



BRITISH VETERINARY ASSOCIATION

Response to the Defra consultation - Controlling the spread of *bovine Tuberculosis* in cattle in high incidence areas in England - Badger Culling

10th March 2006

INTRODUCTION:

1. The British Veterinary Association (BVA) is the national representative body for the veterinary profession in the United Kingdom and represents over 10,000 members. Our chief interest is to protect and promote the interests of the veterinary profession in this country and we therefore take a keen interest in all issues affecting the veterinary profession, be they animal health, animal welfare, public health or employment concerns.

2. The BVA welcomes the opportunity to respond to the consultation on controlling the spread of bovine Tuberculosis in cattle in high incidence areas in England. We have consulted with our specialist divisions to formulate the response below, which includes submissions from the British Cattle Veterinary Association (BCVA), the British Veterinary Zoological Society (BVZS), the Society of Practising Veterinary Surgeons (SPVS), the Scottish Branch, the Veterinary Policy group, and individual members.

3. BVA has objectively assessed the current control options outlined in the Defra consultation paper from a veterinary perspective, and has outlined why the profession believes there is a need for badger controls to control this disease in parallel with increased cattle controls to achieve a healthy population of cattle and badgers. We would like to note two important points which affect the response we are able to give at this point in time.
 1. We do not have the full results of the Randomised Badger Culling Trials (RBCT). Limited data has been made available on the trials therefore we are not able to comment fully on the implications of the results.

 2. We cannot comment fully on the cost/benefit analysis as we do not believe that enough up-to-date information on the different methods of control has been provided, including options for a Government co-ordinated cull in partnership with landowners.

4. There is a real need to control the spread of bTB in cattle as the current cattle controls are not working. There is a number of reasons for this and it is recognised that there is a need to tighten the current cattle controls and increase surveillance in the cattle population. These will not be covered in detail in this response however (the BVA's and BCVA's full policy for the control of bTB in the UK can be found on our website (www.bva.co.uk)). The scientific community (including the ISG) agrees that badgers play a significant role in the spread of *bTB* in cattle, which is supported by the initial results of the Randomised Badger Culling Trial (RBCT). The next step is to decide how to deal with this disease reservoir in the most humane and effective manner. It is important to stress that badger controls are just part of the measures needed to control this disease and will not work in isolation. We need to ensure that controls in cattle are stepped up at the same time to provide a holistic approach to disease control. The general public supports the need to control this infectious disease in cattle (92% in a recent survey¹).

Response to the specific Defra consultation questions

Question 1. In light of the evidence presented as part of this consultation, on balance, do you think a policy to cull badgers should be part of the approach to help control the disease in cattle in high incidence areas?

5. Yes. Comments to support this view are provided below.
6. **Badgers play a significant role in the transmission of *bTB* to cattle**

There is sufficient and robust scientific evidence to conclude that the presence of *M. bovis* in the badger population is presenting a wildlife reservoir of infection that inevitably increases the risk of cross infection to other susceptible species, particularly cattle^{2, 3, 4, 5}, which is supported by the initial results of the RBCT⁶. Results from the RBCT showed badger infection levels to be as high as 40%. Concerted efforts must be made to control the disease in the two major species; cattle and badgers. In order to reduce the incidence of *bTB* in cattle we need to increase cattle controls, particularly to reduce the risk of transmission posed by cattle movements from one herd to another, which are known to be a significant factor in the spread of disease⁷. We also need to control the disease in badgers by either decreasing the number of infected badgers in areas where cattle are kept, or by finding ways to separate cattle from badgers and their excretions.

7. **The need for a holistic approach to disease control**

Control measures in cattle must be accompanied by simultaneous and appropriate measures in wildlife. BVA supports a targeted humane culling policy aimed at eradicating *bTB* where sufficient evidence exists to classify a badger population as infected. It is in the interests of public and animal health that the spread of *bTB* to cattle from infected badgers be contained. The current controls which attempt to control the disease in cattle only, are not working and are not sufficient. The Wilsmore review concluded that international evidence clearly showed *bovine tuberculosis* in cattle cannot be eradicated by cattle controls alone when there is a secondary reservoir of infection from wildlife⁸.

8. **The culling of badgers is the most viable control option we have**

It is recommended that a long-term strategy for control should include both culling and vaccination, when and if the latter becomes available, which is expected to be at least 10 years away. It is conceivable that vaccination of badgers may eventually supersede the need for badger culling, but that remains no more than a possibility at present. We know that badger culling can reduce the incidence of bTB in cattle from past experience (see para.10). In a situation where the control of an animal-based disease is critical, yet absolute science is absent, the application of first principles of disease control by the veterinary profession is essential i.e. wherever the disease is identified it should be removed to reduce the possibility of further infection. The eradication of Rinderpest at the turn of the 1900s and the identification and implementation of control measures for BSE in the 1990s were both undertaken with success by the application of such principles without a pre-emptive diagnostic test and without a clear understanding of the pathogenesis and epidemiology of the disease.

9. It is recognised that improved on-farm biosecurity has an important role to play in the control of bTB, however the current measures available are not all practical or cost-effective for farmers and they will not work in isolation of other controls. As badgers and cattle share the same habitat, it is difficult to completely separate the two. However it is possible to reduce the level of infection in both reservoirs and the number of contacts between the two through farm husbandry. Much work still needs to be done to continue to develop practical and cost-effective biosecurity techniques for use on-farm. Defra need to carry out a cost/benefit analysis study on a sample of farms to show what can be done and at what cost, so that a realistic value and design plan can be produced

10. **Badger culling as a method of control**

A number of trials suggests positive benefits from the removal of badgers in infected areas on the incidence of *bTB* in cattle including the Thornbury Trial, the Steeple Leeze Trial, the Hartland Trial, the Offaly Trial and the Irish Four Areas Trial^{4,5,9, 10}. There has been some criticism of these trials based on deviations from standard scientific protocols, however these are examples of practical control policies that reduced the incidence of *bTB* in cattle considerably, in parallel with cattle controls. We have now developed more humane culling methods, and should build on the knowledge so acquired.

11. The Irish 'Four Areas' Badger Culling Trial (FABCT) is considered to provide the strongest evidence that badgers play a role in *bTB* in cattle⁵ and supports the need for a consistent cull over a specified area. Although many have reservations about the statistical design and analysis of the FABCT, in the opinion of the Chief Scientific Advisor, the trial still provides strong evidence of a lower incidence of *bTB* in removal compared to reference areas. In removal sites badgers were intensively culled, in the reference sites, low level 'reactive' culling occurred. The difference between the two sites is not thought to be due to social perturbation, as the incidence of *bTB* did not increase in the reference areas over the study period. However, the incidence of *bTB* in the removal areas decreased significantly. The trial areas were also well isolated from surrounding cattle and badger populations by geographical features, which may reduce the edge effects.

12. The level of landowner co-operation was also extremely high. Although there are significant differences between the UK and Ireland in terms of badger densities, *bTB* prevalence, stocking density, herd testing regimes and cattle movements for example, there are also significant correlations which need to be analysed in more detail. It has been noted that edge effects were not seen in the Thornbury or East Offaly trials¹⁰ which is thought to be due to the fact that they were geographically isolated with boundaries relatively impermeable to badgers. This demonstrates that badger impermeable boundaries are effective in preventing the edge effect and should be used whenever possible.

Analysis of the initial results from the RBCT – what conclusions can we draw?

13. Initial data from the RBCT shows that badger culling can reduce the incidence of *bTB* in cattle⁶. It also shows that it can increase the incidence of *bTB* in cattle in neighbouring control areas, known as the 'edge effect'. The latter effect has been attributed to social perturbation¹¹, where culling disrupts the social patterns of the badgers in the area,

leading to an increase in movement and therefore transmission of the disease. The initial results of the RBCT failed to confirm that the increased incidence at the 'edges' were a direct result of increased badger perturbation, but it is thought to be the most likely hypothesis. Although these results are important we should not over-conclude them and should remember that the results only apply to the conditions set within the trial.

14. The no-net-benefit results in the proactive culled areas could have been due to a number of factors, including variations in compliance, coverage and culling success within the trial areas. The culling rate was estimated to have varied from 80% to as low as 20%, giving rise to different levels of social perturbation throughout the culled areas, as well as at the edges. The initial results of the trial also do not tell us what level of clearance would be necessary to achieve a population free of *bTB*, or what level of population decrease is necessary to result in minimal transmission of *bTB* to cattle.
15. We can conclude from the RBCT that culling will not be successful, or justified, if compliance and coverage is patchy. However it is important to note that even with social perturbation occurring throughout the proactive areas, a 19% decrease of *bTB* incidences in cattle was still achieved. The overall impact on the total area influenced by the culling is close to zero when roughly 100 km² is culled (according to John Bourne in a letter sent to Ben Bradshaw on the 7th October 2005). In order for a culling policy to be successful the area would have to be sufficiently large to outweigh edge effects, and culling across the area would have to be intensive. It is estimated that an area of 300 km² would have to be covered to achieve a 25% reduction in the incidence of *bTB* among cattle. It would also be necessary to ensure that edge effects did not occur within the culling areas.
16. The results from the proactive areas of the RBCT do support the perturbation effect but they do not inform the policy maker about what would happen to badger movements if one increased the efficiency of culling. From the initial results of the RBCT it would suggest that each time the population is reduced further the positive effects of culling on cattle incidence increase, and the negative effects (social perturbation) decrease. In a letter to the Minister Ben Bradshaw, dated 29th November John Bourne noted that analysis of the initial results of the RBCT did suggest that the effect of culling in reducing breakdowns within trial areas increased, amounting to an estimated 5.2% greater reduction in TB incidence for each year since the initial cull, (95% CI: 16.1% greater to 7% less, $p=0.39$ for confirmed TB breakdowns in whole trial areas based on VETNET

location data). By contrast, the analysis also showed that the effect of culling in increasing breakdowns in the neighbouring areas declined by an estimated 3.7% for each year since the initial cull, (95% CI: 17.3% smaller to 12.1% greater, $p=0.63$ for confirmed TB breakdowns in whole trial areas based on VETNET location data). Therefore it could be suggested that if repeated culling continued the negative effects on bTB incidence in cattle would decrease and the positive effects would increase significantly.

The badger population in the UK – is it sustainable?

17. Badgers are a protected species and the BVA supports the continued protection of the badger from those elements of society that might wish harm on the species in the name of sport or recreation. However, badgers are not an endangered species and in the right conditions will breed prolifically. The current population is estimated to be around 450,000 and there is no immediate risk to the overall numbers of badgers should culling in particular problem areas of high *bTB* incidence be an integral part of any control policy.
18. *bTB* in badgers is a complex disease and bTB incidence has not been found to correlate directly to the density of the population. The level of disease in cattle does not correlate with the size of the badger population, nor with the incidence of *bTB* in badgers¹². A correlation has been found however between the number of badger movements, and therefore contacts with cattle, and *bTB* incidence in cattle. This correlation is only prevalent however, when the badgers in contact with cattle are infected. Therefore it is dependent on the number of infected badgers within a population. A culling policy should therefore aim to reduce the level of infection in a population to a sustainable level, and should take into account wherever possible, ecological knowledge of the badger population in an area.
19. There is still a shortage of truly accurate information on the level of infection in the badger population across the UK. The BVA would urge Government to consider a census of badger numbers as a matter of urgency and further work to develop diagnostics and determine the incidence of *bTB* in badgers across the UK. Government should also seriously consider carrying out work to find the sustainable population size for badgers in terms of managing *bTB*. Badgers are prevalent across Europe and yet *bTB* in badgers in most Member States does not spill over to the cattle population. Population management

for badgers should therefore be an important consideration for the future.

Question 2. Comments are invited on the options considered and the costs and assumptions made in the Partial Regulatory Impact Assessment.

20. Option 2 from the RIA, a state controlled cull, is the only viable option but it needs to be in partnership with landowners. The BVA does not have sufficient expertise to comment on the cost/benefit analysis completed for the consultation. However we would like to express disappointment that Defra has not presented all of the relevant costings for the possibility of a Government co-ordinated operation in partnership with landowners.

Consultation options for a badger culling policy

21. We see no real distinction between options 2 and 3 in the consultation document (General cull or a targeted cull), as in high-incidence areas most farms, or adjoining land, are affected in some way and therefore would be included in any targeted culling activities. Culling over specific areas linked to herd incidence is considered to be the most viable option, using snares and then shooting of restrained badgers, at least at the outset. It is difficult to comment fully on the size of an area that would be needed to achieve the control of this disease. BVA believe that this issue should be discussed in more detail with stakeholders once an assessment of the scale of the problem in badgers in high incidence areas has been made. Further discussions should take into account the results of the RBCT and should build on the experiences of previous culling trials.
22. Gassing is the preferred option should current research confirm its suitability in the near-future (see para 38 below). Culling needs to be efficient and consistent over the entire area if it is to be effective. Government co-ordination is essential. It is also essential to ensure that culling is carried out in a co-ordinated and humane manner. We believe that groups of landowners could apply for licenses to cull badgers within a defined geographical area, but we do not believe that land-owners will be capable of coordinating such a task across large areas without assistance from the state. We also do not believe that land-owners will have the necessary expertise to carry out the task without training from the state, from wildlife management experts and ecologists.
23. Any policy must be accompanied by surveillance and research and the policy amended in light of the results of such activities. It will also be important to have an exit strategy set to define under what circumstances badger culling would cease.

24. Individual licensing to allow shooting of free-running animals is not considered to be a viable option for control in high incidence areas as it would not guarantee a high enough level of coverage, and would therefore make the situation worse (due to perturbation). This option must however be kept as a tool for control along with the use of snares and then shooting of restrained badgers, but only for those competent to shoot badgers humanely from a distance (which should be restricted to those with the expertise).

A partnership approach is vital

25. A partnership approach is vital to the success of the scheme as stated in Defra's Animal Health and Welfare Strategy. Current Government policy – specifically, the lack of surveillance, insufficient cattle or badger controls - is considered to be a contributing factor to the spread of *bTB* and Government should therefore stand shoulder to shoulder with the industry and accept its responsibility for the statutory control of this disease. Disease surveillance and control are legal obligations at the European level and are placed on Government, not on the individual land-owner.

Stakeholder involvement

26. Stakeholder involvement is vital to the success of a culling policy, and culling should not be considered unless sufficient coverage can be obtained. There is concern that not all of the farms in high incidence areas involve cattle, as there are many other farming enterprises, and it may be difficult to get agreement to cull badgers. Considerable land is owned by non-farmers and some farming land is rented by tenant farmers. Some farmers and landowners may also not want to sign up to a badger cull on their land. It is estimated that farmers own only 20% of the land in Britain and large landowners own about 30%, of which a proportion will be tenant farmed. The issue of security also needs to be addressed for all those involved in a badger culling policy.
27. The BVA believes that there is a need to ensure farmers and landowners are informed of the scientific facts surrounding *bTB* in cattle and badgers and that any new policy is clearly understood by all landowners. It is only in such an environment that they can make informed and objective decisions. The BVA would also recommend that Defra co-ordinate a series of stakeholder meetings in high-incidence areas to inform the stakeholders and subsequently assess the level of support for such a scheme.

Individual Licensing to cull badgers to help control *bovine* TB

Question 3. Under what circumstances should the Government grant licences to cull badgers for the purpose of preventing the spread of *bovine TB* under the Protection of Badgers Act 1992?

28. Licensing of landowners to participate in a Government co-ordinated cull over an area using snaring, followed by shooting of restrained badgers is the most viable option in the first instance. The veterinary profession does not support individual licensing to shoot free-running badgers across culling areas as it would not provide adequate coverage for an effective cull, and would be impossible to administer. It is considered to be a less humane method of culling than other options available¹³.
29. However, it has been suggested that individual licensing for shooting (in a Government co-ordinated cull) should be kept as an option for control under certain circumstances as the final policy will probably require a mixture of tools depending on the regional prevalence of disease.
30. The BVA believes that Government co-ordination would be necessary to carry out such actions, if it were deemed necessary, and Government should ensure all personnel involved are trained and have proven their competence.

Regional approach

31. Although Government should co-ordinate any badger culling policy at the national level they should also take full advantage of knowledge and skills at the regional level. In the FMD outbreak, there were many problems caused by standardising central decision making when local assets e.g. local ministry vets, local farmers and local private practitioners were much better placed to assess the local situation. For this reason, we would suggest that any badger culling policy should involve all relevant stakeholders on the ground to make sure that local knowledge is utilised.

Question 4. What qualifying geographic criteria would be appropriate, achievable and reasonably likely to be an effective disease control measure?

32. BVA does not have sufficient expertise to comment on the types of geographical criteria. We believe that evidence does support the use of geographical boundaries where possible, but it is not possible to rely on this technique across the board as there simply are not enough geographical barriers (of the magnitude necessary to prevent badger movements).

General Cull

Question 5. How could farmers ensure sufficient coverage to deliver a sustained cull over a large area?

33. The BVA does not believe that it will be possible for individual farmers to ensure sufficient coverage to deliver a sustained cull over a large area, for the reasons stated above. Government needs to be involved to co-ordinate the control policy, and to ensure that the necessary areas are covered, in partnership with farmers.

Targeted Cull

Question 6. What qualifying disease history would be appropriate?

34. There has been some debate on testing badgers before culling but it is generally accepted that this is not practical as a test with high enough sensitivity and specificity does not yet exist. We must proceed therefore in the absence of such a test. BVA would suggest that regional groups be set up, through the co-ordination of Regional Animal Health Offices and the Divisional Veterinary Manager, to assess the evidence within an area to support a cull. A number of criteria could be used to help in deciding if culling should be carried out including: a high prevalence of disease in the cattle population sustained over a number of years, known breakdowns in closed herds and evidence of infection within the badger population. We would also suggest testing of the culled population to show whether the predicted infection was or was not present.

Question 7. What could be included in the criteria to define those farmers eligible for a licence to cull badgers?

35. This question is ambiguous. Farmers or other landowners eligible for a licence to take part in a co-ordinated culling policy would need to be suitably trained to carry out the culling method used. There should also be incentives to improve on farm biosecurity¹⁴. It should have been agreed by the local DVM that badgers were considered to be a significant factor in the transmission of bTB to cattle on their farm. Licences should be time-limited to ensure that culling was carried out at the same time across an area. They should also have no history of offences with regards to badgers, which would suggest that they were not capable of carrying out a cull humanely. Defra still have staff with experience in badger work, including culling and Defra should retain this expertise for training purposes.

Targeted Cull

Question 8. Would it be practical for primary herd owners to recruit neighbours and

adjoining landowners to achieve, say, 75% coverage within 1km of the boundaries of their holding? If not, what might be achievable and reasonable?

36. No. The BVA would stress that Government co-ordination must be involved and that Government will need to communicate the costs/benefits of culling to all landowners.

Question 9. Over what size of area could self co-ordinated groups of farmers and landowners be expected to manage a cull consistently and efficiently for up to 5 years, with a high degree of coverage?

37. It is more appropriate for representative bodies of the farming industry and other landowners to respond to this question. We do believe however that a cull should be Government co-ordinated and that contingency plans should be put in place to account for changes in ownership. Factors other than the size of the area should also be taken into account, such as the shape of an area, the types of animals farmed and any geographical boundaries for example.

Question 10. Are there other methods of culling which should be considered?

38. Having read the review of effectiveness, environmental impact, humaneness and feasibility of lethal methods for badger control¹³, the BVA is not aware of any other appropriate control measures. We would however urge Government to increase research and efforts into producing a viable method for using CO gas to cull badgers for the reasons stated below in paragraphs 37-41.

Methods of Culling

39. We consider body snares and then shooting of restrained badgers to be the most viable short-term options for culling in terms of welfare and feasibility, as they are well established wildlife management methods. However gassing is the preferred method of control and it should be thoroughly assessed as it has the potential to be the most humane, time and human resource efficient and cost-effective – provided that the problems of diffusion in blind tunnels within a sett can be addressed.

Gassing

Question 11. Is gassing appropriate for use under licence by groups of farmers, landowners and their agents?

40. If gassing were considered to be a viable option, it would be appropriate to licence groups of farmers, land-owners and their agents to use gassing to cull badgers, as long as:

It was co-ordinated by Defra,

The farmers were suitably trained to carry out the task; and

Wildlife experts were involved in an advisory capacity.

41. Viability: According to the report on lethal methods for badger control¹³, out of all the fumigants considered, carbon monoxide (CO) is considered to raise the least issues regarding humaneness and feasibility. CO has been used to euthanase animals for many years and if used at the right concentrations animals become unconscious before showing signs of distress. However at sub-lethal concentrations CO can have adverse effects such as brain damage and neonates are also known to have a greater capacity to tolerate exposure to CO. Therefore a closed season is recommended.
42. There are concerns that the right concentration may not be sustained throughout the sett and according to the report fumigants cannot be reliably expected to kill all the animals in a complex burrow system due to the difficulty of gases spreading through complex tunnel systems containing blind-ends. Therefore further research needs to be carried out to determine how to sustain the concentration. The Central Science Laboratory concluded that any proposed use of CO for the fumigation of mammals should seek to ensure exposure to concentration greater than 1% and to gradually increase concentrations to prevent the onset of adverse reactions.
43. There is some evidence to suggest that a diffusion model may work and Defra is

currently carrying out research to determine how to achieve a 1% concentration throughout a sett, however results are not expected until 2007 at the earliest. We would urge Defra to put more resources into work on the use of fumigants, due to the significant advantages this technique would have over the other control options currently available, in terms of humaneness, feasibility, cost, and efficiency.

44. It has also been noted that CO is not registered as an approved vertebrate control agent in the UK and that approval will require at least a year to obtain. However the advantages of this method over the other methods are felt to outweigh the costs in the longer-term, therefore this is the preferred option from a veterinary perspective.

Question 12. Would there be a need for training of licensees? If so, what form should this take?

45. Yes. It would be essential for those carrying out gassing to be suitably trained, with standard operating procedures. Training should involve Government veterinarians, or LVIs, and wildlife experts.

Shooting of free running badgers (under licence)

Question 13. How could this training be best provided?

46. The BVA does not have sufficient expertise to comment. Gamekeepers and stalkers may have the necessary expertise to advise on this issue.

Question 14. Would permitting the shooting of free running badgers (under licence) be practical and acceptable?

47. Not for a general cull. This should be considered as a supporting method only as few landowners have an appropriate firearms certificate and it is not viable as a stand-alone control policy i.e. it would be suitable for use on single badgers found in close contact with cattle. Anyone licensed to shoot should be trained and be able to demonstrate competence.

Snaring

Question 15. What features should be included in the design and use of the body snare? Are there particular features which should be avoided or included?

48. It is felt that objective information is necessary from those who have experience with these control methods. However, from the limited information available in the report on lethal methods for badger control it appears that, when correctly set for badgers by

personnel competent to do the work, and if frequently checked, both free-running body and padded foot snares are considered to be humane and cause few injuries. Shooting restrained badgers could also be carried out using firearms and ammunition that comply with the Protection of Badgers Act (1992). Clearly there are potential welfare concerns with the use of snares if they are not used in the appropriate way. The humaneness of snares used to restrain badgers will need to be assessed as required by the Agreement on International Humane trapping Standards, as incorporated into the draft EU Humane Trapping Standards Directive (COM (2004) 532) and it is not clear how long this would take to achieve, which may be a consideration when choosing a control method.

Question 16. What inspection intervals for checking snares would meet welfare considerations and be practical?

49. It is accepted that objective information is necessary from those who have experience with these control methods. However from the report, we believe that the Code of Good Practice for the use of fox and rabbit snares, drawn up by the Independent Working group on Snares (2005) should be followed and is reasonable i.e. animals should be dealt with as soon as possible after they are caught. During winter, snares must be inspected as soon after sunrise as is practicable, and should again be inspected near dusk. In summer snares must be inspected before 9 a.m., and a further inspection should be conducted before evening. These recommendations should be the minimal requirements for the inspection periods permitted when cage trapping or snaring badgers.

Question 17. What skills and competencies for culling are required to ensure body snares are safely and effectively deployed?

50. It is felt that objective information is necessary from those who have experience with these control methods. Anyone authorised to carry out culling of badgers using snares and shooting of restrained badgers should be suitably trained to place the snares in the most effective places, where they will not be a danger to other wildlife, and to ensure that they are set correctly. They should also be trained and competent with the appropriate firearms. Wildlife experts and Government veterinarians should also be involved.

Question 18. Is there a need for training for farmers or licensees? If so, what form should this take?

51. Yes. It would be essential for those carrying out gassing to be suitably trained, with standard operating procedures. Training should involve Government veterinarians, or

LVI, and wildlife experts.

Question 19. How could this training be best provided?

52. The advice of experts in this area should be sought and followed.

Disposal of carcasses

Question 20. What methods of disposal would be suitable to minimise risk of disease transmission, assist in monitoring a cull of badgers and be practical?

53. A state funded collection service is considered to be the only viable option, to allow efficient recording of culls, and to allow surveillance of badger carcasses. It will not be a huge tax burden, and incineration should be the normal route of disposal for waste classified as 'infectious' as set out in the Hazardous Waste Regulations.

Monitoring

Question 21. Do the proposals for monitoring the impact on wildlife (paras 93 - 95) look at the right issues? If not, what else do you think should be monitored?

54. It would be a mistake not to monitor disease incidence in badgers. We appreciate that the position is by no means straightforward, but would suggest that surveillance across the UK is still needed, even if at a limited level within each area culled. Simply not to make any effort at monitoring disease in badgers will be a misguided attempt to save a relatively small amount of funds.

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