6. Breeding

Introduction

6.1 Uncertainty as to whether BSE could be transmitted from cow to calf during pregnancy or birthing (‘maternal transmission’ or ‘vertical transmission’) made it difficult for MAFF to formulate a breeding policy in relation to BSE. Despite being quick to implement maternal transmission studies and experiments (see vol. 2: Science and vol. 11: Scientists after Southwood) MAFF still needed to consider whether it should implement restrictive breeding policies before the results of the experiments became available.

6.2 A major factor that influenced action in this area was that should BSE prove to be maternally transmissible, this alone would not be sufficient to maintain the epidemic. For BSE to become endemic, each infected cow would need, on average, to be replaced by one infected offspring. However, of all calves born, only one in five was kept for breeding purposes. Further, it was calculated that on average a cow with BSE would produce 2.5 calves within its lifetime, whereas a healthy cow would produce more. Thus, less than one offspring per BSE cow would be retained for breeding. This meant that even if each offspring of a BSE-affected cow became infected, BSE would still be self-limiting if maternal transmission was the only means of transmission.2191

6.3 MAFF officials treated the likelihood of maternal transmission occurring as a real possibility. Ministers asked for advice on what measures should be adopted in anticipation of the experiment results. They were advised that a first step should be an improvement in movement and breeding records that farmers were required to hold for each animal they owned. These recommendations were approved and resulted in legislative changes, which are described in Chapter 5 on cattle-tracking.

6.4 This chapter examines MAFF’s deliberations on how the offspring of BSE-affected cattle should be treated. It describes the policy options considered by MAFF, and the conflict between Mr Meldrum’s views and the advice of the Spongiform Encephalopathy Advisory Committee (SEAC), which prevailed. We also discuss the parallel issue of the use of semen from BSE-affected bulls for artificial insemination purposes and the formulation of MAFF’s policy that restricted the use of semen from such animals. Transmission, or the lack thereof, of BSE by embryo transfer was also of interest to MAFF officials. We look briefly at this aspect to conclude this chapter.

6.5 See vol. 12: Livestock Farming for descriptions of the breeding industries and breeding techniques covered in this chapter.

2191 YB90/2.19/2.10; YB90/7.12/2.6
Early consideration of cattle breeding and BSE

6.6 As part of its efforts to learn more about BSE, MAFF was concerned to determine the routes by which it might be transmitted. A number of different experiments were planned to test whether BSE could be transmitted maternally. These included (see vol. 2: *Science* for discussion of the experiments):

i. analysis of pedigree data;
ii. long-term cohort study;
iii. embryo transfer study; and
iv. infectivity of placenta, intestine and milk.

6.7 However, as MAFF informed various breeding industry representatives during a meeting on 13 July 1987, ‘research is being undertaken into the transmissibility of the condition although because of the nature of the problem it is unlikely that any results would be available in the short term’. Indeed, results were not anticipated for several years. In the meantime, however, MAFF was under pressure to provide advice to veterinarians and farmers on breeding in light of BSE.

MAFF’s advice to veterinary surgeons

6.8 On 14 April 1988, during a Minister’s meeting on BSE, it was agreed that BSE should continue to be handled in a low profile manner. It was decided that a short article should appear in the *Veterinary Record*. In his written answer to a Parliamentary Question on 28 April 1988, Mr Donald Thompson, the Parliamentary Secretary (Commons), stated that farmers and veterinarians were receiving advice, based on the current state of knowledge about the disease, via Veterinary Investigation Centres (VICs). He said that the latest advice would appear in that week’s *Veterinary Record*.

6.9 A short article entitled ‘Ministry sets up BSE study and issues advice’ appeared in the *Veterinary Record* on 30 April 1988, announcing the establishment of the Southwood Working Party (see vol. 4: *The Southwood Working Party, 1988–89*), and setting out MAFF advice on BSE. On breeding, it advised:

In the light of experiences with possibly similar diseases in other animals and in the present state of knowledge on BSE it is recommended that the progeny of affected cows should not be retained for breeding purposes.

6.10 The status of this advice is not clear. Its appearance in the *Veterinary Record* suggests that MAFF intended it to be advice to veterinary practitioners, rather than advice to farmers. However, there was no reference to the advice when MAFF officials contemplated issuing similar advice to farmers in 1990. The practical impact of this advice is similarly unclear. During oral evidence, some farmers said that despite being aware of the *Veterinary Record* advice, they continued to breed...
from the offspring of affected cows, with no subsequent problems in their progeny. Other farmers said they were not aware of the advice.\textsuperscript{2196} However, in a memorandum submitted to the Agriculture Select Committee in June 1990, the British Veterinary Association (BVA) stated that ‘we have no doubt that many prudent livestock farmers have avoided breeding from the infected lines – this is the advice they have been given by their veterinary surgeons’.\textsuperscript{2197}

**The Southwood Working Party consider maternal transmission**


> No allowance has been made either for new infections arising from maternal transmission: insufficient time has elapsed to determine whether maternal transmission occurs in BSE and if so at what incidence. Given the age distribution of the BSE cases at the onset of clinical signs and therefore the number of offspring which survive the minimum incubation period, the occurrence of maternal transmission, should it occur, is unlikely to be witnessed until 1990.

> Though maternal transmission would increase the number of cases on its own it would probably be insufficient to sustain BSE in the national cattle population because it is likely that the number of offspring per case which will reach a susceptible age and produce their own offspring will be less than one.\textsuperscript{2198}

6.12 Although the Working Party urged that all necessary resources be made available to allow the successful completion of maternal transmission studies already underway, it did not make any recommendation on breeding from the progeny of BSE-affected animals.\textsuperscript{2199}

**The Tyrrell Consultative Committee’s recommendation**

6.13 The Tyrrell Consultative Committee on Research was established to advise MAFF and the Department of Health (DH) on needs and priorities in research on transmissible spongiform encephalopathies (see vol. 11: *Scientists after Southwood* for a full account of its work). It presented an Interim Report to MAFF and DH in June 1989, which was published in February 1990.

6.14 In its report, the Committee noted that ‘knowledge about whether or not maternal transmission can take place is essential for the agricultural industry and for users of its products, such as the manufacturers of biological pharmaceuticals’. It therefore gave a formal controlled study on possible vertical transmission the highest research priority.\textsuperscript{2200}
MAFF considers issuing advice to farmers

British Veterinary Association (BVA) seeks guidance from MAFF

6.15 During a BVA Council meeting on 19 July 1989, Mr Francis Anthony, Chairman of the Farm Animals Committee, spoke about his earlier meeting on BSE with Mr Meldrum. On maternal transmission and breeding, a report of the Council meeting, which appeared in the Veterinary Record, noted that:

[Mr Anthony] was also very concerned about what advice should be given to practitioners on dealing with the offspring of BSE cases. If scrapie was an accurate model of the new disease then it could be vertically transmitted and he was desperately concerned that nothing was being done to monitor the offspring. He had been assured that the records of cases were held on computer but he was not convinced that this would help the practitioner when asked what to do with an affected animal’s progeny.\(^{2201}\)

6.16 On 24 August 1989 Mr Meldrum minuted Mr David Kyle, Assistant Chief Veterinary Officer with responsibility for notifiable diseases, to draw his attention to the BVA Council meeting. Mr Meldrum suggested that MAFF might consider ‘advising owners and their veterinary surgeons concerning the fate of offspring of confirmed cases of BSE’. He asked that Mr Kyle keep his suggestion in mind and ‘discuss with me when we can see the way forward’.\(^{2202}\) In a statement to the Inquiry, Mr Meldrum explained that:

This was an issue that had been under informal discussion within the AHVG for some time because we knew that maternal transmission occurred in scrapie and the possibility existed that it could also occur with BSE.\(^{2203}\)

6.17 Mr Kyle returned to the issue on 30 January 1990 by way of a written comment on Mr Meldrum’s original minute, asking whether Mr Meldrum wished to ‘re-open this matter now’.\(^{2204}\) Five days earlier, the BVA had issued a press release publicising their advice on various BSE issues. On breeding, it advised:

[W]hile there is at present no evidence of vertical transmission (research is continuing) it would be prudent for farmers not to breed from calves from confirmed BSE parents and to be punctilious in keeping movement records.\(^{2205}\)

6.18 Mr Meldrum, by a manuscript note dated 2 February 1990, informed Mr Kyle that he had asked Mr Kevin Taylor, Veterinary Head of Notifiable Disease Section, to provide a paper on ‘maternal transmission and the various options’. Mr Meldrum suggested to Mr Kyle that ‘we need to have a plan that we can implement if and when more results become available’.\(^{2206}\)
On 6 February 1990 Mr John Gummer, Minister of Agriculture, met Mr Derek Andrews, Mr Meldrum, Mrs Elizabeth Attridge, Mr Alastair Cruickshank, Mr Charles Capstick and other MAFF officials to discuss BSE. Mr Meldrum advised that there was a ‘three to one chance in favour’ of maternal transmission being proved. This prompted Mr Gummer to suggest that MAFF should not wait for proof, and ‘should identify what measures we would wish to take once proof was established, and adopt them now’. Mr Meldrum said that there were a number of policy options to be explored. Mr Gummer therefore asked for a paper to be prepared setting out the options, with accompanying recommendations.

Preparation of advice for Ministers

On 8 February 1990 Mr Meldrum provided Mr Taylor with ‘some thoughts’ for inclusion in the paper being prepared. He noted that if MAFF was to alter its policy on the offspring of BSE-affected cattle, a clear objective was needed:

If the option of slaughter is for purposes of consumer protection or confidence it is not tenable since the offal ban is designed for this purpose and to remove any residual human health hazard. Thus any offspring that may be infected are no more nor less a risk than those that may have been exposed through feeding of meat and bone meal. Indeed any risk must be the same. To remove the offspring in this way would be an over-reaction to the present scientific evidence related to any remote risk to man.

If the objective is for animal health purposes it is illogical to remove healthy offspring when it is not known as to whether they have been exposed and whether they could transmit the agent to their offspring. Such animals may prove to be lower risk than animals fed contaminated meat and bone meal as calves. It follows that to remove offspring of affected animals whilst we are unable to identify those cattle infected through meat and bone meal is illogical and will not significantly alter the cost of the epidemic. Such action might stand up to scrutiny if there was some evidence of maternal transmission and these animals exposed could be identified by a diagnostic test in the living animal.

Mr Meldrum set out policy options that he thought MAFF might consider:

i. keep the present policy, which was to record the unique ear number of the progeny: Mr Meldrum noted that this was attracting criticism from the industry and practising veterinary surgeons, who believed that more should be done;

ii. advise owners not to breed from progeny: Mr Meldrum said this was the option supported by the BVA, and noted it was ‘a wise course to follow in case maternal transmission does take place’. In addition,
MAFF could use existing powers to require that such progeny were retained on the farm of origin and were not sold except for slaughter or fattening;

iii. slaughter the most recent calf born of an affected dam: Mr Meldrum noted that this would be a ‘crude instrument of control’, given that healthy animals would be slaughtered; and

iv. slaughter all progeny of affected cows: Mr Meldrum explained scientists had suggested that if progeny of affected cows were to be slaughtered, then all progeny should be slaughtered because there was no evidence that maternal transmission was restricted to the most recent calf born.2214

6.22 Mr Meldrum noted that ‘there are clear presentational difficulties in destroying some thousands of healthy cattle when we have no evidence that maternal transmission can occur and where there is no evidence that the cattle themselves have actually been exposed’. He concluded that:

I am clearly of the opinion that we should not require slaughter of progeny of cattle affected with BSE but it would be wise to consider whether option 2 should be pursued to limit the animal health damage that could occur in a herd should maternal transmission occur.2215

6.23 On 12 February 1990 Mr Lebrecht, Private Secretary to Mr Gummer, asked Mr Robert Lowson, Head of Animal Health Division, to prepare the paper requested by Mr Gummer. He was asked to collaborate with Mr Meldrum and present it by 16 February 1990.2216

6.24 On 19 February 1990 Mr Lowson provided Mrs Attridge with a draft note for Mr Gummer on maternal transmission. He had agreed with Mr Meldrum that it would take the form of a short note covering a more detailed paper prepared by the State Veterinary Service (the SVS paper), which was attached.2217

6.25 Mr Lowson’s draft submission noted that if maternal transmission occurred, it would not present any public health issues, and would not prejudice the elimination of BSE from the national herd. It discussed various policy options in light of this, and asked Ministers:

to endorse the view that the slaughter or segregation of the offspring of cattle infected with BSE would not be appropriate;

to indicate whether they want to pursue the question of restrictions on the use of such offspring for breeding, and if so whether [SEAC] should be consulted first . . .2218

6.26 Dr Hilary Pickles, Principal Medical Officer DH, provided Mr Lawrence with her comments on Mr Lowson’s draft submission on 20 February 1990. She qualified her remarks by noting that they represented ‘a personal viewpoint since I
have not had time to consult on a collective DH view’. In addition to pointing out a lack of cost-benefit analysis, Dr Pickles commented on obtaining expert advice:

It is in my view essential to consult outside experts i.e. SEAC. Firstly because there may be alternative interpretations of the scientific data, and the mechanism of transmission of scrapie from ewe to lamb is a case in point; secondly because there may be alternative ways of controlling infection which should perhaps be looked at, even if just to dismiss (e.g. caesarean section, at least for valuable calves or those for export, or restocking from overseas); and thirdly because it is useful for Ministers to be able to confirm that new actions are endorsed by outside expert opinion.2219

Mr Lowson’s final submission to Mr Gummer

6.27 Mr Lowson’s final submission was forwarded to Mr Gummer on 22 February 1990. Both it and the State Veterinary Service (SVS) paper attached had been amended in line with comments received from Dr Pickles and various MAFF officials.2220

6.28 The SVS paper set out possible control measures, listed in order of increasing severity:

- improved identification of calves – this was recommended, irrespective of any other measures adopted (see r on cattle tracking);
- advise owners that progeny of BSE cases should not be retained for breeding;
- control movement of progeny by marking or licensing to prevent breeding;
- segregate the offspring of BSE cattle – it was noted that this would be impracticable, and would attract suspicion and undermine confidence in existing control measures;
- slaughter the female progeny of BSE-affected cows; and
- slaughter all progeny of BSE-affected cows, and all their progeny – it was noted that this step could not be justified, so would not be considered further.2221

6.29 The SVS paper accepted that the main source of infection – contaminated feed – had been eliminated, meaning maternal transmission was the only possible means of future transmission.2222 However, it stated that ‘maternal transmission alone is incapable of maintaining the epidemic’.2223 It did not therefore recommend slaughter or segregation of progeny. However it did recommend that owners be formally advised that the progeny of BSE-affected cases should not be used for breeding. If Ministers felt there was a need to go further, then it suggested controls on the movement of progeny by marking or licensing could also be implemented.2224

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2219 YB90/2.20/4.1
2220 This included Mr Cowan, Mrs Attridge, Mr Yavash, Mr Wentworth and Mr K Taylor (see S184A Meldrum para. J6)
2221 YB90/2.22/3.10–3.12
2222 The ruminant feed ban, prohibiting the sale, supply and feeding of ruminant protein to ruminant animals had been introduced in July 1988. See vol. 3: The Early Years, 1986–88 and Chapter 2 of this volume
2223 YB90/2.22/3.12
2224 YB90/2.22/3.14–3.15
6.30 Mr Lowson’s submission briefly summarised the main points in the SVS paper. He said:

The SVS paper concludes that it could make sense, in advance of the outcome of the transmission experiment, to restrict the use of the offspring of cows affected with BSE so that they may not be used for breeding. This could be done by issuing advice to farmers not to breed from such animals (as is advocated by the BVA, WFU [Women’s Farming Union], and others) or, if it is felt necessary to go further, by introducing a compulsory licensing and marking system to ensure that BSE progeny are not used for breeding . . .

Either approach would well beyond the advice of the Southwood Committee, which was that the offspring of a sample of BSE cattle should be closely monitored. In the absence of any new risk to public health even if maternal transmission were shown to occur, there is no reason for the Government to abandon its stance of proceeding on the basis of the best scientific advice. Ministers are therefore recommended as a first step to seek the advice of the newly-constituted [SEAC] on what action would be appropriate.2225

6.31 Mr Lowson also noted that the introduction of further controls would ‘risk that the public will perceive such controls as tantamount to an admission that there is a risk to public health from consumption of calves of infected animals’. 2226 This point reflected concerns raised by Mr John Cowan, Head of Beef Division, in his comments on Mr Lowson’s draft submission:

However carefully presentation of such actions is handled here, they are interpreted by the media (and subsequently by the public) as proof that there is something very nasty in the woodshed which we are doing our best to hide . . .

Though I am quite certain that the measures proposed would be presented in ways which emphasised that they had absolutely nothing to do with public health but rather with disease control, I have no doubt that they would provide a focus for public comment by those self-styled experts who seem to think they have a vested interest in arguing that most food is unsafe and red meat is particularly unsafe. 2227

6.32 Mr Lowson recommended for Ministers:

i. to endorse the view that the slaughter or segregation of the offspring of cattle in which BSE is confirmed would not be appropriate;

ii. to seek advice from [SEAC] on the question of restrictions on the use of such offspring for breeding;

iii. note the arguments made on the possible impact of new measures . . . 2228

2225 YB90/2.22/3.3–3.4
2226 YB90/2.22/3.1
2227 YB90/2.20/1.1
2228 YB90/2.22/3.5–3.6
MAFF ministers consider the advice

6.33 After receiving the submission, Mr Gummer asked Mr David Maclean, Parliamentary Secretary, for his comments. Mr Maclean provided these on 2 March 1990. He believed that Mr Lowson’s submission started from the ‘wrong premise’, and ‘slightly misses the point’:

The paper asks what steps we should take in response to the possibility that [maternal transmission] might occur, whereas I believe we need to know what steps we would want to have taken if we discovered in two years time that maternal transmission had occurred. There is an important difference.2229

6.34 Mr Maclean pointed out that although in theory there was no need to trace and cull the offspring of affected cows should maternal transmission occur, since existing controls would catch the animals when the disease developed, there would still be a public outcry over calves under 6 months old.2230 He continued:

But more important perhaps would be the concern that we had allowed offspring from BSE animals to wander unrecorded through the farming and food chain and permitted breeding from them. We know that even if [maternal transmission] occurs the epidemic would still die out albeit more slowly . . . but that will not be the public perception or perhaps the international perception from those who buy our pedigree animals.2231

6.35 He agreed that at the present time the culling of all offspring of BSE-affected cows would be wrong, ‘because of the panic and doubts it would create’. However, if a culling policy became necessary in the future owing to the occurrence of maternal transmission, MAFF needed to be able to identify such animals. Mr Maclean continued:

Therefore the first step to take now is to identify BSE offspring. Second and of vital importance I agree [with] the advice that we should have a compulsory policy against using BSE animals for breeding purposes. Indeed this would be essential not just for its own sake and in order to eradicate the disease, but it is also justification for the identification part of the scheme.2232

6.36 Mr Gummer and the Parliamentary Secretaries, Mr Maclean and Mr David Curry, met MAFF officials on 5 March 1990 to consider measures that might be taken in anticipation of maternal transmission being proved. Most of the discussion focused on the fact that if maternal transmission was proved, the exclusion of calves from the human Specified Bovine Offal (SBO) ban, introduced in November 1989 (see vol. 6: Human Health, 1989–96), would be questioned. The note of the meeting records that at its conclusion, Mr Gummer said that the ‘main issue remained what we would say publicly if maternal transmission were to be demonstrated’. Mr Gummer agreed that policy could not be based on zero risk, ‘but the key question was how far towards that we should go’. He suggested that: ‘All concerned should reflect on the discussion in preparation for a further meeting to be arranged shortly’.

2229 YB90/3.2/1.2
2230 Calves were exempt from the SBO ban, which had been implemented in October 1989 to prevent potentially infective cattle offal from entering the human food chain – see vol. 6: Human Health, 1989–96
2231 YB90/3.2/1.2
2232 YB90/3.2/1.4
Further, Mr Curry was asked to chair another meeting to discuss other questions raised in the briefing papers.  

6.37 At this time, MAFF was in the process of updating an Advisory Note to farmers about BSE. In a statement to the Inquiry, Mr Meldrum said that he received a draft copy of the note the day after the meeting, upon which he provided comments, ‘but said that I was convinced that Ministers would want further advice to be contained in the leaflet on maternal transmission which could not be finalised until discussions on the issue had been concluded’.  

6.38 At Mr Meldrum’s request, Mr Taylor discussed the draft note with Mr Anthony of the BVA. Mr Taylor informed Mr Meldrum on 7 March 1990 that the ‘BVA would like the note to include advice that the off-spring of suspect animals should not be used for breeding’. Mr Taylor noted that acceptance of this point would depend on the policy discussions in progress.  

6.39 On 9 March 1990 Mr Meldrum attended a seminar organised by the Women’s Farming Union (WFU). It was also attended by Dr Tony Andrews, Senior Lecturer in Veterinary Medicine at the Royal Veterinary College, and representatives of the National Farmers’ Union (NFU), the National Cattle Breeders Association (NCBA) and the Farmers Union of Wales (FUW). Maternal transmission and breeding from progeny of BSE-affected cows was discussed. Mr Meldrum informed the seminar that there was no need to do anything from a public health perspective. However, he said that animal health posed different issues, and he raised the question of whether the industry was prepared to countenance the slaughter of potentially healthy animals. Mrs Rosemary Berry of the WFU said that the WFU was only suggesting a non-breeding policy from offspring of BSE-affected cows, and that such offspring should not leave the farm on which they are born. Dr Andrews said that tracing of BSE offspring would be very difficult and that it would be better to make sure that such animals were not bred from.  

6.40 Following further discussion, Mrs Barbara Smith of the WFU told the seminar that the WFU would inform Mr Gummer that it would like to see a ban on breeding from the offspring of BSE-affected animals come into operation. Mr Peter Rudman of the NFU said that the NFU would disassociate itself for the meantime, while Mr Rowland Kershaw-Dalby of the NCBA said his association might join in support in the future.  

6.41 During oral evidence, Mrs Smith explained why she thought it was wrong to breed from the offspring of BSE-affected animals:

There was not a shortage of cattle, so there was not any desperate need to breed from those animals. I felt that from the very start but as time went on I became even more convinced of it because from our experience, and we had one batch of 30 heifers which were all fed the same feed at the same time and only two of those animals succumbed to BSE which led to my thinking that maybe there was a genetic disposition factor coming into play which just
reinforced my viewpoint that it was not necessary to breed from heifers of BSE cows, so why do it?  

6.42 Mrs Berry added in oral evidence that in the absence of scientific evidence on the potential of maternal transmission, ‘the sensible thing was not to breed from these animals so that if scientific evidence subsequently proved that there was a risk, we prevented the disease becoming endemic’.  

6.43 On 14 March 1990 Mr Curry chaired a further meeting as requested by Mr Gummer, attended by Mr Maclean and MAFF officials. The note of the meeting records that Mr Curry summed up the discussion on breeding from calves produced by BSE animals:

It was agreed that there would be considerable benefits obtainable through voluntary action. However, whether controls were voluntary or statutory, we could not expect complete coverage and some animals would slip through the net. If statutory action was taken, this would send signals which would re-inforce public concerns about the disease. There would also be a significant marketing effect on beef. At the same time, it was recognised from experience of management of public relations and the political climate, that there would be demands for statutory controls which would be difficult to resist. At this stage, it was for consideration whether we should pre-empt what would, inevitably, be seen as weakness later, even though such a decision would not necessarily have a scientific basis.

6.44 It was agreed that the advice of SEAC should be sought, ‘in the knowledge that [SEAC] would judge the matter on objective scientific criteria, which might question the value of statutory controls’. It was also recognised that there would be other criteria to take into account, ‘and that it was likely that some form of action would be taken on breeding, irrespective of [SEAC’s] recommendations’.

6.45 Mr Curry requested that the draft Advisory Note to farmers should be submitted to Ministers for approval as soon as possible, and that it include a paragraph advising that there should be no breeding from the offspring of BSE-affected cows, ‘in anticipation of action in this area’.

6.46 Mr Lowson prepared the requested passage on breeding for inclusion in the Advisory Note, accompanied by a draft press release highlighting the advice. He submitted them to Mr Andrews on 19 March 1990. The passage read:

Experiments are being carried out to determine whether BSE can be spread at calving. Results may not be available for several years. Spread at calving would make the eradication of BSE more difficult. Therefore, even though transmission at this time is not known to occur, Ministry advice is that calves born to cows which are or which become confirmed cases of BSE should not be used for breeding.  

\[2238 \text{T57 p. 133} \]
\[2239 \text{T57 p. 134} \]
\[2240 \text{Mr Capstick, Mr Meldrum, Mrs Attridge, Mr Cruickshank, Mr Taylor and Mr Lowson were among those who attended} \]
\[2241 \text{YB90/3.16/3.2} \]
\[2242 \text{YB90/3.16/3.2} \]
\[2243 \text{YB90/3.16/3.4} \]
\[2244 \text{YB90/3.16/3.4} \]
\[2245 \text{Copied to Mr Capstick, Mr Meldrum, Mrs Attridge and officials from the Welsh Office Agriculture Department (WOAD), the Department of Agriculture and Fisheries for Scotland (DAFS), the Department of Agriculture for Northern Ireland (DANI) and DH} \]
\[2246 \text{YB90/3.19/4.1} \]
6.47 Mr Gummer met senior MAFF officials the next day to discuss the outcome of the meeting on 14 March 1990. It was confirmed that SEAC’s advice would be sought on breeding from the offspring of BSE-affected cows. It was further agreed that segregation of BSE offspring would be impractical, and that a slaughter policy should not be pursued in the absence of evidence that it was desirable.

DH’s consideration of the advice

6.48 On 2 April 1990 Dr Pickles expressed concern to Sir Donald Acheson, the Chief Medical Officer, that:

We had agreed with MAFF that any new initiatives would be subject to outside expert advice from [SEAC].

However, it now seems MAFF are preparing to offer new advice to farmers without that expert advice. Within the draft advisory note attached, it is recommended that ‘even though transmission is not known to occur, Ministry advice is that calves born to cows which are or which become confirmed cases of BSE should not be used for breeding’. This advice is new.

This arose from the MAFF Ministers’ view that should there be action that we might want to take were BSE shown to be passed on from cow to calf, we should take that action now. Advice from within MAFF was to have breeding records of all cows/calves and advise against or prohibit breeding from any cows who are themselves offspring of cows who later develop BSE. Although pressed to refer the whole matter to [SEAC], it seems MAFF propose to refer only the question of whether the offspring of cases should be slaughtered.

6.49 Dr Pickles set out her reservations with MAFF’s proposed action:

i. There is no substantial new and relevant scientific evidence since Southwood reported a year ago. So taking action not recommended by that group might call into question the rest of the Southwood advice, including the remoteness of risk to humans.

ii. The public/press will be worried by the giving of this advice and the net response could well be that these identified offspring of BSE cases become not acceptable as beef cattle for export either. There will be pressure to turn informal advice into statutory controls. Farmers will then lose money unless they ignore the advice or evade new controls, setting off more media worries. Yet the experts will have to admit it is impossible to identify all calves born to cows infected with BSE, since many of these will have been killed before showing symptoms. Hence more public worries about the ineffectiveness of the new ‘controls’.

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2246 Mr Capstick, Mrs Attridge, Mr Meldrum and Mr Lowson were among those present.
2247 YB90/3/20/7.1
2248 YB90/4/27/1
iii. There is no *substantial benefit* and the whole exercise is unlikely to warrant the cost and hassle. Even if BSE is transmitted from cow to calf, the epidemic will almost certainly die out in a few years.

iv. *Why have an expert group* if their advice is not asked for on a matter as major as this? Justification for any new action should be that advice was sought and then followed. There is only a month to wait before the first meeting of the experts.\(^{2249}\)

\(6.50\) Annexed to Dr Pickles’ minute was a document entitled ‘Maternal Transmission’, which set out DH’s understanding of the reasoning behind MAFF’s proposals. Under the heading ‘Comments from DH on the proposals include’, it was said that:

> There may be pressure from the farming lobby for advice on breeding. So far, this issue has not been taken up more widely. Bringing attention to it with new measures has to be fully justified and that justification has yet to be produced. This looks like MAFF digging another big hole for themselves to fall in.\(^{2250}\)

\(6.51\) Sir Donald agreed that:

> . . . it would be foolish of MAFF to make such a decision of this sort which must be based on a view of risk of transmission from cows to calves without seeking advice. If they do not they will undermine [SEAC] from the start.\(^{2251}\)

\(6.52\) On 4 April 1990 Mr Lowson informed Mr Lebrecht that he had sent a copy of the draft Advisory Note to DH on 19 March 1990, and that DH had now told MAFF that they objected to the reference to breeding from offspring of affected cattle. DH’s concerns were:

- to offer advice to farmers would go beyond what the Southwood Committee advised, which would call into question the rest of Southwood’s recommendations;

- to put out advice so soon before asking [SEAC] to advise on the topic would run counter to the objective of proceeding on the basis of scientific advice only; and

- to put any kind of question mark against a new category of animal would heighten public concern about the safety of beef.\(^{2252}\)

\(6.53\) Mr Lowson noted that these arguments ‘were ventilated at Mr Curry’s meeting, and it is the CVO’s strong recommendation that advice about breeding *should* be offered’. He also said that the BVA’s view was consistent with Mr Meldrum’s, ‘and we know that some at least of the [SEAC] members already support it’. However, Mr Lowson suggested that DH’s concern ‘certainly cannot be brushed aside’.\(^{2253}\) This left three possible courses of action:

\(^{2249}\) YB90/4.2/7.1–7.2  
\(^{2250}\) YB90/4.2/7.4  
\(^{2251}\) YB90/4.2/8.1  
\(^{2252}\) YB90/4.4/2.1  
\(^{2253}\) YB90/4.4/2.1
One possibility would simply be to drop the reference to breeding from the leaflet, and to deal with any enquiries by saying that we were seeking further scientific advice on the topic, even though Southwood did not make any recommendations. Another would be to recommend that farmers should seek advice from their veterinary surgeons about breeding from the offspring of BSE cattle. The third possibility, which corresponds with the approach which Ministers have so far adopted, would be for them to seek to impress upon DOH colleagues the importance that they attach to this point . . .

6.54 Mr Curry and Mr Maclean both responded that they agreed with Mr Meldrum, and that the reference to breeding should be retained in the Advisory Note. However, there was also concern that MAFF should not be seen to be pre-empting the deliberations of SEAC.

6.55 Also on 4 April 1990, Mr Gummer met Mrs Browning, Mrs Smith and Mrs Berry of the WFU. They suggested to him that breeding from the offspring of BSE-affected animals should be banned. Mr Gummer responded that it had not been established whether maternal transmission occurred and that epidemiological evidence indicated BSE would decline even if it did occur. He emphasised that he was concerned that all necessary control measures should be taken, and would look at the possibility of introducing controls on breeding if SEAC recommended that it was appropriate. By 3 May 1990 the WFU had changed its policy on BSE offspring, and publicly advocated that ‘to prevent vertical transmission MAFF should introduce a slaughter policy for the progeny of BSE cattle’.

6.56 Dr Jeremy Metters, Deputy Chief Medical Officer, minuted Sir Donald Acheson on 10 April about MAFF’s proposal to issue advice on breeding. He said that Dr David Tyrrell’s view was that the advice should be delayed until SEAC had considered the issue. Dr Metters had spoken with Mr Meldrum, and pointed out that issuing the advice before SEAC had considered the issue would undermine their credibility. Mr Meldrum had admitted that MAFF would be reluctant to issue the advice if DH had doubts, and following Dr Metters’s affirmation that they did, conceded that he could agree to wait, though other officials might not. Dr Metters said that Mr Meldrum had indicated that if Sir Donald conveyed DH’s views to Mr Andrews, then this would be enough to delay the issue of advice.

6.57 Mr Maclean wrote to Mr Roger Freeman, DH Parliamentary Secretary, on the same day to explain MAFF’s position. He noted that farmers’ organisations and other representative groups had been pressing MAFF for official advice on breeding from offspring of BSE-affected cattle, and that he believed such advice should be offered. Mr Maclean suggested that ‘if we were not do so, we would be accused of irresponsibility’. He continued:

The strong recommendation that I have received from the State Veterinary Service is that farmers should be advised not to use the female offspring suffering from BSE for breeding. In doing so it would be important to make it clear that this was a common-sense precaution to reduce the risk of the introduction of BSE to farms which had not already suffered it, with no

2254 YB90/4.4/2.1
2255 YB90/4.4/3.2; S312 Maclean para. 66
2256 YB90/4.9/12.1
2257 YB90/5.3/8.1
2258 Chairman of SEAC
2259 YB90/4.10/2.1–2.2
implications for human health and on the basis of no scientific evidence of maternal transmission. We would, as already discussed between officials, want to seek the advice of [SEAC] on the topic, but in the meantime I do not see how we could issue advice to farmers which did not contain any information on the one point on which they most want to be advised.2260

6.58 After reading the letter Dr Pickles minuted Dr Metters on 11 April 1990 and reiterated DH’s arguments against the issue of advice. She suggested:

It seems that we and MAFF may have different views on the facts. The first sentence of the second paragraph [of] Mr Maclean’s letter suggests animals suffering from BSE might be used for breeding – we understood all ill animals were slaughtered. His next sentence mentions introduction of BSE to farms as if herds that have not had clinical cases are free of infection – it was our understanding that all cattle in this country must be regarded as suspect for subclinical infection. Whilst we still believe BSE has no direct implications for human health, and any new measures will not change this, we are also concerned about public perceptions of risk and the anxiety caused by any ill-judged new moves. These are all good reasons for using the mechanisms we have set up to get the advice of independent experts.2261

6.59 Dr Pickles attached a draft letter for Mr Freeman to send to Mr Maclean. It pointed out that Mr Maclean had previously agreed that ‘important new measures were to be approved by both departments and also that these would be based on advice from [SEAC]’. In suggesting that the issue of the advice should be delayed until after SEAC had considered the matter, it continued:

I think it is important we stick to these agreements, particularly as my own officials appear to have a rather different interpretation of the facts available – a clear indication that we need independent expert advice. As you say, there is no relevant new scientific evidence on maternal transmission, so we must be careful in the presentation of new advice that goes beyond what was recommended by the Southwood group in case this calls into question the rest of their advice.2262

6.60 The final version of Mr Freeman’s letter, sent on 17 April 1990, said:

I think it is important we stick to these agreements, particularly as [SEAC] is to meet on 1 May. To issue this advice just before they meet will only undermine their credibility. As you say, there is no relevant new scientific evidence on maternal transmission, so we must also be careful to ensure that any new advice [that] goes beyond that recommended by the Southwood group is backed by independent experts.

I believe the right approach is for you to delay the issue of the advice to farmers, or to issue it with no comment about breeding, and present the problem to [SEAC]. Depending then on their views, we can reconsider what advice, should be offered.2263

2260 YB90/4.10/1.1
2261 YB90/4.11/2.1
2262 YB90/4.11/2.2
2263 YB90/4.17/2.1
6.61 Following receipt of Mr Freeman’s letter, the issue of the Advisory Note was delayed until SEAC had considered the issue, and Mr Gummer asked that the draft Advisory Note be forwarded to SEAC for its consideration.2264

6.62 It appears Mr Gummer had already resigned himself to this approach. On 11 April 1990 the Press Office forwarded the draft text of the advisory leaflet to Mr Gummer. A manuscript note on the covering minute records:

The Minister discussed this with the Secretary this morning. He has decided that the leaflet should be submitted to [SEAC] for comments before it is used.2265

6.63 On breeding, the draft advisory leaflet read:

Experiments are being carried out to determine whether BSE can be transmitted from dam to calf. Results may not be available for several years, but the existence of such transmission would mean that the eradication of BSE would take longer and be more difficult. Therefore, even though transmission is not known to occur, Ministry advice is that calves born to cows which are or which become confirmed cases of BSE should not be used for breeding.2266

6.64 On 24 April 1990, in relation to a suspected BSE case born after the ruminant feed ban, Mr Raymond Bradley Head of Pathology at MAFF’s Central Veterinary Laboratory (CVO) suggested to Mr Meldrum that at worst it indicated the possibility of maternal transmission existed. He continued:

However, there have been no reported cases yet in the offspring trial even though some animals are over two years old and some had exposure or possible exposure to MBM before July 1988. There is still time of course for these to develop BSE but the . . . case, even if confirmed, may be the unusual example rather than the norm.2267

SEAC considers the breeding issue

6.65 SEAC considered the breeding issue during its first meeting on 1 May 1990.2268 The minutes record that SEAC had several reservations about MAFF’s proposal to issue advice:

The incidence of subclinical infection invalidated any action proposed. Any advice against breeding from BSE offspring might imply breeding from other cows was acceptable, and yet this was not necessarily the case since these animals could have silent infection. The evidence with natural scrapie suggested there was no association with birth order, so even young cows might be capable of passing infection on to offspring. With the proposed measures, there would be incentives to cheat, perhaps even leading to an increase in infection as farmers offload suspect animals, with difficulties in buying in replacement cows at appropriate ages. There could be disposal of

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2264 S184A Meldrum para. J17
2265 YB90/4.11/9.1
2266 YB90/4.11/9.5
2267 YB90/4.24/8.1
2268 See vol. 11: Scientists after Southwood for further discussion of SEAC’s advice on breeding
certain useful genes if BSE-offspring were not used for breeding. It was possible infectious but resistant genotypes would be selected, leading to further problems. The effect on the public and the meat trade was thought important: if all these offspring could be properly identified then there would be difficulty in finding buyers for them, but if not properly identified there would be presentational difficulties and little chance such measures would have any effect. In view of the expected elimination of the disease eventually in any case (barring horizontal transmission), at best new measures might be able to accelerate this slightly. At worst, new measures could conceivably make the epidemic worse, although minimal effect was most likely. Introduction of new measures now would lead to suspicion of something unpleasant being concealed.

6.66 The day after SEAC’s meeting, Dr Pickles informed Dr Metters that the Committee ‘were not persuaded on MAFF’s proposed line . . . vindicating our stance that this action should await independent expert advice’. Dr Metters replied on 4 May 1990 and said that:

In view of [SEAC’s] reservations about MAFF’s proposed ban on the breeding of offspring of cows who later developed BSE, I am very glad we took action to delay MAFF’s announcement until [SEAC] had met. The scientific arguments they identified against the proposed ban are persuasive and show how ineffective it could be in identifying all offspring of cows incubating BSE.

6.67 On 9 May 1990 Mr Lowson sent a letter to Dr Pickles to help finalise the minutes of SEAC’s first meeting, and said ‘I will put fresh advice to our Ministers about advice regarding the use for breeding of the offspring of BSE cattle’.

6.68 Mr Meldrum forwarded his comments on SEAC’s first meeting to Mr Lowson on 14 May 1990. On the breeding issue he said:

The Committee have been over influenced by the possibility that sub-clinical infection not only may occur but that such animals, as in scrapie, could transmit maternally. That is also pure conjecture, particularly as there are already indications that the agent of BSE is a single agent and that there may not be a genetic resistance to the agent in cattle. I would argue, strongly, that it is far better to offer advice for a percentage of the population where disease has been confirmed, even though this would not cover those where sub-clinical infection may exist, than to offer no advice at all and to extend the duration of the epidemic . . .

All in all the arguments deployed are not convincing to me . . . and, if this is the view of the Committee, then it will not be supported by me . . .

You will, I am sure, understand my position and that I must in such situations retain the right to offer my own advice to Ministers. All of this reinforces my earlier view that in such delicate situations it is imperative that I am in a position to present my case to [SEAC]. You will appreciate that there was no
one present at that meeting from the SVS in support of the paper that you had circulated beforehand.2273

6.69 The next day Mrs Attridge sent a draft submission prepared by Mr Lowson, in the light of SEAC’s advice, to Mr Gummer. Mrs Attridge pointed out that SEAC did not consider it appropriate for MAFF to issue advice, and noted that ‘Mr Meldrum is aware of the Committee’s advice but has not had the opportunity to comment on it’.2274 Mr Lowson’s submission said that:

[SEAC’s] arguments are convincing and the Minister is therefore recommended to agree to the release of the advisory leaflet . . . without the passage on the use of the offspring of BSE cattle for breeding. If challenged on this point, we can point to the strong scientific advice that we have received.2275

6.70 Also on 15 May 1990, Mr Gummer met Mr Maclean and senior MAFF officials to discuss how to react to new NFU proposals on BSE. On breeding from calves of BSE-affected cattle, the minutes of the meeting record that:

. . . [Mr Gummer] said the only tenable line was for him to follow the advice of his expert committee. This was so even though Mr Meldrum was not fully convinced by all of the views expressed by the Tyrrell Committee.2276

6.71 Mr Gummer met NFU representatives later that day to discuss BSE issues, including the proposed advice on breeding. The note of the meeting records that:

The Minister said that, given he was basing his position firmly on reliance on scientific advice, he could not possibly with credibility take a decision which contradicted that advice and might lead to a worsening of the situation.2277

6.72 Although the NFU representatives expressed some doubt about the advice given by SEAC, they ‘eventually accepted that the Minister could not stand against that advice, given its source’.2278

6.73 Mr Maclean met Mr Andrews, Mr Capstick, Mrs Attridge, Mr Meldrum and Mr Simon Dugdale, the Chief Information Officer, on 16 May 1990. It was noted that a statement was being prepared on SEAC’s advice on breeding from the offspring of BSE-affected cows, which would be put to Dr Tyrrell for endorsement within the next day or two. Mr Maclean thought the advice ‘should come out in full’. Although Mr Meldrum said the obvious advice for veterinarians to give to farmers was that they should not use offspring of affected cows for breeding, he acknowledged that ‘in the context of general advice to farmers, [SEAC] was right to draw attention to the problems [it] had identified’.2279
SEAC discussed breeding again at its second meeting on 17 May 1990, during which a draft statement of advice was discussed. Their agreed advice, provided to DH and MAFF Ministers that day, stated:

...there is no scientific evidence currently available to support official advice against the use for breeding of the offspring of cows suffering from BSE, even if infection can pass down from cow to calf, a possibility that cannot be excluded at present. Decisions about breeding should be left to individual farmers and their veterinary advisers.

Because the likely origin of the epidemic has been eliminated, the outbreak in cattle will be self-limiting unless infection can be spread freely between cattle – in which case restricting breeding would be pointless... Because of the possibility that sub-clinically infected animals might infect their offspring, not all potentially infected calves might be identified, which would reduce any benefit. Other possible consequences might even be unhelpful, since it could lead to the increased dispersal of infected animals to other herds, and to the loss of valuable genetic material.

They concluded the advice by noting that their viewpoint may need revising 'in light of new scientific information'.

The same day Mr Gummer made a statement in the House of Commons during oral answers to Parliamentary Questions, which was also issued as a press release. During his statement on breeding he said:

Some have suggested that there should be a ban on breeding from the offspring of BSE-infected cattle. The Southwood Committee did not recommend this. But I was concerned to ensure that all up-to-date information was taken into account so I referred the question back to [SEAC]. It confirms fully what Southwood said.

During SEAC’s meeting on 17 May 1990, a draft paper, giving fuller explanation of their advice to Ministers on breeding, was circulated. Dr Tyrrell subsequently redrafted the paper, and Mr Meldrum provided comments on the revised draft entitled ‘The Scientific Background to the Control of BSE in Cattle’ to Dr Pickles on 31 May 1990. He said that he had 'severe reservations about this paper since it does contain a number of inaccuracies and misconceptions'. He thought the paper needed further redrafting, which he believed a member of SEAC was doing in any event.

SEAC discussed the draft paper at its third and fourth meetings on 13 June and 2 July respectively, and the final paper, ‘Control of BSE in Cattle’, was agreed and published on 12 July 1990. The paper set out the basis for SEAC’s advice to Government on breeding from offspring:
10. Slaughtering, or avoiding breeding from, the female offspring of affected cows may harm the productivity of the herd and would remove animals which could be valuable for improving the stock – e.g. because of their potential milk yield or quality. There could also be a tendency for animals which were infected, but had not yet shown clinical disease, to be disposed of to other farms rather than to be retained for breeding, thereby dispersing infected animals to other herds. If, as we believe is possible, maternal transmission does not occur, such measures would obviously bring no benefit because the only animals that will develop clinical signs in the future are those which are already infected but have not yet succumbed to clinical disease.

11. If the disease were transmitted from dam to calf exclusively, or nearly exclusively, there would still be a tendency for the disease to die out, because cows which became clinically affected would have fewer calves than those which remained well, and infected animals would not produce enough calves for the epidemic to be maintained. Consequently preventing the progeny of cattle suffering from BSE from breeding would do no more than accelerate the self-limitation of BSE that would occur anyway.

12. If the mechanisms of transmission were like those of scrapie, the value of applying restrictions to the offspring of known BSE cattle would be severely limited because infection could be passed to their calves and even to their offspring’s offspring before the dam showed signs of the disease. Some cows could pass the disease onto their offspring without ever developing clinical signs of BSE.

13. The factors in paragraphs 10–12 above were the main considerations which led us to the conclusion that we could not advise the Government to take measures to limit the use of the offspring of cattle suffering from BSE for breeding. Such measures would either not be necessary, or would not be adequate, as a national control policy for dealing with BSE. Nevertheless, individual farmers might well find such measures appropriate. Farmers who knew that their animals had never been given feed containing meat and bone meal, for example, would no doubt want to avoid buying in breeding replacements from a herd where BSE had occurred. Some farmers might choose to fatten the offspring of BSE cattle rather than to breed from them. But such decisions will depend on the farming practices of the individuals and the advice of their veterinary surgeons.2288

MAFF issues the Advisory Note to farmers, June 1990

6.79 On 31 May 1990 Mr Maslin forwarded to Mr Maclean a revised draft Advisory Note for farmers. Mr Maslin suggested that to take into account SEAC’s advice, the section on breeding be changed to:

Experiments are being carried out to determine whether BSE can be transmitted from dam to calf but results may not be available for several years. If you wish to obtain advice on breeding from the offspring of cows affected with BSE you should consult your veterinary surgeon.2289

2288 YB90/7.12/2.5–2.6. See vol. 11: Scientists after Southwood for discussion of this paper
2289 YB90/5.31/2.1
MAFF issued the final Advisory Note to farmers in June 1990. It set out general guidance on BSE symptoms, the slaughter and compensation scheme and health and safety. Mr Maslin’s suggestion for the breeding section was also included. 2290

During oral evidence, Mr Francis Anthony of the BVA was asked what his understanding was for MAFF’s withdrawal from its 1988 advice. He responded:

I wish we could have understood. We were extremely frustrated as an association because the advice not to breed from an animal which might be carrying a disease which we did not know was transmissible or not maternally, there is no other advice. We as veterinary surgeons in the field and the British Veterinary Association was representing those veterinary surgeons in the field, there is no other advice we could have given. We gave that advice, we were delighted when it was accepted by the Agricultural Select Committee and extremely disappointed of course that it was turned down by the government of the day. 2291

On 12 July 1990 MAFF issued a press release to coincide with the publication of SEAC’s ‘Control of BSE in Cattle’ paper (see paragraph 6.78 above). It quoted Mr Gummer’s written answer to a Parliamentary Question:

I have today received the [SEAC’s] paper on the Control of BSE in Cattle. This paper discusses the scientific background to the opinion which the Committee offered on 17 May to the effect that there is no scientific evidence currently available to support official advice against the use for breeding of the offspring of cows suffering from BSE and that some possible consequences might even be unhelpful. 2292

The Agriculture Select Committee’s report on BSE

The Select Committee’s recommendation

In its report on BSE, published on 10 July 1990, the House of Commons Agriculture Select Committee commented on whether there should be a ban on breeding from the offspring of cows with BSE. SEAC’s advice was considered, and in its report the Agriculture Select Committee said that it found SEAC’s reasoning ‘neither fully convincing nor fully clear’. It acknowledged that Dr Tyrrell had admitted the advice was produced in haste, and that a second report was being prepared (see paragraph 5.77 above). The Select Committee continued:

The essence of Dr Tyrrell’s advice is that decisions on whether or not to breed from the offspring of confirmed cases should be left to farmers on their veterinary surgeon’s advice. His reasons for this are abstruse and depend less on pure science than a series of finely balanced judgements about whether particular constraints on breeding would be warranted by their likely

2290 YB90/6.1/1.1
2291 T62 p. 94
2292 YB90/7.12/2.1
2293 Dr Tyrrell, Dr Will and Dr Kimberlin gave evidence to the Select Committee on 18 June 1990 (IBD1 tab 7 p. 74). See vol. 11: Scientists after Southwood for an account of their evidence.
effectiveness. Our own view is that this is an area where scientific advice needs to be considered in conjunction with other factors and where, beneath the agonising over technicalities, the issue may be a comparatively simple one. If it was known that BSE was maternally transmissible, no Government could countenance the offspring of BSE-affected cows breeding freely since that would signal an indifference to eradicating the disease. Since it is only speculated that the disease is maternally transmissible, what is at issue is whether one proceeds on the basis of speculation or awaits certain knowledge.

The judgment is a fine one but, in our view:

i. no legislative action is necessary unless maternal transmission is confirmed;

ii. in the interests of public confidence, farmers should be discouraged from breeding from animals whose dams have been affected by BSE.2294

6.84 The Select Committee suggested that one way of achieving this would be for MAFF to ‘indicate that it would not pay compensation on animals which had been knowingly bred from a dam with BSE in its lineage’.2295

The Government’s response

6.85 On 24 July 1990 Mr Lowson sent a submission to Mr Gummer, which advised that the Select Committee’s recommendations on breeding should be rejected.2296 Mr Gummer acceded to this advice when he met with MAFF officials the next day.2297

6.86 In November 1990 the Government presented its response to the Select Committee’s report. On breeding from offspring of BSE cows, the Government stated:

The arguments are complex and it is important that [SEAC’s] views should be read in full. But the Government finds them convincing and therefore does not accept the Select Committee’s recommendation on this point.

It follows that the Government does not accept either the recommendation that farmers who breed from known BSE cases should not get compensation if the offspring succumb to BSE. Such action would act as a clear discouragement to reporting suspect disease, even though it is a legal requirement. Moreover, the Animal Health Act 1981 lays down that if the Minister requires the compulsory slaughter of an animal, the owner must be compensated.2298
Subsequent advice on breeding: 1995–96

6.87 Near the end of 1995, MAFF began work on revising the original 1990 Advisory Note to farmers. A draft version was submitted for SEAC’s consideration at its meeting on 23 November 1995. On maternal transmission the draft stated:

Experiments are being carried out to determine whether BSE can be transmitted from dam to calf. Although these will not be completed until 1997, it is already clear that this happens rarely, if at all. If you wish to obtain advice on breeding from the offspring of cows affected with BSE, you should consult your veterinary surgeon.2299

SEAC considered the draft Advisory Note during its meeting, but did not comment on the section on breeding.2300

6.88 By the time the final version was distributed in September 1996, maternal transmission studies had indicated that BSE could be maternally transmitted (see vol. 2: Science). Thus, the advice issued was:

Experiments have shown that BSE can be transmitted from a BSE infected dam to her calf. This maternal transmission of BSE is most likely to occur when a calf is born within 6 months of its dam developing clinical BSE; around 1% of cows which die of BSE will have produced a calf which will die of BSE as a result of maternal transmission. This will not prevent the eradication of BSE. MAFF advice is that you do not retain for breeding the most recent offspring of a BSE affected dam. You may wish to obtain further advice on breeding from the offspring of cows affected with BSE from your veterinary surgeon.2301

Artificial insemination (AI) and BSE

Early consideration of AI

6.89 The possibility that semen could transmit BSE required MAFF officials to think carefully about AI policy. AI was used in cattle breeding on a significant scale when BSE emerged. About 1.9 million inseminations were performed across all breeds in the UK in 1986. Modern techniques allow semen to be collected from AI bulls, diluted, frozen and then stored, possibly for years, in plastic tubes or ‘straws’ until required. Further, a single, potentially BSE-infected, bull could be used for many thousands of inseminations. Vol. 12: Livestock Farming should be consulted for further details about the UK AI industry.

6.90 On 8 March 1988 Mr Bradley minuted the CVL Director, Dr William Watson, about a BSE-suspect bull which had been slaughtered. Mr Bradley advised that he had asked whether semen was available and that the CVL should have a plan to secure semen from suspect bulls for a transmission study.2302

2299 SEAC 22 tab 2; YB96/2.6/14.10
2300 YB95/11.23/1.12
2301 YB96/8.9/1.3
2302 YB88/3.8/2.1
6.91 A paper on the CVL’s BSE research and development programme, forwarded by Dr Watson to Mr Meldrum on 9 September 1988, noted that:

The risk of transmission of BSE via semen is of particular interest to AI organisations. Knowledge of this risk is important to maintain or re-instate the export of semen. Determination of this risk is dependent on the development of a suitable animal model in which to assay the BSE agent, but there is also the problem of proving zero risk.

The design of an experiment to fulfil a given objective or set of objectives requires further thought and possibly discussions with the AI organisations. Plans have been made to obtain semen, under suitable conditions, from clinically suspected bulls. Give the current incidence of BSE, a maximum of one affected bull is likely to occur each year ...

6.92 In October 1988 an exchange of minutes, initiating discussion of AI policy, took place between MAFF officials. Mr Robin Bell of the Animal Welfare, Exports and Veterinary Resources Section in the Veterinary Field Service (VFS), informed Mr Kyle, Assistant Chief Veterinary Officer (ACVO) responsible for notifiable diseases, that he supported a proposal that action be taken to prevent the distribution of BSE-confirmed bulls’ semen. However, he pointed out that there was no evidence that BSE could be transmitted via semen. Since at that time the offspring of confirmed BSE cases were left untouched, he also queried whether it would be logical to ban the use of semen from BSE-confirmed bulls. Against this, Mr Bell noted that MAFF would be criticised if such semen was allowed to be used, when its role in the transmission of BSE was still unknown.

6.93 Mr Kyle agreed that semen from BSE-confirmed bulls should not be allowed to be distributed, and sought Mr Meldrum’s endorsement. Mr Meldrum suggested to Mr Bell that he seek the industry’s views – in particular, AI veterinarians.

6.94 Mr Bell reported to Mr Kyle that veterinarians whom he had spoken to thought that semen from bulls with confirmed BSE should not be used until the results of transmissibility tests were available. Thus, on 9 November 1988, Mr Kyle recommended to Mr Meldrum that the approval of bulls in which BSE was confirmed should be suspended, and the distribution of their semen should be prevented. He also recommended that bulls that were not suspected of BSE, but whose dams were confirmed, should not be allowed to enter the AI network.

6.95 Mr Meldrum replied two days later, and suggested that a move in the direction proposed ‘must be carefully assessed with particular reference to the best means of public presentation in view of the extreme sensitivity of BSE at the present time’. He also said that he would like to consult with the Neuropathogenesis Unit (NPU), and requested that a paper be prepared for a BSE research and development meeting on 17 November 1988.

6.96 Mr Bell provided the background information Mr Meldrum sought on 16 November 1988. At that stage BSE had been confirmed in one bull in the AI
network, and one case was under investigation. Soon after bulls enter the AI centre, about 1,000 semen straws are collected, most of which are used for progeny testing. Progeny testing, which involves assessing the merit of the offspring produced using the semen, takes about four or five years, during which time the bull enters ‘lay off’. Mr Bell noted that the majority of potential BSE cases would emerge while a bull was in ‘lay off’, and before a significant number of straws had been stored. At that time, there was no requirement for bulls entering AI centres to originate from BSE-free farms. Mr Bell posed a number of ‘unanswered questions’:

i. Can ‘BSE agent’ be excreted in semen?
ii. Can BSE be transmitted to cows inseminated with ‘infected semen’?
iii. Should semen from confirmed BSE bulls be distributed without control?
iv. Could such semen be permitted for use in herds with confirmed BSE at owners risk?
v. Should MAFF require destruction of semen from confirmed cases and pay compensation?
vi. Is there a risk of semen from BSE negative bulls being ‘contaminated’ during normal collection and processing procedures even if normal hygiene and sterilisation procedures are followed?
vii. Should bulls which are progeny of BSE confirmed dams/sires be allowed into AI system?
viii. Should bulls originating from known infected herds be allowed into AI system? 2309

6.97 The minutes of the BSE research and development meeting, held in Mr Meldrum’s office on 17 November 1988, do not record any discussion about the transmission of BSE via semen. 2310

MAFF consults the industry on AI

6.98 The proposal to ban the distribution of semen from BSE-positive bulls, and to prevent the progeny of BSE-confirmed cows from entering AI centres, was discussed when Mr Kyle and Mr Kevin Taylor, veterinary Head of the Notifiable Diseases Section, met NFU and NCBA representatives on 5 December 1988. 2311 On the same day, in view of the discussions, Mr John Wilesmith, Head of Epidemiology at the CVL, informed Mr Taylor of ‘what the [Milk Marketing Board] and Avoncroft Cattle Breeders have in mind on this subject’. He understood that semen from the offspring of affected dams and bulls born in the same cohort as affected animals, would not be used by either body in their AI operations. 2312

6.99 Mr Taylor subsequently reported to Mr Meldrum that the discussion with NFU and NCBA representatives was inconclusive, with both organisations wanting more time to consider their reactions. However:

2309 YB88/11.16/4.1
2310 YB88/11.17/3.1–3.5
2311 S184 Meldrum para. 144
2312 YB88/12.09/4.1
The balance of feeling at the meeting was, however, strongly in favour of banning the use of stored semen, at least until semen had proved not to be a vehicle of transmission. Opinion was divided on whether any ban should be voluntary or affected by legislation, the NFU arguing for the former.

On the [question of allowing the male progeny of affected cows to be used for AI] attitudes were more clearly influenced by financial considerations, NCBA in particular talking of ‘massive compensation’. All present understood the arguments and were reluctant to see the progeny of affected cows used for AI in case a genetic susceptibility was eventually proven. NCBA asked about legal implications, and asked for time for discussion and thought before giving a definite opinion.2313

6.100 Two weeks after the meeting, Mr Kershaw-Dalby, of the NCBA, wrote to Mr Meldrum to inform him of the NCBA’s considered position:

1. Any semen stocks from bulls which become infected with BSE should be destroyed and any stocks held by breeders should be traced by the bull owners and an offer to replace this with semen from an alternative bull made.

2. If the dam or surrogate dam (recipient of an embryo) of a bull active in an AI stud becomes infected with BSE then the bull should be removed from service and all semen stocks withdrawn from sale. The bull will have a market value for slaughter and there should be no compensation required.2314

6.101 Mr Kershaw-Dalby commented that the unanimous opinion of those that he had consulted within the industry was that no risk of spreading BSE should be taken.2315 Mr Meldrum replied on 10 January 1989, and informed Mr Kershaw-Dalby that MAFF was obtaining legal guidance on various aspects of dealing with AI, and that the NCBA’s input would be helpful ‘when we establish firm policy lines’.2316

MAFF obtains legal and expert advice

6.102 Meanwhile, Mr Bell had minuted Mr John Suich, Head of the Animal Health Division, explaining the three areas in which MAFF required legal advice:

   i. if a bull was confirmed with BSE: would MAFF be liable for the loss in value of the bull’s semen should MAFF decide to suspend its use and it was later proved that BSE could not be transmitted through semen? Also, could MAFF suspend the use of the bull’s semen even though there was no evidence that BSE could be transmitted through it?;

   ii. if a bull’s dam was confirmed with BSE: whether MAFF would be liable for the cost of restricting the use of semen to the owner’s own herd, and whether MAFF would be liable for any loss if it allowed the bull’s semen to be used and it subsequently developed BSE or BSE subsequently occurred in the herds in which its semen was used; and

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2313 YB88/12.7/5.1
2314 YB88/12.19/3.1
2315 YB88/12.19/3.1
2316 YB89/1.10/4.1
iii. if AI centres sought to restrict the admission of bulls from the same cohort as BSE-confirmed cases: whether they could obtain official confirmation from MAFF of the owner’s declaration that the bull was from a BSE-free herd. 2317

6.103 Mr Bell said that the legal advice was required by the end of January 1989, so that MAFF’s policy could be announced at the time of the publication of the Southwood Report in February. 2318

6.104 Mr Suich forwarded Mr Bell’s minute to Mr Alan Lawrence, Animal Health Division, BSE and Related Issues, on 11 January 1989, asking him to seek the Legal Department’s advice. However, he suggested that whatever the legal advice:

I think we need to give the whole matter very careful thought before we proceed. All the other restrictions and safeguards which we have introduced have been on the advice of the Southwood Working Party. Should we not put the question of AI to the Working Party also? . . .

There have already been various suggestions, especially in connection with public health, that measures should be taken to guard against the possible risk of infection being transmitted from animals in which clinical BSE is not apparent. So far we have said that we do not consider this necessary and have pointed to the fact that the Southwood Working Party has made no recommendation that we should. If we take decisions on AI which might seem to imply that there is a risk of infection from clinically healthy cattle we will need to be able to explain convincingly why the nature of the risk from AI is greater or different. 2319

6.105 On 16 January 1989 Mr Meldrum responded to Mr Suich’s minute of 11 January 1989, saying that he did not favour an approach to the Southwood Working Party, because:

I am fully aware that if we made such an approach he would suggest that legislation should be enacted to impose a ban on the use of semen from affected bulls and a ban on the introduction of bulls from affected dams into an AI centre. 2320

6.106 He concluded that before reaching a final view and obtaining the support of Ministers, it would be helpful to get the legal advice requested by Mr Bell. 2321 Mr Cruickshank, Head of the Animal Health Group, endorsed these views the following day. 2322

6.107 In a statement to the Inquiry, Mr Meldrum explained why he was against referring the AI issue to the Southwood Working Party:

I believed that to add a further issue at that time on which the Southwood Working Party would need to fully and properly consult, consider and
advise, would have held up delivery of the final report which was urgently awaited by Ministers.\textsuperscript{2323}

\textbf{6.108} On 24 January 1989 Miss D Wood of the Legal Department provided the legal advice sought. On a general basis, she advised that ‘if MAFF decides to err on the side of caution but there is some scientific evidence of genetic susceptibility to support the restrictive measures taken, it is unlikely, in my view, that a civil case for judicial review would succeed’. Further, ‘provided MAFF acts reasonably in the general interests of the national breeding stock and to consumers at the end of the food chain there is no particular duty of care owed to any individual breeder, for which he could sue in negligence’.\textsuperscript{2324}

\textbf{6.109} Mr Meldrum chaired a meeting on 13 January 1989, attended by Mr Kyle, Mr Bell and Mr Suich. For any bull confirmed with BSE, Mr Bell proposed that its licence be suspended, but that its stored semen should not be destroyed, as this would involve paying compensation. Mr Kyle noted that legal advice supported this approach. However, Mr Meldrum felt it could be an over-reaction, since there was no evidence to suggest semen posed a risk. Mr Suich pointed out that such action would be the first taken without expert advice. Mr Meldrum suggested that the advice of Professor John Bourne, Director of the Institute of Animal Health, and Dr Richard Kimberlin be sought.\textsuperscript{2325}

\textbf{6.110} In relation to the offspring of confirmed cases of BSE, Mr Kyle noted it would be reasonable for MAFF not to licence such a bull, since MAFF risked criticism if it licensed a bull that subsequently affected other herds. Mr Meldrum agreed that such bulls should not be licensed. However Mr Suich pointed out that there was no restriction on breeding from cows whose dams were affected with BSE. Mr Bell queried how MAFF could justify not licensing the offspring of confirmed BSE cases, given Mr Meldrum’s previous assertion that there was no evidence that semen posed a risk. Mr Meldrum responded that it would be to protect the AI centre’s exports. However Mr Bell thought that this was a commercial decision for the AI centre to make:

Mr Meldrum concluded that it would be wise to stop affected bulls going into AI centres and MAFF would probably need to revoke an established bull’s licence if its dam was subsequently to become affected. It would, however, be necessary to await advice from NPU and Richard Kimberlin before discussing the matter with the industry and reaching a conclusion.

\ldots

It was agreed that taking action against bulls from the same cohort as BSE-affected cattle would be unjustified.\textsuperscript{2326}

\textbf{6.111} On 28 February 1989 Mr Meldrum wrote to Dr Kimberlin and Professor Bourne, seeking their ‘views on the possibility that BSE might be transmitted in bovine semen’. Mr Meldrum explained that he understood ‘there is no evidence to suggest that any of the spongiform encephalopathies have been spread by semen’, though there was ‘a well recognised inherited susceptibility to Scrapie and there is
some speculation as to whether a similar condition occurs with BSE’. He asked for their opinion on the possibility of transmitting BSE via semen collected from a clinically normal bull that subsequently developed BSE, and the probability that semen, from a bull whose dam is confirmed with BSE, was infective. Mr Meldrum concluded:

I appreciate that I may be asking you to offer an opinion on the impossible but I would be grateful for your views nonetheless as we need to formulate our policy in this area based on the best available evidence.2327

6.112 Dr Kimberlin replied on 3 March 1989, stating that ‘I have been dreading the question of infectivity in semen! It is difficult enough with scrapie but the widespread use of AI in cattle makes the problem even more tricky to assess’. Dr Kimberlin discussed the current knowledge in relation to scrapie, and then turned to BSE:

[W]e have two major unknowns. As I have already advised, it is absolutely essential to assess the occurrence of maternal transmission of BSE . . . The other unknown is whether or not genetic factors control BSE. The fact that there is no evidence yet does not rule out a genetic effect.2328

6.113 Dr Kimberlin then considered:

. . . what I can only call the ‘perceived’ risks as opposed to the estimated risks. Since it is conceivable that in future BSE might have to be controlled by sire selection, there is a case for banning now the use of semen from positive bulls and high risk bulls. To do otherwise might appear illogical and the ban could always be lifted in the face of real evidence that maternal spread of BSE infection does not occur.2329

6.114 Dr Kimberlin concluded that it was difficult to discuss ‘such a complex issue’ by letter, and that he may not have explained himself adequately. Thus, he offered to discuss the issues further in person.2330 Following a meeting with Mr Meldrum, Dr Kimberlin wrote to him again on 16 March 1989 regarding the infectivity of semen. Dr Kimberlin compared the theoretical risks associated with natural service compared to AI. He noted that in natural service, the total ejaculate would be around 6 ml. Only about 20 µl (microlitres) would be used per cow for AI. Dr Kimberlin thought that ‘Regardless of what assumption one makes about the localisation of infectivity in semen, the theoretical risks associated with AI will be lower by a factor of about 300; say 10^{-2}. He set out a calculation of the theoretical risk of semen, and continued:

This simple calculation again shows that semen presents a low risk to the cattle population . . . The important point is that the risk from natural service would be around . . . 100 times higher than from AI. In other words, AI would be safer than natural service and this could be used as an argument for not taking action against BSE positive AI bulls; provided of course, that it is not overruled by the ‘perceived risks’.2331
Mr Meldrum replied to Dr Kimberlin on 20 March 1989, thanking him for his comments and adding:

Quite clearly this issue is extremely complex and I conclude that although the risks appear very slight, particularly with AI, we need to assess these risks extremely carefully considering not only the technical issues but also the perception of any such risks.\textsuperscript{2332}

Professor Bourne replied to Mr Meldrum on 5 April 1989. He noted that ‘semen collected from a clinically-normal bull which later develops the disease has a low but finite probability of containing pathogen. It can be argued that this likelihood increases during the period leading up to the onset of clinical signs’. He suggested:

\ldots the most sensible course of action is to regard BSE as cattle scrapie, and follow the guidelines laid down by MAFF for the management of scrapie in sheep. Hence the progeny of a BSE-affected dam would be culled and its tissues and secretions destroyed \ldots

It is difficult to quantify the risk of transmission and [it is] a matter of opinion what constitutes an acceptable risk in this situation.\textsuperscript{2333}

Approval and implementation of the proposals

Mr Meldrum put a submission to Mr Donald Thompson, Parliamentary Secretary, on 19 July 1989. The proposed action on which his agreement was sought, was:

\begin{enumerate}
  \item for a bull confirmed with BSE: collected and stored semen would not be used, which would involve suspending the licence approval until research showed conclusively that BSE could not be transmitted by semen;
  \item for a bull yet to enter an AI centre whose dam is confirmed with BSE: the bull would not be allowed entry into the AI centre; and
  \item for a bull already in an AI centre whose dam is confirmed with BSE: the AI centre should be informed so that it could decide whether to continue to collect and distribute semen or whether to impose a voluntary embargo.\textsuperscript{2334}
\end{enumerate}

On 28 July 1989 Mr Meldrum was informed that Mr David Curry, who had succeeded Mr Thompson as Parliamentary Secretary a few days earlier, had agreed to these proposals.\textsuperscript{2335} MAFF officials then met cattle breeding and other farming group representatives on 12 September 1989 to discuss the proposals. A number of issues were discussed, but the proposals were not altered.\textsuperscript{2336}

On 31 January 1990 Mr Richard Gregg, Branch C of Animal Health Division, wrote to representatives of cattle breeding associations, the Milk
Marketing Board (MMB), BVA, Meat and Livestock Commission (MLC), NFU and the Royal College of Veterinary Surgeons (RCVS) confirming MAFF’s policy on AI. He noted that the arrangements as agreed at the meeting on 12 September 1989 would be ‘implemented forthwith, until scientific evidence shows conclusively whether or not bovine semen is a vehicle for BSE transmission’. The policy was:

i. In cases where BSE was confirmed in an approved bull;
   a. the approval of the bull would be suspended pursuant to regulation 5(8)(b) of the Artificial Insemination of Cattle (Animal Health) (England and Wales) Regulations 1985;
   b. under regulation 5(9), the owner would be informed that no semen collected before suspension could be used without written consent of the Minister; and
   c. if the owner chose to destroy collected semen, supervision was required from the approval office;

ii. In cases where BSE was confirmed in the dam or surrogate dam of a bull being put forward for AI approval;
   a. approval of the bull would be refused. To this end, application forms for AI approvals would include an owner’s declaration as to the BSE status of the bull’s dam or surrogate dam; and

iii. In cases where BSE was confirmed in the dam or surrogate dam of an approved bull;
   a. it would be for the owner and the AI centre to decide whether to continue collection and distribution of the semen, or whether to impose a voluntary embargo; and
   b. approval letters would stipulate that the owner was to inform the Ministry should the approved bull’s dam or surrogate dam develop BSE.

6.120 Mr Gregg also stated that compensation would not be payable where approval was suspended.

6.121 On 26 March 1990 Mrs Sylvian Sadowski, Branch C of the Animal Health Division, minuted Miss Wood about the AI policy. She explained that the requirement on bull owners, to certify that dams of bulls entering AI centres were BSE free, was causing difficulty. The MMB was ‘unhappy’ about signing declarations for bulls they purchased as calves and then submitted for AI approval up to one year after purchase. The MMB claimed it had no knowledge of the dam’s history in the intervening period and had reservations about going back to the breeder to find out. MAFF also found it difficult to adequately check all the declarations because its various systems did not provide sufficient information.
6.122 Mrs Sadowski canvassed problems with cattle identification. She said:

I am concerned that if we license a bull born of an infected dam because we have been unable to retrieve information previously notified by the dam’s owner, MAFF may be open to criticism and possible claims for compensation if any semen collected became valueless or, if semen proves to be infectious, infection in other herds was traced to semen from the bull . . .

In the light of the background, I would be grateful if you could consider our position, in particular whether MAFF would be liable if it approved a bull which was subsequently found to be worthless because of its BSE background.2341

6.123 Miss Wood advised on 28 March 1990 that MAFF would be so liable, and that the position was ‘serious’:

You have been notified by the dam’s owner that the dam has become infectious. You cannot retrieve that information in all cases: that is negligence. You have breached your duty of care to ensure that that information is notified to the people who need to know. You have already publicly stated that you will be checking whether or not a dam or surrogate dam has been reported as a BSE case and owners of bulls are entitled to expect that you have carried out those checks thoroughly and to rely on that check when they purchase bulls.2342

6.124 Mrs Sadowski replied on 11 April 1990 that ‘we see no alternative to telling the Industry that the BSE records were not originally set up in a manner that allows us to trace bulls’ dams or surrogate dams with certainty and that while we will do our utmost to check each case, we can offer no cast iron guarantees’. MAFF would try to improve its checking procedures and thus would be using its ‘best endeavours’ with the information it had available. Mrs Sadowski suggested it was reasonable for MAFF to require the same of the industry and therefore require them to sign the declaration on the application form. If they did not then MAFF should be able to refuse approval.2343

6.125 Miss Wood agreed that if MAFF ‘do all that a reasonable government department could be expected to do in the foreseeable circumstances, then [it] will not have failed in [its] duty of care and will be able to rebut any claim for negligence’. However, she did not see how calf owners could be asked to furnish information about dams or surrogate dams that develop BSE quite some time after they had purchased the calf.2344

6.126 Mrs Sadowski and Miss Wood exchanged minutes again, with the result being that MAFF would only require owners to sign a declaration that the bull’s dam was BSE free ‘to the best of my knowledge’.2345 Mr Gregg conveyed this proposal to Mr Merson of the MMB on 14 May 1990.2346
MAFF revisits its policy

6.127 Once the AI policy was implemented, MAFF continued to investigate whether BSE could be transmitted via semen. One method used was an epidemiological study to track the offspring, produced during progeny testing, of AI bulls. On 16 April 1992 Mr Wilesmith wrote to Mr K Taylor about two AI bulls that had been confirmed with BSE. Mr Wilesmith had obtained the details of their offspring. In addition, similar information had been supplied for offspring of two unaffected bulls of the same age, which had been progeny tested in the same counties as the confirmed bulls. The progeny were above the age at which BSE could be expected to occur. Mr Wilesmith advised:

There is no indication of an excess risk [of contracting BSE] for the progeny of affected bulls. Perhaps more importantly the incidence [of BSE] in progeny . . . is not at variance with that observed in the general epidemic for this age group.

As we have discussed in the past these analyses are rather slight with respect to determining the risks that semen from BSE affected bulls may carry as the two affected bulls were most likely infected in calfhood. However, there is no evidence from this analysis that the semen from the two bulls considered resulted in the transmission of infection to their progeny.

The more difficult aspect of this analysis is the risk of infection for the dams, the recipients of the semen. However, no case of BSE has been reported in these recipients.\[2347\]

6.128 On 27 April 1992 Mr Meldrum informed Mr Sadler of the United Kingdom Renderers’ Association (UKRA) that in practice, when a bull approved for AI purposes was confirmed as having BSE, the following occurred:

i. the breeding company which processed the semen was asked to provide a list of all farm storage units to which semen had been supplied;

ii. all the named farm storage licensees were then informed in writing that the bull’s AI approval had been withdrawn and that no semen collected prior to the suspension could be used without the written consent of the Minister; and

iii. the licensees had the option either to continue to store the semen until the safety of semen with respect to BSE transmission was ascertained, or to destroy the semen under MAFF supervision.\[2348\]

6.129 On 21 September 1993 Mr Bell revisited MAFF’s AI policy in correspondence with Mr K Taylor. He noted:

It was decided that this policy would apply until there was scientific evidence to show conclusively whether or not bovine semen is a vehicle for BSE transmission. Legal advice was that any legal challenge to have a suspension lifted would be based on whether MAFF had acted unreasonably in suspending approval. If MAFF acted with caution because of uncertainty
of scientific knowledge, such a challenge would be unlikely to succeed. Our policy is still supported by AI centres, but we have had several queries from owners of semen to have the suspension lifted. In the light of the report which MAFF presented to OIE in May 1992, we therefore need to assess whether the policy can continue.2349

6.130 Mr Bell explained that the report to the Office International de Epizooties (OIE) had concluded that semen from BSE-affected bulls was non-infective, and thus placed doubt on the current policy from a legal perspective. Mr Bell thought it needed to be decided whether the report would persuade a court to conclude that MAFF would be acting unreasonably if it continued to suspend the use of semen from BSE-affected bulls. Before he sought further legal advice, Mr Bell asked Mr Taylor to advise on the scientific status of the report to OIE, and in particular, ‘Does it constitute the conclusive scientific evidence under which we could discontinue our present policy?’ Mr Bell suggested that one possible relaxation would be to allow the use of semen from a BSE-confirmed bull in the owner’s own herd.2350

6.131 Mr Taylor responded on 4 October 1993, and said the ‘recommendations of the OIE Animal Health Code are unequivocal: semen can be traded safely, and no conditions are recommended’. After considering the arguments, Mr Taylor judged that ‘prudence dictates that if there was no pressure for change none should be offered’. He suggested that if there was pressure for change, semen collected after clinical signs appeared should be prohibited from use, while restrictions on semen produced before signs appeared could be relaxed. However, users of the semen should be informed that it originated from a bull that had subsequently developed BSE. Finally, Mr Taylor suggested that if MAFF was to consider changing its policy, the issue should be referred to SEAC.2351

6.132 Mr Thomas Eddy, Head of Animal Health (Disease Control) Division, was copied Mr Taylor’s minute, and on 25 October 1993 he informed Mr Bell that he agreed with Mr Taylor and that if a change was to be considered it would be sensible to obtain SEAC’s views. He continued:

I have to say that I am somewhat reluctant in policy terms to be seen to be relaxing restrictions on BSE at this stage. There remains quite a ground swell of feeling that our restrictions do not go far enough and although we have been robust in defending the current position, I am not sure that Ministers would be comfortable in starting to roll back the status quo yet.2352

6.133 It appears that SEAC did not consider this issue. MAFF’s AI policy in relation to BSE-affected bulls has not changed since this time.

Embryo transfer

6.134 Embryo transfer has played a role in UK cattle breeding since the 1970s. Multiple Ovulation Embryo Transfer (MOET), in particular, enables a greater
number of calves to be bred from a single high quality cow by transferring her embryos into several surrogate mothers. See vol. 12: *Livestock Farming* for descriptions of embryo transfer techniques and practices. In addition, vol. 2: *Science* describes the experiments that were initiated to try to determine whether embryos could transmit BSE.

6.135 We have not sought evidence about MAFF’s consideration of embryo transfer policy in light of BSE. However, whilst investigations into the transmissibility of BSE via embryos were ongoing, in 1992 the EU implemented new controls on embryo trade in response to BSE. Article 1 of Commission Decision 92/290/EC stated that ‘Member States shall not send to other Member States embryos of the domestic bovine species derived from females in which, at the time of sending, bovine spongiform encephalopathy is suspected or confirmed’. Article 2 required that:

i. The United Kingdom shall not send to other Member States embryos of the domestic bovine species derived from females which:

   – were born before 18 July 1988,

   – are the offspring of females in which bovine spongiform encephalopathy is suspected or confirmed.

ii. The provisions of paragraph 1 shall not apply to embryos derived from females born outside the United Kingdom and subsequently introduced into the United Kingdom after 18 July 1988.

iii. The United Kingdom shall make full use of records to guarantee identification of donors and embryos.

Discussion

6.136 The approach of MAFF to the different aspects of cattle breeding that are covered in this chapter illustrates some of the issues that arise in relation to the use of expert committees. We propose first to consider AI.

The decision not to refer AI to the Southwood Working Party

6.137 The reason given by Mr Meldrum to Mr Suich for not referring the issues in relation to AI to the Southwood Working Party differed from that which he gave to us (see paragraphs 6.105–6.107). To Mr Suich he said that he did not wish to put the matter to the Southwood Working Party because he was ‘fully aware’ that they would suggest legislation banning the use of semen from infected bulls, or the introduction of bulls from affected dams into an AI centre. Inferentially this indicated that Mr Meldrum thought it preferable to form his own view on the matter rather than have it resolved by the Southwood Working Party in the manner he anticipated. If this was Mr Meldrum’s preference, was it one that he should have adopted and was Mr Suich right to have accepted it?

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2353 L18 tab 22
2354 These issues are also dealt with elsewhere in this volume and in vol. 4: *The Southwood Working Party, 1988–89*, vol. 6: *Human Health, 1989–96*, vol. 7: *Medicines and Cosmetics* and vol. 11: *Scientists after Southwood*
6.138 We consider that Mr Meldrum acted reasonably in deciding that he would prefer, himself, to resolve the issues in relation to AI rather than refer them to the Southwood Working Party. Resolution of the issues involved an exercise in risk assessment, informed by expert advice. The expert advice needed was of two varieties:

i. He needed advice from an expert or experts in TSEs in relation to the likelihood that BSE would be transmissible genetically, or directly as a consequence of semen containing the BSE pathogen.

ii. He needed legal advice on the duties owed by MAFF in public and private law.

6.139 The Southwood Working Party was not itself in a position to provide either areas of expertise. Mr Meldrum sought advice directly from those who had the expertise – the MAFF lawyers in relation to MAFF’s legal position and Dr Kimberlin and Professor Bourne in relation to risks of transmissibility.

6.140 The advice which he received in relation to transmissibility was that the possibility that there was a genetic factor in BSE could not be ruled out (see paragraphs 6.113–6.114) and that there was a low, but finite probability that semen from a bull incubating BSE might contain the pathogen (see paragraph 6.116).

6.141 In the light of this advice Mr Meldrum, no doubt after consulting his veterinary colleagues, decided on the policy recommendation set out in his submission to Mr Thompson (see paragraph 6.117). That recommendation struck, it seems to us, a balance that reasonably reflected both the transmission risk and the commercial considerations. Semen from affected bulls should not be used. Progeny of an affected dam should not be selected for breeding purposes, but if a bull had already been purchased by the AI centre before its dam developed clinical symptoms, it should be for the AI centre to decide whether or not to use its semen.

6.142 Mr Meldrum told us that he did not wish to refer the AI issue to the Southwood Working Party because this would have held up its Report. Whether the Southwood Working Party would have held up their Report to deal with this issue, or whether, had it been referred to them, they would have given it separate consideration, they might well have needed a considerable period to consider the implications of AI, obtain expert advice, and reach their conclusions. This is a further reason why we consider that Mr Meldrum acted reasonably in carrying out his own enquiries and forming his own view. As with the ruminant feed ban, so with AI, MAFF had no need of the guidance of the Southwood Working Party in order to reach an informed policy decision.

**Use of the progeny of BSE for breeding**

6.143 The possibility that there might be a genetic factor in susceptibility to BSE, or that BSE might otherwise be transmissible from cow to calf (‘maternal transmission’) led both the MAFF veterinarians and the BVA to conclude that it was preferable that the progeny of cattle with BSE should not be used for breeding lest they, having been infected with the disease, should pass it on to their own progeny.
On 30 April 1988 MAFF recommended, in the *Veterinary Record*, that the progeny of affected cows should not be retained for breeding purposes (see paragraph 6.9). This would have brought the advice to the attention of veterinarians, but not to most farmers. On 25 January 1990 the BVA issued a press notice giving the same guidance (see paragraph 6.15).

On Mr Gummer’s initiative, the SVS prepared a paper setting out the options for action to address the possibility that BSE might be vertically transmissible. In essence, the choice was between simply advising farmers not to breed from the progeny of cattle affected by BSE or imposing regulations that would prevent them from doing so. The latter course raised tricky policy considerations. If statutory action was taken, this might reinforce public concern about the disease and have an adverse effect on the market. If no mandatory action was taken, the public might criticise MAFF for failure to take adequate precautions. In the event, the decision was taken to refer the matter to SEAC (see paragraphs 6.43–6.44).

We do not believe that it can have occurred to MAFF that there would be anything controversial about giving advice not to breed from offspring, pending the possibility of SEAC recommending more stringent measures. Dr Pickles’s intervention, in a matter which was pre-eminently one of veterinary expertise, cannot have endeared her to the MAFF veterinarians.

The arguments raised by Dr Pickles against the issue by MAFF of advice against breeding from the offspring of dams affected by BSE were:

i. Southwood had not given such advice. For MAFF to do so might call in question the soundness of other parts of the Southwood Report, including its assessment that the risk to humans was remote.

ii. Such advice would raise concerns on the part of the public and the media about the offspring of BSE victims. This might lead to their being made the subject of an export ban.

iii. There would be pressure to replace such advice with statutory controls.

iv. The result might be a loss of income to farmers.

Dr Pickles added that there would be little benefit from the advice as, even if maternal transmission occurred, BSE would almost certainly die out in a few years.

The question of the extent to which the proposed advice would be beneficial in expediting the eradication of BSE, should maternal transmission occur, was one that called for expert input from the veterinarians. The points raised by Dr Pickles were essentially political questions.

In those circumstances we question whether SEAC had much to contribute to the debate. MAFF’s veterinarians were as well if not better placed to provide the expertise that was needed to inform the debate as SEAC. It was for MAFF administrators and for Ministers to weigh veterinary considerations against the wider political implications of the proposed advice.

We can, however, see force in Dr Pickles’s point that, having just set up SEAC, it might discredit the Committee to proceed to issue advice without consulting them. In these circumstances we consider that Mr Gummer acted
reasonably in deciding that guidance from SEAC should be sought before MAFF’s advice to farmers was given.

6.151 The basis on which SEAC’s advice was sought, however, was not satisfactory. They appear to have been expected to produce an opinion on a difficult matter at their first meeting. They were asked not merely to advise on the scientific justification for taking action in relation to breeding from the offspring of cattle suffering from BSE, but to have regard to ‘wider issues such as perception of the media, public and the export trade’. We do not think that SEAC was the right body to reach a decision that involved evaluating those wider issues. Yet the minutes of SEAC’s meeting indicate that much of their discussion was devoted to these issues.

6.152 It seems to us that after their meeting SEAC had some difficulty in formulating a scientific basis that justified their disapproval of the advice that MAFF had wished to give to farmers. Dr Tyrrell failed to produce a convincing explanation of this when he appeared before the Select Committee and SEAC’s Final Paper did not persuade us that Mr Meldrum’s position was unsound. But SEAC, dealing with this matter at their first meeting, were constrained to advise under pressure. For most members of SEAC, policy on animal breeding was unfamiliar territory. Their advice is not a matter for criticism.

6.153 Mr Gummer felt that he could not take a decision which contradicted SEAC’s advice as he was basing his position firmly on scientific advice. We, like the NFU, appreciate the difficulty that Mr Gummer would have had in disregarding the first advice to be proffered by the new advisory Committee. Mr Meldrum commented in a minute to Mr Lowson:

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\ldots \text{in such delicate situations it is imperative that I am in a position to present my case to the Tyrrell Committee.}^{2355}
\]

6.154 We sympathise with Mr Meldrum. On a matter such as this it would have been preferable for SEAC to have had the benefit of hearing from him.

6.155 In summary, we consider that a preferable way to have made use of SEAC in relation to the breeding issue would have been:

i. to have targeted the advice sought on the scientific issues;

ii. to have allowed SEAC more time to reach a considered advice; and

iii. to have invited SEAC to discuss the veterinary issues with Mr Meldrum or some other member of the SVS.

6.156 Although this episode provides a lesson for the future about the way in which the Government should make use of scientific advisory committees (we discuss this further in vol. 11: Scientists after Southwood), we do not think that it calls for criticism of any of the individuals who were involved at the time.