

Opinion on the Welfare of Farmed and Park Deer

July 2013

Farm Animal Welfare Committee
Area 5D, Nobel House
17 Smith Square
London SW1P 3JR, UK
www.defra.gov.uk/fawc

FAWC Opinions

FAWC Opinions are short reports to Government¹ on contemporary topics relating to farm animal welfare. They are based on evidence and consultation with interested parties. They may highlight particular concerns and indicate issues for further consideration.

Opinions published by the Farm Animal Welfare Committee

The welfare implications of breeding and breeding technologies in commercial livestock agriculture, 2012

Contingency planning for farm animal welfare in disasters and emergencies, 2012

Opinions published by the Farm Animal Welfare Council

Lameness in sheep, 2011

Mutilations and environmental enrichment in piglets and growing pigs, 2011

Osteoporosis and bone fractures in laying hens, 2010

The welfare of the dairy cow, 2009

Policy instruments for protecting and improving farm animal welfare, 2008

The welfare of farmed game birds, 2008

Enriched cages for laying hens, 2007

Beak trimming of laying hens, 2007

¹ Where we refer to "Government" we are addressing ourselves to the Department for Environment, Food and Rural Affairs in England, the Scottish Government and the Welsh Government, and other responsible Government Departments and Agencies.

SCOPE

- 1. This Opinion considers the welfare of all enclosed deer, that enter the food chain, from birth to slaughter.
- 2. The Farm Animal Welfare Council's² 1985 report on the Welfare of Farmed Deer did not include park deer. Since there is no clear legal distinction between deer parks and farms, deer in parks are covered in this Opinion.
- 3. This Opinion is directed at all deer species which are enclosed. These are principally red deer (*Cervus elaphus*) on farms and fallow deer (*Dama dama*) within parks: currently, only one commercial fallow deer farm is known to exist in Great Britain.
- 4. Reindeer (*Rangifer tarandus*) are kept in the UK but are not farmed. There is a long established free-ranging herd in the Scottish Cairngorms but in recent years other reindeer have been imported and kept in small zoological collections or open farms where they are used as a visitor attraction, particularly at Christmas. There have been a number of reports of ill thrift and death³ in these animals due to poor management and their special dietary and environmental requirements. Reindeer are outwith FAWC's remit because they are not farmed but we strongly suggest their welfare should be considered further by the Government as they are particularly likely to be kept by inexperienced owners for commercial reasons.
- 5. The objective of this Opinion is to determine whether the welfare of farmed deer has changed since 1985.

Recommendation

1. That the welfare of reindeer should be considered further by Government as they are particularly likely to be kept by inexperienced owners for commercial purposes.

BACKGROUND

6. When writing this Opinion, we heard evidence from various parties via consultation, and we have also used our knowledge and experience of farm animal husbandry, underpinned by visits to deer farms, a deer park and the only dedicated deer abattoir. We have focussed on those procedures to which farmed and park deer are subjected during day-to-day husbandry.

² The Farm Animal Welfare Council was closed in March 2011 following a review of public bodies. It was reconstituted as the Farm Animal Welfare Committee, an expert committee of the Department for Environment, Food and Rural Affairs and the Devolved Administrations in Scotland and Wales. Both the Committee and the Council use the acronym FAWC.

³ Foster, A. 2010. Common conditions of reindeer. In Practice, 32: 462-467.

- 7. Following consultation we agree with consultees⁴ that farmed deer should not be considered as wild animals. Wild or park deer moved on to farms will quickly become tractable especially if they are placed with existing farmed deer.
- 8. The EU defines wild (cf. farmed) game as "wild ungulates and lagomorphs, as well as other land mammals that are hunted for human consumption and are considered to be wild under the applicable law in the Member State concerned, including mammals living in enclosed territory under conditions of freedom similar to those of wild game"⁵.
- 9. It does not follow that deer that live in an enclosure cannot be classed as wild for meat hygiene purposes. The decision as to whether a deer is wild or farmed should, according to the Food Standards Agency, be determined with reference to the conditions and circumstances in which the deer live.
- 10. More farmed deer are killed in the UK now than in 1985 and this, together with the importation of up to 30,000 farmed red deer carcases per annum from New Zealand, indicates a growing demand for venison from the British consumer. There are currently stable or declining supplies of wild venison in the UK which are stimulating an increase in the number of British deer farms, although this has been difficult to estimate.
- 11. Almost 30 years have passed since FAWC's 1985 Report and it was felt that in a changing industry we should revisit the issue of farmed deer welfare and also look at that of deer in parks.

Welfare concerns or contentious issues and/or opportunities to improve welfare

- 12. Deer farming has the potential to attract people who are new to agriculture and who have little or no experience of managing livestock. Insufficient experience and expertise can lead to inadequate management. Training for prospective deer farmers is lacking. The British Deer Farms and Parks Association (BDFPA) is well placed to carry out training courses to remedy problems associated with a lack of stockmanship.
- 13. A reluctance to cull may allow deer numbers to grow to unacceptable levels in small enclosures with inevitable impact on the welfare of the deer.

Recommendation

2. That training for i) veterinarians and ii) deer farmers and park keepers, in the management of enclosed deer be encouraged; and that a body, such as the British Deer Farms and Parks Association, provides the education and management skills to those keeping deer specifically on the feeding, handling and catching of park deer, and the management and creation of health plans for farmed deer.

⁴ Those organisations and individuals who participated in FAWC's 2011 consultation on the welfare of farmed deer are listed in Appendix A.

⁵ European Union. April 2004. Meat Hygiene Regulation (EC) No 853/2004 Annex 1.

Number of animals involved

- 14. The UK handles approximately 5,000 tonnes of venison per annum coming from deer farms and wild deer, including deer in parks. The production of wild venison in Scotland is static or declining with no immediate prospect of increasing. Between 2006 and 2009 retail sales of farmed venison rose 34% in the UK, from £32 million to £43 million in 2009, mostly through supermarket sales. More recent figures suggest that more venison is being consumed by the UK customer.
- 15. We have had difficulty identifying the numbers of farmed and park deer accurately. In 1985, FAWC estimated that there were some 5,000 deer on 'well over 100 deer farms' although this figure excluded deer parks. Since then the number of farmed deer in the UK has grown substantially to about 31,000⁷. The number of park deer are unknown but the most recent assessment in 2005 gave an annual cull of around 8,000 deer suggesting about 40,000 park deer^{8,9}. By contrast wild deer in GB are estimated to number well over two million with an annual cull of over 300,000¹⁰. The number of enclosed deer is therefore a minority of deer across the country.

Recommendation

3. That Government establishes a record of all enclosed deer holdings with the intention of recording numbers and species of deer per holding.

Legal Context

16. All deer are legally protected from cruelty. Farmed and other deer "under the control of man, whether on a temporary or permanent basis" are protected by the Animal Welfare Act (2006) (AWA) and the Animal Health and Welfare (Scotland) Act (AHWSA) 2006. Wild deer that are not covered by the AWA or AHWSA are protected from intentional cruelty under the Wild Mammals (Protection) Act (1996) whereby any person who "mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates a wild mammal with intent to inflict unnecessary suffering" is guilty of an offence. The Act also usefully details the circumstances for exemption under the Act and the humane killing of wild mammals, including deer, in a 'reasonably swift and humane manner'.

⁶ Scottish Venison Partnership. August 2011.

⁷ Defra/National Statistics. Farming statistics: Final crop areas, yields, livestock populations and agricultural workforce. UK. 1 June 2012, p.15.

⁸ Chapple, D (2005). The impact of a wild deer cull on the venison market in the UK. Report prepared by ADAS for Defra.

⁹ Munro, R (2002). The Deer Industry in Great Britain. Report prepared for DEFRA and the Food Standards Agency.

¹⁰ Chapple op cit.(7).

- 17. The AWA and AHWSA also provide for responsible persons (owners and keepers) to ensure that the needs of an animal, for which he or she is responsible, are met to the extent required by good practice. These needs reflect the Five Freedoms and include: provision of a suitable environment and diet, to be able to exhibit normal behaviour patterns, to be kept with, or apart from, other animals, and to be protected from pain, suffering, injury and disease. In contrast, deer which are in a wild state, for instance in managed forests, are not extended the same protection as farm or park deer, unless taken into temporary care.
- 18. In addition to legislation, there are the (traditional) welfare codes and guidelines for transport of farmed deer and for abattoir practice.
- 19. As of 1985, deer were excluded from the Movement of Animals (Records) Order 1960 but this was amended in 1989 to include deer in the definition of animals and extending requirements of the 1960 Order relating to movement records of deer, (as well as already applying to the movement of cattle, sheep, goats and pigs).
- 20. On farm slaughter was included in the Fresh Meat (Hygiene and Inspection) Regulations 1995¹¹ and is approved by the Food Standards Agency.
- 21. Additional provisions under European law (98/58/EC) for farmed animals are transposed in the Welfare of Farmed Animals (England) Regulations 2007 and in equivalent legislation in Scotland and Wales. These requirements expand upon the basic needs described by the AWA and AHWSA. Farmed deer, as livestock, fall within the remit of this legislation.
- European hygiene rules on meat intended for human consumption under 22. regulation EC/853/2004 have defined 'wild game' as "wild ungulates and lagomorphs, as well as other land mammals that are hunted for human consumption and are considered to be wild game under the applicable law in the Member State concerned, including mammals living in enclosed territory under conditions of freedom similar to those of wild game". It less usefully defines farmed game as "farmed land mammals" that are not included under the definition of 'domestic ungulates' so in essence any land mammal that is not a commonly domesticated ungulate, with no reference to the meaning of the term 'farmed'. This legislation provides a requirement for hunters to be trained in basic physiology, behaviour and pathology to aid in determination of an animal's fitness for human consumption but no requirement with respect to the hunter's competence in killing. The legislation states that the hygiene rules applicable for farmed domestic ungulates should also be applied for even-toed farmed wild game (including boar and deer). However, it also allows these animals to be slaughtered on farm to avoid risks to handlers or to protect the welfare of the animal.
- 23. All vertebrate animals bred or kept for the production of food, wool, skin or other purposes come within the scope of EU Regulation 1099/2009 on the protection of animals at the time of killing¹². This came into effect in all Member States in January

¹² Council Regulation (EC) No 1099/2009 on the protection of animals at the time of killing.

¹¹ www.legislation.gov.uk/uksi/1995/539/regulation/2/made.

2013. The Regulation requires all persons killing farmed deer for human consumption to use specified stunning (this includes killing) methods and be certified as competent. This means persons using a free bullet to kill farmed deer now need a certificate of competence when previously no licence was required.

Recommendation

4. That the various Codes for managing farmed deer be revisited by Government in light of changes to legislation and within the industry since the 1985 FAWC report on the Welfare of Farmed Deer, and to include park deer.

National and international considerations

- 24. Historically, there was no subsidy for deer farming in the UK when there was such support for farming cattle and sheep. This might be one explanation for the limited number of deer farms in the UK. New Zealand has had no agricultural subsidies since the 1980s, farmers' income is directly linked to market forces and New Zealand has a thriving deer farming industry.
- 25. Of particular importance within the UK industry has been the establishment in 1992 of the Quality Assured Farmed Venison Scheme which is independently assessed by SAI Global, a recognised certification body¹³. The Scheme includes specific animal welfare requirements.
- 26. Within Europe, the European Food Safety Authority (EFSA) published in 2004 a scientific report¹⁴ which includes a section on the transport of deer.
- 27. Approximately 30,000 deer carcases are imported from farms in New Zealand into the UK per annum; this quantity is increasing each year. During the last two years small quantities of venison have been imported from Poland and other north European countries especially Spain. These farms were established primarily from breeding stock exported from the UK in the past decade.
- 28. Deer farming in New Zealand was originally developed for production of venison and this remains the principal product. The high demand for by-products for traditional Chinese medicine led to farming deer for antlers in velvet. The removal of growing antlers has been prohibited in Great Britain since 1980¹⁵.
- 29. The UK has exported embryos and semen to New Zealand. Stags are sedated to collect semen by electro-ejaculation and hinds are anaesthetised for laparoscopy. The

¹³ SAI Global has been approved by United Kingdom Accreditation Service (UKAS).

¹⁴ EFSA Scientific Panel on Animal Health and Welfare (2004). The welfare of animals during transport, **10**, 76-93.

¹⁵ Welfare of Livestock (Deer) Order 1980.

procedures are carried out by New Zealand veterinarians overseen by UK veterinarians. The UK has imported frozen deer semen and embryos from New Zealand.

30. Currently in the UK there is no formal genetic improvement programme in operation for venison production although selection of males for large antlers in some herds is actively pursued for sporting purposes. In contrast in New Zealand where 1.1 million deer are farmed, routine genetic evaluations for growth and carcass production are performed using a national deer genetic database (DEERSelect). Computer Tomography (CT) information to provide highly accurate carcass information is also built into the national genetic evaluation programme.

Recommendation

5. That for those keeping deer membership of an accredited assurance scheme for farmed venison should be encouraged by food retailers, and that training of inspectors be safeguarded.

Advice by FAWC

- 31. FAWC last considered deer welfare in 1985 and made 11 recommendations. These were concerns about the release of farmed deer for sporting purposes, transport of deer, shooting of deer in the field, the competence of marksmen and the issuing of firearms licences, the slaughter of deer in slaughterhouses and in farm abattoirs. Additionally, recommendations were made on extending the close season exemption for the killing of farmed deer to England and Wales, including deer in the 1960 Movement of Animals Order, bringing park deer under the same legislation protecting farmed deer welfare and exempting farmed deer from restraints on movement under the Deer Act of 1963. In the interim, all of the concerns have been addressed.
- 32. Nine of the 1985 recommendations have been addressed through the publication of Codes of Practice or changes to legislation, e.g. AWA 2006, where appropriate. In regard to the remaining two which were both recommended for further consideration, there has however, been no restriction on the release of farmed deer for sporting purposes and no formal link has been made between marksmanship ability and the issue of firearms licences.
- 33. The Deer Act 1991 (as amended) makes it illegal to kill deer in close season¹⁶ except in certain circumstances such as deer in enclosed land used for the production of meat or breeding stock. This is to protect the welfare of nursing hinds and their young. The 1985 Report recommended that farmed deer should not be included in the close season restrictions. This was accepted although the regulation still applies to park deer.

¹⁶ A set period in the year during which it is illegal to kill female deer.

- 34. FAWC suggested that when issuing firearms certificates to new deer stalkers more account should be taken of the competence of the applicant. This has not been addressed although the training of those stalking deer has developed greatly since 1985 through the establishment of the Deer Stalking Certificate (administered by Deer Management Qualifications), which in its parts I and II provides the recognised standard of training for deer stalkers. Whilst it is not a legal requirement to undertake such training, having a deer stalking certificate may be used by the police as part of their decision to grant a firearms certificate to an applicant.
- 35. FAWC recommended in 1985 that all abattoirs slaughtering deer should be specifically licensed for that purpose, and that regulations and codes proposed for other slaughterhouses apply to slaughterhouses taking deer.

EVIDENCE

Traceability

36. Evidence from several sources suggested that a register of premises keeping deer should be mandatory.

Managing the nutrition of deer on farms and in parks

- 37. Most species of deer have marked seasonal inappetance (reduction in appetite). They rely on summer vegetation to accumulate fat reserves¹⁷ and then eat less during the winter and so their body condition declines. If enclosed deer are not provided with plentiful grazing during the summer and access to supplementary feeding after the rut, in October or November, they may not have sufficient energy reserves to survive a hard winter, even if supplementary food is given in winter. The commonest cause of death in deer in parks is malnutrition either from absolute insufficient provision of food or high stocking densities that prevent deer gaining good body condition over the summer. Experienced deer farmers expect to feed their stock throughout the winter, however, we were told that some inexperienced deer keepers erroneously assume that deer do not require supplementary feeding and so deaths from starvation occur.
- 38. During our consultation we were told by one consultee that some parks tolerate and even expect some 'winter die off', i.e. death of deer through the winter, but that this usually reflects insufficient winter feeding. In their opinion, the loss of significant numbers of deer over the winter in UK deer parks is preventable, and represents poor standards of welfare in kept, undomesticated animals. Another consultee stated that farmed calves might be housed to enhance their welfare and to ensure that they receive the right level of care and nutrition which are vital during the challenging winter months.
- 39. Deer are less well insulated than cattle and sheep and in the wild depend on their ability to anticipate weather changes and move quickly into shelter provided by

¹⁷ Kay, R.N.B. 1979. Seasonal changes of appetite in deer and sheep. *ARC Res.Rev.* **5**, 13-15.

vegetation or topography. The enclosure should provide such shelter. Other species of deer are even more susceptible than red deer: axis deer (Axis axis) and hog deer (Axis porcinus) require access to buildings for shelter in parks.

40. Park deer keepers should have a planned cull of deer in the autumn when necessary to avoid over stocking pasture in the following year. They also should have a plan for supplementary feeding in the winter.

Recommendation

6. That the risks of deer in parks dying through inadequate stocking, feeding and shelter be highlighted and the legal responsibilities of park deer keepers be enforced by Government.

Management procedures entailing handling of deer

- 41. Farmed deer need to be handled for routine husbandry procedures, which may occur up to five times per year, and additionally for occasional veterinary procedures. Handling is stressful but this can be minimised by well designed facilities.
- 42. There is growing expertise in the design of handling systems and restraining crushes and many deer farms now have sophisticated systems appropriate for the handling of farmed red deer. Some parks and small numbers of farms have also good systems for handling fallow deer. However, there is no readily accessible source of information on handling systems that is useful for new deer keepers and we consider that suitable advice should be more easily available.
- 43. Removal of antlers may be carried out in preparation for transport to an abattoir, or, in the case of adult stags, to prevent injury to other deer, people or fences and to avoid entanglement, for example in fence wire. Antlers (including spikes) can be removed legally only when calcified and the velvet has been shed completely. The removal of growing or 'velvet' antler is prohibited by AWA and AHWSA. There should be no pain associated with the removal (e.g. by saw or embryotomy wire) of hard antler because it has no live tissue and thus no innervation. Good handling facilities reduce the stress of handling that is required for this procedure.
- 44. For weaning, farmed hinds and calves are normally gathered in September or November, before or after the autumn rut. Farmed hinds should have finished calving by the end of June and so calves are three to five months old at weaning. Normally in Great Britain calves are weaned into buildings where they can be protected from inclement weather and fed over winter. Hinds are turned back out onto grass to improve body condition before the onset of winter.
- 45. Farmed deer are often gathered before the rut to divide them into mating groups. Following faecal sampling, this is also a time when anthelmintics may be administered and deer may be sold for breeding.

- 46. Park keepers rarely carry out interventions other than for herd health, with a strategy of planned culling of deer in the autumn to avoid over stocking, together with supplementary feeding in the winter. Few parks have handling facilities. Deer may be captured for sale as breeding stock. This is done using a dart gun to deliver tranquilising drugs or by gathering deer into yards or, in the case of fallow deer, by netting. Very rarely, efforts may be made to catch all the deer in the park, for example where park deer have become infected with tuberculosis. Unless this is carried out by experienced deer park keepers such infrequent handling, especially where antlered animals are present, has the potential to compromise welfare.
- 47. The FAWC 1985 Report stated that housed deer should be restricted to groups of 10–15. Over the 30 years since the last report; as the industry has developed, experience suggests that groups of up to 75 can be managed successfully.
- 48. Wild Scottish red deer hinds were captured and immediately relocated to deer farms to provide breeding stock during the 1980s¹⁸. Such live capture and translocation can compromise welfare by causing stress and increased risk of disease. Resurgence in demand for breeding stock might create conditions in which capture of wild deer is revived especially where there is pressure to reduce wild stock for environmental reasons. Best Practice Guides for the capture and relocation of wild deer are currently being drawn up by Scottish Natural Heritage (SNH). FAWC considers that this procedure should only be carried out under licence from SNH in Scotland and English Nature in England and Wales. Given the risk to welfare, there should be a moratorium on capture of wild deer until the guidelines and licensing process are in place. Using farmed hinds as breeding replacements is best practice; gradual adaptation of wild deer to farm conditions by enticing them into enclosed fields is preferable to live capture and translocation where this is possible.

Recommendations

- 7. That the 1985 Report's recommendation that housed deer be restricted to small group sizes be amended by Government to permit group sizes of up to 75.
- 8. That Scottish Natural Heritage should complete the Best Practice Guides for the capture and relocation of wild deer and achieve Government approval.
- 9. That the Government should permit the capture of wild deer for the provision of breeding stock only following best practice where the procedure has been licensed by Scottish Natural Heritage or, in England and Wales, by English Nature. A moratorium on the procedure should remain until the Best Practice Guides and licensing system are in place.

¹⁸ Live Capture of Wild Hinds in Scotland, proceedings of a conference organised by the British Deer Society. 1989.

Transport and killing

- 49. Deer are transported for the following reasons: from farms to abattoirs for slaughter, from parks and farms to provide breeding stock for new or existing herds or for finishing. Transport has been more thoroughly researched than any other aspect of deer welfare and they are not measurably more stressed by transport than other conventional livestock¹⁹,²⁰. The greatest risk to the welfare of deer in transit arises from overcrowding²¹. The provision of recommendations for the stocking density of deer when they are being transported (for example, by EFSA²²) would help to prevent this.
- 50. Farmed deer are routinely transported by road for movements between farms and to slaughter. Deer hauliers are controlled in that journeys over 65 km carried out as part of an 'economic activity' require authorisation of the transporter under Council Regulation (EC) No 1/2005. Unlike for other species there is no requirement for the driver or his/her attendant to possess a certificate of competence when transporting deer. The driver must however, be able to show that he/she has the appropriate equipment and operational procedures in place to transport animals in compliance with the Regulation. Additional safeguards including vehicle approval certified by independent certifying bodies apply to journeys over eight hours.
- 51. Deer are currently not sold through livestock markets. There was unanimous agreement among consultees that deer should not be permitted to go through markets on grounds of both welfare and disease transmission.
- 52. Legislation requires stags in hard antler to be penned individually whilst deer with growing antlers ('in velvet') cannot be transported²³. Consequently there is a short period of time in the autumn when stags can be moved. Stags that are introduced to breeding herds with other stags with antlers must themselves have antlers otherwise they cannot protect themselves. Experience gained within the industry before the movement of stags in velvet was made illegal indicated that stags with growing antlers can be transported without damage if penned individually. Research into transporting individually penned adult stags in velvet would be informative.

Recommendation

10. That Government and industry commission research into the transport of adult

¹⁹ Weeks, C.A. (2000) Transport of deer: a review with particular relevance to red deer (*Cervus elaphus*). Animal Welfare **19**, 63-74.

²⁰ Grigor, P.N., Goddard, P.J., Littlewood, C.A., Warriss, P.D., and Brown, S.N., 1998. The behavioural and physiological reactions of farmed red deer to transport: effects of road type and journey time. Applied Animal Behaviour Science, **56**, 263-279.

²¹ Fletcher, T.J. (1998). The Transport of Deer. In 'The management and health of farmed deer'. Ed.H.W. Reid publ. Kluwer Academic Publications, Boston, USA.

²² EFSA *op.cit.* (12).

²³ Council Regulation (EC) No. 1/2005 on the protection of animals during transport and associated and related operations and amending directives.

stags in velvet.

- 53. Farmed deer can be killed at an approved on-farm slaughter facility or approved abattoir at any time of the year. They require a veterinary ante-mortem inspection. They cannot be processed by game dealers.
- 54. In 1985, deer were not permitted into abattoirs. Since then, regulations have been amended to permit deer to be killed in abattoirs. There are now approximately 55 slaughterhouses²⁴ approved to kill deer in Great Britain although only two or three exercise this licence. The 1985 Report listed the requirements necessary for the slaughter of farmed deer in abattoirs. It did not specify that slaughterhouses licensed to kill deer must be dedicated to deer alone, however, it did specify that deer must not be slaughtered at the same time as other species unless separated by solid walls. FAWC sees no reason to change these recommendations.
- 55. The 1985 Report recommended that deer should be retained in lairage for not less than one hour or more than three hours, however, it was stated that this recommendation be kept under review. Similarly, the *Code of Welfare Practice on Abattoir Slaughter of Farmed Deer* in 1988 suggested that deer should not be kept in lairage for more than three hours and that shorter times were preferable. This was based on limited observations of killing deer in abattoirs designed for conventional livestock.
- 56. FAWC visited the only approved dedicated deer abattoir and witnessed stockmanship and handling of a high standard. Deer were kept in lairage overnight and appeared settled the following morning before slaughter. It may be preferable to keep deer overnight prior to slaughter. FAWC did not visit any abattoirs killing both deer and other species.
- 57. FAWC remains strongly of the opinion that deer, like all livestock, should be stunned immediately prior to slaughter. In addition, FAWC recommends the subsequent use of pithing rods to ablate the central nervous system to ensure lack of sensation and to reduce movement in deer which might injure slaughtermen.
- 58. For the slaughter of farmed deer in the field with a free bullet FAWC, in light of accumulated experience and Government advice²⁵, recommends a head shot. Council Regulation 1099/2009 on the protection of animals at the time of killing, requires those carrying out field shooting of deer to be competent.

Recommendations

11. That Government requires drivers and animal attendants transporting deer to have

²⁵ Code of Recommendations for the Welfare of Livestock: Farmed Deer (paragraphs 56-61).

²⁴ Food Standards Agency, Approved premises (figure as at January 2013).

certificates of competence.

- 12. That Government relaxes the recommendation that deer killed in abattoirs be killed as soon as possible after entry into the abattoir and gives consideration to keeping deer in lairage facilities overnight.
- 13. That Government should retain the legal requirement that all deer killed in abattoirs must be stunned prior to slaughter.
- 14. That Government requires that deer killed in abattoirs must be pithed subsequent to slaughter.

Deer killed in parks

- 59. All deer killed in parks should be killed with a free bullet as in paragraph 57. Deer in parks are treated for meat hygiene purposes as wild game. As such they can only be killed during the open season²⁶ relevant to that species. Park deer are not subjected to ante-mortem inspection.
- 60. Whilst transport of park deer to an abattoir is not illegal, in practice, this activity would be difficult to achieve without compromising the welfare of the deer and FAWC recommends that this should not be done.

Recommendation

15. That Government permits only farmed deer to be killed in abattoirs.

Disease control and surveillance

- 61. Scotland's Rural College and the Animal Health Veterinary Laboratories Agency (AHVLA) in England and Wales compile disease data for deer. Deer are often not categorised as farm, park or free living and often the species of deer is not recorded. FAWC recommends that in future all deer presented for post-mortem examination are coded by species, farm, park or free living and location.
- 62. The most recent review of diseases in British deer was in 1994, however, it is thought that little has changed since then. The commonest infectious cause of death in enclosed deer is lungworm. Metabolic diseases include enzootic ataxia in areas of low copper availability and rumenal acidosis due to excessive intake of starch with low fibre diets. Common infectious diseases include cryptosporidiosis where ground has been previously grazed by cattle and, sporadically, malignant catarrhal fever contracted from clinically healthy sheep. Deer can contract foot and mouth disease when experimentally exposed to the virus but no cases have been recorded outside the laboratory. There is

_

²⁶ The period of the year when the killing of deer is legally permitted.

evidence that deer are susceptible to infection with the Schmallenberg virus but as yet there is no evidence of this causing disease.

- 63. Deer are susceptible to bovine tuberculosis but are deemed to be 'spillover hosts'. Bovine tuberculosis exists in farmed and park deer in Great Britain. The movement of deer from areas of high tuberculosis risk is, at present, unrestricted. Tuberculin testing of deer that are moved from these areas could play a role in the national fight against bovine tuberculosis, however, there are welfare implications in tuberculin testing using the comparative intradermal cervical skin test, which requires deer to be restrained twice in 72 hours and that they be tagged for identification. This is not a serious factor for farmed deer, but for park deer consideration would need to be given to the provision of appropriate handling facilities or transport to quarantine premises with purpose built facilities capable of handling park deer, including adult stags that will be unaccustomed to being handled. The risk of spreading bovine tuberculosis with consequent economic implications justifies the requirement to test deer prior to movement from high risk areas.
- 64. Biosecurity is as relevant to deer as to other livestock species and less research is carried out into deer disease. Unlike other livestock, farmed deer have wild conspecifics from which and to which diseases may be transferred. Chronic wasting disease is a disease characterised as a transmissible spongiform encephalopathy (TSE) which has proven to be a major economic problem in North America, and the deer industry within Europe and the United Kingdom should remain vigilant to prevent the disease spreading across the Atlantic. There is now a Defra risk assessment on chronic wasting disease²⁷. There should be efforts to raise awareness of other potentially hazardous diseases such as bluetongue and epizootic haemorrhagic disease as our climate becomes warmer.

Recommendations

- 16. That surveillance of deer continues through the Animal Health Veterinary Laboratories Agency and Scotland's Rural College, and that deer presented for post-mortem examinations be coded by species, farm, park or free-living, and location.
- 17. That, where deer are handled, facilities need to be appropriately designed and maintained to protect the welfare of deer and safety of operators; and that Government and a body, such as the British Deer Farms and Parks Association, consider how best to make suitable advice on handling facilities more readily available for deer farmers.
- 18. That deer be protected by the same biosecurity measures as those extended to other livestock and this to be emphasised by a body, such as the British Deer Farms and Parks Association, in the training of deer keepers. In particular, the deer industry must be aware of the risk of introducing chronic wasting disease from North America.

²⁷ Defra. What is the risk of chronic wasting disease being introduced into Great Britain? A Qualitative Risk Assessment. October 2012.

Veterinary aspects

- 65. It is rare that veterinary attention is sought for diseased or injured park deer because they are not used to being handled. Generally keepers would euthanise deer requiring veterinary intervention. Farmed deer would benefit from being managed within herd health planning developed by the farmer with their veterinarian.
- 66. Most consultees considered that there is a lack of knowledge of deer in the veterinary profession. The consequence is that farmers are reluctant to request assistance from vets. Many suggested that aspects of deer biology and management should be included within the veterinary curriculum. FAWC recommends that, at a minimum, veterinary undergraduates should know that there are several species of deer with differing management requirements. FAWC also considers that the deer industry and the Veterinary Deer Society should have training programmes to develop veterinary expertise post-graduation.
- 67. Few medicines are authorised for use in deer in the UK; consequently, the veterinary cascade system must be used.
- 68. The only medicine authorised in Great Britain for tranquilising deer is an etorphine/acepromazine drug combination used for sedation and its reversal agent, diprenorphine. These are the medicines of choice for sedating park deer or for emergency use in other deer. These medicines are no longer manufactured or marketed in Great Britain but can be imported. They are not approved for use in food-producing animals and therefore deer treated with them cannot enter the food chain. Consequently, it is important to record individual animals on which these medicines are used.

CRITICAL ISSUES

- 69. In FAWC's view, enclosed deer in Great Britain generally have a life worth living; their welfare has improved materially since it was last considered in 1985. Nevertheless, we still have some concerns about welfare which mean that enclosed deer in Great Britain do not always have a good life. FAWC considers that the welfare of enclosed deer will be further improved by:
 - Managing nutrition to avoid winter die off
 - Limiting the practice of stocking farms with deer from the wild
 - Training veterinarians, farmers and park keepers in deer management
 - Pithing deer at slaughter
 - Using appropriate handling facilities
 - Implementing biosecurity measures
 - Identifying numbers of enclosed deer
 - Maintaining disease surveillance

ETHICAL ANALYSIS

- 70. Historically, herds of deer, particularly red and fallow, have been enclosed in parks for their aesthetic value, as a food source and as an opportunity for stalking. Stalking within parks is a necessary culling process to maintain the right stocking density on the land, to provide the deer with adequate grazing and forage to minimise if not eliminate any winter losses.
- 71. Exotic deer species such as sika, Pére David's deer, axis deer (chital), sambar, barasingha, muntjac and Chinese Water Deer were introduced to parks during the nineteenth and early twentieth centuries. As soon as these deer are enclosed in any way which limits their independence and autonomy, they are in effect no longer truly wild; they are not however, domesticated in the sense that we would regard sheep and cattle. More recently reindeer have been imported and enclosed, principally for their value in displays during the Christmas season.
- 72. These deer, which are no longer free to leave the enclosure, are limited by its boundaries to that which is contained within those boundaries. This places responsibility and a duty of care towards these animals throughout the year, particularly when resources such as food are limited within the enclosure.
- 73. Irrespective of whether deer are stalked or slaughtered there is a duty incumbent upon the person responsible for their killing to avoid pain and minimise distress and suffering during the killing process, taking into account the best practices in the field and the legally permitted methods.
- 74. The decision as to whether an intervention is ethically justified is more complex in deer than in other species because they are semi wild. For example, assisting a difficult birth is more stressful for the mother than euthanasia and the ethical dilemma is whether it is justifiable to intervene in the hope of saving calf and mother given the stress caused. Handling large antlered stags to carry out a tuberculin test is justifiable where the possibility of spreading tuberculosis exists, but it may be prudent to consider reducing the number of adult stags prior to embarking on testing a whole herd.
- 75. FAWC's concern in 1985 that the release of farmed deer for sporting purposes might occur has not been realised. FAWC maintains our opposition to the transportation of deer for sporting purposes or 'trophy hunting'.
- 76. While the consequences of transportation for the deer may be the same regardless of whether they are being transported for sporting or other purposes, it can be argued that the reason for transportation is ethically significant. Sport or trophy hunting cannot be construed as necessary, whereas the provision of food clearly is. There would therefore seem to be a stronger case for justifying transport in the context of food production than of sport.

77. There has been a growing stringency in granting firearms certificates and the competence of marksmen is a factor taken into account by the police. FAWC welcomes certification of competency training in the use of firearms for stalking deer which has increased dramatically since 1985.

CONCLUSIONS

- 78. From the observations made and responses to the consultation, FAWC considers that that the majority of enclosed deer in the UK have a life worth living, but a minority potentially face challenges due to inadequate stockmanship and husbandry. Many of these can be addressed by the provision and taking of appropriate training.
- 79. The deer farming industry has a good record encouraging responsible management of farmed deer through the long established British Deer Farmers Association, which created the Quality Assured Farmed Venison Scheme. It has now formally extended that role to encompass park deer through the establishment of the BDFPA which will shortly launch a Quality Assurance Scheme for Park Venison. This places a substantial onus on a small organisation and it must be encouraged to run courses and hold meetings at which all those responsible for farm and park deer can benchmark and network to ensure high standards.
- 80. It is not possible to determine precisely the numbers of farmed and park deer involved as currently there is no register of holdings keeping deer.
- 81. It is important that surveillance of both wild and farmed deer is maintained and improved through the Animal Health Veterinary Laboratories Agency and Scotland's Rural College Veterinary Services to ensure that endemic and epidemic diseases are monitored.
- 82. There is concern over the occurrence of starvation of deer in parks in winter conditions arising from inadequate feeding commenced early in the winter and absence of adequate shelter. The provision of training to deer keepers should alleviate this risk.
- 83. FAWC strongly believes that stunning prior to abattoir slaughter is essential to preserve the welfare of deer at killing.
- 84. Although there are controls over the ways in which deer are transported these do not include a requirement that drivers or attendants should have formal certificates of competence. This should be changed and drivers should have the same certified competence as for other farmed livestock.
- 85. Substantial expertise has accumulated in the design of deer handling yards which permit deer to be handled humanely and safely; handling facilities need to be appropriately designed and maintained to protect the welfare of deer and the safety of operators. An accessible source of information and advice on these systems for new deer keepers would be beneficial.

- 86. The slaughter of deer in abattoirs has become an established procedure since the 1985 Report. In most cases, this is carried out only in abattoirs which provide appropriate procedures and have dedicated handling/slaughtering facilities and prevent deer being in contact with other species. We recommend that pithing is introduced, and that the recommendation of the 1985 Report that deer be killed as soon as they enter an abattoir be amended to permit slaughterhouses to hold deer for up to twenty four hours.
- 87. All consultees were adamant that farmed deer are not wild and should not be considered as such. It is therefore inappropriate to consider catching wild deer for farms except in unusual circumstances.

SUMMARY OF RECOMMENDATIONS

- 1. That the welfare of reindeer should be considered further by Government as they are particularly likely to be kept by inexperienced owners for commercial purposes.
- 2. That training for i) veterinarians and ii) deer farmers and park keepers, in the management of enclosed deer be encouraged; and that a body, such as the British Deer Farms and Parks Association, provides education and management skills to those keeping deer, specifically on the feeding, handling and catching of park deer, and the management and creation of health plans for farmed deer.
- 3. That Government establishes a record of all enclosed deer holdings with the intention of recording numbers and species of deer per holding.
- 4. That the various Codes for managing farmed deer be revisited by Government in light of changes to legislation and within the industry since the 1985 FAWC Report on the Welfare of Farmed Deer, and to include park deer.
- 5. That for those keeping deer membership of an accredited assurance scheme for farmed venison should be encouraged by food retailers, and that the training of inspectors be safeguarded.
- 6. That the risks of deer in parks dying through inadequate stocking, feeding and shelter be highlighted and the legal responsibilities of park deer keepers be enforced by Government.
- 7. That the 1985 Report's recommendation that housed deer be restricted to small group sizes be amended by Government to permit group sizes of up to 75.
- 8. That Scottish Natural Heritage should complete the Best Practice Guides for the capture and relocation of wild deer and achieve Government approval.

- 9. That the Government should permit the capture of wild deer for the provision of breeding stock only following best practice where the procedure has been licensed by Scottish Natural Heritage or, in England and Wales, by English Nature. A moratorium on the procedure should remain until the Best Practice Guides and licensing system are in place.
- 10. That Government and industry commission research into the transport of adult stags in velvet.
- 11. That Government requires drivers and animal attendants transporting deer to have certificates of competence.
- 12. That Government relaxes the recommendation that deer killed in abattoirs be killed as soon as possible after entry into the abattoir and gives consideration to keeping deer in lairage facilities overnight.
- 13. That Government should retain the legal requirement that all deer killed in abattoirs must be stunned prior to slaughter.
- 14. That Government requires that deer killed in abattoirs must be pithed subsequent to slaughter.
- 15. That Government permits only farmed deer to be killed in abattoirs.
- 16. That surveillance of deer continues through the Animal Health Veterinary Laboratories Agency and Scotland's Rural College, and that deer presented for post-mortem examination be coded by species, farm, park or free-living, and location.
- 17. That, where deer are handled, facilities need to be appropriately designed and maintained to protect the welfare of the deer and safety of operators; and that Government and a body such as the British Deer Farms and Parks Association consider how best to make suitable advice on handling facilities more readily available for deer farmers.
- 18. That deer be protected by the same biosecurity measures as those extended to other livestock and this should be emphasised by a body, such as the British Deer Farms and Parks Association, in the training of deer keepers. In particular, the deer industry must be aware of the risk of introducing chronic wasting disease from North America.

Appendix A – Acknowledgements

FAWC is grateful for the information and assistance provided by:

British Deer Farms and Parks Association

British Deer Society

British Veterinary Association

British Veterinary Association Veterinary Deer Society

The Deer Initiative

Dovecote Park Ltd

Round Green Deer Farm

Waitrose Ltd

Windsor Great Park

Woburn Abbey Deer Park

We should also like to thank our Defra veterinary adviser, Dr Sophia Hepple, Dr Mark Dagleish of the Moredun Research Institute, Andrew Voas of the Scottish Government and Brenda Rawson of the FAWC Secretariat, for their help and advice in preparing this Opinion.