Opinion on the Welfare of Farmed Gamebirds

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Farm Animal Welfare Council,
Area 5A, 9 Millbank,
c/o Nobel House, 17 Smith Square,
London, SW1P 3JR.
www.fawc.org.uk
FAWC Opinions

FAWC Opinions are short reports to Government on contemporary topics relating to farm animal welfare. They are a new format of advice to Government and were introduced in 2007. They are based on evidence and consultation with interested parties. They may highlight particular concerns and indicate issues for further consideration.

Opinions published to date

Opinion on Beak Trimming of Laying Hens, 2007
Opinion on Enriched Cages for Laying Hens, 2007
OPINION ON THE WELFARE OF FARmed GAMEBIRDS

Scope

1. This Opinion reviews specific aspects of the welfare of farmed gamebirds kept in Great Britain, particularly during breeding, rearing prior to release and the extent of management and support after release.

2. The species covered by this Opinion are pheasants and partridges, either home-bred or imported, and reared under farm conditions. No specific aspects of reared quail, grouse or ducks are considered, although the general points made in this Opinion may be appropriate to the rearing of such birds.

3. Shooting activities for sport are beyond the remit of the Farm Animal Welfare Council.

Background

Extent and nature of the topic covered in the opinion

4. Farmed gamebirds are bred on farms in Great Britain or are imported to Great Britain, mostly from Europe, as eggs or day-old chicks. They are then reared intensively on the farm, or more extensively on the shoot, before release to the wild for shooting when the season begins. In the release pens and after release, there may be some ongoing support in the form of feed, water or shelter.

5. Gamebirds have traditionally been bred and reared using simple systems of husbandry, though increasingly more intensive methods are used. The principal features of gamebird management are:

- The strains used tend to retain their semi-wild behaviour, preference for which may be related to flying characteristics (i.e. speed, height and trajectory), size, feather colour, and reproductive efficiency.
- Some birds may be released in the autumn and gathered in the following season for breeding purposes. Increasingly, breeding birds are over-wintered in pens or large paddocks, or, in the case of partridges, in cages or wooden boxes.
- Rearing is fairly intensive with high stocking densities at certain times of the season. Brooding and rearing often take place in shelters of various sizes attached to grass pens or runs and also in commercial chicken-type housing with or without integral outdoor runs, with subsequent release into extensive pens.
- Most gamebird farmers use ‘low tech’ or traditional equipment while a few use commercial poultry systems to breed and rear larger numbers of birds.
A number of management devices (e.g. bits, bumpa-bits or spectacles\(^1\)) may be used to reduce the potential for injurious pecking and egg eating during confinement, while birds may be “brailed”\(^2\) with wing tapes to restrain them from flying away.

Codes of Practice have been issued by various bodies representing game keepers and shooting interests. Defra is currently working on a gamebird welfare code in collaboration with interested stakeholders and the devolved administrations in Scotland and Wales.

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

6. Most of the welfare concerns relate to selection and sourcing of breeding stock, housing systems, confinement, transport, stockmanship and the use of various management devices and procedures, including:

- confinement of semi-wild species, either in open pens offering birds a challenging environment, exposed to adverse weather, or various cage systems offering a barren environment, restricting space and potentially the expression of normal behaviour;
- use of management devices, including bits, spectacles, and brailles;
- beak trimming instead of, or as well as, bitting;
- stockmanship, including training, record keeping, seeking of prompt veterinary advice and development of best practice;
- transport of day-old or rearing birds in vehicles, crates or other receptacles that may not be suitable;
- availability of licensed medicines to treat or prevent disease;
- general biosecurity; and
- adaptation/acclimatisation of birds to outdoor conditions prior to and during release.

**Number of animals involved, duration and extent of welfare issues**

7. Approximately 40 million gamebirds (30 to 35 million pheasants and 5 to 10 million partridges) are estimated to be released each year in Great Britain for shooting. Data on the number of gamebirds reared in Great Britain are not readily available from official sources (although the change of use of the GB Poultry Register may make requesting such data easier in future). These estimates have therefore been provided by various stakeholders. About half the pheasants reared and up to 90% of partridges are imported into Great Britain. These imports are mostly as hatching eggs, with a lesser number as day-old chicks from France. Some birds or hatching eggs may be imported from outwith Europe.

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1 Bit – a strip of hard material, usually plastic, fitted round the upper mandible, preventing the beak from closing.

Bumpa-bit – a plastic bit with an additional loop of plastic in front of the upper mandible.

Spectacles – flaps of plastic clipped to the top of the beak restricting forward vision.

2 Braille – Loop of canvas or similar material twisted into a figure-of-eight round the wing, restricting its full extension and, thus, flight.
raising potential biosecurity issues unless isolation procedures are rigorously enforced. Breeding flocks and hatchery businesses exist in Great Britain, to make up the balance, with a few, truly ‘wild’ birds being ‘caught up’ and used as breeders as an additional source of hatching eggs.

8. Breeding birds usually lay eggs between March and June, with eggs collected and incubated artificially in hatcheries from March through to July. Adult pheasants tend to be kept in breeding groups for a single season. Pheasants selected for the next breeding season are often over-wintered in large enclosed areas. Breeding red-legged partridges tend to be kept as cock/hen pairs in confinement in raised cages or traditional wooden boxes continuously for up to three seasons. A small minority of partridges is over-wintered in larger groups.

9. Day-old pheasants are placed for rearing on about 400 farms in Great Britain for up to 7 weeks, prior to sale and release. Up to another 2,500 smaller premises with gamekeepers rear birds for their own estate. It is estimated that there are up to 7,000 shoots registered to release pheasants. Furthermore, there are up to 1,500 premises rearing partridges and 3,000 releasing them.

10. Shooting activities for pheasants take place from 1st October to 1st February and for partridges from 1st September to 1st February.
chicken type housing would be at risk of heat stress without the requirement for such alarms and contingencies.

14. On the other hand, the Animal Welfare Act 2006 (and similar legislation in Scotland) defines an ‘animal’ as a vertebrate other than a human and a ‘protected animal’ as one commonly domesticated in the British Isles, one under human control, whether on a permanent or temporary basis, or one not living in a wild state. This would appear to give farmed gamebirds protected animal status when they are under human control, even if they are not ‘farmed animals’ under the law. There is a lack of clarity as to when this responsibility ceases for birds that are placed into open release pens where feed, water or shelter may be provided.

15. Transport of gamebirds for journeys of more than 65 km is covered by the Welfare of Animals (Transport) (England) Order 2006 (and similar legislation in Scotland and Wales).

16. Gamebird keepers with 50 birds or more are required to be listed on the British Poultry Register. Voluntary registration of premises keeping less than 50 birds is encouraged. This enables Defra and the devolved administrations to locate poultry premises accurately and to warn keepers of health and restriction problems associated with notifiable diseases through an alerts system. The use of the Poultry Register has subsequently been extended to other animal health and welfare purposes, including planning of visits related to legislation on veterinary medicines and animal welfare.

17. A Code of Practice for the Welfare of Gamebirds is in preparation and FAWC is contributing to the working group on these deliberations. The Code for England is expected to be published in 2009.

National and/or international considerations

18. As already mentioned, pheasants and partridges are imported from France and elsewhere in Europe, as well as further afield. Estimates put 70% of imported pheasants and 100% of imported red-legged partridges as originating from intensive systems, with most imported Grey partridges being managed and conserved in extensive traditional breeding programmes.

Commercial interests and developments

19. As many as 70,000 jobs are said to depend on the game shooting industry and shooting is quoted as being worth £1.6 billion to the UK economy. It is estimated that there are up to 7,000 shoots registered to release pheasants and 3,000 for partridges. Information supplied by the industry informed us that day-old chicks reared in Britain cost between 80 and 100 p each (but as little as 40 p

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3 Public & Corporate Economics Consultants (PACEC), Cambridge, 2006; www.shootingfacts.co.uk
each for French imports). Poults reared to 7 or 8 weeks of age are sold for between £2.50 and £4.00. Prices have risen in the 2008 season in response to significant increases in feed prices. Shot birds may be worth as little as 50p each to the shoot for meat but a day’s shooting can cost between £25 and £40 per bird shot, although prices vary widely.

Advice by FAWC and/or EFSA relating to the topic, especially within the last 2 to 3 years

20. FAWC has not addressed the subject of farmed gamebirds before. EFSA’s previous advice relating to farmed gamebirds have been considerations of feed additives and these birds’ inclusion in the definition of poultry covered by the Opinion of the Scientific Panel on Animal Health and Welfare (AHAW) on a request from the Commission related to animal health and welfare aspects of Avian Influenza, June 2008.

Evidence

Scientific knowledge relating to the topic

21. Researchers from Denmark, France, Italy, Spain and the USA, as well as Great Britain, have published reports on farmed gamebirds. Danish research precipitated legal measures to define specific requirements for gamebird management and led to a ban on the use of bits and spectacles under Danish rearing and breeding conditions, although examination of the reports revealed differences in management systems between Denmark and Great Britain that make extrapolation to the British situation difficult. There is little scientific research on the welfare of gamebirds reared in Great Britain that has been published in peer reviewed journals. The Game and Wildlife Conservation Trust is the main organisation undertaking research on game species in Great Britain. Specifically, the findings of a recently completed Defra-funded project on the effects of the application of bits and spectacles on pheasants are expected to be published in 2008. Defra has recently announced a research call to investigate whether the designs for cages for pheasants and partridges can fully meet duty of care requirements and, if not, whether practical improvements to the breeding environment can be identified. In the current absence of specific scientific evidence, we have relied on basic scientific principles, some taken from other poultry species.

Evidence from veterinarians and other welfare professionals

22. Evidence from written and oral consultations revealed a common theme: in all rearing and production systems, effective management and stockmanship were seen as the main contributors to acceptable productivity and good welfare. Variable results were reported to have been achieved following the introduction

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4 http://www.efsa.europa.eu
of raised cages for pheasants, but in all systems there needed to be competent stockmen taking responsibility for the welfare of the birds in their care. Effective communication with veterinarians and working veterinary health and welfare plans were required. The paucity of therapeutic medicines specifically licensed for gamebirds in Great Britain was considered to be disappointing and led to the possibility of sub-optimal control of some diseases and parasites.

Evidence from farming and allied industries

23. The game breeding and rearing industry cooperated readily during our consultations and assisted in arranging visits to a range of traditional and modern game breeding and rearing establishments in Great Britain. Our thanks go to the Game Farmers Association and British Association for Shooting and Conservation.

24. Council members saw a range of traditional and more intensive methods of gamebird breeding and rearing including: breeding partridges in cages; breeding pheasants in grass pens or raised cages; and rearing partridges and pheasants in brooder huts with grass pens and in commercial broiler chicken-type sheds with outdoor runs.

25. Some stakeholders were critical that these visits were arranged by the industry such that farmers were aware that a visit would take place. It must be stressed that FAWC has no right of entry onto premises and depends on the cooperation and goodwill of industry for such visits. Our aim is to identify best practice and Council members have the necessary experience to determine where weak points might exist. A number of stakeholders offered examples of where systems were not working optimally and such information was considered, where appropriate, in the preparation of this Opinion.

26. We saw during our visits a range of accommodation for breeding pheasants, which included outdoor pens of 3 x 3m for 1 cock bird and 7 to 10 hens, and larger pens of 6 x 6m up to 12 x 12m for several cock birds and their harem of 7 to 10 hens each. We also saw A-frame aviaries for 1 cock bird and up to 10 hens. Some, but not all farms, used nest boxes and other enrichment, but use of nest boxes for laying was said by some farmers to be limited.

27. We saw examples of raised cages for breeding pheasants. These were a metal box construction, solid on all four sides with a sloping wire mesh floor and a plastic netting top. The cages measured about 2 x 1.5m and up to 1m high, were raised 1m off the ground and housed 1 cock and up to 8 hens. There were various attempts to enrich the cages with concealed laying areas, matting, perches and abrasive materials for claw shortening.
28. Large paddocks and other enclosed areas were used to overwinter pheasants chosen for the next season’s breeding stock. These birds were brailed to prevent escape from these open areas.

29. We saw cages for breeding pairs of partridges that were of two types. Older designs were wooden boxes with solid sides, wire mesh floors and netting tops, measuring around 1.4 x 0.45m and 0.3m high and having covered areas at both ends for feed and laying. Newer galvanised steel boxes had solid sides, wire mesh floor and netting top, measuring around 0.9 x 0.3m and 0.4m high with a covered area. Both types were raised about 1m from the ground and would house one cock and one hen. A few items of enrichment such as abrasive material and refuge areas were being trialled. Perches were not provided; it was said that partridges are ground-living birds and do not use them.

30. We saw pheasant and partridge chicks placed in a variety of brooding and rearing enclosures. Wooden brooder huts arranged on grass fields varied in size from around 2.5 x 2.5m to 3.7 x 3.7m, containing between 200 and 400 or 500 and 600 chicks respectively. Wood and plastic shelters of similar sizes were also used. One farm had recently purchased 7.5 x 10m prefabricated sheds to hold 2,000 chicks. Chicks were kept in brood rings for a few days before being given more movement around the shed. There were some purpose-built sheds of larger dimensions partitioned for groups of chicks. Birds were gradually introduced to outdoor runs to acclimatise them for outdoor living after release.

31. Also in use for brooding chicks and rearing poults were large commercial chicken-type housing where birds were either permanently partitioned (1,800 birds in each 6 x 6m space) or temporarily partitioned before having the whole floor space to roam (up to 100,000 birds per shed). Floors were covered with litter material. These birds were also given gradual access to outdoor runs.

32. Pheasant poults at 7 weeks and partridge poults at around 14 weeks are delivered to shoots and held in open-topped release pens, while still being given feed and water. These pens are opened for birds to move out into the wild before the shooting season but some support (for example supplementary feeding) may continue in an attempt to ensure that birds do not venture away from the shoot.

Other pertinent information

33. Following an outbreak of Newcastle disease in pheasants in 2005, Defra commissioned ADAS to produce a report identifying and quantifying the principal components of the gamebird industry in GB, its economic structure and detail of sub-sectors within the industry (July 2005)\(^5\). FAWC has drawn on this report during its study.

Statement of areas of poor or incomplete evidence, including irresolvable or disputed issues

34. There is a lack of systematic industry records of mortality, health and welfare. There is very little scientific assessment of welfare in the breeding and rearing systems in use in Great Britain. Specifically, there is little or no work on welfare assessment that might aid meaningful appraisal of on-farm breeding and rearing of gamebirds.

35. There is also little official surveillance or monitoring of farmed gamebird premises, although relevant stakeholders indicated that where official visits by Animal Health or Local Authority inspectors were made no consistent or significant deficiencies were identified. As farmed gamebirds are not considered ‘farmed animals’ under the legislation, gamebird premises are not selected for risk-based or random inspection by Animal Health under the arrangements for Single Farm Payment cross compliance or for random inspections of non-claimants. Animal Health and Local Authority inspectors would, however, respond to welfare complaints and allegations of suffering, as gamebirds are within the remit of the Animal Welfare Act 2006 (Animal Health and Welfare Act 2006 in Scotland) and the GB Poultry Register, while the birds are under human control. There is little evidence of industry audit of compliance with industry Codes of Practice.

Critical issues

Statement of the critical issues and questions

36. Gamebird rearing and breeding in Great Britain has traditional roots, but the increased interest in rearing birds to shoot has attracted new enterprises, leading to the introduction of larger breeding and rearing sites. There is a danger that this expansion exacerbates existing, or introduces new, welfare issues. Many of these issues raise concerns that may be related to the use of novel and potentially unproven production systems, operated by stockmen without the necessary skills required to ensure optimal management and good welfare. There are formal qualifications for gamekeepers but these are unlikely to cover rearing large numbers of birds in farmed conditions. Labour on farms is seasonal and may require training, although some workers return each year.

37. We were told that gamebirds, predominantly pheasants and red-legged partridge, are sourced from populations which have been exposed to very little quantified genetic selection and as a result they retain many of the characteristics perceived to be necessary in the wild. Selection is aimed mainly at size, feather colour and some subjective assessments of breeding performance and flying behaviour. As a result, intensive breeding and rearing of these semi-wild species in confinement have the potential to compromise bird welfare.
38. There are few established welfare measures available to stockmen to assess or compare welfare in the systems used, other than mortality or breeding performance. One measurable outcome which may be useful is feather cover. It is well established that good feather cover is essential to enable birds to accommodate varying weather conditions in release pens while in breeders it may protect against skin damage. The degree of feather cover also appears to be an indicator of the bird’s ability to cope with different stocking densities and other environmental and management aspects of confinement during rearing and breeding.

39. During our visits, and following discussions with stakeholders, FAWC identified a number of potential and actual welfare problems associated with the intensification of gamebird breeding and rearing in Great Britain. The most significant were outlined in Paragraph 6; these vary in their incidence and impact. In terms of systems, FAWC is particularly concerned about the development of raised cages for breeding pheasants and the long-term use of small raised cages for partridges in pairs. Many of the systems seen offered very little in the way of enrichment: birds were kept in a barren environment on wire floors, with minimal opportunity for seclusion (including females laying eggs). Design appeared to be influenced more by cost and manufacturing requirements than the bird’s welfare. Attempts to enrich the environment were minimal and unlikely to satisfy the birds’ needs, although there may be scope for improvements through better design and space allowance. Stakeholders using raised cage systems of different types did point out the advantage to bird management over extensive floor pens in the production of cleaner hatching eggs, with the expectation that lower microbiological loads would result in better quality, healthier day-old chicks.

40. With such large numbers of birds originating from breeding flocks in other countries, British legislation is unable to influence directly the management conditions for those breeders supplying the majority of progeny reared in Great Britain. It appears that a major driver for sourcing decisions for British gamebird rearers is the price of hatching eggs or day-old chicks and it is unclear how progress can be made to persuade rearers to include welfare specifications when sourcing their birds.

41. The use of management devices such as bits, spectacles and brailles often appeared to relate more to tradition and routine than to a justified requirement for specific systems or enterprises. The reasons given for the use of spectacles and bumpa-bits included reduction in cannibalism and prevention of egg eating.

42. Brailles were used to avoid the loss of birds from partially enclosed overwintering pens. However, some enterprises also used them continuously, leaving them on individual birds even in enclosed pens throughout the breeding season, merely to prevent loss by mismanagement.
43. There appeared to be more justification for the limited use of small plastic bits for pheasant poults between 3 and 7 weeks of age to avoid feather pecking, partly because feather loss may make birds less able to adapt to conditions after release. A persuasive argument was made that this could be undertaken most efficiently in a planned manner at a specific age for each pen. However, there was little evidence of any assessment as to whether the practice could be avoided for specific systems or enterprises. In addition, the prevalence of, and need for, beak trimming instead of, or in addition to, bitting was unclear.

44. In summary, the critical concerns remain:
   i) In view of the current scale and expansion in gamebird rearing, are the training, knowledge and experience of stockmen sufficient to ensure best management practice in use of varied rearing systems for birds which retain many of their wild behaviours and traits?
   ii) Do barren raised cages for breeding pheasants offer a suitable environment for birds during the season? If not, could enrichment, properly researched and applied, overcome these deficiencies?
   iii) Do barren raised cages for pairs of breeding partridges offer a suitable environment in which to keep birds for up to three consecutive seasons? If not, could enrichment, properly researched and applied, overcome these deficiencies?
   iv) Can breeding partridges be over-wintered in larger groups, as for pheasants, and then be paired again for breeding the next season, without detriment to their health and welfare?
   v) Are stocking densities used for rearing birds based on a scientific assessment of requirement for good welfare?
   vi) Are bits, spectacles or brailles and other management devices essential, or are they merely used to deal with problems caused by rearing conditions that are ultimately inappropriate? Is it possible for such practices to be justified on an enterprise-by-enterprise basis, following veterinary assessment?
   vii) Do current management systems of gamebird rearing provide appropriate support to birds in release areas?
   viii) Does the industry understand its biosecurity responsibilities and employ best practice?

Ethical analysis

Benefits and costs for animals, farmers and other interested parties

45. In assessing the benefits and costs of any management system or farming practice, FAWC has always referred to the Five Freedoms when considering animal welfare. While confinement can protect animals from an adverse climate, predators and some disease risks, any systems used should provide an environment in which the behavioural needs of the birds can be met. This principle probably applies more strongly to gamebirds, which are semi-wild, than to other,
domesticated species. Wild traits are regarded as desirable by customers, and housing, breeding and other management practices are intended to perpetuate these, so this concern will not diminish over time.

46. The use of any management aid, device or mutilation should be fully justified and should not merely be used to deal with problems caused by an inappropriate environment or stocking density. Where it can be proven that the use of such devices or surgical interference can improve the welfare of semi-wild species held for short periods of their rearing by preventing injurious behaviour then this may be appropriate, i.e. the lesser of two evils argument. However, any decision should be based upon a risk assessment of health and welfare, including consideration of alternative management approaches, and be regularly reviewed as part of the flock’s health and welfare plan.

47. A study has suggested that the proportion of birds that die or are lost from the shoot following release and before the start of the shooting season may be between 25 and 30%\(^6\). It is unclear how much of this loss is related to trauma as road casualties, inappropriate genetic selection, lack of ability to adapt to their new environment, or to ‘natural wastage’ such as starvation and predation comparable with the usual losses experienced by wild-hatched birds.

48. While some people question the ethical acceptability of rearing animals expressly for release for shooting, this is a separate issue from the responsibility of caring for gamebirds while they are under human control, which is the subject of this Opinion.

Conclusions

49. FAWC considers that all commercial systems for the rearing and breeding of gamebirds, as essentially captive wild species, offer some compromise in terms of bird welfare. However, with high standards of stockmanship and management many of these compromises may be overcome.

50. Raised cages for breeding pheasants in their present form do not appear to offer birds an environment in which their basic needs to express normal behaviour can be or are being met. It is possible that with research on space and environmental enrichment, suitable accommodation to house a single cock pheasant and a harem of hen pheasants might be developed to meet the physical and behavioural needs of the birds.

51. The current design of small raised metal cage for breeding partridges in pairs does not provide birds with a suitable environment in which to express normal behaviour, especially if birds are retained in such cages for up to three seasons. More traditional, larger designs would be preferable. Furthermore,

work to avoid the need to retain breeding birds as isolated pairs between breeding seasons is required.

52. The necessity to use spectacles or bumpa-bits has not, in FAWC's opinion, been proven. There is evidence that spectacles may result in the eventual perforation of the nasal septum. As spectacles inhibit the bird's ability to express normal behaviour, and may lead to injury, discomfort, pain and suffering, they should not be used. FAWC is not aware of comparable research on bumpa-bits, but this needs to be undertaken.

53. In current husbandry systems, there does appear to be some justification for the continued use of small plastic bits for young pheasants to avoid injurious behaviour. Their use is likely to reduce damage and feather pecking without obviously causing undue discomfort or distress, leaving the birds in better physical condition for further rearing and improving survival at release. Where such bits are used, they should be selected and managed appropriately in terms of their size, the minimum age at which they are introduced and the maximum duration of use. They should be fitted only by trained and experienced stockmen.

54. Defra-funded research on the welfare implications of bits and spectacles for pheasants should be published and any recommendations acted upon without delay. Further research into the effects of bumpa-bits or similar devices on gamebirds should be undertaken if their use is to be justified. However, the ideal would be to develop husbandry systems that do not require these devices.

55. Beak trimming is sometimes practised instead of, or as well as, bitting of pheasants, although not commonly. There is no indication that it is necessary in addition to bitting, and the welfare problems appear to be potentially worse than well-managed bitting. There does not seem to be a justification for beak trimming of gamebirds.

56. The routine use of brailles throughout the year does not appear to be justified.

57. Shooting activities and much of a gamebird's life beyond the release pen are considered to be outwith the scope of the animal welfare legislation. This places these activities beyond the remit of FAWC. Council has, however, noted that the extent of man's control, general management and husbandry of birds after release is not completely clear in the case of gamebirds and that ultimately it will be for the Courts to decide whether such birds are still under the control of man.
Recommendations

58. Gamebirds are captive wild animals. FAWC believes that pheasants and partridges should be kept in breeding and rearing systems that meet their physical and behavioural needs. Research is required to define and cater for these needs.

59. The Defra Code of Practice on the Welfare of Farmed Gamebirds currently in preparation should highlight the need for better surveillance of mortality, disease, breeding performance and other welfare measures as appropriate such as feather cover. Records of health and welfare should be kept. Industry, in cooperation with Government, should be encouraged to collate this information to assist benchmarking and to guide improvements in health, welfare and performance, including demonstration of best practice.

60. Compliance with best practice as outlined by the new Welfare Code should be closely monitored and audited, and where deficiencies are identified improvements should be a condition of retention within an industry association.

61. Government should recommend the use of a farm health and welfare plan, which should be developed in consultation with the farmer’s veterinary surgeon. Plans should be reviewed regularly and clearly justify management devices, such as bits or brailles.

62. The use of management devices that do not allow birds to express their full range of normal behaviours must not be considered as routine. All stakeholders should work towards the ideal of management systems that do not require these devices. Their use should be avoided wherever possible and, in any event, be justified on an enterprise-by-enterprise basis.

63. Spectacles should not be used. If industry does not heed this recommendation, then Government should act to ban their use within three years from the publication of this Opinion.

64. Research is required into the effects of bumpa-bits on the welfare and health of pheasants.

65. Brailles for pheasants should only be used in open pens, where there is strong evidence that otherwise birds would be lost from these pens.

66. Small plastic bits may currently continue to be used in young pheasants for short periods (3 to 7 weeks) to avoid injurious behaviour as long as that use is justified and closely monitored on an enterprise-by-enterprise basis. Bits must be appropriate to the size and age of bird and fitted only by trained and experienced stockmen. The justification for their use must be clearly stated in the health and welfare plan.
67. Beak trimming should not be practised in gamebirds.

68. Barren raised cages for pheasants should not be used. If industry does not phase out barren cages then Government should act to ban them within five years from the publication of this Opinion.

69. Research proposed by Government on the design of accommodation for pheasants that meets their physical and behavioural needs should be progressed quickly and thoroughly.

70. Small, barren cages for breeding partridges should not be used, particularly to house birds continuously for three years. Further research is needed into design of improved accommodation for partridges, into larger systems and into over-wintering in larger groups, to enable a fuller and more effective expression of normal behaviours. If industry does not phase out barren cages then Government should act to ban them within five years from the publication of this Opinion.

71. Game farmers purchasing hatching eggs or day olds from abroad should satisfy themselves that the health and welfare of the breeding stock meet the standards required in Great Britain. The standards required in Great Britain should be incorporated in the Codes of Practice and promoted between all stakeholders in the industry.

72. Further research should be carried out into the requirements for support and adaptation for gamebirds during and after release.

73. When formulating its next work plan, FAWC should consider undertaking a major investigation of the welfare of farmed gamebirds so that this topic can be investigated further in light of progress made following publication of this Opinion.
APPENDIX

FAWC gratefully acknowledges the information supplied by the following:

Alpharma
Animal Aid
British Association for Shooting and Conservation
Country Land and Business Association
Countryside Alliance
Dalton’s Game Consultancy Ltd
Farm Animal Welfare Network
Game and Wildlife Conservancy Trust
Game Farmers Association
Humane Slaughter Association
League Against Cruel Sports
Local Authorities Co-ordinators of Regulatory Services
Meat Hygiene Service
National Gamekeepers’ Organisation
National Proficiency Tests Council
Royal Society for the Prevention of Cruelty to Animals
Scottish Agricultural College
Tesco plc
Universities Federation for Animal Welfare
Veterinary Laboratories Agency

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