous:

#### INSIDE STORY: WHAT HAVE I DONE TO DESERVE THIS?

In the book [*The Wind in the Willows*], Badger is a solitary creature. Round here, he'll be shackled up with a dozen friends and family. And quite likely, he'll have tuberculosis. (Perkins, *The Guardian*, 12 April 1999, p. 8)

#### SUPER FURRY ANIMAL OR CATTLE-KILLING, TB-RIDDEN VERMIN?

As the badger population has grown, they are increasingly in our back yards; as Colin Gray points out, just as we had urban foxes, increasingly we will be seeing urban badgers as they travel further in search of food. In some places this is already a reality. In Evesham last year, 'a rogue badger attacked five people during a 48-hour rampage in a quiet suburb'. In one suburb in Sheffield, it was recently reported, residents 'were demanding an Asbo for sex-mad badgers'. There were 19 setts in a hundred yards of back gardens. Michael Broomhead, 60, a retired butcher, said: 'They have felled three trees by digging under them. When they are having sex they howl and scream, and when they are fighting they make terrible bloodcurdling noises as if they are being murdered.' (Adams, *Observer Magazine*, 4 May 2008, p. 24)

While violence, or the capacity for violence when under attack, is present in the 'good badger', here we see badgers' predatory and violent behaviour being greatly accentuated:

#### CULL OR CURE DILEMMA AS BADGERS GET BLAME FOR EPIDEMIC

Ground-nesting birds have also suffered in the explosion of badger numbers, according to Mr Barker [a dairy farmer]. He believes there could be up to 50 badgers in the main sett alone. 'I now have no lapwings, curlews or wild pheasants because there are so many badgers searching for food and taking all the eggs in the spring.' (Goodwin, *The Independent*, 1 December 1997, p. 20)

Other negative aspects (or those disruptive to humans) of badger behaviour are also emphasized, such as crop destruction and digging. Badgers live in underground setts, continually dig and are opportunistic, intelligent omnivores: therefore, such activities at times bring them into conflict with humans (Roper 2010: 267–298):

#### THOUSANDS OF BADGERS ARE CONDEMNED TO DIE OVER TB FEARS

Farmers detest the nocturnal mammals not only because of the belief that they spread TB but because they flatten cereal crops, nibble growing corn on the cob, and even strip vineyards of grapes. (Hinsliff, *Daily Mail*, 18 August 1998, p. 21)

#### THE SMART SETT

Aberdeenshire council is spending pounds 30,000 on a new council home for a family of badgers because their present sett has undermined a main road between Huntly and Banff. (*Daily Telegraph*, 21 March 2001, p. 25)

In the 'bad badger' framing, these features come together to depict an agent of chaos – and, due to legal protections, one that can escape 'justice':

#### A VERMINOUS VIETCONG STALKS THE COUNTRYSIDE

Not since the Beast of Bodmin, not since the Hound of the Baskervilles, had so awful a creature plagued the countryside. *Meles vulgaris*, something between a weasel and a bear, was overrunning hill and dale. And it was, of course, Labour's fault. What were the teddy-hugging, town-dwelling, pizza-eating classes going to do about it, I was asked? They would not be content until every rustic parlour was a zoo of free-range foxes, badgers, stags, kites and predatory geese? I could not argue the damage. Across the landscape meadows were being upheaved, hedges, banks and bridleways subsiding, tennis courts falling into holes. Tunnels of Ho Chi Minh ingenuity were sapping the ancient walls and lawns of England with a verminous Vietcong. These omnivorous monsters were eating lambs and ground-nesting birds. They were the only known predator of the hedgehog. Archaeological sites were being destroyed. The killer brock was prowling at will, cockily secure under the 1992 Protection of Badgers Act. (Jenkins, *The Times*, 4 April 2004, p. 24)

While this piece, in common with much newspaper commentary, is clearly meant to be humorous, it still expresses a common frustration with the legal protection of badgers in the United Kingdom. It also illustrates how controversies over badger culling are intertwined with tensions between traditional British rural centres of power and modern urban elites – at the time epitomized by successive Labour administrations. During their time in power (1997–2010), as well as gradually withdrawing licences for farmers to cull badgers, and ruling out a culling policy in 2008, the Labour government also outlawed foxhunting in 2005 (Woods 2008). While the specifics of foxhunting controversies are distinct to those surrounding badger culling and baiting/digging (Marvin 2000), current intersections of power and political interests result in their present alignment (see, e.g. May 2010).

These 'good' and 'bad' badger framings are employed strategically by media and other actors engaged in arguments for and against culling policies. However, as is suggested by some of the examples above, each trope is also employed, albeit in an exaggerated form by the 'other' side as well, for example when pro-cull actors cite *The Wind in the Willows* as the source of 'emotional' popular resistance to culling (Tasker 2012). Indeed, in some longer articles, authors switch rapidly between the two tropes, using them as a resource to explore the issue at depth. Wyn Grant (2009) and Gareth Enticott (2011b) also identify the use of good/bad badger tropes, respectively by policy makers during the 1960s and 1970s and farmers currently affected by bTB carrying out illegal culling. However, these take a slightly different form, involving the attribution of bTB infection/spread to specific individuals: sick 'rogue badgers' whose behaviour is abnormal in many ways and must be 'taken care of' (Enticott

2011b: 204; Maye et al. 2014: see also Jenkins 2004, quoted above). This trope was rarely present in national press coverage of badger/bTB, although the related idea of expressing concern for the suffering of sick badgers was employed as part of pro-cull rhetoric:

#### ANIMAL LOBBY CONDEMNS BADGERS TO SLOW DEATH

It [bTB] is also causing great suffering to the badgers themselves. Thousands die each week from the long-drawn-out effects of the disease (unless, as any West Country roadside bears witness, they are so weakened that they fall victim to a passing vehicle). (Brooker, *The Daily Telegraph*, 7 March 2005, p.14)

This illustrates the flexibility of good/bad badger discourses, and the ways in which they can be taken up and strategically reshaped to suit changing contexts and audiences. While the link with TB is new, the association of the 'bad badger' with dirt and solitary, violent behaviour is evident in Beatrix Potter's Tommy Brock, created nearly one hundred years earlier.

### Discussion

This chapter has traced how badgers have been represented in British society via an analysis of historical and cultural sources, alongside media coverage of contemporary debates over bovine TB and badger culling. Across all these sources, two opposing characters dominate: the 'bad badger' and the 'good badger', which today are broadly associated with arguments for and against culling policies for bTB management. This analysis suggests that badgers have occupied an ambivalent position in British society since at least the mid-nineteenth century, and that their connection with bovine TB has intensified this conflicted role since 1971. Various aspects of badger behaviour bring these animals into conflict with humans: on the other hand, they have a range of other characteristics that people have found admirable and aesthetically pleasing. Some of these, such as strength, bravery and loyalty to family, are features that may be displayed during baiting and digging activities: this valorization of and sense of closeness to the 'hunted' animal by the 'hunter' is not unusual (Marvin 2000; Carvalhedo Reis 2009). Through long-standing British cultural traditions surrounding nature and the countryside, as well as in more recent traditions of popular natural history, badgers are widely regarded as 'charismatic animals' in the United Kingdom (Lorimer 2007). Charismatic wildlife species such as the panda are often used in conservation campaigning: the fact that in the United Kingdom badgers take on such a role despite not being an endangered species attests to the strength of this status, and may go some way towards explaining the strength of opposition to badger culling (Bennett and Willis 2008; DEFRA 2011).

At the same time, many of the characteristics of the 'bad badger' highlight how these animals can come into conflict with humans. Alongside the obvious issue of bTB transmission, these include crop-raiding, predation, violence and disruptive digging. Such descriptions are congruent with the kinds of language used to describe animals in conflict with humans across a wide variety of species, cultures and locales: such animals are often ascribed to the category 'pest' or 'vermin'. John Knight's (2000b) framework of 'pestilence discourses', in which pest animals tend to be represented as dirty, violent,

criminal, cunning, numerous and out of control, while their harmful effects upon humans are emphasized, fits well with these negative framings of badgers. This is also apparent in the transition from debates about badgers to debates about badgers and bTB. The historian Mary Fissell (1999) has argued that the category 'vermin' in early modern England related to animals in direct competition with humans for resources, which could explain why badgers and other vermin animals were (and are) frequently portrayed (and treated as) criminals (see, e.g. Cassidy and Mills 2012). Fissell also argued that early modern 'vermin' were not associated with dirt, disease and disgust as they are today, and that these links later developed alongside the adoption of germ theory during the nineteenth century (Douglas 1966). Lucinda Cole (2014) draws upon sixteenth- and seventeenth-century accounts of the plague to instead argue that vermin *were* associated with disease at this time, but via an intertwined complex of natural and supernatural causes including miasma (bad air) and witchcraft.

In either case, badgers were not directly connected with bovine TB until the early 1970s; and as we have seen, historical and contemporary representations of the 'bad badger' tend to focus disproportionately on their roles as agricultural pests, rather than as disease carriers. Therefore, contemporary associations between badgers and bovine TB appear to be facilitated by *both* historical understandings of badgers as animals in competition and conflict with humans, and by modern scientific understandings of them as disease vectors. Research on societal representations of disease supports this idea: we see a common language of war, apocalypse, the enclosure of safe space (biosecurity) and attributions of risk outside such spaces across cases including foot-and-mouth disease, 'superbugs', pandemic influenza and bTB (Nerlich and James 2009; Nerlich, Brown and Wright 2009; Washer 2010). This includes the 'othering', dehumanization and exclusion of groups and individuals seen as the source of disease risks (Joffe 1999). In this case, badgers have been treated in much the same way, transferring societal anxieties about disease risks onto an animal species: these associations between 'vermin', disease anxieties, prejudice and excluded groups have been applied to humans and other animals alike (Marcu, Lyons and Hegarty 2007; Mavhunga 2011). It is possible that the badger/bTB controversy is part of a broader escalation of risk narratives around animals in European media and popular culture in recent years (Gerber, Burton-Jeangros and Dubied 2011).

Knight (2000b) also highlights the dualistic nature of pestilence discourses. This is very much in evidence in the material presented here, as are the ways in which 'pest' animals tend to disrupt the spatial, bodily or psychological boundaries constantly being constructed between humans and other animals, as well as 'culture' and 'nature'. As described above, these framings of badgers invoke important notions of space, and the proper occupation of space. The 'good badger' is symbolic of an idealized British nature or countryside, and as such is often depicted occupying 'natural', non-human spaces such as Kenneth Grahame's 'Wild Wood'. By contrast, 'bad badgers' are invariably framed as intruders into human, albeit agricultural, spaces where they disrupt and impede human activities (see also Spencer 2010). The constructed nature of these boundaries, and the way in which they must constantly be (re)negotiated (Schlich, Mykhalovskiy and Rock 2009) means that the 'pest' role is inherently ambiguous. This explains why constructions of pests tend to flip between positive and

negative versions, particularly when such boundaries are being contested (e.g. Hytten 2009; Potts 2009; Brown 2011; Cassidy and Mills 2012).

By comparing contemporary public debates over badgers and bTB with older representations of badgers in the United Kingdom, a tentative historical narrative can be traced. From an early period in which badgers were legally considered to be vermin and hunted (although also admired), during the late nineteenth and early twentieth centuries the 'good badger' gradually appeared and become more prominent. During this period, the emergence of early animal welfare movements and resulting changes in social attitudes marginalized, and eventually outlawed many hostile interactions with badgers via baiting and formal hunting (Griffin 2007). The first two decades of the twentieth century seem to have been a turning point of sorts: while it may be a coincidence that *The Wind in the Willows*, *The Combe* and *Tales of Mr. Tod* were all published within ten years of each other, the British anti-bloodsports movement also came to the fore at this time (Allan 2010: 81; Griffin 2010). Through the twentieth century positive representations of badgers became increasingly common, particularly once they had featured in BBC wildlife programming (e.g. Neal and Hewer 1954; Bale 1977). By the late twentieth century the 'good badger' had become so dominant that it became increasingly abstracted and even parodied by comedians. This most recent incarnation, the 'surreal badger', has been adeptly mobilized by contemporary anti-culling campaigners, transforming into a symbol of resistance to the Conservative government that came to power in 2010 (figure 4.5).<sup>9</sup>



Figure 4.5. 'Bring It'; *Daily Mash* badger T-shirt design Source: reproduced by kind permission of Paul Stokes / *Daily Mash*.

Today's controversy over badgers and bTB can be read as a continuation of the long-standing 'badger debate' about the appropriate position of these animals in British society. Are badgers pests to be 'managed' and removed when they get in our way; or a cherished, charismatic wildlife species to be preserved and protected? Contemporary associations between disease, risk and animals (particularly pests) also appear to have contributed to the re-emergence of the 'bad badger' into public discourse in the United Kingdom.<sup>10</sup> These deep-rooted connections suggest that a deeper understanding of many other contemporary conflicts between humans and wildlife can be gained by investigating the historical development of such conflicts, and how cultural representations of the animals involved have changed over time.

These findings have important implications for current debates over the management of bovine TB in the United Kingdom. Firstly, there is a pressing need to reframe the controversy beyond the reductive yes/no question of badger culling, and to 'open up' (Stirling 2008; Leach, Scoones and Stirling 2010) and investigate the broader questions of the underlying and highly complex problem of bTB spread, its potential causes and what can and should be done about it. A key first step would be to acknowledge the existence of the historical and contemporary 'badger debate' underlying the bTB controversy. This would enable researchers and policy makers to mobilize human/wildlife conflict frameworks to investigate and attempt to mitigate problems of human/badger coexistence that are *unrelated* to bTB. Such a recognition could start to decouple public debates about badger protection, conservation and coexistence from those about bTB control, farming and the rural economy.

Secondly, as research on the disease ecology of bTB is increasingly recognizing (Macdonald 2014; O'Connor et al. 2012; Byrne et al. 2012; Broughan et al. 2016), human cultures, histories, politics, ethics, economics and actions play important roles in maintaining, spreading and managing the disease across multiple species. To improve our understanding of how bovine TB works, and how it might best be managed, the multiple social and biological causes of this chronic disease problem must be further investigated in concert, using a broader range of qualitative and quantitative research methodologies. Only then can we hope to work towards some kind of sustainable resolution of this protracted and divisive controversy, which has yet to find any satisfactory solutions for the humans and other animals involved.

**Dr. Angela Cassidy** is a lecturer in the Land, Environment, Economics and Policy Institute, Department of Politics, University of Exeter. She is currently undertaking a Wellcome Research Fellowship investigating the history of bovine tuberculosis in the United Kingdom since the late 1960s and the long-standing public controversy over whether to cull wild badgers in order to manage the disease in domestic cattle herds. Her research spans the contemporary history of science and medicine, science communication and science and technology studies: she has particular interests in public scientific controversies; interdisciplinarity; environments, food and agriculture; and nature/culture. Her earlier work has investigated these issues in case studies of 'One Health' (advocacy for the convergence of human and animal health), food-chain risks and public debates over popular evolutionary psychology.

### Acknowledgements

A version of this chapter was originally published in 2012 as 'Vermin, Victims and Disease: UK framings of badgers in and beyond the bovine TB controversy', *Sociologia Ruralis* 52(2): 192–204. Research was initially carried out with the support of an Interdisciplinary Early Career Fellowship from the UK Rural Economy and Land Use Programme (grant no. RES-229-27-0007-A), and further developed with the support of a Medical Humanities Fellowship from Wellcome Trust (101540/Z/13/Z). I would like to acknowledge the contribution of Charlotte Kenten to the early stages of this research, and thank my various fellowship mentors, particularly Abigail Woods, Peter Simmons, Graeme Medley and Robbie MacDonald, for their feedback and support in developing this work.

### References

- Adams, T. 2008. 'Super Furry Animal or Cattle-Killing, TB-ridden Vermin?' *Observer Magazine*, 4 May, p. 24.
- Allen, D. 2010. *Otter*. London: Reaktion Books.
- Askwith, J. 2003. 'If You Go Down To The Woods Today. To Some, they're Charming, Gentle Creatures. To Others, they're a Menace', *The Independent*, 13 June.
- Atkins, P.J. 2000. 'Milk Consumption and Tuberculosis in Britain, 1850–1950', in A. Fenton (ed.), *Order and Disorder: The Health Implications of Eating and Drinking in the Nineteenth and Twentieth Centuries*. East Linton: Tuckwell Press, pp. 83–95.
- Atkins, P.J., and P.A. Robinson. 2013a. 'Coalition Culls and Zoonotic Ontologies', *Environment and Planning A* 45(6): 1372–1386.
- . 2013b. 'Bovine Tuberculosis and Badgers in Britain: Relevance of the Past', *Epidemiology and Infection* 141(7): 1437–1444.
- Bale, P. (producer). 1977. *Badger Watch*, BBC One, British Broadcasting Corporation.  
<http://www.wildfilmhistory.org/film/288/Badger+Watch.html>

- Barnes, G. 1877. 'Badgers' (Letters to the Editor), *The Times Archive*, issue 29102, 17 November, p. 4, col F.
- Barnes, J. 2006. 'Stop Picking on Mr Brock: It's the Silly Cow with TB you Should be Blaming', *The Times*, 7 October, p. 23.
- Bartrip, P.W.J. 2008. *Myxomatosis: A History of Pest Control and the Rabbit*. London: I.B.Tauris.
- Beardsall, J. 2003. 'Black and White and Bred All Over: Thanks to Dairy Farming, Badgers are Thriving in Areas such as Somerset, says Jonny Beardsall', *Daily Telegraph*, 9 August, p. 12.
- Bennett, R.M., and K.G. Willis. 2008. 'Public Values for Badgers, Bovine TB reduction and Management Strategies', *Journal of Environmental Planning and Management* 51(2): 511–523.
- Bitterli, D. 2007. 'Exeter book Riddle 15: Some Points for the Porcupine', *Anglia - Zeitschrift für englische Philologie* 120(4): 461–487.
- Boyd, I.L. 2015. 'Bovine Tuberculosis: DEFRA Responds to Badger-Cull Critique', *Nature* 527 (7576): 38. doi:10.1038/527038b.
- Bresalier, M., and M. Worboys. 2014. 'Saving the Lives of our Dogs: The Development of Canine Distemper Vaccine in Interwar Britain', *The British Journal for the History of Science* 47(2): 305–334.
- Brooker, C. 2005. 'Animal Lobby Condemns Badgers to Slow Death. TB EPIDEMIC. Notebook', *The Daily Telegraph*, 7 March, p. 14.
- Broughan, J.M., et al. 2016. 'Farm Characteristics and Farmer Perceptions Associated with Bovine Tuberculosis Incidents in Areas of Emerging Endemic Spread,' *Preventive Veterinary Medicine* May. doi:10.1016/j.prevetmed.2016.05.007.
- Brown, J. 2005. 'THE CULLING FIELDS: Mass slaughter plan for badgers provokes outcry; Animal groups deny that cull will ease TB "crisis"', *The Independent*, December 16, p. 1–2.
- Brown, K. 2011. 'Rabid Epidemiologies: The Emergence and Resurgence of Rabies in Twentieth Century South Africa', *Journal of the History of Biology* 44(1): 81–101.
- Buller, H. 2004. 'Where the Wild Things Are: The Evolving Iconography of Rural Fauna', *Journal of Rural Studies* 20(2): 131–141.
- Buller, H.J. 2013. 'Animal Geographies 1', *Progress in Human Geography* 38(2): 308–318.
- . 2015. 'Animal geographies II: Methods', *Progress in Human Geography* 39(3): 37–84.
- Byrne, A., et al. 2012. 'The Ecology of the European Badger (*Meles meles*) in Ireland: A Review', *Biology and Environment: Proceedings of the Royal Irish Academy* 112B: 69–96.
- Cammack, P.J., I. Convery and H. Prince. 2011. 'Gardens and Birdwatching: Recreation, Environmental Management and Human–Nature Interaction in an Everyday Location', *Area* 43: 314–319.
- Carvalho Reis, A. 2009. 'More than the Kill: Hunters' Relationships with Landscape and Prey', *Current Issues in Tourism* 12(5): 573–587.
- Cassidy, A. 2006. 'Evolutionary Psychology as Public Science and Boundary Work', *Public Understanding of Science* 15(2): 175–205.
- . 2015. "'Big Science'" in the Field: Experimenting with Badgers and Bovine TB, 1995–2015', *History and Philosophy of the Life Sciences* 37(3): 305–205. doi:10.1007/s40656-015-0072-z.
- Cassidy, A., and B. Mills. 2012. "'Fox Tots Attack Shock": Urban Foxes, Mass Media and Boundary-Breaching', *Environmental Communication: A Journal of Nature and Culture* 6(4): 494–511.

- Cassidy, A., Mason Dentinger, R., Schoefert, K. and Woods, A. 'Animal Roles and Traces in the History of Medicine' *BJHS: Themes*, Vol. 2, in press, 2017
- Clare, J. 2008. *John Clare: Major Works*, E. Robinson and D. Powell, eds. Oxford: Oxford University Press, pp. 246–247.
- Cole, L. 2014. 'Of Mice and Moisture: Rats, Witches, Miasma and Early Modern Theories of Contagion', *Journal for Early Modern Cultural Studies* 10(2): 65–84.
- Corbett, J.B. 2006. *Communicating Nature: How We Create and Understand Environmental Messages*. London: Island Press.
- Cosslett, T. 2006. *Talking Animals in British Children's Fiction, 1786–1914*. Aldershot: Ashgate Publishing.
- Daily Telegraph*. 2001. 'The Smart Sett', 21 March, p. 25.
- Dann, C. 1979. *The Animals of Farthing Wood*. London: Egmont Publishing.
- Daston, L., and G. Mitman. 2005. *Thinking With Animals: New Perspectives On Anthropomorphism*. New York: Columbia University Press.
- Daily Mash*. 2012. 'Bring It, say Badgers', 18 September. Retrieved 24 May 2016 from <http://www.thedailymash.co.uk/news-in-pictures/news-briefly/bring-it-say-badgers-2012091841472>
- . 2014 'Fudd Declares Badger Cull Vewy Successful', 6 January. Retrieved 24 May 2016 from <http://www.thedailymash.co.uk/news/society/fudd-declares-badger-cull-vewy-successful-2014010682288>
- Davies, G. 2000. 'Science, Observation and Entertainment: Competing Visions of Postwar British Natural History Television, 1946–1967', *Cultural Geographies* 7(4): 432–460.
- DEFRA. 2011. 'Bovine Tuberculosis: The Government's Approach to Tackling the Disease and Consultation on a Badger Control Policy. Summary of Consultation Responses.' Retrieved 1 December 2014 from <http://webarchive.nationalarchives.gov.uk/20120616115816/http://archive.defra.gov.uk/corporate/consult/tb-control-measures/bovinetb-summary-responses-110719.pdf>
- . 2014. 'A Strategy for Achieving Officially Bovine Tuberculosis Free Status for England.' Retrieved from <https://www.gov.uk/government/publications/a-strategy-for-achieving-officially-bovine-tuberculosis-free-status-for-england>
- Donnelly, C.A., and R. Woodroffe. 2015. 'Bovine Tuberculosis: Badger-Cull Targets Unlikely to Reduce TB', *Nature* 526(7575): 640. doi:10.1038/526640c.
- Douglas, M. 1966. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London: Routledge and Kegan Paul.
- Ellis, A. 1877. 'The Badger' (Letters To The Editor), *The Times Archive*, issue 29081, 24 October, p. 5, col E.
- Ellis, S. 2002. 'Tea for Two, Please', *The Times (Weekend)*, 6 July, p. 6.
- Enticott, G. 2001. 'Calculating Nature: The Case of Badgers, Bovine Tuberculosis and Cattle', *Journal of Rural Studies* 17(2): 149–164.
- . 2008. 'The Spaces of Biosecurity: Prescribing and Negotiating Solutions to Bovine Tuberculosis', *Environment and Planning A* 40(7): 1568–1582.

- . 2011a. 'The Local Universality of Veterinary Expertise and the Geography of Animal Disease', *Transactions of the Institute of British Geographers* 47(1): 75–88.
- . 2011b. 'Techniques of Neutralising Wildlife Crime in Rural England and Wales', *Journal of Rural Studies* 27(2): 200–208.
- . 2015. 'Public Attitudes to Badger Culling to Control Bovine Tuberculosis in Rural Wales', *European Journal of Wildlife Research* 61: 387–398. doi:10.1007/s10344-015-0905-9.
- Farm Crisis Network. 2009. *Stress and Loss: A Report on the Impact of Bovine TB on Farming Families*. Farm Crisis Network, Northampton. Retrieved 1 December 2014 from <http://www.tbfreeengland.co.uk/assets/4200>
- Fissell, M. 1999. 'Imagining Vermin in Early Modern England', *History Workshop Journal* 47(Spring): 1–29.
- Fitzgerald, S.D., and J.B. Kaneene. 2013. 'Wildlife Reservoirs of Bovine Tuberculosis Worldwide: Hosts, Pathology, Surveillance, and Control', *Veterinary Pathology* 50(3): 488–499.
- Fricker, M. 2015. 'The culling fields; 2,000 badgers to be shot dead . . . & it will cost taxpayers £12million', *Daily Mirror*, September 25, p. 25.
- Gerber D.L.J., C. Burton-Jeangros and A. Dubied. 2011. 'Animals in the Media: New Boundaries of Risk?' *Health, Risk & Society* 13(1): 17–30.
- Goodwin, S. 1997. 'Cull or Cure Dilemma as Badgers get Blame for Epidemic', *The Independent*, 1 December, p. 20.
- Grahame, K. 1908. *The Wind in the Willows*. London: Methuen.
- Grahame, K., and P. Branscombe. 1913. *The Wind in the Willows*. New York: C. Scribner's Sons. Retrieved 1 December 2014 from *Project Gutenberg* at <http://www.gutenberg.org/files/27805/27805-h/27805-h.htm>
- Grahame, K., and I. Moore. 2009. *The Wind in the Willows (Walker Illustrated Classics)*. London: Walker Books.
- Grahame, K., and E.H. Shepard. 1931. *The Wind in the Willows*. London: Methuen.
- Grant, W. 2009. 'Intractable Policy Failure: The Case of Bovine TB and Badgers', *The British Journal of Politics & International Relations* 11(4): 557–573.
- Griffin, E. 2007. *Blood Sport: Hunting in Britain since 1066*. New Haven, CT: Yale University Press.
- Griffiths, H.I., and D.H. Thomas. 1997. 'The Conservation and Management of the European Badger (Meles meles)', *Nature and Environment, No. 90*. Strasbourg: Council of Europe Publishing.
- Guardian Leader. 2007. 'Leading Article: In Praise of . . . Badgers', *The Guardian*, 15 May, p. 28.
- Hall, M., and B.B. Cosgrove. 1984–1987. *The Wind in the Willows* (TV series). Manchester: Cosgrove Hall Productions.
- Haraway, D. 2007. *When Species Meet*. Minneapolis: University of Minnesota Press.
- Hardstaff, J.L., et al. 2014. 'Evaluating the Tuberculosis Hazard Posed to Cattle from Wildlife across Europe', *Research in Veterinary Science* 97(S): S86–S93.
- Hardy, P. 1975. *A Lifetime of Badgers*. Newton Abbot: David and Charles.
- Hattersley, R. 2005. 'A Cull by Royal Appointment', *The Times*, 22 December, p. 18.
- Hill, C.M. 2015. 'Perspectives of "Conflict" at the Wildlife–Agriculture Boundary: 10 Years On', *Human Dimensions of Wildlife* 20(4): 1–6.

- Hinsliff, G. 1998. 'Thousands of Badgers are Condemned to Die over TB Fears', *Daily Mail*, 18 August, p. 21.
- Hytten, K. 2009. 'Dingo Dualisms: Exploring the Ambiguous Identity of Australian Dingoes', *Australian Zoologist* 35(1): 18–27.
- Independent Scientific Group on Cattle TB. 2007. *Final Report of the Independent Scientific Group on Cattle TB*. London: Department of the Environment and Rural Affairs. Retrieved 1 December 2014 from [http://archive.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/isg/report/final\\_report.pdf](http://archive.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/isg/report/final_report.pdf)
- Jacques, B. 1988. *Mossflower*. London: Hutchinson.
- Jenkins, S. 2004. 'A Verminous Vietcong Stalks the Countryside', *The Times*, 4 April, p. 24.
- Joffe, H. 1999. *Risk and the Other*. Cambridge: Cambridge University Press.
- Knight, J. (ed.). 2000a. *Natural Enemies: People–Wildlife Conflicts in Anthropological Perspective*. London: Routledge.
- . 2000b. 'Introduction', *Natural Enemies: People–Wildlife Conflicts in Anthropological Perspective*. London: Routledge, pp. 1–36.
- Krebs, J.R., and the Independent Scientific Review Group. 1997. *Bovine Tuberculosis in Cattle and Badgers: Report to the Rt. Hon Dr. Jack Cunningham MP*. London: MAFF Publications.
- Lascelles, E. 1932. 'The Badger: Damage Caused in the Hunting Countries', letter from Edward Lascelles, *The Times Archive*, issue 46226, 31 August, p. 6, col. B.
- Law, J., and M. Lynch. 1988. 'Lists, Field Guides, and the Descriptive Organization of Seeing: Birdwatching as an Exemplary Observational Activity', *Human Studies* 11(2): 271–303.
- Leach, M., I. Scoones and A. Stirling. 2010. 'Governing Epidemics in an Age of Complexity: Narratives, Politics and Pathways to Sustainability', *Global Environmental Change* 20(3): 369–377.
- Lester, L. 2010. *Media and Environment: Conflict, Politics and the News*. Cambridge: Polity.
- Lewis, C.S. 1951. *Prince Caspian: The Return to Narnia*. London: Geoffrey Bles.
- Lodge, M., and K. Matus. 2014. 'Science, Badgers, Politics: Advocacy Coalitions and Policy Change in Bovine Tuberculosis Policy in Britain', *Policy Studies Journal* 42(3): 367–390.
- Lorimer, J. 2007. 'Nonhuman Charisma', *Environment and Planning D: Society and Space* 25: 911–932.
- Lovegrove, R. 2007. *Silent Fields: The Long Decline of a Nation's Wildlife*. Oxford and New York: Oxford University Press.
- Marcu, A., E. Lyons and P. Hegarty. 2007. 'Dilemmatic Human-Animal Boundaries in Britain and Romania: Post-Materialist and Materialist Dehumanization', *British Journal of Social Psychology* 46(4): 875–893.
- Marren, P. 1995. *The New Naturalists: Half a Century of British Natural History*. London: HarperCollins.
- Marvin, G. 2000. 'The Problem of Foxes: Legitimate and Illegitimate Killing in the English Countryside', in J. Knight (ed.), *Natural Enemies: People–Wildlife Conflicts in Anthropological Perspective*. London: Routledge, pp. 189–211.
- Marvin G. 2001. 'Cultured Killers: Creating and Representing Foxhounds', *Society and Animals* 9: 273–292.
- Mavhunga, C.C. 2011. 'Vermin Beings: On Pestiferous Animals and Human Game', *Social Text* 29(1): 151–176.

- May, B. 2010. *Save Me* (campaign website). Retrieved 1 December 2014 from [www.save-me.org.uk](http://www.save-me.org.uk).
- Maye, D., et al. 2014. 'Animal Disease and Narratives of Nature: Farmers' Reactions to the Neoliberal Governance of Bovine Tuberculosis', *Journal of Rural Studies* 32: 401–410. doi:10.1016/j.jrurstud.2014.07.001.
- MacDonald, R.A. 2014. 'Animal Health: How to Control Bovine Tuberculosis', *Nature* 511(7508): 158–159. doi:10.1038/nature13514.
- Mitchell, S. 2006. 'TB OR NOT TB? Badgers are on Trial, Accused of Spreading Tuberculosis. Before the Jury is Dismissed on Friday, Sandy Mitchell Talks to both Defence and Prosecution', *Daily Telegraph(Weekend)*, 4 March, p. 1.
- Molloy, C. 2011. *Popular Media and Animals*. Basingstoke: Palgrave Macmillan.
- More, S.J. 2009. 'What is Needed to Eradicate Bovine Tuberculosis Successfully: An Irish Perspective', *Veterinary Journal* 180(3): 275–278.
- Mort, M., et al. 2008. 'Animal Disease and Human Trauma: The Psychosocial Implications of the 2001 UK Foot and Mouth Disease Disaster', *Journal of Applied Animal Welfare Science* 11(2): 133–148.
- Moss, S. 2004. *A Bird in the Bush: A Social History of Birdwatching*. London: Aurum.
- Muirhead, R.H. 1972. 'Bovine Tuberculosis in Wild Badgers in South Gloucestershire', *State Veterinary Journal* 27(1), September: 197–205.
- Muirhead, R.H., J. Gallagher and K.J. Burn. 1974. 'Tuberculosis in Wild Badgers in Gloucestershire: Epidemiology', *Veterinary Record* 95(24): 552–555.
- Müller, B. et al. 2013. 'Zoonotic Mycobacterium Bovis-Induced Tuberculosis in Humans', *Emerg Infect Dis* 19(6): 899–908.
- Naylor, R., et al. 2015. 'The Framing of Public Knowledge Controversies in the Media: A Comparative Analysis of the Portrayal of Badger Vaccination in the English National, Regional and Farming Press', *Sociologia Ruralis* Early View. doi:10.1111/soru.12105.
- Neal, E. 1948. *The Badger (New Naturalist Monograph)*. London: Collins.
- . 1994. *The Badger Man: Memoirs of a Biologist*. Ely: Providence Press.
- Neal, E., and H. Hewer (filmmakers). 1954. *Badgers*. BBC, British Broadcasting Corporation. Retrieved from <http://genome.ch.bbc.co.uk/c28140ea6560458696f962560142258c>
- Nelson, M. 1975. 'Old English Riddle no. 15: "The Badger", an Early Example of Mock Heroic', *Neophilologus* 59(3): 447–450.
- Nerlich, B., B. Brown and N. Wright. 2009. 'The Ins and Outs of Biosecurity: Bird Flu in East Anglia and the Spatial Representation of Risk', *Sociologia Ruralis* 49(4): 344–359.
- Nerlich, B., and R. James. 2009. "'The Post-Antibiotic Apocalypse" and the "War on Superbugs": Catastrophe Discourse in Microbiology, its Rhetorical Form and Political Function', *Public Understanding of Science* 18: 574–590.
- Nicholls, H. 2011. 'The Art of Conservation', *Nature* 472(7343): 287–289.
- O'Connor, C.M., D.T. Haydon and R.R. Kao. 2012. 'An Ecological and Comparative Perspective on the Control of Bovine Tuberculosis in Great Britain and the Republic of Ireland', *Preventive Veterinary Medicine* 104(3–4): 185–197.
- Pease, A.E. 1898. *The Badger: A Monograph*. London: Lawrence and Bullen Limited.

- Perkins, A. 1999. 'Inside Story: What Have I Done to Deserve This? The Government is About to Launch a Badger-Culling Campaign. But Instead of Solving a Problem, it's Likely to Cause a New Catastrophe in the Countryside, says Anne Perkins', *The Guardian*, 12 April, p. 8.
- Perkins, D. 2003. *Romanticism and Animal Rights (Cambridge Studies in Romanticism)*. Cambridge and New York: Cambridge University Press.
- Picking, J. 2003. *Badger Badger Badger* (web animation). Retrieved 1 December 2014 from <http://weebls-stuff.com/songs/badgers/>
- Picking, J., B. May and B. Blessed. 2013. *Save The Badgers* (web animation). Retrieved 1 December 2014 from <http://www.weebls-stuff.com/songs/Save+The+Badgers/>
- Political Scrapbook. 2013. 'Best of the Badger: The 5 Funniest Responses to Paterson's Own Goal', *Political Scrapbook*. Retrieved 1 December 2014 from <http://politicalscrapbook.net/2013/10/5-funniest-responses-to-badger-goalposts-gaffe/>
- Potts, A. 2009. 'Kiwis Against Possums: A Critical Analysis of Anti-Possum Rhetoric in Aotearoa New Zealand', *Society and Animals* 17: 1–20.
- Potter, B. 1912. 'The Tale of Mr. Tod.' London: Frederick Warne & Co. Retrieved from Project Gutenberg at <http://www.gutenberg.org/files/19805/19805-h/19805-h.htm>
- Potter, B., and J. Taylor. 2012. *Beatrix Potter's Letters* (ebook edition). London: Penguin Books Limited. Retrieved 1 December 2014 from <http://books.google.com/books?id=BvMuYoVIZugC&pgis=1>
- Redpath, S.M., S. Bhatia and J. Young. 2014. 'Tilting at Wildlife: Reconsidering Human–Wildlife Conflict', *Oryx* 49(2): 222–225. doi: <http://dx.doi.org/10.1017/S0030605314000799>.
- Rees, A. 2006. 'A Place that Answers Questions: Primatological Field Sites and the Making of Authentic Observations', *Studies in the History and Philosophy of Science C* 37: 311–333.
- Robinson, P.A. 2015. 'A History of Bovine Tuberculosis Eradication Policy in Northern Ireland', *Epidemiology and Infection* 143(15): 3182–3195. doi:10.1017/S0950268815000291.
- Roper, T.J. 2010. *Badger* (The New Naturalist Library). London: Collins.
- Rowling, J.K. 1997. *Harry Potter and the Philosopher's Stone*. London: Bloomsbury.
- Runhaar, H., M. Runhaar and H. Vink. 2015. 'Reports on Badgers *Meles meles* in Dutch Newspapers 1900–2013: Same Animals, Different Framings?' *Mammal Review* 45(3): 133–145.
- Schlich, T., E. Mykhalovskiy and M. Rock. 2009. 'Animals in Surgery – Surgery in Animals: Nature and Culture in Animal–Human Relations and Modern Surgery', *History and Philosophy of the Life Sciences* 31(3–4): 321–354.
- Scoones, T. 2009. *Springwatch, Episode 2, Predatory Badgers* (TV series). Bristol: BBC Natural History Unit. Retrieved 1 December 2014 from [http://www.bbc.co.uk/nature/life/European\\_Badger#p007x3mn](http://www.bbc.co.uk/nature/life/European_Badger#p007x3mn)
- Spencer, A. 2011. 'One Body of Evidence, Three Different Policies: Bovine Tuberculosis Policy in Britain', *Politics* 31(2): 91–99.
- Spencer, M. 2010. 'Imagining Badgers: An Attempt at Working with Objects of Governance', *Sentient Creatures: Transforming Biopolitics and Life Matters Conference Oslo*, 16–17 September. Oslo: University of Oslo.
- Stirling, A. 2008. 'Opening Up and Closing Down: Power, Participation and Pluralism in the Social Appraisal of Technology', *Science Technology and Human Values* 33(2): 262–294.

- Strauss, A., and J. Corbin. 1998. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 2nd edition. Thousand Oaks, CA, and London: Sage Publications.
- Syse, K.V.L. 2013. 'Otters as Symbols in the British Environmental Discourse', *Landscape Research* 38(4): 540–552.
- Tasker, J. 2012. 'In the Hot Seat: Owen Paterson', *Farmer's Weekly Interactive*, 14 September. Retrieved 1 December 2014 from <http://www.fwi.co.uk/articles/14/09/2012/135217/in-the-hot-seat-owen-paterson.htm>
- The Times*. 1811. 'Easter Monday Sports', *The Times Archive*, issue 8271, 16 April, p. 3, col C.
- . 1927. 'Men And Badgers (Editorial)', *The Times Archive*, issue 44567, 28 April, p. 15, col E.
- . 1999. 'Badger the Government', *The Times*, 5 May.
- Thomas, E. 1917. *Poems*. London: Selwyn & Blount.
- Waddington, K. 2006. *The Bovine Scourge: Meat, Tuberculosis and Public Health*. Woodbridge: The Boydell Press.
- Washer, P. 2010. *Emerging Infectious Diseases and Society*. Basingstoke: Palgrave Macmillan.
- Weathers, H. 2003. 'Mother Badgers are Snared in Rusty Cages, Parted from their Screaming Cubs and Coldly Shot in the Head . . . all with the Government's Blessing', *Daily Mail*, 3 June, p. 11.
- White, T.H. 1938. *The Sword in the Stone*. New York: G.P. Putnam's Sons.
- White, P.C.L., and A.I. Ward. 2010. 'Interdisciplinary Approaches for the Management of Existing and Emerging Human–Wildlife Conflicts', *Wildlife Research* 37(8): 623.
- Wilkinson, K. 2007. 'Evidence Based Policy and the Politics of Expertise: A Case Study of Bovine TB', *CRE Discussion Paper* 12 (Working paper). Retrieved 1 December 2014 from <http://www.ncl.ac.uk/cre/publish/discussionpapers/pdfs/dp12%20Wilkinson.pdf>
- Woodroffe, R., et al. 2009. 'Social Group Size Affects Mycobacterium Bovis Infection in European Badgers (*Meles meles*)', *Journal of Animal Ecology* 78: 818–827.
- Woods, M. 2000. 'Fantastic Mr. Fox? Representing Animals in the Hunting Debate', in C. Philo and C. Wilbert (eds), *Animal Spaces, Bestly Places: New Geographies of Human–Animal Interactions*. London: Routledge, pp. 183–202.
- . 2008. 'Hunting: New Labour Success or New Labour Failure?' in M. Woods (ed.), *New Labour's Countryside: Rural Policy in Britain since 1997*. Birmingham: The Policy Press, pp. 95–114.
- Veterinary Association for Wildlife Management. 2010. *Badgers and Bovine TB*. Retrieved 26 November 2014 from [http://www.vet-wildlifemanagement.org.uk/index.php?option=com\\_content&task=view&id=14&Itemid=28](http://www.vet-wildlifemanagement.org.uk/index.php?option=com_content&task=view&id=14&Itemid=28)

## Notes

- <sup>1</sup> The nature of the poem is such that the animal is never identified, but it has popularly been considered to be a badger: for arguments to the contrary, see Bitterli (2007).
- <sup>2</sup> Alongside other Romantic poets, Clare's work was mutually shaped by the incipient animal rights movement in Britain; see Perkins (2003) for a more in-depth discussion.

- <sup>3</sup> The cover of Neal's autobiography (1994) simultaneously references his own work and the cultural role of the badger by depicting the animal in schoolmaster's robes.
- <sup>4</sup> See, e.g. material by the British comedians Eddie Izzard, Marcus Brigstocke and Harry Hill.
- <sup>5</sup> I understand that part of the reason for the adoption of the badger face as the logo for the UK Wildlife Trusts is that the simple monochrome image could be easily copied using the scarce resources available to NGO campaigners at the time (Owain Jones, pers. comm.); see also Nicholls (2011) for the role of visual abstraction of animal images in conservation logos.
- <sup>6</sup> Many of the UK Wildlife Trusts, as well as local landowners and farmers, now conduct supervised or unsupervised 'badger watching' on a routine and frequently commercial basis; see, e.g. <http://www.wildlifetrusts.org/stake-out-a-badger-sett>.
- <sup>7</sup> This contrasts with the notorious difficulties of 'seeing' or indeed studying many wild animals (Rees 2006). Similarly, the relative visibility of birds plays an important role in the popularity of bird watching as a leisure activity (see Cammack et al. 2011; Law and Lynch 1988; Moss 2004).
- <sup>8</sup> I generally avoid the term 'anthropomorphic', as it seems too normatively loaded to be helpful in understanding how and why people tend to highlight the similarities between themselves and other animals in this way; see Daston and Mitman (2005) for further discussion of this issue.
- <sup>9</sup> In 2013 the rock star Brian May (funder of the anti-cull *Save Me* campaign) teamed up with the makers of *BadgerBadgerBadger* to create a Save the Badger web animation (Picking, May and Blessed 2013). See also the Badger Penalty Shootout online game responding to then Environment Secretary Owen Paterson's comments that 'the badgers have moved the goalposts' (Political Scrapbook 2013), and satirical commentary on the situation (e.g. Daily Mash 2012, 2014)
- <sup>10</sup> While it is far beyond the scope of this article to draw direct links between this re-emergence and changes in human attitudes or practices towards badgers, Enticott (2011b) suggests that the severity of the bTB problem (and farmers' lack of power to prevent it) may be leading to an increase in illicit persecution and killing of badgers.