

INTRODUCTION

How do we solve the problem of bovine tuberculosis? For over a hundred years this has proved a contentious and intractable question. The complexities that have surrounded the transmission of bovine tuberculosis (bTB) and attempts to protect consumers and eradicate the disease in cattle not only reveal conflicting constructions of risk and expertise, but also highlight how the boundaries between animals and humans, and between different animals, can be disrupted. Whereas in her opening comments Angela Cassidy sensitively identifies the broad historical shifts that structured controversy between the late-1960s and the mid-1990s, in this introduction, I outline the history of responses to bTB from the 1890s to c.2000 to place the volume in context, and highlight some of the historical parallels between contemporary and earlier debates.

For Victorian health officials and governments bTB was essentially a public health problem tackled through inspection to protect consumers from ingesting meat and milk from tuberculous livestock. While local public health and veterinary controls remained problematic, by the 1911 the findings of three royal commissions had reinforced pre-existing assumptions about the dangers of bTB to consumers and the importance of cattle-to-human and cattle-to-cattle transmission. As attention shifted after 1900 from diseased meat to infected milk, European models of eradication attracted interest as concern about bTB drew on anxieties about food safety, child health, national efficiency, and farming. For the public health lobby, the eradication of bTB offered a means to reduce an important childhood disease, while for farmers and the Ministry of Agriculture and Fisheries (MAF) there were important economic considerations. In the 1920s, efforts were made to increase resistance among cattle through breeding and improved stable hygiene, and research was conducted into developing a cattle vaccine. With the science and value of pasteurization initially contested, measures to promote disease-free herds and support for eradication schemes gained ground in the 1920s and 1930s with the 1937 Agriculture Act establishing the rudiments of a

national system of testing in cattle with veterinarians at the centre. However, the voluntary nature and economics of eradication and a shift from arable to livestock and dairy farming, combined with farmers' apparent unwillingness to stamp out bTB, ensured that levels of the disease in the national herd remained high until the 1950s.¹

Progress in eradicating bTB was therefore slow: it was not until 1964 that it became government policy to detect and contain the disease in cattle through routine testing, slaughter, compensation, and movement controls. By 1971, complete eradication had not been achieved but the incidence of reactors in individual herds had fallen dramatically. It was in this context that the discovery in 1971 of bTB in a dead badger at a farm in Gloucester following an atypical outbreak of bTB provoked immediate concern. While as the contributors to this volume reveal, the reasons for rising levels of bTB in the UK after 1971 remain open to speculation, veterinarians and farmers highlighted a 'reservoir' of infection in wild badger populations and in 1975 a programme of badger culling was started. Despite the absence of research demonstrating a concrete link, MAF became embroiled in a campaign to stop badger-transmitted TB in cattle. Badger-borne TB became an intractable problem and culling a deeply contentious issue. As attention focused on badgers, the role of cattle movements, other animals, or testing in the spread of the disease attracted little attention despite questions having been asked about these vectors since the 1890s. Only by the mid-2000s did work confirm much earlier assumptions that cattle-to-cattle transmission was an important factor, while studies came to show that culling and perturbation increased incidences of TB in badgers, issues explored by the contributors as they unravel competing opinions and uncertainties about rising levels of bTB in the UK.

Whereas before the 1960s appeals for the eradication of bTB were made in the name of public health, child health and national efficiency, or to support the growing dairy industry, the post-1965 history of bTB as a public scientific and

¹ Phillips J. and French M. (1999) State regulation and the hazards of milk, 1900-1939. *Social History of Medicine* 12: 371-88.

policy controversy has been a complex one of competing interpretations, interests groups, and emotions. As MAF commented in 1986, since the 1970s, badger controls have been influenced by ‘practical and political expediency, field experience, research, public relations considerations, the perplexities and imponderable nature of TB badger/cattle relationships and much discussion among interested parties’.² They have equally been shaped by a particular perception of the badger as a problem, and by appeals based on different constructions of ‘good’ and ‘bad’ badgers.³

As emotively charged images of badgers and culling were presented in the media and by campaigners against culling, policymakers increasingly sought to involve a wider range of interest groups. For some the involvement of conservation and animal welfare groups resulted in a paralysis of policy, but responses to bTB need to be seen in the context of the uncertainties surrounding transmission. With evidence of the role of badgers in the resurgence of bTB remaining circumstantial, proving that badgers were responsible for outbreaks was problematic. In an effort to resolve uncertainties, successive governments turned to expert advisory committees as they attempted to navigate the emotive and politicized issues surrounding culling. If the Badger Panel established in 1976 to provide a forum for advice from experts and leading organizations explained government policies and sought agreement from interest groups, further reports were commissioned to provide an elusive evidence-base for policy. Whereas the 1980 Zuckerman report reinforced the need for culling and supported a clean ring strategy, the 1986 Dunnet report tried to reconcile competing interests and recommended a scaling down of culling, an approach that remained in place for ten years as BSE came to dominate anxieties about animal health and food safety. In 1996, the Badger Panel ceased to meet following the creation of an independent

² Cited in Grant W. (2009) Intractable policy failure: The case of bovine TB and badgers. *British Journal of Politics and International Relations* 11: 561.

³ Cassidy A. (2012) Vermin, victims and disease: UK framings of badgers in and beyond the bovine TB controversy. *Sociologia Ruralis* 52: 192-204.

review to investigate whether badgers were responsible for the spread of bTB in cattle and whether culling strategies worked. Two years later, the Independent Scientific Group on Cattle TB was set up to conduct the Randomized Badger Culling Trial to once again address uncertainties and establish the effects of badger culling on incidences of bTB in herds. Its findings were contradictory. In response the then Department of Environment, Food and Rural Affairs secretary, Hilary Benn, decided that a renewed cull would be too risky in the face of uncertainty and public opposition. It is against this policy background, uncertainties surrounding transmission, and the emotions generated by culling, that contributions to this Witness Seminar need to be understood as they fill a vital gap in historical studies by addressing policy responses to bTB after 1960.

While badger culling introduced a hitherto unknown emotional dimension to debates about bTB and involved the public and NGOs in animal health policies in new ways, the pre- and post-1965 history of bTB suggests interesting recurrent themes around bTB and animal diseases. Responses to bTB not only reveal important issues about the role of scientific knowledge in policy and the boundaries of expertise in responses to epizootic and zoonotic diseases, but also their limits in the face questions about risk and the complexities of how bTB is transmitted to humans or between animals. Whether framed as a public health, laboratory, veterinary or farming problem, since the 1890s uncertainty and the pursuit of evidence to support policy has been central to responses to bTB. Questions about diagnosis, testing, and vaccination important in contemporary debates equally troubled meat inspectors, veterinarians, laboratory scientists, and farmers from the 1900s to the 1940s. Likewise, since the 1890s, rather than science setting the agenda, uncertainties surrounding bTB have repeatedly been met through government investigations and state-sponsored studies into the nature of transmission and testing in an attempt to find answers. Tensions between different models of expertise and shifting expert groups have continually resurfaced in responses to bTB. For example, from the 1870s to the 1930s conflict between

public health officials and veterinarians over who was best qualified to protect the public and identify tuberculous cattle was an important feature of debate. Further issues have regularly re-appeared around bTB. Here we might think of repeated debates about the impact of bTB on farming and the cost of eradication or the obstacles to testing, which were just as important in the 1920s and 1930s as they are to contemporary policymakers. Thinking about this longer history of bTB not only allows us to place this volume in context, but also helps identify recurrent concerns that are important to understanding the post-1965 history of responses to bTB, eradication, and the problems of policymaking in the face of epizootic and zoonotic diseases.

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