

Badgers and bovine tuberculosis

The badger. T. J. Hayden, ed. Royal Irish Academy, Dublin, 1993, £ 15 (pbk), 211 pp. ISBN 1-874045-14-3. [Available from: Royal Irish Academy, 19 Dawson Street, Dublin, Ireland]

A wildlife source of bovine tuberculosis has been suggested as the obstacle to the late stages of cattle TB eradication programmes. These include badgers *Meles meles* in southwest England, and south but not northern Ireland, and possums *Trichosurus vulpecula* in New Zealand. Much controversy surrounds the extent of involvement of such wildlife sources, and the cost-effectiveness of badger or possum culling.

This very valuable new book represents a collection of papers presented at a seminar on badgers held in Dublin. Their scope is very broad, covering ecology, behaviour, territoriality, and sociality ... but most are in one way or another directed towards the bovine TB issue.

Whilst there is overwhelming evidence of a link between badgers being found with TB, after cattle herd breakdowns, rather surprisingly it is not certain whether these badgers are cause or effect: Accepted 'wisdom' is that TB transfer is one way, badger to cattle, even though it is unclear how badgers might give cattle a respiratory lung infection under field conditions. Tom Hayden's conclusions are hence refreshingly unbiased, since he notes that the badger contribution to cattle TB could be zero, there is a lack of even simple models of TB pathways, and little attention has been paid to a possible cattle to badger effect.

Several papers hint at a solution to these conundrums. It is noted that cattle TB is almost always a progressive disease, so that as any farmer knows, all cattle are potentially infectious both within and between herds, and they do produce TB slurry. TB in badgers based on early clinical diagnosis is dietary in origin, with swollen throat lymph nodes, aptly named 'scrofula'. Pigs are very prone to catching TB from cattle TB contaminated pasture, so why not badgers too? And TB dies out in pigs and badgers too when not topped up from cattle, as in former English midlands blackspots. Current badger 'modelling' by the Ministry of Agriculture, and Bristol and Oxford Universities seem to have overlooked this element, so are a poor basis for cattle TB management, as is currently being proposed by the RSPCA.

Proving a cattle TB badger spillover would be cheap, quick, and easy to do, and might be rather more constructive than long term difficult and speculative 'research' based on badger 'guilt'.

Martin HANCOX, 17 Nouncells Cross, Stroud, Gloucestershire, GL5 1PT, Great Britain.