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The Editor
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Dear Editor

We read your editorial in February “*Bovine TB: working towards a long-term solution*” and wonder why, if the ISG is an independent scientific group, they have already dismissed for presumably political reasons what must be one of the obvious options for TB control, namely the culling of badgers. Your editorial and the ISG’s politically controlled approach will have done little to comfort farmers and veterinarians contending **now** with the problem of bovine tuberculosis in the field, for many of them *long term* is already *full term*. Time is what they have not got.

Without doubt, the only significant reservoir of *Mycobacterium bovis* in the UK is the badger population. Extensive nationwide surveys published by one of us (AMcD) during the 1970’s and 80’s assisted by colleagues at the Institute for Research on Animal Diseases, Compton failed to isolate *M.bovis* from any other species of wild life, which included 797 **free living**, wild deer (Fallow, Red, Roe and Sika deer), 285 Brown hares and 5 hedgehogs (Matthews, McDiarmid and Collins 1980, Matthews and Sargent 1977, Matthews and McDiarmid 1977). Apart from those examined by culture, hundreds more of various species including grey squirrels, rabbits, rats, foxes, stoats and weasels were examined post mortem for signs of tuberculous disease with negative results.

More recent data from MAAF quoted in the Krebs report (1997) cites a small number of isolations of *M.bovis* made nationwide in each of 2 moles, 11 foxes, 1 mink, 5 rats, 19 deer and 1 ferret. It is likely that most of the isolates in deer were in farmed deer into which it is suspected infection was introduced from imported stock in the 1970’s. These infections in other species of wild life are, at present, trivial and irrelevant in comparison with the overwhelming burden of infection in the badger population, up to 28% infected in affected areas. And it is to be expected that infections will turn up in other species as the burden of infection rises in the environment but at the moment they are simply indicators of an increasing problem, they represent no epidemiological threat to other species at present and hopefully not in the future for various biological reasons. The danger of endemic tuberculosis in the badger population was highlighted by one of us (AMcD) at an international wildlife conference in Munich as long ago as 1975. MAAF cannot now afford to sit on their hands and be deflected by unsubstantiated “hares” from the so called pro badger lobby that there may be other animal reservoirs of infection.

The “compelling” circumstantial evidence (Krebs and others 1997) that badgers are the major, if not the only wildlife reservoir for bovine tuberculosis must be acted upon now in order to control the disease both in cattle, badgers and other in contact wild life such as free living deer. Already we believe that transmission has occurred to two different species of wild deer in the south west. To dismiss the culling of badgers as not being an

option for political reasons is an abdication of responsibility both to the farming community and the badger population. Simply on the grounds of probability the **controlled** culling of badgers (not elimination) represents the best chance of turning the situation around now. We suggest that all the esoteric questions of cattle to cattle transmission, problems of diagnosis and modes of transmission could become largely academic if the burden of infection in the badger population is reduced. Furthermore if vaccination is to become a realistic method of control in the future, that is supposing a vaccine can be found in 15-20 years time, its efficacy will be severely compromised with even the present burden of infection in cattle and badgers.

What is needed immediately is modification of the existing badger legislation to enable landowners and farmers or their nominees (and only them) to deal with their local problem by culling excessive numbers of badgers. Such a measure would ensure that the population of badgers remain at a reasonable level and numbers in setts are not allowed to build up causing fighting, upheaval in the groups with consequent migration to new areas and further spread of disease. A wildlife population will inevitably suffer, diseased or otherwise, if its numbers are allowed to run out of control, as is presently the case with the rapidly expanding badger population. This will bring the control and legislation relating to badgers in line with existing deer legislation, which since the early 60's has been so successful in giving the deer a fair deal and at the same time has been a vital factor in managing their numbers. TB in man has always been a disease of overcrowding, stressed conditions, poor housing and nutrition and the current status of the badger as a protected species is now rapidly creating exactly this situation for them.

Failure to act now will not only see the disease spreading in both cattle and badgers but progressive environmental contamination will see it establish in other domestic stock eg free range pigs or, as reported recently, in cats (Monies and others 2000) and produce further human cases of bovine tuberculosis particularly in the rural population. The long term holistic approach advocated by the ISG would be entirely reasonable if time could be made to stand still but this problem is out of hand now and will inevitably worsen in the years to come that the group and the government take to formulate their solution.

Yours faithfully

Lewis H.Thomas

Archie McDiarmid

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