

Culling vs Vaccinating badgers

According to WAGS own models¹ culling and vaccination are expected to be equally effective and rapid in reducing herd breakdowns. In the words of the WAG model:-

“Since culling also perturbs the badger population and produces an increase in herd breakdowns immediately outside the control area, culling and vaccination appear to be equally effective in reducing cattle herd breakdowns across the whole simulated grid.”

<u>Culling</u>	<u>Vaccination</u>
Evaluated in 2007 in the UK by the ISG and rejected as unable to “meaningfully contribute to the control of cattle TB in Britain”	Widely supported by many scientists, including leading researchers working in this field
Controversial, socially divisive and distressing	Broadly supported or tolerated by stakeholders
Cost: £4220 / km ² (WAG FOI request) ² WAG budget of £9 million for the proposed 2010 cull would imply a total figure of £6250 per km ² per year	Cost: £2900 / km ² year one, £1600 / km ² thereafter (DEFRA Report ³)
Minimum 5 years duration. Therefore starting culling now commits us to continued culling.	Long duration beneficial but not required, so vaccinating now commits us to nothing.
Large area required (>200km ²)	Large area beneficial but not required
'Hard' boundaries required, so IAPA trial of limited utility to rest of Wales	No boundary requirements, so vaccination is potentially useful for all TB hotspots
Must be carried out swiftly and simultaneously, respecting the closed season	Can be carried out over the year, no closed season
Inefficient delivery would lead to perturbation and TB increase . Given the length of time taken by the Sett survey this is a real concern.	No need to vaccinate in a short period or simultaneously over large areas, so will be beneficial whatever the delivery strategy.
Significantly increases TB prevalence in badgers	Significantly reduces TB prevalence in badgers
'Perturbation' spreads TB. Of particular concern to farmers whose land has been TB free for decades and who do not wish to see their healthy badgers culled and replaced by infected ones.	No perturbation effect, so will not cause any further breakdowns.
Significant policing cost, potentially impossible to police effectively.	Policing costs likely to be minimal
Benefits likely to be short lived (Jenkins et al ⁴)	Benefits likely to endure many decades (WAG spatial strategies model ⁵)

1 <http://wales.gov.uk/docs/drah/research/090916annex6en.pdf>

2 <http://wales.gov.uk/publications/accessinfo/disclosurelogs/premay10disclosures/dl2300/disclog2346a/?lang=en>
(excludes some costs)

3 http://www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/documents/vaccine_badger.pdf Annex 4

4 <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0009090>

5 <http://wales.gov.uk/docs/drah/research/090916annex5en.pdf> page 18