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**BOVINE TB**

## **Bovine TB and badger culling**

WE are dismayed that this Government is issuing licences to cull badgers.

Defra's own Independent Scientific Group (Defra 2007) concludes its £50 million research project by stating 'careful

evaluation of our own and others' data indicates that badger culling can make no meaningful contribution to cattle TB control in Britain?

This massacre would cause untold suffering to badgers, and the 'perturbation effect' could cause TB outbreaks in surrounding areas (Defra 2007). Perturbation of other TB carrying species such as foxes, deer, rats, voles, mice and birds (Chambers 2009, Hardstaff and others 2012) could also further its spread.

Has a thorough disease risk analysis been carried out on shooting large numbers of potentially TB-infected animals in the same vicinity? Contamination of the land with TB bacteria would spread infection.

The BVA and BCVA have made statements supportive of the cull. We feel that this gives a misleading impression as to the views of the veterinary profession which, in general, respects wild animals and their right to live unabused by humans.

The genetics of resistance to TB in the dairy herd needs to be further elucidated. Breeding preferentially for milk yield via artificial insemination (AI) has undoubtedly had some adverse impacts on the genotype of the cow in other respects (Goldmann and others 1991, Juling and others 2006, Nicholson and others 2008, Nino-Soto and others 2008, Hinrichs and Thaller 2011, Stachowicz and others 2011), as natural selection is no longer operant. Infectious agents and their hosts co-evolve together such that a balance is formed between infection, immunity and survival, and this is demonstrably true for TB (Dorhoi and others 2011, Gagneux 2012). In badgers, this balance with TB has happened over millennia. Dairy cows stopped co-evolving with TB more than 50 years ago, due to AI. The only things dairy cows have co-evolved with are human will, industrial economic policy and money. The fact that any cattle showing detectable immunity to TB are summarily slaughtered further increases the immunological naivety of the herd.

It is a disgrace that the veterinary profession would even consider a cull of badgers, when vaccination hasn't been tried on any large scale. This, rather than slaughter, is the preferred method for the control of TB in humans. Perish the thought that the medical profession would choose to follow the same mediaeval control methods as the veterinary profession.

TB is often a disease of poverty, in people as well as animals, and many of our dairy cattle live in poverty equivalent to that of a workhouse during the industrial revolution. Most importantly, there is poverty in the lack of any normal relationships around breeding and calf rearing. The only long-term solution is a paradigm shift in favour of cattle welfare, small farmers and wildlife – not mega-dairies and money.

We the undersigned do not support a badger cull. The widespread shooting of a protected indigenous species like the badger would be brutal, misguided, foolish, disgraceful, expensive and potentially counterproductive.

We believe that a simultaneous vaccination programme, for both cattle and badgers, is the best solution to protect animal and human health.

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