

SCOTTISH ANIMAL WELFARE COMMISSION

**Report on The Management of Wild Deer in Scotland –
SAWC Response to the Report of the Deer Working Group**

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Introduction

1. Announced as part of the Programme for Government, the Scottish Animal Welfare Commission (SAWC) will focus on protecting wild and companion animals while also providing scientific and ethical advice to government.

Further information on the Commission, including reports and minutes of previous meetings are published when available; see <https://www.gov.scot/groups/scottish-animal-welfare-commission/>

2. SAWC's terms of reference are to focus on the welfare of wild and companion animals in Scotland. The Commission will only consider areas that are within the normal current remit of the UK Animal Welfare Committee and the UK Zoo Expert Committee where these relate to the overall responsibility to consider the welfare needs of sentient animals in all areas of Scottish Government policy or at the specific request of the Minister. The Commission will not consider matters that are reserved to the UK Government, including the welfare of animals used in scientific procedures.

The Commission will provide written reports and opinions to Scottish Ministers giving practical recommendations based on scientific evidence and ethical considerations on the welfare of sentient animals in Scotland, and the impact of policy on welfare.

Scope

The Deer Working Group (Simon Pepper, Andrew Barbour, Dr Jane Glass) was established by Scottish Government in 2017 to provide an independent review of existing statutory and non-statutory arrangements for the management of wild deer in Scotland. The Working Group has prepared a detailed report on The Management of Wild Deer in Scotland, which was presented to the Scottish Government in December 2019.

The report can be found at <https://www.gov.scot/publications/management-wild-deer-scotland/>. The Scottish Animal Welfare Commission (SAWC) has reviewed the report from the perspective of deer welfare and has prepared this report to highlight specific recommendations of importance for deer welfare, and to suggest future potential research requirements in this area.

This report was prepared by SAWC members: Dr Pete Goddard, Dr Andrew Kitchener, Dr Harvey Carruthers, Mike Flynn and Prof Cathy Dwyer.

Overview

Overall, the report is a thorough and comprehensive review of the legislation and evidence around all aspects of the management of wild deer in Scotland carried out by the public or commercial sector, noting that these have different approaches and targets. A lot of care has been shown in covering some often complex areas. The report makes a large number of pertinent recommendations to Scottish Government about improving the management of deer, not least where legislation needs to be updated. There are also general concerns about bringing the Scottish system for deer management more in line with best practice in other countries. In some places the report is critical of the work of SNH (now NatureScot) in managing deer and the evidence presented suggests that deer management strategies and actions could be improved in a number of significant ways, for example by having much improved deer census data, though clearly resources would need to be made available to achieve this, along with enhanced public-private partnership.

The Working Group, in their Terms of Reference, had a focus on management and sustainability rather than welfare *per se*, although the report does make a number of specific recommendations about deer welfare. SAWC's comments hereafter have a primary focus on deer welfare, bearing in mind that there are many aspects of deer management (including **lack** of appropriate management) where deer welfare is likely to be directly or indirectly affected by management decisions. We consider that humane deer culling can be an appropriate measure to improve deer welfare and maintain healthy deer populations, but, as stated in places below, the application of welfare frameworks to support deer management seems to be lacking in many cases.

In this Overview we highlight a number of overarching points before commenting on those individual recommendations where SAWC see a welfare connection. We also offer some suggestions for areas where further evidence or research would be helpful. These are shown against individual Working Group Recommendations and have been summarised in an Appendix.

Responsibility: Deer are unowned and considered national common property. As there are no natural predators, culling is required to maintain deer health and welfare, as well as reduce economic damage – as unowned common property, responsibility for the culling and management falls to NatureScot. Since 1996, deer welfare has been included as a requirement in legislation, along with sustainability aspects. It is clear then that deer welfare is part of the responsibility of NatureScot.

Deer welfare issues: The report considers a number of “traditional” welfare issues associated with deer management: wounding, orphaning and disease. Some mention is also made of deer-vehicle collisions (DVCs), but largely not from a deer welfare point of view. Winter mortality and the impacts of low body weight are noted in the report. These specific issues are relevant and important, but there could be a wider consideration of the welfare of wild deer. For example, while the use of the Five Freedoms as a framework may not be relevant to wildlife, Quality of Life (QoL) frameworks, or the Five Domains (or other approaches as discussed by the Wild Animal Welfare Committee (WAWC)) could be applied. Understanding of the wider welfare of wild deer may help to improve deer management: we signal this later as

an area for fuller consideration. The 1996 Act prohibits the taking of deer in a manner that causes 'unnecessary suffering' which then allows deer to be taken at night, driven by a vehicle, and shot from a moving vehicle if there is 'no unnecessary suffering'. The report includes comments about the use of language and how this is imprecise and does not always properly protect deer from suffering. As the report notes, there can be welfare consequences for deer through both management and lack of management. The immediate and humane death of a wild animal is in itself not a welfare issue for the individual animal.

The report notes a number of issues in relation to interpreting and assessing welfare and SAWC make a number of comments in relation to the specific recommendations.

Wounding: There is some evidence of a 2% wounding rate for shot deer – this level would not be acceptable in slaughter of farmed animals for consumption – and a study in 2003 found that 14.5% carcasses had received more than one shot. Later studies also suggest that 7-19% of shots do not kill the animal (shots to legs and abdomen which would be associated with significant pain) and 82% of deer were killed with a 2nd shot. Data related to the time interval between the first and second shot is lacking. While there are relatively few studies in Scotland, it seems that wounding was more common with incompetent or inexperienced shooters. All this suggests that more work is needed, especially on the welfare experience of shot deer. (QoL analyses comparing shooting wild deer versus pre-stun slaughter of farmed deer would be illuminating).

Orphaning: Recommendations on the dates for the female close season (and to remove the male close season) are well argued and will reduce the risk of orphaning. Culling of red deer stags after the rut is interesting from a welfare point of view and could be explored further.

Disease and mortality: Although there is some mention of disease in the report, the more general concerns about winter mortality and low body weight/body condition score as a consequence of increasing deer densities demand a fuller investigation of the impact on deer welfare of management policies on this; the focus is still mainly on culling to reduce deer damage to the environment and to avoid DVCs (which can also impact on deer welfare). Targeting the removal of stags in poor condition, which might not survive the winter, could improve welfare (and mimic the action of a natural predator), providing any stress associated with stalking and shooting stags at this time of year did not impact on them or other animals. While the incidence of specific diseases in deer seems low, a better understanding of disease incidence could lead into discussions about welfare issues requiring more targeted annual deer culls. The report notes the secondary impact of tick burdens on humans (e.g. Lyme disease) yet we know little of the impact of large tick burdens on deer.

Deer numbers: Deer numbers appear to be rising and dispersal into peri-urban and urban areas is increasing, suggesting that current deer management is not achieving its goals. The welfare impacts of increased numbers, population density and dispersal could be investigated further as this aspect was largely outside of the scope of the report, the focus of which was mostly on environmental damage and sustainability. In many geographical areas, deer are so numerous so as to inhibit

natural vegetation regeneration, in particular native tree regrowth, and damage new plantations. This is important in the light of the Government's desire to increase woodland cover as part of its delivery on climate change targets. There are also some situations where damage to other interests (such as agriculture) need to be addressed. Also, there are overarching issues related to the increase of "urban deer" and the rise in reported DVCs (not just in built-up areas). An increase in deer numbers can cause deer to move onto other land with better resources, and in the report this is largely considered from a damage and property perspective; welfare issues are at play here too. The report makes mention of the available deer "control" effort which may be insufficient to reduce the steadily increasing population of deer under favourable climatic conditions. To best control numbers in the long term, it is more effective to reduce the number of breeding females (through shooting or immunocontraception). SAWC wish to emphasise the importance of having accurate and contemporary population information.

Culling practices: Decisions over the number of deer to cull is made by land owners (sometimes on a collaborative basis based on the DMG), with statutory interventions required if insufficient deer are killed. In a wider European context, owners are given a required cull, or are compelled to group together to manage deer. The Working Group discusses different approaches to culling and which animals should be culled. This approach could be used to improve deer welfare (e.g. culling low bodyweight yearlings, culling vulnerable animals ahead of winter especially in open hill areas) and management could be more focused on culling specific types of animal to improve animal welfare overall.

Shooting practice recommendations: Overall the recommendations relating to regulation and reduction in the use of shotguns, night shooting and use of night sights seem appropriate and will improve deer welfare by reducing the risks of wounding and the stress of hunting. Recommendations are made around use of lead shot as an important environmental issue, and developments to the use of effective non-lead bullets are required for deer welfare. Suggested amendments to the current restrictions on night shooting seem reasonable from a welfare perspective if deer can be shot efficiently (i.e. without a significant increase in animals wounded) and without causing undue stress: if night shooting can be achieved with less disturbance to deer then this is an acceptable approach. Trained dogs are required particularly when shooting at night in order to track wounded animals and reduce time taken to kill them. The report's suggestion of more formal dog training as required in Europe would improve welfare (of deer and dog potentially) and is supported. SAWC agrees with suggestions about who should be allowed to shoot deer and that anyone doing so should be seen to be fit and competent (equivalent to "trained hunters" in a number of countries). In relation to deer welfare, it is not acceptable that deer can be culled by anyone not deemed fit or competent, simply due to their land ownership status. Training should be encouraged to ensure that understanding of welfare and ability to minimise suffering are paramount. Thus, training should be required before anyone is permitted to shoot, not only from an animal welfare perspective but also in regards safety aspects of using a dangerous weapon. This would be facilitated by having a register of persons competent and qualified to shoot deer in Scotland.

Conclusions and Recommendations

Here we have listed the recommendations from the Deer Working Group report with SAWC agreement or comment on relevant recommendations (where deer welfare is directly or indirectly impacted) in blue.

Part One - Wild Deer in Scotland

Section 1 Legal Status, Hunting Rights and Regulatory Framework

1 The Working Group recommends that the Scottish Parliament should amend the Deer (Scotland) Act 1996 to replace the references in the Act to the Deer Commission for Scotland, Secretary of State and the Houses of Parliament with Scottish Natural Heritage, Scottish Ministers and the Scottish Parliament respectively (*paragraph 72*).

Section 2 National Distributions, Populations and Culls

2 The Working Group recommends that Scottish Natural Heritage should develop its own more detailed distribution maps for wild deer in Scotland; that Scottish Natural Heritage should more accurately report the basis of national population estimates for wild deer which it publishes; and that Scottish Natural Heritage should make clear that the national cull statistics which it publishes are based only on the numbers reported through cull returns (*paragraph 63*).

SAWC Response

Agreed - Accurate cull, population size and distribution statistics are vital, and this will also help with our understanding of deer health and the management of deer populations in specific sites (e.g. near motorways, urban areas).

Section 3 Public Authority, Functions and Interests

3 The Working Group recommends that section 1 of the Deer (Scotland) Act 1996 should be amended to make explicit that Scottish Natural Heritage has distinct functions under the Act, to modernise the stated purpose of the Act to reflect contemporary public policy objectives, and to convert the list of interests to be taken into account into an inclusive rather than exclusive list (*paragraph 37*).

Part Two - Public Safety and Deer Welfare (in all circumstances)

Section 4 How wild deer can be killed lawfully

4 The Working Group recommends that the Scottish Government should make a clear commitment to end the use of lead bullets to shoot deer in Scotland, carry out the necessary research and promotion to enable that change to be made after a transition period and, as a part of that, amend The Deer (Firearms, etc.) (Scotland) Order 1985 so that the specifications in paragraph 3(a) of the Order are suitable for the use of non-lead bullets (*paragraph 21*).

SAWC Response

We understand that for stalking common species in Europe, non-lead bullets already exist, and that some UK supermarkets have pledged only to stock game that has been killed without using lead rounds, but that shooting organisations are looking at a 5-year timescale to switch over (Minutes of the 24th Lead Ammunition Group Meeting 17th March 2020). Part of the problem is mistrust of the 'newer' bullets - copper bullets need to be lighter and faster and are getting a reputation for not being

as effective, as deer may react differently to being struck by these faster rounds. If 95% of deer culled by FLS and SNH are killed by non-lead shot, it should be relatively straightforward for NatureScot to carry out research on the efficacy and welfare implications of this. This is clearly an area that needs to be addressed urgently because of the linked risk to human and environmental health.

5 The Working Group recommends that the use of a shotgun to kill wild deer should be made subject to authorisation by Scottish Natural Heritage through a new provision in the Deer (Scotland) Act 1996, that the owner or occupier of any land should be able to apply for such authorisation and that the terms of paragraph 4 of The Deer (Firearms, etc.) (Scotland) Order 1985 should be amended accordingly (*paragraph 31*).

SAWC Response

Agreed, but the effect depends on the threshold and assessment for which NatureScot would consider issuing authorisation and their ability to respond quickly to any request. The general expectation that shotguns should not be used to kill deer is important. There are many references throughout the report to a person being “fit and competent”. This is a term used in much legislation but in this context should be clearly defined. A person cannot be classed as “fit and competent”, by means only of having a firearms licence. The proposal to authorise the use of a shotgun should also include public safety and animal welfare.

6 The Working Group recommends that the Scottish Government should instruct Scottish Natural Heritage to carry out the planned trials into the use of night sights without further undue delay (*paragraph 38*).

SAWC Response

Agreed

7 The Working Group recommends that, subject to the successful outcome of Scottish Natural Heritage’s trials, paragraph 5(b) of The Deer (Firearms, etc.) (Scotland) Order 1985 should be repealed to allow the use of night sights to shoot deer (*paragraph 40*).

SAWC Response

Agreed - The original conditions were largely as a measure to tackle deer poaching which was and remains a wildlife crime, and which will occur regardless of whatever new legislation requires. Given the improvements in night vision sights over the years it makes perfect sense to allow them to be used under authorisation. As highlighted in the report, the use of such sights will improve shot placement and the chance of a clean kill. Whether through existing means or with permission for night vision sights, part of the authorisation should include a requirement for a suitably trained spotter dog. Even with a well-placed shot, a deer can still move a considerable distance, so without the use of a trained dog, a seriously but not fatally shot deer could be left for a considerable time before it is finally dispatched. When night shooting is currently authorised, a condition applied is that the local Police should be informed of the time and location of any night shooting that is intended.

Section 5 Times of year when deer can be killed lawfully

8 The Working Group recommends that The Deer (Close Seasons) (Scotland) Order 2011 should be replaced with a new Order in which the close season for females of each species is set to start on a date in the period 1st to 15th April (inclusive) and end on a date in the period 31st August to 15th September (inclusive), and in which no close seasons are set for males of each species (*paragraph 67*).

SAWC Response

Male deer – Providing the normal requirements for high standards of public safety and animal welfare are adhered to – for example in terms of accurate shooting, following up on wounded deer and avoidance of harassment or excessive movement of stags after the rut – we agree that there is no need for a close season for males. Female deer – Critically, due regard needs to be given to when dependent young are present. (NB It is taken that when a pregnant female is shot – whatever the state of the pregnancy – the foetus will die as a result of oxygen starvation and that there is no welfare issue to the unborn foetus. It has been suggested (Mellor various e.g. Mellor DJ and Gregory NG, 2003. Responsiveness, behavioural arousal and awareness in fetal and newborn lambs: experimental, practical and therapeutic implications. New Zealand Veterinary Journal, 51, 2–13.) that even a near-term foetus (which might show physical activity on gralloching the mother) will not have achieved a state of consciousness to experience pain since it has not had sufficient brain oxygenation that allows full function. This point may not be universally accepted. However, as a 2017 report from EFSA concluded, it is more probable that the neurophysiological situation does not allow for conscious perception (with 66–99% likelihood) because of brain inhibitory mechanisms. (EFSA Journal 2017;15(5):4782, 96 pp. <https://doi.org/10.2903/j.efsa.2017.4782>) Further comment on the ability of a foetus to experience negative states is beyond this response but could be followed up.)

The actual dates chosen for the general and restricted close seasons for female deer must be related to the onset of calving and the point at which the majority of young are (or could be) nutritionally independent. To avoid an increased opportunity for young being orphaned, the end of the close season should probably not be brought forwards to an earlier date. By the end of the current close season, young will be physically weaned from the hind, though still reliant on the mother for security, comfort and their place in the hierarchy of the herd and therefore the chances of survival throughout the seasons, particularly for female red deer calves joining the maternal herd. There is clearly an element of judgement to be exercised and the degree to which “outliers” can be tolerated. The setting of the more restricted closed season seems to be taking into account about 80% of births (mid-May to Mid-June for red deer). However, some of the wording is vague for births outside these main birthing periods, such as births in the first half of April being “uncommon” for red/sika or “rare” for fallow (Section 5.3, para 36). It would be important to be clear about what these terms mean in actual numbers.

Climate change effects will impact on calving dates – favourable spring weather could mean that females calve earlier but, equally, extended autumns may mean that some females conceive later and thus calve later. Evidence here would help to clarify climate impacts. For example, moving the start of the close season to 15 April may be at odds with an increasingly early start to the calving season.

The criteria for close seasons should apply to all deer regardless of where they are situated, enclosed agricultural or forestry land should not be an exception.

(Unfortunately, Recommendation 8 does not make clear whether it is recommending changes to the dates of close seasons generally or for the restricted close seasons which are the subject of much of the report's preceding discussion. This impacts on whether general or specific authorizations come into play. NB We understand that the latter is the intention.)

We recommend that NatureScot keeps this issue under periodic review.

9 The Working Group recommends, firstly, that section 5(6) of the Deer (Scotland) Act 1996 should be amended to apply to any land and to cover public interests of a social, economic and environment nature; and, secondly, that section 5(8) should be repealed (*paragraph 79*).

SAWC Response

Agreed

Section 6 Times of day when wild deer can be killed lawfully

10 The Working Group recommends that section 18(2) of the Deer (Scotland) Act 1996 should be amended to refer to both owners and occupiers, to be applicable to any land and to cover public interests of a social, economic and environmental nature (*paragraph 38*).

SAWC Response

The requirement for authorisation (Para 17) is essential to ensure that anyone carrying out night shooting is suitably experienced and that the location of night shooting is known to the Police, an essential requirement to allow the Police to be aware of any illegal activity.

This section is also impacted by recommendations 6 & 7 since the use of night sights gives an opportunity to improve the accuracy of shooting and hence public safety and deer welfare, providing these sights do not encourage stalkers to shoot beyond their competence. Though not a formal recommendation in the report, NatureScot should be encouraged to follow up on more formal dog training and performance standards: the current FLS standards would be a good starting point. The current level of training of dogs used for hunting (Section 6, item 14, p.81) is interesting. We believe that in some countries (e.g. Germany) as well as hunters having to sit rigorous compulsory examinations, their dogs have to be tested and licensed. Indeed, in Germany there are various levels of specialisation of working dogs, the lowest being Jagdgebrauchshund. Dogs that don't have licences don't get insurance. A night shooting authorisation in Scotland should include the condition of having a trained dog to follow up a wounded deer.

Section 7 How and when wild deer can be taken lawfully

11 The Working Group recommends, firstly, that section 41(2) of the Deer (Scotland) Act 1996 should be amended or replaced so that the taking of wild deer requires to be authorised by Scottish Natural Heritage and secondly, that section 37(5) should be amended at the same time to require Scottish Natural Heritage to

produce a code of practice for the taking or live capture of wild deer (*paragraph 26*).

SAWC Response

Agreed - Live capture may be considered as an alternative to culling, although there is a lack of evidence to suggest this currently happens. All forms of capture for live deer should be subject to a specific authorisation. Historically, wild deer were taken to establish parks or farms. Capture, transport and initial management can cause serious concerns for animal welfare. (NB if deer are darted with a tranquilizer to facilitate this, they cannot enter the human food chain.) Some deer may be darted for research purposes (e.g. to fit GPS collars), or stags may be taken for deer parks. We are not aware of any guidance at present on capture and relocation of wild deer, even though a number of organisations have a potential interest in this. SAWC suggest that this should be regulated by NatureScot to protect welfare at capture and transition from wild to captive state. Best Practice guidance could be produced and reflect either capture prior to culling or capture prior to relocation (which may require different considerations). This could encompass all aspects of the practice, including the skills needed by practitioners. Given the current low level of activity in this area, it may not be a good use of effort in the short term for NatureScot to develop a specific code of practice until a need arises. It would be efficient to then use the proposed authorisation to work in partnership with the applicant to develop a code.

Section 8 Occupiers, Authorised and Competent Persons

- 12 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended so that the statutory rights of occupiers to prevent damage by wild deer should apply to the occupiers of any type of land and cover public interests of a social, economic and environmental nature (*paragraph 19*).
- 13 The Working Group recommends, firstly, that section 37(1A) should be repealed so that all out of season shooting authorised by Scottish Natural Heritage requires to be carried out by a person judged fit and competent for that purpose by Scottish Natural Heritage, and secondly, that section 10(4) should be amended so that an authorised person requires to be judged both fit and competent (*paragraph 36*).

SAWC Response

It is not just for out of season shooting that a person being allowed to take deer should be judged as fit and competent to do so by NatureScot. Fitness should not rely on a person's lack of conviction for a particular offence, however such a conviction should automatically exclude a person to be deemed "fit". This aspect should be linked to a person's suitability to possess a firearms certificate. Owners and occupiers should not be exempt from the provisions of authorisation. A person should be authorised on evidence of the necessary skills and experience. Registered persons should be required to follow the best practice guidelines and failure to do so should result in removal of the authorised status.

- 14 The Working Group recommends that the Scottish Government should make a clear statement of its commitment to establishing a register of persons competent to shoot deer in Scotland under section 17A of the Deer (Scotland) Act 1996, and develop proposals for a register as set out in this Report (*paragraph 84*).

SAWC Response

A person registered as competent to shoot deer should hold at a minimum a DSC 1. A register of persons competent to shoot deer should be established alongside firearms legislation. A future proposal could include an offence for any landowner or occupier to allow any person who is not on the register to kill deer on their behalf. With regard to human health and safety, a similar provision could be created in relation to game and venison dealers.

15 The Working Group also recommends that section 17A of the Deer (Scotland) Act 1996 should be amended at an early stage as set out in this Report, to enable appropriate secondary legislation to bring the recommended register into effect (*paragraph 85*).

Section 9 Prevention of Suffering and Wildlife Crime

16 The Working Group recommends that consideration should be given to having a provision in the Deer (Scotland) Act 1996 which provides exemptions to protect human safety where a deer poses an immediate threat, with those exemptions being similar to the exemptions in section 25 of the Act to end the suffering of a deer (*paragraph 16*).

SAWC Response

Agreed - The act of emergency dispatch of a seriously injured animal must stay as an exception, which should include the provision for a person to follow an injured deer onto land. An immediate threat to public safety should be clearly addressed with the Police notified where possible of any potential action beforehand or as soon as possible thereafter.

Section 10 Wild Deer and Diseases

17 The Working Group recommends that the Scottish Government should ensure that the role of wild deer in increasing the risk of Lyme disease is given greater prominence in its policies for deer management in Scotland, and that greater priority is given to that risk in considering the need to reduce deer densities in locations across Scotland (*paragraph 33*).

SAWC Response

Agreed. There should also be enhanced efforts to inform the public of the level of risk and action to take if required.

18 The Working Group recommends the Scottish Government and its agencies should, following the current Scottish Deer Health Survey, develop and maintain an ongoing national programme to monitor wild deer in Scotland for existing and potential diseases (*paragraph 36*).

SAWC Response

Agreed, along with publishing information on disease prevalence on a regular basis.

Section 11 Wild venison and food safety

19 The Working Group recommends that The Licensing of Venison Dealers (Prescribed Forms etc.) (Scotland) Order 1984 should be replaced by a new

Order that requires clearer and more robust information on the prescribed form about the source of any purchases or receipts of wild venison (*paragraph 21*).

SAWC Response

Agreed. This information should include disease data and tie in with the previous recommendation to make information available at a regional and national level. There is a potentially beneficial overlap here in terms of disease and welfare. Scottish assured wild venison schemes could have a welfare component like other food labelling schemes. Increasing rates of consumption could be encouraged through marketing on the basis of local, healthy and animal welfare assured labelling following further development and once a better welfare assessment approach than currently exists was developed. This should enhance overall deer welfare.

- 20 The Working Group recommends that section 34 of the Deer (Scotland) Act 1996 should be amended to empower those with the authority under that section, to require a licensed venison dealer to submit a return summarising their throughput of wild deer carcasses during a period not exceeding three years and in a form to be prescribed (*paragraph 55*).
- 21 The Working Group recommends that the Scottish Government should review sections 33-36 of the Deer (Scotland) Act 1996 that cover the licensing of dealing in venison, with a view to making changes in addition to the related recommendations in this Report, so that the arrangements are fit for purpose in contemporary circumstances (*paragraph 60*).
- 22 The Working Group recommends that section of 40 of the Deer (Scotland) Act 1996 dealing with cull returns should be amended by inserting 'and the use of the carcasses' at the end of section 40(1) (*paragraph 65*).
- 23 The Working Group recommends that the Scottish Government should ensure that the requirement for those supplying venison to Approved Game Handling Establishments to be able to demonstrate Trained Hunter status under EU regulations is enforced (*paragraph 67*).

SAWC Response

In a number of places in the report, there are helpful comments about the level of competence / training of those shooting deer. Over a number of years, WDBP has been very helpful in raising standards but could probably be taken further and in line with best practice in other countries.

Section 12 Wild Deer and Other Deer

SAWC Response

NB Page 132 Para 13 contains an error we believe as farmed deer must be processed on farm (in approved premises) or through a licensed abattoir. The AGHE is the route for shot wild deer carcasses.

- 24 The Working Group recommends that section 43 of the Deer (Scotland) Act 1996 should be amended at the end of the definition of farmed deer in s.43(4) to include 'and be clearly marked to show they are kept as such' (*paragraph 21*).

SAWC Response

Agreed. Marking should follow best welfare practice ie not branding or ear notching. RFID- enabled tags can be utilised in on farm management.

25 The Working Group recommends that the Animals (Scotland) Act 1987 should be amended to establish clearly that an owner or occupier of land can shoot a stray farmed deer on that land to prevent damage by the deer, where that is the only reasonable practical means in the circumstances to detain the stray deer under the Act (*paragraph 28*).

SAWC Response

Agreed. Shooting stray deer should be considered best practice for welfare of the national herd as this may reduce disease transmission.

26 The Working Group recommends that there should be a legal requirement for all deer that are owned as private property and not farmed deer or deer in zoos, to be tagged to identify them as private property (*paragraph 46*).

SAWC Response

Agreed. Tagging (of privately owned deer) would ensure good practice in terms of welfare management and is to be encouraged. On some premises handling facilities may not exist to permit this to happen with regard to human and animal safety. Deer kept at private property may not currently be subject to same requirements for health and welfare as farmed, wild or zoo deer, although covered under the 2006 Act.

27 The Working Group recommends that the Scottish Government should give serious consideration to the introduction through the Animal Health and Welfare (Scotland) Act 2006, of a scheme to require an owner of deer to have a licence for the keeping of deer as private property that are not farmed deer, deer in zoos nor muntjac deer (*paragraph 51*).

SAWC Response

Agreed

28 The Working Group recommends that either the Deer (Scotland) Act 1996 or the Wildlife and Countryside Act 1981 should be amended so that any release of captive red deer and captive roe deer into the wild requires to be authorised by Scottish Natural Heritage (*paragraph 62*).

SAWC Response

Agreed. Any authorization should be associated with assessment of the health and welfare of animals pre-release, an assessment of likely survival, and monitoring post release. "Canned hunting" is still considered to occur in Highlands to provide trophy stags. There are both welfare and ethical concerns about this practice, including the stress of capture and translocation. Overall, the impact on an individual will be greater than direct shooting or humane killing. The report stops short of any specific recommendation but SAWC suggests this is not an acceptable practice.

29 The Working Group recommends that the Scottish Government and its agencies should agree and apply practical criteria to identify and correct situations where deer enclosed by deer-proof barriers are being managed as if they are wild deer,

when it is clear from the assessment that they should be managed as captive deer (*paragraph 83*).

SAWC Response

Discussion about the distinction between wild deer and deer on enclosed spaces which are considered wild but without freedom to leave, and whether or not provided with supplementary feed is interesting and legally/morally challenging as it affects requirements to meet welfare needs, depending on the designation. This recommendation, in relation to “park deer”, addresses a long-standing loop hole and the requirement for clarity. In taking this forward it would be helpful to have a parallel discussion in relation to the definition in England. This is also touched on in Section 18 para 15. Any commercial shooting of captive deer should be examined and authorised by NatureScot.

Part Three - Damage to Public Interests (in particular circumstances)

Section 13 Damage by Wild Deer

30 The Working Group recommends that Scottish Natural Heritage should develop fuller statements of the public and private land use interests that can be protected under the Deer (Scotland) Act 1996, and that Scottish Natural Heritage should also ensure that the Wild Deer Best Practice guidance on damage is replaced (*paragraph 18*).

SAWC Response

Land owners are permitted to take steps to prevent damage but this can impact on deer welfare – such as enclosing an area of land without reducing the number of animals which depend on it, or clear-felling an area of forestry. Such actions might cause deer to move onto neighbouring land, but possibly also lead to an overall lack of resources impacting on deer welfare.

31 The Working Group recommends that the Scottish Government should ensure that Scottish Natural Heritage has the capacity to encourage complaints of unacceptable levels of damage by wild deer and to respond by taking effective action where warranted to reduce the damage (*paragraph 33*).

SAWC Response

Evidence for extent of damage caused by wild deer is not clear and information is not collected adequately. This may not be directly relevant to deer welfare but is part of the rationale for culling deer yet the basis for this seems unclear. Deer could be culled for welfare purposes, but these have not been stated.

32 The Working Group recommends that the phrase “or steps taken or not taken for the purposes of deer management” should be repealed from sections 6A(2) and 7(1) of the Deer (Scotland) Act 1996, and that consideration might be given to whether an appropriately termed and practical power for Scottish Natural Heritage to reduce deer control on a property might be introduced through a new section in that Act (*paragraph 49*).

Section 14 Agriculture and Forestry

- 33 The Working Group recommends that Scottish Natural Heritage should take a far more focused approach to identifying the current extent of damage to agriculture by wild deer in different parts of Scotland and take action to tackle the local issues involved (*paragraph 17*).
- 34 The Working Group recommends that the Scottish Government should recognise much more fully than at present, the need for changes to the current statutory and non-statutory system for the management of wild deer in Scotland if the Scottish Forestry Strategy 2019-29 is to be implemented successfully (*paragraph 77*).

SAWC Response

Generally, more evidence for losses to forestry by deer activities would be helpful, especially in relation to browsing on young trees. There is evidence of good deer management by FLS but this can be impacted by encroachment of deer from other sites where there is a different level of management or different objectives. We see insufficient evidence in relation to deer carrying capacity vs hunger, or movement of deer into new areas as driving culling decisions. We believe that a much greater focus and implementation of compensatory culling is needed more widely to protect deer welfare.

Section 15 Public Safety

- 35 The Working Group recommends that the Scottish Government should be working to ensure that the UK Department of Transport form used by Police Scotland to record Personal Injury Accidents (ST19), is modified for use in Scotland to include a separate category for deer (*paragraph 11*).
- 36 The Working Group recommends that the Scottish Government should ensure that a more appropriate level of attention and resources is applied to addressing the continuing rise in road traffic accidents in Scotland involving wild deer (*paragraph 24*).
- 37 The Working Group recommends that Scottish Natural Heritage should be paying much more attention to the control of local deer densities alongside lengths of public roads with frequent road traffic accidents involving wild deer (*paragraph 44*).

SAWC Response

It is important to point out that deer-vehicle collisions also have a very severe impact on deer welfare. Much human injury seems to be caused by actions to avoid a deer. Actions to reduce human impacts of DVCs would also increase the welfare of deer. Other mitigation issues such as under- and over-passes might benefit deer welfare and welfare of other wildlife as are used extensively in other parts of Europe (e.g. for elk in Scandinavia). The Scottish SPCA provides annual figures in relation to DVCs; Scottish SPCA reports account for the majority of reports.

Section 16 Natural Heritage

- 38 The Working Group recommends that the Cairngorms National Park Authority and Scottish Natural Heritage should adopt and enforce a clear policy against the establishment of any populations of Scotland's two non-native deer species, fallow and sika deer, in the Cairngorms National Park (*paragraph 47*).
- 39 The Working Group recommends that the Cairngorms National Park Authority and Scottish Natural Heritage should have a much greater focus on the need to

improve the management of wild deer in the Cairngorms National Park, to reduce deer densities in many parts of the Park to protect and enhance the Park's biodiversity (*paragraph 52*).

- 40 The Working Group recommends that the Scottish Government should remove the current references to deer from the Muirburn Code and end financial support for muirburn for wild deer through its Rural Payments and Services Agri-Environment Climate Scheme (*paragraph 73*).
- 41 The Working Group recommends that the Hill Farm Act 1946 should be amended to make it an offence to carry out muirburn for wild deer without a licence from Scottish Natural Heritage (*paragraph 74*).

Section 17 Non-Native Deer Species

- 42 The Working Group recommends that Scottish Natural Heritage should develop its own maps of the existing distribution of fallow deer in Scotland and implement a clear strategy to prevent the further spread of these fallow deer populations, including the use of Scottish Natural Heritage's regulatory powers under the Deer (Scotland) Act 1996 if necessary (*paragraph 15*).
- 43 The Working Group recommends that Scottish Natural Heritage should be more actively raising awareness that releasing or allowing fallow deer to escape from captivity is an offence, and that Scottish Natural Heritage should be taking enforcement action in any situation where that appears to have happened (*paragraph 19*).
- 44 The Working Group recommends that Scottish Natural Heritage should be taking a clearer, more robust approach to minimising the spread of sika deer in Scotland, and should be targeting areas where Scottish Natural Heritage intend to prevent or slow colonisation by sika deer (*paragraph 41*).
- 45 The Working Group recommends, firstly, that Scottish Natural Heritage should take a more rigorous approach to identifying sites with captive muntjac and knowing the numbers and sexes of muntjac and adequacy of enclosures at the existing sites licensed to keep muntjac, and secondly, that Scottish Natural Heritage should have a clear policy of not issuing any further licences for keeping muntjac in captivity unless exceptional public interest can be demonstrated (*paragraph 55*).
- 46 The Working Group recommends that Scottish Natural Heritage should be maintaining a more active focus on the likely routes by which muntjac deer may colonise Scotland from the north of England, and that Scottish Natural Heritage should have an annual programme of raising awareness about muntjac deer to reduce the risks of muntjac deer becoming established in Scotland (*paragraph 65*).

Section 18 Deer Welfare

- 47 The Working Group recommends that the Scottish Government should ensure that a fuller contemporary interpretation of the welfare of wild deer becomes a more important factor in determining standards of deer management in Scotland than is currently the case (*paragraph 22*).

SAWC Response

Agreed - This is an important recommendation that chimes with SAWC (via WAWC) work in this area. Importantly, the inclusion of positive aspects of welfare would be helpful in the recommendation to move to a more contemporary welfare

interpretation. Discussion on what welfare means when applied to wild animals overlaps with the thinking in SAWC on wildlife welfare, and in particular, a focus on adaptive behavioural responses to adverse welfare challenges – so expanding from welfare at shooting, wounding and orphaning. (The working group does refer to the adaptive capacity of deer and their ability to respond in order to cope.) Note that SAWC has work underway in this area which will be available to inform further debate.

48 The Working Group recommends that Scottish Natural Heritage should be developing a fuller interpretation of the welfare of wild deer that is based on a wider consideration of their biological performance (*paragraph 32*).

SAWC Response

Agreed - Included in this must be the development of transparent and widely understood methods of welfare assessment leading to a much clearer confidence that deer welfare has been addressed when any management decisions are made and how welfare considerations have impacted on these decisions. Increasing the focus on positive aspects of welfare – a good life or a life worth living, for example - should be included here. Green recommended the use of 9 indicators for welfare, but we are unaware of how often these are measured and monitored, and whether management actions are based on these? Thus, we consider that the current suite of indicators is limited. A suitable assessment system could provide a useful basis in order to understand the 'carrying capacity' of areas with respect to deer numbers. Work on welfare of other extensively managed animals (sheep and cattle) could be useful here. A question remains as to who or what body is entrusted with arbitrating on such decisions and how a range of stakeholders might be involved in this.

49 The Working Group recommends that the Scottish Government should make clear that the ongoing levels of annual winter mortality amongst red deer on open hill range in the Highlands are unacceptable and need to be reduced (*paragraph 59*).

SAWC Response

Agreed – This is an important recommendation for deer welfare. The levels of winter mortality in red deer are a significant cause for concern, and it is hoped that NatureScot act on the DWG recommendation as this is a crucial deer management issue, especially with respect to the condition of deer after the rut and before winter. It would be valuable to have a better understanding of causative factors and the variability between years (is this similar to Soay sheep boom and bust years?). Green's report suggests this is mainly a problem for red deer on open hill and not in forest, presumably because these deer are not adapted to cope with hard winter weather in the open. However, the foregoing paragraphs in the report do not set out adequate measures to address this issue, particularly amongst open hill deer. As the report notes, a considerable period of suffering may precede death due to starvation. It may be that in cases where supplementary winter feed is provided, some deer may be in too poor a state to be able to utilize this. Removal of the poorest animals on welfare grounds by stalkers at the start of the winter could mitigate the more extreme problems but it is unclear whether sufficient stalking effort exists. It is also important for deer to have access to tree shelter. It is informative to consider predation patterns on natural populations of red deer. In a study in Poland,

wolves selected for adult red deer stags <5 years old in poor condition, hinds >8 years old in better condition and calves in poor condition (Smietana 2005). Clearly, predators are tending to select for males and calves in poor condition which might not survive the winter anyway and this might point to those deer that should be culled.

Smietana, W. (2005). Selectivity of wolf predation on red deer in the Bieszczady Mountains, Poland. *Acta Theriologica* **50(2)**: 277-288.

50 The Working Group recommends that Scottish Natural Heritage should consider developing the use of the average carcase weights of yearlings in the autumn as an indicator of the welfare of the local population of the deer species involved (*paragraph 71*).

SAWC Response

Agreed – this highlights the value of the comprehensive data and analysis available in some other countries. The report mentions the relationship between deer densities and body weight – increased density leads to reductions in weight and is cited as a way of monitoring deer positive welfare. Monitoring weight and size could provide a cumulative indicator of welfare state over lifetime. Quality of Life (QoL) is not really mentioned, with a focus on the 5 Freedoms. The way to deal with this “problem” seems to be culling again: a suggestion to cull small yearlings at dispersal to reduce environmental damage from food competition. There is an interesting discussion about whether carcass weight can be used a welfare indicator in conjunction with winter mortality. Antler quality and development may also be a useful indicator of condition.

As noted above, more work could be done in this area to better understand deer welfare and improve management methods. This is not a specific recommendation of the Working Group but might be an area for SAWC to consider.

The report does not speculate on the welfare impact of the introduction of carnivores as part of any re-wilding activities but those engaged in re-wilding need to consider the welfare of any potential prey species.

Section 19 Other Public Interests

51 The Working Group recommends that Scottish Natural Heritage should be implementing a strategic approach to limiting ongoing dispersal by deer into both peri-urban areas from the wider countryside and urban areas from peri-urban areas, selecting target areas on a prioritised basis (*paragraph 26*).

52 The Working Group recommends that the Scottish Government should ensure that increasing attention is focused on implementing effective deer management in peri-urban and urban areas to limit damage to public interests, and that Scottish Natural Heritage adopts a more focused approach towards achieving this (*paragraph 39*).

SAWC Response

Public interest should include public safety and animal welfare. Generally, the public do not like to see animals being shot, particularly in peri-urban areas. It would thus be helpful and more acceptable if educational resources were publicly available to explain the reasons why deer control was needed (including deer welfare and not

just the avoidance of damage). With different (better?) culling policies in some European countries, this appears less of an issue than in Scotland.

Section 20 Economics of Wild Deer

- 53 The Working Group recommends that the Scottish Government should keep a clearer account of the expenditure by the public sector each year on the management of wild deer, and also ensure that it develops improved information on the estimated annual costs of damage by wild deer (*paragraph 22*).
- 54 The Working Group recommends that amendments to the ratings legislation in the 1975 and 1994 Local Government (Scotland) Acts should remove references to 'deer forests' in the phrase 'shootings and deer forests', and that section 6(8za) of the Valuation and Rating (Scotland) Act 1956 should be repealed (*paragraph 58*).

SAWC Response

The report makes the case for the economic benefits of deer being maintained at lower numbers leading to fewer costs in terms of DVC and environmental damage. We note that the welfare cost-benefit is not included in the report.

Part Four - Compulsory Powers

Section 21 Information – Cull Returns

- 55 The Working Group recommends that Scottish Natural Heritage should be planning to move its cull return system entirely online as soon as practically possible (*paragraph 29*).
- 56 The Working Group recommends that Scottish Natural Heritage should provide the option for land owners and occupiers completing cull returns to report whether they have experienced damage by deer in the year being reported and the nature of that damage (*paragraph 35*).
- 57 The Working Group recommends that section 40 of the Deer (Scotland) Act 1996 should be amended to enable secondary legislation to be used to add to the types of information that can be required on a statutory basis under the section (*paragraph 40*).
- 58 The Working Group recommends that Scottish Natural Heritage should, as an essential step, start to increase substantially the extent of Scotland covered by the cull return system, taking a targeted and prioritised approach to the areas where the coverage is to be increased (*paragraph 64*).
- 59 The Working Group recommends that Scottish Natural Heritage should replace its current online deer database with a new system and establish a publicly accessible National Cull Database (*paragraph 59*).

Section 22 Information – Other Powers

- 60 The Working Group recommends that section 40A of the Deer (Scotland) Act 1996 should be amended to refer to 'taken or killed' and to enable the information required to cover a period not exceeding five years (*paragraph 5*).
- 61 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to remove the reference to the Code of Practice on Deer Management in section 6A(1) of the Act (*paragraph 19*).

- 62 The Working Group recommends that section 6A(5) of the Deer (Scotland) Act 1996 should be amended to change the period within which a Deer Management Plan is to be submitted to Scottish Natural Heritage, so that the period is not less than three months and not more than 12 months as Scottish Natural Heritage may determine, according to circumstances (*paragraph 25*).
- 63 The Working Group recommends that section 15(3)(b) of the Deer (Scotland) Act 1996 should be amended to include sections 10 and 11 of the Act, rather than just sections 7 and 8 (*paragraph 39*).
- 64 The Working Group recommends that the period of notice required to enter land under section 15(2) of the Deer (Scotland) Act 1996, should be reviewed with the intention of making the period of notice shorter (*paragraph 41*).
- 65 The Working Group recommends that section 15(3) of the Deer (Scotland) Act 1996 should be amended to include as a purpose for entering on land, carrying out an assessment of the impacts of deer in any area in pursuance of Scottish Natural Heritage's functions under section 1(1) of the Act (*paragraph 47*).

Section 23 Emergency Control Measures

- 66 The Working Group recommends that section 10(1) of the Deer (Scotland) Act 1996 Act should be amended to include damage, directly or indirectly, to the natural heritage and that section 11 of the Act should be repealed (*paragraph 31*).
- 67 The Working Group recommends that section 10(1)(b) of the Deer (Scotland) Act 1996 should be repealed (*paragraph 36*).
- 68 The Working Group recommends that the Scottish Government should amend Section 10 of the Deer (Scotland) Act 1996, so that the owners of land where Scottish Natural Heritage implements measures under section 10(4) have a liability for any net cost involved in carrying out the measures, subject to scope for Scottish Natural Heritage to waive any net cost in appropriate circumstances (*paragraph 45*).
- 69 The Working Group recommends that the title of section 10 of the Deer (Scotland) Act 1996 should be replaced with 'Control Actions' or a title similar to that and that the section should be amended to cover public interests of a social, economic or environmental nature (*paragraph 55*).

Section 24 Control Schemes

- 70 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to remove references to the Code of Practice on deer management from section 7(1) and (3) and from section 8(1) (*paragraph 27*).
- 71 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to repeal section 8(2) and that, as a consequence, s.7(2) should also be repealed (*paragraph 38*).
- 72 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to re-instate section 8(5), which was repealed in 2011 (*paragraph 44*).
- 73 The Working Group recommends that paragraph 13(2) of Schedule 2 of the Deer (Scotland) Act 1996 should be amended, so that the grounds for appeal are that a control scheme is not within the powers of the Act or that any of the requirements of the Act has not been complied with (*paragraph 54*).
- 74 The Working Group recommends that paragraph 13(4) of Schedule 2 of the Deer (Scotland) Act 1996 should be amended, so that the options for the Land Court

are to confirm the scheme or direct Scottish Ministers to revoke it or part of it in so much as it affects the applicant (*paragraph 55*).

- 75 The Working Group recommends that the Environment, Climate Change and Land Reform Committee of the Scottish Parliament should consider holding a short inquiry into the use of section 7 Control Agreements under the Deer (Scotland) Act 1996 in the Caenlochan area (*paragraph 68*).
- 76 The Working Group recommends that Scottish Natural Heritage should ensure that it sets out any section 7 Control Agreements in terms that can be readily converted into a section 8 Control Scheme under the Deer (Scotland) Act 1996, and that Scottish Natural Heritage should also ensure that it already has the evidence to enforce a section 8 Control Scheme if Scottish Natural Heritage is entering into any new section 7 agreements (*paragraph 79*).

Part Five - Non-Statutory Arrangements

Section 25 Scottish Government

- 77 The Working Group recommends that the review of Wild Deer: A National Approach (WDNA) which is due in 2020, should be a major and thorough review of the WDNA approach and should result in a more focused and targeted outcome (*paragraph 38*).
- 78 The Working Group recommends that section 5B of the Deer (Scotland) Act should be amended to remove the requirement for compliance with the Code of Practice on Deer Management to be reviewed every three years (*paragraph 57*).
- 79 The Working Group recommends that the Scottish Government should instruct Scottish Natural Heritage to carry out a review of the contents of the current Code of Practice on Deer Management with the aim of producing a clearer and more effective version of the Code (*paragraph 63*).
- 80 The Working Group recommends that Scottish Natural Heritage should make a policy decision with the Scottish Government's support, to continue to management the Wild Deer Best Practice project for at least the next five years (*paragraph 77*).

SAWC Response

Agreed – The WDBP guidance has had a wide reach (and essentially copied by the former Deer Initiative for England and Wales). Guides include a number impacting on deer welfare and, of course, supporting best practice generally. As the report notes, they need to be driven forwards and we believe that the impetus for this should remain with NatureScot.

Section 26 Scottish Natural Heritage

- 81 The Working Group recommends that Scottish Natural Heritage should ensure an appropriate level of distinction between Scottish Natural Heritage's responsibilities under the Deer (Scotland) Act 1996 and the Natural Heritage (Scotland) Act 1991 respectively (*paragraph 15*).
- 82 The Working Group recommends that section 2 of the Deer (Scotland) Act 1996 should be amended to include provisions requiring, firstly, Scottish Natural Heritage to report annually to Scottish Ministers on the exercising of Scottish Natural Heritage's functions under the Act and secondly, Scottish Ministers to present a copy of Scottish Natural Heritage's report to the Scottish Parliament (*paragraph 20*).

- 83 The Working Group recommends Scottish Ministers should no longer be responsible for appointing the members of a panel under section 4 of the Deer (Scotland) Act 1996 (*paragraph 33*).
- 84 The Working Group recommends that the sequence of assessments of Deer Management Groups carried out by Scottish Natural Heritage in 2014, 2016 and 2019 should come to an end and that Scottish Natural Heritage's focus should now be ensuring the standards of practical deer management implemented on the ground by land owners minimise the damaging impacts which deer can cause to public interests (*paragraph 69*).

Part Six - Refocused Approach

Section 27 Deer Authority

- 85 The Working Group recommends that Scottish Natural Heritage should avoid over-emphasising the need for formal collaborative groups for deer management and adopt a more flexible approach to supporting other forms of liaison and collaboration where these develop, including in open hill red deer range (*paragraph 25*).
- 86 The Working Group recommends that Scottish Natural Heritage should adopt 10 red deer per square kilometre as an upper limit for acceptable densities of red deer over large areas of open range in the Highlands, and review that figure from time to time in the light of developments in public policies, including climate change measures (*paragraph 37*).
- 87 The Working Group recommends that Scottish Natural Heritage should very substantially reduce the extent to which Scottish Natural Heritage carries out direct counts of red deer on open hill range and refocus Scottish Natural Heritage's limited resources on building up more information on the impacts that deer are having on the natural heritage, woodlands, forestry, agriculture and other public interests in Scotland (*paragraph 43*).
- 88 The Working Group endorses Scottish Natural Heritage's identification of the need for significant changes in deer management as an important issue in climate change mitigation measures, and recommends that Scottish Natural Heritage treats this as a high priority (*paragraph 50*).
- 89 The Working Group recommends that Scottish Natural Heritage should allocate a significantly greater share of its resources as the deer authority under the Deer (Scotland) Act 1996, to the management of wild deer in Scotland outwith open hill red deer range (*paragraph 64*).
- 90 The Working Group recommends that Scottish Natural Heritage should be using suitably experienced staff based in Scottish Natural Heritage's seven Areas and acting for Scottish Natural Heritage's responsibilities under the Deer (Scotland) Act 1996, to develop a systematic account of deer management and deer impacts in all parts of Scotland where wild deer occur (*paragraph 74*).
- 91 The Working Group recommends that Scottish Natural Heritage should, in fulfilling its responsibilities for deer management under the Deer (Scotland) Act 1996, be developing Local Authority areas as an important intermediate level between national and local levels (*paragraph 79*).
- 92 The Working Group recommends that the Scottish Government should, in making its annual budget allocation to Scottish Natural Heritage, distinguish between the budget allocated to Scottish Natural Heritage for its functions under the Deer

(Scotland) Act 1996 and the budget allocated for Scottish Natural Heritage's functions under the Natural Heritage (Scotland) Act 1991 (*paragraph 88*).

Section 28 Regulatory System

- 93 The Working Group recommends that Scottish Natural Heritage should start obtaining returns under both sections 40 and 40A of the Deer (Scotland) Act 1996, by combining the notices that are sent and providing space for each return on Scottish Natural Heritage's cull return form (*paragraph 15*).
- 94 The Working Group recommends that Scottish Natural Heritage should, as part of developing Local Authority areas as an intermediate level for considering deer management, appoint a Panel under section 4 of the Deer (Scotland) Act 1996 for each such area with a membership made up of public sector representatives (*paragraph 22*).
- 95 The Working Group recommends that section 4 of the Deer (Scotland) Act 1996 should be amended to allow a member of Scottish Natural Heritage staff to be a member of a Panel established under section 4, in order to represent Scottish Natural Heritage's natural heritage functions under the Natural Heritage (Scotland) Act 1991 (*paragraph 25*).
- 96 The Working Group recommends that Scottish Natural Heritage should make more use than so far of its powers under sections 6A and 10 of the Deer (Scotland) Act 1996, where deer are causing or are likely to cause damage to public interests (*paragraph 37*).
- 97 The Working Group recommends that the Scottish Government develop proposals for a planned cull approval system that would work to best effect in Scotland and then amend the Deer (Scotland) Act 1996 to provide scope for such a system to be introduced by secondary legislation as and when required (*paragraph 88*).

Section 29 Conclusions

- 98 The Working Group recommends that the Deer (Scotland) Act 1996 should, after amendments to implement recommendations in this Report, be replaced with a new Deer (Scotland) Act (*paragraph 16*).
- 99 The Working Group recommends that the Scottish Government and Scottish Natural Heritage should develop and implement a programme of changes to the current system of deer management based on the Group's recommendations, so that Scotland will have a system that ensures effective deer management that safeguards public interests and promotes the sustainable management of wild deer (*paragraph 24*).

SAWC Response

Agreed – SAWC would also recommend inclusion of protecting and enhancing deer welfare as part of the aims of any system of deer management.

Suggestions for Future Research

Areas where SAWC considers further information gathering or research effort would aid decision making.

1. *There could be a wider consideration of the definition and application of specific frameworks to the welfare of wild deer (as indeed to any free-living wild animal). For example, while the use of the Five Freedoms as a framework may not be relevant to wildlife, Quality of Life (QoL) frameworks, or the Five Domains (or other approaches as discussed by the Wild Animal Welfare Committee (WAWC)) could be applied. Understanding of the wider welfare of wild deer may help to improve deer management.*
2. *We consider that included in improved understanding of welfare definitions when applied to deer must be the development of transparent and widely understood methods of welfare assessment leading to a much clearer confidence that deer welfare has been addressed when any management decisions are made and how welfare considerations have impacted on these decisions. Increasing the focus on positive aspects of welfare – a good life or a life worth living, for example - should be included here. We consider that the current suite of indicators is limited. A suitable assessment system could provide a useful basis in order to understand the ‘carrying capacity’ of areas with respect to deer numbers.*
3. *The levels of winter mortality in red deer are a significant cause for concern. It would be valuable to have a better understanding of causative factors and the variability between years. Green’s report suggests this is mainly a problem for red deer on open hill and not in forest, presumably because these deer are not adapted to cope with hard winter weather in the open. However, the measures to address this issue, particularly amongst open hill deer, need to be considered. As the report notes, a considerable period of suffering may precede death due to starvation.*
4. *Given that part of the Scottish Government’s agenda to tackle the climate change emergency requires a significant increase in woodland/forest cover, it would be important to have a better prediction of the impact on deer (and other wildlife species too), especially if compensatory culling was required to mitigate the effect of the loss of deer habitats in terms of carrying capacity.*
5. *More generally, the impact of excluding deer from feed resources or shelter (often through fencing new plantations or felling mature trees that would otherwise have provided shelter) can have a significant effect on their welfare. We consider that this is not always adequately balanced against the need reduce local deer population density. In some cases, it is not clear where the responsibility for action lies in order to protect deer welfare.*
6. *Section 20 touches on the economics of wild deer and notes the likely effect of lower deer numbers on particular issues of environmental damage and deer-vehicle collisions (DVCs). A different type of cost-benefit analysis, not included in the working group’s report, could be focused on the welfare impact of deer management decisions/actions more widely; we must not assume that a reliance on culling alone is a desired option. (This concern relates to wildlife management more generally of course.)*
7. *While there are relatively few studies in Scotland on the efficiency of culling practices (in terms of numbers of deer killed cleanly or the time interval*

between wounding and killing for example), it seems that wounding was more common with incompetent or inexperienced shooters. Additional studies suggest that up to 20% of deer may not be killed by the first shot. This suggests that more work is needed, especially with focus on the welfare experience of shot deer.

Appendix I – Membership of the Scottish Animal Welfare Commission

The Scottish Animal Welfare Commission Members are:

- Professor Cathy Dwyer from Scotland's Rural College and the University of Edinburgh (Chair)
- Dr Harvey Carruthers, veterinary surgeon
- Mike Radford, lawyer specialising in Animal Welfare
- Paula Boyden, Veterinary Director at Dogs Trust
- Professor Marie Haskell, Professor in Animal Welfare Science at Scotland's Rural College
- Dr James Yeates, Chief Executive Officer of Cats Protection
- Libby Anderson, Animal Welfare Policy Advisor
- Dr Simon Girling, Head of Veterinary Services, Royal Zoological Society of Scotland
- Mike Flynn, Chief Superintendent at the Scottish SPCA
- Dr Pete Goddard, veterinary surgeon
- Professor Tim Parkin, Professor of Veterinary Epidemiology, University of Glasgow
- Dr Andrew Kitchener, Principal Curator of Vertebrates at the National Museum of Scotland

Full biographies are at <https://www.gov.scot/publications/scottish-animal-welfare-commission-member-biographies/>.

Appendix II – Contact Details

The Commission is contactable through the Scottish Government's Secretariat Support:

Secretariat Support for the Scottish Animal Welfare Commission

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