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Report on Deer Management in Scotland: Report to the Scottish Government from Scottish Natural Heritage 2016



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Environment, Climate Change and Land Reform Committee

To consider and report on matters falling within the responsibility of the Cabinet Secretary for Environment, Climate Change and Land Reform.



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Executive Summary

1. The Committee welcomes the fact that progress that has been made in deer management in Scotland in recent years, but this remains a complex issue with competing objectives, within and across deer management groups (DMGs), and in areas which do not have an established deer management group (DMG).

Environmental Impact

2. Although there has been a decline in overall deer numbers in the past 10 years, deer are still impacting significantly on the natural heritage and a greater focus and urgency is now needed to address the challenges of deer management across Scotland. The Scottish Natural Heritage (SNH) Report to the Scottish Government (the Report) highlights 50 per cent of deer management groups have failed to identify actions in deer management plans to deal with deer impacts in designated sites. Habitats take a long time to recover and the Committee considers we do not have time to wait in delivering the Scottish Biodiversity Strategy. The scale of action needed to address deer impacts on the natural environment across Scotland is a significant factor.

Deer Management Planning - Variable Performance

3. While there has been a notable increase in deer management planning across the sector since 2013 there is considerable variability in the performance of DMGs and variability in performance across the categories. Some deer management groups have worked to develop deer management plans with the support of the Association of Deer Management Groups (ADMG) and SNH, and in some DMGs there has been substantial and rapid change in their performance, however progress on the ground in terms of positive outcomes cannot be evidenced in all areas.

Delivery of Public Interest Objectives

4. The Committee is clear that some DMGs have an action plan, but is equally clear that many do not have an action plan that adequately addresses the public interest, and will result in positive outcomes for natural heritage on the ground. The Committee considers that a step change is needed in some DMGs to deliver greater public interest objectives. Considering public interest criteria on a collaborative scale is an issue for some DMGs and also requires to be addressed.
5. The Committee is concerned that despite the best attempts of SNH and the ADMG there are still gaps in management structures and gaps in the coverage of deer management plans. Overall the Committee cannot be confident that the situation at present, without significant further action, is capable of delivering the required change on the ground.

Deer Management Planning - Use of the Backstop Provision

6. Following careful consideration of the SNH Report, the Committee can see no compelling reason why the interim measures that allow SNH to intervene to amend and to lead on drafting deer management plans should not come into effect immediately. This should provide a backstop to ensure that all Deer Management Plans (DMPs) adequately address the public interest. The Committee therefore recommends that the powers under section 80 of the [Land Reform \(Scotland\) Act 2016](#) come into immediate effect and are used as required.

Statutory Duty of Sustainable Deer Management

7. The Committee welcomes the provisions in the [Land Reform \(Scotland\) Act](#) but is concerned that the [Code of Practice on Deer Management](#) has been insufficient in influencing all DMGs. The Committee is of the view that further consideration now needs to be given to the introduction of a statutory duty of sustainable deer management.

Deer Management in Lowland Scotland

8. There are significant challenges for deer management in lowland Scotland and the Committee is disappointed that there has been so little progress and in much of lowland Scotland there are no formal collaborative structures for deer management. This needs to be addressed as a matter of priority.

A Strategic Approach to Managing Deer

9. We need a deer management system, developed collaboratively, covering the whole of Scotland, based on a clear expression, and spatial articulation of the public interest, particularly in relation to biodiversity and climate change. Deer management plans need to take an inclusive habitat approach focusing on deer densities and impacts at a local level.
10. We also need a strategic approach to managing deer numbers. SNH should be responsible for determining the cull levels in the public interest; DMGs should carry out deer counts in their area and return planned deer culls to SNH; the Scottish Government, through relevant agencies and Local Authorities, should undertake deer counts in areas not covered by a DMG and; the close season for stags should be reviewed.

Adequacy of the Current Legislative Powers

11. The Committee is not convinced the currently available suite of powers are adequate. Section 7 agreements are not fulfilling their purpose and the failure to use Section 8 powers is seen by many as being due to them possibly being open to challenge. The Committee recommends the Scottish Government now take urgent action to devise alternative measures and simple, provisions that lead to action to protect and restore habitats and sites impacted by deer. The Scottish Government needs to act to replace the existing legislation with a simple, effective back-stop power that is fit for purpose which sits alongside a predominantly voluntary system and will ensure the public interest is delivered.

Support and Incentives

12. The role of support and incentives will be important in ensuring DMGs make progress and the Committee recommends the Scottish Government commission an analysis of incentives and their use in supporting deer management in the public interest as a matter of urgency.

Capacity of Scottish Natural Heritage (SNH)

13. The Committee is of the view that SNH has not provided the level of leadership in deer management that might have been expected and there has been a failure to adequately set expectations for deer management in Scotland. SNH appears to have been unable, or unwilling, to enforce the legislation to secure the natural heritage interests.
14. The Committee is concerned that SNH may not have the capacity to fully deliver all its duties, including deer management, without additional resource. The Committee recommends the Scottish Government engage in early discussion with SNH in relation to priorities for delivery and review the adequacy of resourcing, in light of the potential additional calls upon it and the extension of duties, and report back to the Committee on the outcome of those discussions.

Moving Forward - An Independent Short-Term Working Group

15. To address some of the issues highlighted the Committee recommends the Scottish Government establish, as a matter of urgency, an independent short term Working Group to provide clear advice on the way forward for deer management in Scotland and report back in early autumn 2017. The Group should have a very tight remit and should consider—

- The recommendations contained within the Committee’s report, reflecting the position of the Land Reform Review Group and those of the predecessor Committee and how best to establish a framework where—
 - SNH is responsible for determining the cull levels required in the public interest in each of these areas;
 - DMGs carry out deer counts in their area, according to a particular methodology, and return them to SNH ;
 - DMGs return planned deer culls and plans to SNH; and
 - SNH consider their deer cull, the deer count, and the planned cull, and go back to DMGs if it is not appropriate.
16. The Group should also consider—
- the cost to the public purse and whether there are alternatives to fencing that could deliver the objective;
 - the approach to Deer Management in the Lowlands; and
 - lessons from management approaches elsewhere in Europe.

Wider Supply Chain Development

17. The Committee recommends the Scottish Government prepare an action plan for wider supply chain development for deer carcasses and deliver public funding for the establishment of a network of deer larders across Scotland, including its islands, to support greater opportunities for taking part in appropriate culling activity.

Introduction

18. In Session 4 the Rural Affairs, Climate Change and Environment (RACCE) Committee held an inquiry into deer management and the impact that deer (especially red deer) were having on the natural heritage of Scotland and made a number of recommendations to the Scottish Government. ¹ The Committee also considered deer management issues in 2015/16 within its Stage One report on the Land Reform (Scotland) Bill. ² Responding to the RACCE Committee's recommendations, the Scottish Government commissioned Scottish Natural Heritage (SNH) to conduct a review into the effectiveness of deer management in protecting the public interest, with a specific focus on the impact on natural heritage. The SNH Report ³ seeks to assess whether or not the present voluntary system has produced a step change in the delivery of effective deer management in Scotland.
19. The final SNH Report 'Deer Management in Scotland: Report to the Scottish Government from Scottish Natural Heritage 2016' ³ was submitted to the Cabinet Secretary on 31 October 2016 and published on 18 November 2016.

Consideration of the Environment, Climate Change and Land Reform Committee

20. As part of its work programme discussion, on 13 September 2016 ⁴, the Environment, Climate Change and Land Reform (ECCLR) Committee agreed to consider the Scottish Natural Heritage (SNH) Report on deer management, once published. At its meeting on 15 November 2016 ⁵ the Committee subsequently agreed its approach. The Committee agreed to explore the review process and the conclusions and recommendations with SNH and then hear stakeholders' views on the Report before writing to the Scottish Government outlining its views.
21. SNH appeared before the Committee on 22 November 2016 ⁶ to discuss the Report. The Committee subsequently heard from stakeholders, in two panels, on 13 December 2016. ⁷ The Committee then considered the evidence received and agreed to hold two further evidence sessions – on 17 January 2017 ⁸, with academics and experts, to explore issues relating to the scientific evidence base, and on 24 January 2017 ⁹, with SNH, to reflect the evidence heard and provide SNH with an opportunity to respond, before presenting its views on the Report and evidence received.

Membership of the Committee

22. During the Committee's consideration of this report, the membership changed. The Committee thanks Jenny Gilruth MSP for her work on this report during her time with this Committee.

Background

Previous Consideration of Deer Management

Rural Affairs, Climate Change and Environment (RACCE) Committee Inquiry into Deer Management

23. In November 2013 the Rural Affairs, Climate Change and Environment (RACCE) Committee commenced scrutiny of the issue of deer management in Scotland.¹⁰ The Committee received a number of written submissions and took evidence from stakeholders before writing the Scottish Government in January 2014¹ with its views and recommendations for action.
24. At that time the RACCE Committee was of the view that the pace of movement towards all Deer Management Groups (DMGs) having demonstrably effective and environmentally responsible management plans in place was too slow, and considered a reasonable time frame for all DMGs to have adopted deer management plans was by the end of 2016. The Committee agreed to monitor progress and consider what further action may be required, should the voluntary approach fail, to ensure that deer management plans (DMPs) were adopted and implemented by all DMGs by the end of 2016. The Committee stated those plans should be environmentally responsible, demonstrate how they are delivering positive outcomes for deer populations and for the natural heritage, and be publicly available.
25. The Committee was also concerned that the work of some DMGs was insufficiently transparent and publically accountable and it made a number of recommendations in relation to stakeholder and community engagement. The Committee agreed to monitor progress in the establishment and operation of the DMGs and consider what further action may be required.
26. The Committee reviewed the powers available to Scottish Natural Heritage (SNH) and recommended that the Scottish Government undertake an assessment of the effectiveness of Section 7 Agreements. The Committee encouraged SNH and the Scottish Government to make full use of Section 8 powers where voluntary agreement cannot be secured or where environmental damage is persistingⁱ and recommended the Scottish Government undertake an assessment of how workable Section 8 powers were, as they remained unused.

ⁱ Sections 7 and 8 of the [Deer \(Scotland\) Act 1996](#) set out a process for SNH to negotiate with landowners to agree or impose measures to manage deer. Section 7 relates to voluntary “control agreements”. Control agreements usually set a target for reducing deer numbers, usually expressed as a density of deer per unit area. They may also provide for other measures, such as fencing, to manage deer impacts. Section 8 relates to compulsory control schemes, where it has not been possible to secure a control agreement. This section provides that SNH “shall make a scheme (a “control scheme”) for the carrying out of such measures as it considers necessary for those purposes [reducing or preventing damage caused by wild deer]”. Section 8(7) states that “Where any control

27. The Scottish Government responded to the Committee on 5 March 2014¹¹ stating—

- ” • The Scottish Government agreed with the Committee that we need to focus on the impacts of deer rather than their absolute numbers – what matters is the monitoring of trends in populations;
- It is helpful to understand locally what the sustainable deer density is in order to achieve land management objectives;
- Formal intervention powers should be employed where necessary;
- We need to consider further means to support DMGs and build capacity to deliver effective, environmentally responsible Deer Management Plans (DMPs) and action on the ground;
- We need to look at the incentives for sustainable deer management to protect and enhance designated sites;
- We need a systematic assessment of the impact of deer on upland habitats outwith designated sites.

28. The Scottish Government agreed the end of 2016 would be a suitable point in time to consider progress and look to take action if the current voluntary system had not produced a step change in the delivery of effective deer management.

Rural Affairs, Climate Change and Environment (RACCE) Committee Consideration of Deer Management within the Land Reform (Scotland) Bill

29. The Rural Affairs, Climate Change and Environment (RACCE) Committee continued its consideration of deer management at Stages One and Two of the Land Reform (Scotland) Bill.ⁱⁱ At that time the Committee heard concerns that progress in deer management measures was mixed, and, in some cases, slow. In considering the Bill, the Committee was keen to see a review of the Code¹² and the operation of the Deer Management Groups (DMGs) before the end of 2016.²
30. [Sections 78 to 82](#) of the [Land Reform \(Scotland\) Act 2016](#) were [commenced](#) in June 2016. These deal with the management of wild deer populations in Scotland and provide for interim measures which could be used following completion of the SNH Report and Environment, Climate Change and Environment (ECCLR) Committee inquiry into deer management. The [Policy Memorandum](#) to the Bill states—

scheme has been confirmed, every owner or occupier shall take such measures as the scheme may require of him in accordance with its provisions.

ii Details of the Committee's consideration of the Land Reform (Scotland) Bill can be found [here](#).

” “What is being proposed at present are essentially interim measures which could be brought into effect quickly following upon the conclusion of the review that is to take place at the end of 2016, if it is decided that more stringent measures are required at that point. The intention is that these interim measures would be in force throughout the period during which the new statutory scheme was being developed.”

31. The “interim” measures in [Section 78 – 82](#) of the Act provide—

- ”
- an additional use of existing deer panels to promote community involvement in local deer management;
 - a new power for SNH to require the production of a deer management plan where, in its view, the public interest in deer management is not being delivered;
 - an increase in the level of fine to £40,000 for failing to comply with a deer control scheme, imposed under section 8 of the Deer (Scotland) Act 1996;
 - a requirement on SNH to carry out a review into compliance with the code of practice on deer management; and
 - a power to SNH to require returns on the number of deer planned to be killed.

32. In addition to the measures proposed in the Bill, the Committee recommended ² the Scottish Government give consideration to amending the Bill to make the following statutory changes as proposed by the Land Reform Review Group, which it considered could also be enacted quickly, following the conclusion of the 2016 review—

- enabling SNH to set cull targets for each Deer Management Group area;
- requiring landowners to apply to SNH for a licence to cull deer; and
- enabling SNH to, in certain circumstances, take over culling responsibility, either by carrying out the cull itself or allocating it to the local Deer Management Group or other suitably qualified persons

33. These proposals for amendment were not reflected in the final Act.

34. In considering deer management in its inquiry and within the Land Reform (Scotland) Bill, the RACCE Committee was clear that if the 2016 review found real and sufficient progress had not been made, then it considered the Scottish Government must move quickly to replace the voluntary system with further statutory measures.

Issues considered by the Environment, Climate Change and Law Reform (ECCLR Committee)

35. In considering the Scottish Natural Heritage (SNH) Report the Environment, Land Reform and Climate Change (ECCLR) Committee sought to test the extent to which the concerns and recommendations of its predecessor had been addressed, particularly whether there was clear evidence of a step change in the delivery of effective deer management. The Committee considered the approach taken to the review, including the quality assurance process, and gaps in knowledge and data, and the evidence and analysis presented in each chapter alongside evidence received by the Committee from stakeholders. The key areas addressed are listed below and recommendations for action are set out in each of the sections—

- Approach taken to the review, including the quality assurance process and gaps in knowledge and data;
- Current approach to deer management across Scotland
- Deer populations and trends;
- Environmental impacts of deer on protected areas and on woodland
- Socio-economic costs and benefits of deer;
- Planning and implementation of deer management;
- SNH's powers of intervention; and
- Moving forward.

The Scottish Natural Heritage (SNH) report on Deer Management in Scotland

Remit of the Scottish Natural Heritage (SNH) Review

36. The focus of the Scottish Natural Heritage (SNH) review is to “assess the effectiveness of current deer management arrangements in protecting the public interest, with specific attention on the impact on the natural heritage” (p iii).³ It seeks to assess whether or not the present voluntary system has produced a step change in the delivery of effective deer management.
37. The Report is undertaken within the context of key policy documents for the management of deer including the ‘Code of Practice on Deer Management’¹², and ‘Scotland’s Wild Deer: A National Approach’.¹³
38. The Report:
 - Assesses the current practice of sustainable deer management in Scotland and appraises progress and the rate of progress, including changes in the scale and pace of deer management planning across the current range of delivery models, including non-traditional deer management groups and areas without any formal management structure, since late 2013, recognising that delivery is not uniform across the models.
 - Provides an assessment of progress by the 44 upland Deer Management Groups (DMG) towards the delivery of effective, environmentally responsible and publicly available deer management plans and the extent to which the public interests as set out in ‘Scotland’s Wild Deer: A National Approach’ (WDNA)¹³ strategy are addressed in plans, and are leading to changes in approaches to deer management. The assessment of individual DMG plans is based on analysis of DMG plans submitted to SNH in March 2016.
 - Provides an update on the work of the Lowland Deer Network and progress with management of deer and associated issues in the lowlands.
 - Does not consider alternative scenarios for deer management in Scotland and does not draw comparisons with deer management models elsewhere.
 - Has a strong focus on the natural heritage (following the direction to SNH) and does not include a full analysis of the wider public interest issues such as the impact of deer-vehicle road collisions or Lyme disease.
 - Identifies gaps in the collective knowledge about aspects of deer management and the extent to which it provides a range of public and private benefits. The Report highlights additional research that was commissioned to address this.
 - Makes no recommendations. In evidence to the ECCLR Committee Ian Ross (Chairman of SNH) said—

” “The commission that we had did not require us to make recommendations—that was clear—so we have not made recommendations. However, we have provided an evaluation and a number of conclusions. We have deliberately left it open so that people who read the report can form a view and make proposals and then our cabinet secretary can respond to that.”

39. However, the Committee notes that the Report ³ concludes by stating—

” “While we recognise that implementation of improved deer management planning will take time to lead to corresponding changes to the natural environment, the review indicates that longer-term improvements may not be forthcoming without additional measures to enhance sustainable deer management in Scotland”.

40. Impacts on the natural heritage are considered using available data, including a detailed assessment on delivering favourable condition and deer impacts on protected sites, using data from SNH’s Site Condition Monitoring Programme. Evidence from other sources, including a review of the existing Section 7 Control Agreements and the Forestry Commission Scotland (FCS) Native Woodland Survey of Scotland were also used. ³

41. The main findings are set out in the Executive Summary to the Report (p iii - iv) ³ and replicated below. The final finding concludes that the present voluntary system has not produced a step change in the delivery of effective deer management (p iv) ³ —

” “On the basis of evidence from the analysis of DMG plans, Section 7 Control Agreements and assessments of the impacts of deer on other interests in the uplands and lowlands, we are not confident that present approaches to deer management will be effective in sustaining and improving the natural heritage in a reasonable timescale, particularly in time to contribute significantly to the specific challenges outlined in the Scottish Biodiversity Route Map to 2020.”

Main Findings of the SNH Report

42. The Executive Summary (p iii - iv) ³ of the SNH report summarises the main findings.

Benefits of Deer and Deer Management

- ” • Wild deer are important to Scotland’s rural economy, provide us with healthy food and recreational opportunities and are integral to Scotland’s ecosystems.
- Deer management provides a number of socio-economic benefits including supporting employment, contributing to rural tourism, providing sporting income and the sale of venison. Other benefits are intangible and a total monetary value cannot be estimated.

Differences in Upland and Lowland Deer Management

- There are significant differences in the management of deer in the uplands and lowlands of Scotland. Variations are a result of differences in the ranges of the different species, different behaviours of red and roe deer, differences in the pattern of land ownership, the levels of woodland cover, differences in land quality, history and culture and issues in the peri-urban/urban environment.
- There are substantial areas of Scotland in both the uplands and lowlands where no formal collaborative approach to deer management exists.

Lowland Deer Management

- It is too early to say if the new models of collaboration in some parts of the lowlands will be effective in delivering the public interest.
- The ability to undertake a full assessment of deer and deer impacts in the lowlands is limited due to insufficient data.

Progress in Deer Management Groups

- The reassessment of 44 upland Deer Management Groups shows that between 2014 and 2016, significant progress has been made in developing effective deer management plans.
- Progress in Deer Management Group plans has been less evident for public interest categories most relevant to the natural heritage.

Environmental Impact of Deer

- Grazing by deer and other herbivores is a major cause of unfavourable condition of natural features in protected areas.
- The Native Woodland Survey of Scotland found that more than a third of all native woodlands were in unsatisfactory condition due to herbivore impacts. Evidence supports the view that deer are a major factor in limiting woodland condition recovery.

Deer Densities

- Between 1961 and 2016, red deer densities in Scotland have increased by 60 per cent overall although there are marked variations in deer densities across the country.
- Available information suggests that if deer densities were lower across much of Scotland the benefits arising from deer could be largely maintained, and many of the costs (such as deer vehicle collisions and impacts on forestry productivity) reduced leading to enhanced overall delivery of public benefits.

Use of Section 7 Control Agreements

- The analysis of Section 7 Control Agreements shows that there has been some reduction in deer numbers across all agreements. However, deer density targets and habitat condition targets have not been met in around half of the Agreements reviewed.

Overall Approach to Deer Management

- On the basis of evidence from the analysis of DMG plans, Section 7 Control Agreements and assessments of the impacts of deer on other interests in the uplands and lowlands, we are not confident that present approaches to deer management will be effective in sustaining and improving the natural heritage in a reasonable timescale, particularly in time to contribute significantly to the specific challenges outlined in the Scottish Biodiversity Route Map to 2020.

Approach to undertaking the review, the assurance process, knowledge and data gaps

43. The Committee explored the approach Scottish Natural Heritage (SNH) had taken to the review, including the peer review process and the identification of significant gaps in knowledge and data and how those impact on SNH's consideration of the current state of deer management and assessment of progress.

The Assurance Process

44. The Committee considers it is important that there is confidence in the data contained within the Report and in the interpretation and analysis of that data. In order to be assured that the Report and assessment is robust the Committee sought to understand the assurance process.
45. The Committee heard concerns from some stakeholders about the review process and the validity of the data, particularly in relation to deer counts and densities and explored this with experts on [17 January 2017](#) and with SNH on [24 January 2017](#). The Committee focused specifically on how the Report was validated and whether the process was independent and external of SNH.
46. The Report (p 2) ³ states—
- ” “The report has gone through a robust assurance process with the appointment of a Deer Science Panel that included a range of external academics who reviewed the analysis of key pieces of evidence, as well as an external peer review from Professor Colin Adams, Glasgow University.”
47. Professor Colin Adams's [webpage](#) states “My research interests centre on fresh water ecosystems and particularly on behavioural ecology of fish.”
48. The peer review process was questioned by Professor Rory Putman ¹⁴ who expressed concern, in written evidence, in relation to the selection of reviewer and, in his view, the lack of relevant expertise in deer and in the impacts of herbivores on terrestrial ecosystems.
49. The Committee questioned SNH on the independence of the scientific advisors and the process of peer review.
50. Des Thompson of SNH outlined the process—
- ” “We have a scientific advisory committee, which is composed of a variety of experts. For the deer management report, we chose a member of the committee – Professor Robin Pakeman – to go through the annexes in detail. Professor Colin Adams, at the University of Glasgow, was asked to peer review the report”. ¹

51. He went on to say that Professor Adams was a former member of the advisory committee and an experienced reviewer.
52. Andrew Bachell of SNH clarified that the scientists on the advisory committee were appointed following a public appointments process.² SNH confirmed that the forthcoming report from the James Hutton Institute would be subject to external peer review. SNH also provided a further written submission¹⁵ on the process of appointment of the scientific advisors and their role and relationship with SNH.
53. **The Committee considers it is important that scientific evidence is externally peer reviewed, by those with relevant expertise, as a matter of course. In this case it may have been beneficial to select a reviewer with relevant expertise to ensure the highest level of confidence in the final document.**
54. **Having considered the information provided by SNH, on the appointment and role of advisors, the Committee is of the view that the advisory panel should be sufficiently independent of SNH.**
55. **The Committee considers the approach to publication of the Report may have benefitted from prior communication of the review findings to key stakeholders, and may have assisted in maintaining positive relationships.**

The Evidence Base of the Report

56. The Committee sought to explore whether the Report provided a robust evidence base for policy making. It discussed with stakeholders whether the Report was considered to be impartial in its use and interpretation of information.
57. A number of stakeholders who submitted evidence to the Committee expressed concerns about the quality and accuracy of the Report and considered the interpretations did not reflect the evidence. Some DMGs said the Report had reduced their trust in SNH.
58. In written evidence¹⁶ Sir Patrick Grant of Dalvey, chair of Knoydart Deer Management group said—
 “There appear to be a significant number of errors in this report.”
59. Richard Cooke of the Association of Deer Management Groups (ADMG) states in a letter¹⁷ dated 21 November 2016—
 “the report goes out of its way to commend the progress made which seems perversely at odds with the premature conclusion that we are doomed to fall short.”
60. Other stakeholders were of a different view. Scottish Environment Link¹⁸ appeared to consider the Report is accurate stating that—

- ” “the detailed SNH Review has established the facts against which progress can be considered.”
61. The expert panel was questioned about the accuracy of the Report and expressed differing views.
62. Professor Rory Putman was critical of the Report. He stated—
- ” “There are a number of flaws in the SNH report. The flaws were not so much with the data that were presented...What concerned me more was that some of the interpretations in the report did not seem to reflect the evidence...I do not entirely agree with Duncan Halley that SNH did the best job that it could have done”.³
63. This view was not shared by the other panel members. Professor Steve Albon of the James Hutton Institute stated—
- ” “...The data is not so unreliable; it is only unreliable in that we do not absolutely know how many deer there are in Scotland”.⁴
64. Dr Duncan Halley of the Norwegian Research Institute stated—
- ” “I do not characterise the data presented in the SNH Report as unreliable. The SNH was asked by the previous committee to produce information on certain subjects, which it did in a competent and objective manner. From the data available it is clear that the objectives that were specified by the previous committee to be met by 2016 about “a step change in delivery” ...have, to a large extent not been met. That is what SNH was asked to do, it has done a competent job”.⁵
65. Professor Davy McCracken of SRUC Scotland’s Rural College stated—
- ” “As a member of the team that worked on the gaps in knowledge and understanding, I was reassured by a lot of what was published in the SNH report. When it is read in total, it bears out what we found by speaking to people on the ground and through literature reviews”.⁶
66. The DMGs and the ADMG questioned SNHs deer count statistics and Richard Cooke of the ADMG stressed—
- ” “deer numbers need to be considered on a local basis because management is delivered on a local basis and impacts are assessed on a local basis”.⁷
67. He also confirmed that deer numbers can be under-reported, and tend to be under-reported, and suggested that –
- ” “deer counting is not a precise science, it is an indicator that is important in considering what the carrying capacity of the land is and what the approach to deer management should be in terms of the population model”.⁸

68. The Committee questioned the expert panel on the accuracy of the national population estimates. Dr Duncan Halley confirmed “the accuracy will be reasonably good within broad limits”.⁹ Professor Steve Albon stated—

” “I think that the national trend estimates are very good in the sense that the trend is well described...it does not matter whether there are 500,000 deer or 300,000 deer, what matters is the trend and the impacts, and the impacts are very much a local thing. There can be high density areas where there might be little impact, but there can be relatively low density areas with sensitive habitats where there might be considerable impacts. Therefore we must get away from totals. My overall message is that totals are not particularly important, whereas trends are”.¹⁰

69. The Committee discussed issues relating to the count with SNH who stated—

” “...the confidence intervals on each count are large, because of the opportunity for errors. However, we have confidence in the trend – that is the important information, and it is robust”.¹¹

70. SNH confirmed their confidence in the information provided by the James Hutton Institute, and discussed by Professor Albon, and referred to the issues raised by stakeholders in relation to the modelling scenario compared with the practical counts confirming “that was within standard tolerance of about 10 to 20 per cent”.¹²

71. In considering the evidence received the Committee is of the view that there is a difference between the question of whether the data as presented is factually accurate (or inaccurate) and the interpretation of that data (or questions in relation to gaps in data or knowledge).

72. The Committee recognises that deer counting is not a precise science and there are acceptable or standard tolerances. It appears that the differences between the DMG counts and the data within the Report are a result of differences in the methodology used and are within acceptable margins of error.

73. The Committee also recognises that the Report was prepared using information provided at a point in time. The Committee understands that trends and impacts rather than overall population is what matters. The Committee considers the focus should be on understanding deer densities and the impact of this at a local level.

Determining Herbivore Impacts

74. Stakeholders also questioned the attribution of impacts by herbivores, particularly on woodland. This is discussed in greater detail later in this report. Scottish Natural Heritage (SNH) commented on the native woodland survey and stated that the Forestry Commission, which commissioned the work, considered that there had been misunderstandings of how to interpret what is a complex set of data.¹³ SNH

confirmed that more than 30 per cent of native woodlands are impacted by herbivores. SNH also referred to the allegation that surveyors had a tendency to overestimate when recording deer as being present. Claudia Rowse of SNH confirmed that was incorrect in terms of the guidance that was given to surveyors and stated –

” “for the record, as our review shows, surveyors identified deer in 73 per cent of cases. That is the correct figure”.¹⁴

75. Claudia Rowse also referred to supplementary information in the full native woodland survey showing surveyors identified livestock in 15 per cent of cases and rabbits and hares in 3.5 per cent of cases.¹⁵

Research Base and Knowledge Gaps

76. The SNH Report outlines a number of pieces of research commissioned by SNH, but unavailable at the time of the review, and unavailable to the Committee initially. The Committee asked SNH to provide additional detail on this. The Committee was keen to understand the significance of this, both to the review and to the development of effective deer management and impacts on the ground.
77. The report (p 3)³ identified knowledge gaps—
- ” “In undertaking this review, it is clear that there are gaps in our collective knowledge about aspects of deer management and the extent to which it provides a range of public and private benefits.”
78. In a letter to the Committee dated 5 December 2016, SNH provided information about three research projects that were due to report in the spring of 2017. These are—
- Wild Deer Research Project - Meeting the Challenge of Wild Deer Research to Support Delivery of Sustainable Deer Management in Scotland – this collates deer research and looks at data gaps. It has produced a [website with deer research in one place](#) and is due to complete by the end of January 2017.
 - Strath Caulaidh: Trends in woodland deer abundance across Scotland: 2001 – 2016. This project is examining deer and culls on the National Forest Estate. It is expected to be complete in early 2017.
 - Estimating national trends and regional differences in red deer numbers on open-hill ground in Scotland: identifying the causes of change and consequences for Upland habitats. This is expected to be completed by 31 March 2017.¹⁹
79. The Committee recognises there are gaps in knowledge. The initial findings of the James Hutton Institute and SRUC reports (unpublished at the time of the evidence session) were discussed with the expert panel. The Committee questioned SNH on the impact the new findings might have on the review. SNH confirmed the research

was expected to provide additional detail but was not expected to have a material effect on or influence the key findings and conclusions of the review.¹⁶

- 80. The Committee understands there is benefit in having a comprehensive and up-to-date data set available but is of the view that the necessary data and research was available to SNH, in order to assess progress, at the time of the review.**
- 81. However, the Committee is clear that there are knowledge and data gaps that could have been identified and addressed at an earlier stage. From the information made available the Committee anticipates the recently commissioned work may go some way to identify further action. The challenge will be in taking this forward. Given the significance of this work the Committee would have expected it to have been commissioned in sufficient time to have been considered and incorporated within the review.**
- 82. The Committee acknowledges that data gaps exist, but considers the data and analysis that is available supports the conclusion in the Report and the need for changes in deer management policy. However, the Committee is concerned that knowledge gaps within and across DMGs and in parts of Scotland that are not covered by DMGs may have contributed to the rate of progress in the approach to deer management.**

The Current Approach to Deer Management in Scotland

83. The following sections outline the key findings of the SNH Report³, the evidence reviewed by the Committee and the views of the Committee.

Key Findings of the SNH Report

- In legal terms, wild deer belong to no-one and can only be shot by those who own or manage the land or with their permission. The right to shoot deer cannot be separated from ownership of the land. Deer management is carried out on a voluntary basis.
- There are significant differences in how deer are managed in the uplands and lowlands of Scotland. These variations are a result of differences in the ranges of the different species, different behaviours of red and roe deer, differences in the pattern of land ownership, the levels of woodland cover, differences in land quality, history and culture, and issues in the peri-urban/urban environment.
- There are 44 Deer Management Groups (DMGs) coordinating deer management in the open hill red deer ranges. These DMGs cover approximately 39 per cent of the land area of Scotland.
- Deer management in the lowlands is not coordinated across groups in the same way as in the upland DMGs. They are instead managed in a number of different ways, ranging from informal arrangements with owner/occupiers, to stalking leased from larger commercial forestry companies through to the 11 Lowland Deer Groups. In some areas, there are no formal collaborative structures for deer management.
- Expectations on deer managers have changed substantially in recent years with a growing desire that deer management should support a range of public benefits. As a result of this expectation, changes in approaches to deer management have accelerated with the expansion of Lowland Deer Groups and accelerated production of deer management plans among upland DMGs.

Evidence Considered by the ECCLR Committee

The Current Approach to Deer Management in Scotland

84. The Committee considered the current approach to deer management in Scotland and heard evidence on lowland deer management issues. Issues specifically relating to upland deer management and the work of the DMGs are considered later in this report.
85. The SNH Report sets out the background to the current approaches to deer management in the uplands as well as the lowlands.

86. In considering the Land Reform Bill at Stage One ², the RACCE Committee considered the distinct approaches to upland and lowland deer management and heard that it was important to distinguish between upland red deer issues, which are covered more widely by DMGs, and lowland deer issues. The Committee heard apart from both involving deer (of different species), the problems and likely solutions in these two areas are very different and it was not possible, or desirable, to try and establish a one-size-fits-all deer management system across Scotland. At that time all agreed that deer management in the uplands and the lowlands require distinct approaches.
87. The ECCLR Committee is aware that 61 per cent of Scotland is not covered by DMGs (p 4) ³ but heard little evidence on how gaps in coverage in the uplands, where no formal collaborative approach to deer management exists, are going to be addressed or what SNH's role in this was. The discussion outwith the DMGs primarily focused on lowland deer management.

Lowland Deer Management

88. In its inquiry of 2013/14, the RACCE Committee heard a degree of deer management was happening in lowland Scotland but it is often not as structured or focussed as it is in some parts of the uplands, and that meaningful collaboration was proving challenging in many areas. In the Stage One inquiry on the Land Reform (Scotland) Bill the Committee heard that there were 10 deer groups in the lowlands but they do not cover all of the local areas they are seeking to represent. The Committee also heard that deer numbers in many lowland areas are increasing rapidly but there was little robust data to demonstrate this. At that time the Lowland Deer Network Scotland (LDNS) said that for many Local Authorities and farmers in the lowlands, deer management was simply not a priority.
89. The RACCE Committee was of the view ¹ that deer management challenges in the lowlands are very different from those in the uplands, however, it feared the lowland deer situation could be as bad as that faced in some parts of the uplands. The RACCE Committee considered that the significant problems in many parts of lowland Scotland required specific consideration in the SNH review. The Committee considered there was an urgent need for: better group structures; greatly improved collaboration between land owners and managers; more proactive positive engagement by Local Authorities and public agencies; and the establishment of deer larders to help with the processing and marketing of venison products. The Committee considered the lack of robust data on deer numbers, densities and impacts in the lowlands must also be addressed.
90. The RACCE Committee recommended the Scottish Government seek to address these issues as a matter of urgency. The Committee also recommended the Scottish Government consider what, if any, role the new Scottish Land Commission could have in providing leadership on lowland deer management issues.
91. SNH considered the issue of lowland deer management in its report (p 10) ³ and stated—

- ” “A different approach is required to deer management in the lowlands from the deer management structures that have evolved in the uplands.”
92. The Report (p 12)³ also stated the common objectives across all Lowland Deer Groups (LDGs) are to ensure members are competent to undertake deer management according to Best Practice Guides taking deer welfare into account, to promote communication on deer management and work with local communities to raise awareness.
93. The ECCLR Committee explored what is being done to monitor the impact of lowland deer populations on the natural heritage and what lessons are being learned from the experience of deer management in the uplands that are applicable in the lowlands. The Committee also explored progress in addressing the issues of lowland deer, how the gaps in coverage of lowland deer groups would be addressed, whether the management of lowland deer is appropriate and whether changes are needed.
94. In evidence Eileen Stuart of SNH stated that a range of work is underway in the lowlands. SNH has been working with the ADMGs to expand the network of lowland deer management groups but that work is not yet complete.¹⁷ The Committee understands there are now 11 LDGs (one more since 2013/14). SNH advised it was working with Local Authorities seeking to improve their “current patchy performance”¹⁸ and to ensure they are engaged in and taking their deer work seriously. SNH also advised they were working on a project to better understand the current models of deer management in the lowlands and the extent to which public interests are being delivered, and trial different approaches to deer management to support better delivery of public interests.
95. In evidence to the Committee SNH mentioned a number of challenges related to lowland deer management, including: the complex land ownership picture; that a collaborative approach is not in place in large areas of the lowlands; that local authority performance is patchy; there is no model of deer management to roll out; and there is a lack of landowner investment.¹⁹ Specifically Ian Ross, the Chair of SNH stated —
- ” “We do not have a collaborative approach in large areas of lowland Scotland That is a challenge that we need to address.”²⁰
96. Eileen Stuart of SNH offered further comment—
- ”
- We do not have the details of all the people who are undertaking management in the lowlands. The land ownership picture is much more complex, and we do not have a mechanism of asking and requesting people to provide that information
 - We do not have a model as we do in the uplands that we could just roll out
 - Many landowners do not have the same investment or interest in deer management²¹
97. In a later evidence session, Andrew Bachell of SNH stated –

” “...It is clear we need to take a collaborative approach and one of the tricks will be engaging that very big potential audience without burdening ourselves with the bureaucracy of trying to micromanage such a large number of people. There is a genuine issue that we have not resolved here”.²²

98. The Committee asked stakeholders how successful lowland deer management has been to date and what barriers are faced by Local Authorities, farmers and landowners in the lowlands which prevent them taking responsibility for sustainable deer management on their ground. The Committee was keen to understand if enough was being done to address those barriers.

99. In their written evidence²⁰ to the Committee, the Lowland Deer Network (LDNS) stated that the solution (to deer management issues in the lowlands)—

” “may lie in more farmers and landowners taking responsibility, individually or collectively, for sustainable deer management on their ground, carrying out that management themselves, or contracting it out, or offering deer management on another arranged basis.”

100. In oral evidence, Richard Playfair of LDNS highlighted that available data was a barrier to farmers and landowners as was the need for Local Authorities to recognise they have a duty to manage deer on their ground.²³ Malcolm Muir of South Lanarkshire Council confirmed there was a lack of information about deer numbers, and a lack of information on whether and where there is a problem. He suggested that there are issues in controlling deer by shooting.²⁴ Richard Cooke suggested that there was a need to make progress with the agricultural community. He also confirmed that assistance was needed to address the involvement of Local Authorities.²⁵

101. SNH also highlighted the issues faced by Local Authorities including budgetary and other challenges. Donald Fraser of SNH confirmed SNH struggle on engagement with Local Authorities in terms of deer management which he considered was down to their resource requirements and priorities²⁶ but Eileen Stuart said SNH are “making sure that the current patchy performance of local authorities is improved”.²⁷

102. The issue of availability of data and the importance of easily accessible, up to date information about the status of deer in a particular area and accessible information on who is culling and planning to cull was raised by Simon Pepper of the Forest Policy Group (FPG). He considered this to be fundamental to Local Authorities exercising their responsibilities and taking decisions.²⁸

103. Alex Hogg also raised the issue of the supply chain constraints in managing deer –

” “In the Glasgow area, for example, 30 men could each shoot 10 deer, which would total 300. At present, however, they cannot get rid of the carcasses, so they will shoot enough for their family, but will not go on to shoot what is needed because there is nowhere for the carcasses to go—the big game dealers do not come in. There is an idea on the go to get a wee processing plant up and running so that the local venison could go to butchers and restaurants. The local schools could come to see it.”²⁹

104. **The Committee recognises that there is considerable variation in the lowland environment from remote and rural areas to peri-urban and urban areas and the challenges for deer management will vary both across and within these areas.**
105. **The Committee recognises there are examples of good practice in the lowlands and there has been some limited expansion in the number of deer management groups. However, the Committee is disappointed that since the inquiry of the RACCE Committee in 2013/14 only one additional deer management group has been established. The Committee remains significantly concerned that in much of lowland Scotland there are no formal collaborative structures for deer management. Given the stress the predecessor Committee placed on the urgent need to review the significant problems in many parts of lowland Scotland in light of the requirement for—**
 - **Better group structures;**
 - **Greatly improved collaboration between land owners and managers;**
 - **More proactive positive engagement by Local Authorities and public agencies;**
 - **The development of the supply chain and establishment of deer larders to help with the processing and marketing of venison products; and**
 - **The need for robust data on deer numbers, densities and impacts in the lowlands - the Committee is disappointed that there has been so little progress in lowland Scotland.**
106. **The Committee understands that there are a range of approaches that may be appropriate to differing circumstances in lowland Scotland and considers it vital that the approach to deer management in the lowlands and the appropriate mix of management models is considered as a matter of urgency and an action plan identified. The Committee recommends the Scottish Government give further support to the piloting of new approaches.**
107. **The Committee considers the role and operation of the Lowland Deer Network Scotland (LDNS) also requires review to determine whether it is sufficiently independent of agencies that fund its work and to determine what role it should play in promoting and supporting deer management in the lowlands moving forward.**

108. **The Committee is concerned that there is considerable variation in the level of engagement of Local Authorities in deer management, reflecting the priority attached to deer management and the adequacy of the relevant skills, expertise, knowledge and training of staff.**
109. **The Committee is concerned that there are many duties placed on Local Authorities and an approach that simply ‘encourages’ them to engage with or lead deer management groups in their area may not result in a positive response with full engagement in terms of deployment of the necessary time and resources. The Committee considers there may be a need to review this approach and assess how Local Authorities are consistently delivering their duty under the Wildlife and Natural Environment (Scotland) Act 2011 to manage deer on land for which they are responsible.**
110. **During the course of the inquiry the Committee heard that lowland DMGs had not contributed to the submission by the LDNS. The Committee questioned the extent to which the LDNS submission reflected the views of the deer groups and the views of the agencies who fund the LDNS. In response Richard Playfair said—**
- ” “I would like to think we promote their views (of the membership of the LDNS) but we do not necessarily know what their views are at any given time.” ³⁰**
111. **The Committee considers that the Lowland Deer Network has an important role in engaging with key agencies and partners to secure effective deer management in lowland Scotland. The Committee considers it is vital that the LDNS is actively representing the lowland DMGs and is concerned to ensure there is no disconnect or a lack of active dialogue between the LDNS and the lowland deer group members. The Committee recommends the Scottish Government explores further how the LDNS is working and encourages the LDNS to proactively seek the views of their deer group members on deer management issues affecting lowland Scotland.**

Deer Population and Trends

Key Findings of the SNH Report

- Between 1961 and 2000, red deer densities on the open hill have increased markedly, with a 60 per cent increase since 1961 reaching a peak in 2000-01. Since 2000-01, the previous 40 year trend of increasing deer density appears to have stopped.
- There are marked variations in red deer density trends at DMG scale. Over extensive areas of the red deer range, densities have continued to rise or remain high. The underlying causes of these are being examined and will be reported early in 2017.
- Up to date national population estimates for red and roe deer are required. There is no systematic monitoring of roe deer across all of their range. SNH is working with the James Hutton Institute to provide an up to date estimate for red deer numbers across their main open-hill ground range. Previous estimates for red deer were between 360,000 - 400,000.
- The population of deer in woodland habitats is estimated to be between 210,000 and 250,000. The red deer component is estimated to be between 85,000 and 105,000, with the roe, Sika and fallow deer ranging between 125,000 and 145,000.
- National trends for woodland deer populations are uncertain due to challenges in data collection. Estimates for private woodlands suggest the deer population is stable or possibly declining slightly. On National Forest Estate land, estimates point to a 24 per cent decline for all deer species combined between June 2001 and June 2016.
- Over the last 15 years, the total number of red deer reported to have been culled peaked in 2004-05, decreased substantially to its lowest level in 2011-12, but by 2014-15 had returned to 2004-05 cull levels (over 68,000).
- The number of roe deer reported to have been culled has increased substantially in the last 15 years, (from 26,214 in 2001-02 to 38,628 in 2014-15), largely driven by the increased culling of deer in woodland.³

Evidence Considered by the ECCLR Committee

Trends in Deer Numbers and Densities

112. In its inquiry in 2013/14 the RACCE Committee heard that deer numbers have increased over the last 30 to 40 years, but that more recently, red deer numbers have stabilised.
113. Chapter 3 of the SNH Report³ provides estimates and information on deer numbers and deer densities. It includes interim findings from a study being

conducted by the James Hutton Institute to analyse red deer counts in open hill ground at the estate level.

114. The ECCLR Committee explored the issue of population numbers and densities in terms of impacts, and whether there is an optimum population density that allows maximum public and private benefits, in different habitats. The Committee also questioned whether the deer density data was accurate.

Population Figures

115. The Committee understands there is a statutory requirement to have a deer population estimate. The SNH Report (p 16)³ puts total red deer numbers at around 360,000 – 400,000. Stakeholders were keen to emphasise the importance of trends as opposed to the total number. Des Thompson stated –

“it is much more important to understand the variations in trends across the country and the impacts of those trends on the natural heritage interests...”³¹

116. Professor McCracken also suggested a better way of assessing roe deer population dynamics was also needed.

117. Questioning the expert panel on deer counts Professor Albon suggested it would be valuable to get a “truly collaborative” approach between the statutory agency and the local industry on the ground and in relation to the frequency of counts suggested –

“I would hope that we could move to a system where we never have intervals of more than five years”.³²

118. A number of Deer Management Groups provided written evidence to the Committee disagreeing with the deer counts and densities that appear in the Report. For example Sir Patrick Grant, Chair of Knoydart Deer Management Group said –

“On p21, it says that the deer density in Knoydart and West Knoydart is 13.6 to 15.1 deer/ km sq. There was a very good SNH helicopter count carried out in November 2014 which gave the population as 9.6 per sq km across the two groups, and this is the best information available to us. We have no reason to believe that the population has changed since then. Indeed, it would be biologically impossible for it to have reached the densities given.”¹⁶

119. The Committee asked SNH if they agreed with those views. In oral evidence Claudia Rowse of SNH confirmed they had not been able to provide an up to date national population figure for red deer or roe deer as they did not believe the available data was robust. She stated that a new national deer density population estimate had been provided as they believe the evidence base for this is robust. SNH also agreed that further work was needed on roe deer in order to provide advice on national population densities.³³

120. In a letter to the Committee on 5 December 2016, SNH seem to acknowledge that there is some issue with the deer counts presented in the Report –

” “We know there are a number of questions in relation to the population trends data we reported on. The main issue relates to the difference in regional counts based on the national statistical model that we report, compared to actual counts on the ground which Deer Management Groups use to inform local management.”¹⁹

121. The Committee was advised that SNH had commissioned the James Hutton Institute to consider the red and roe deer count programme and address the best way of providing more robust estimates at the national level.³⁴

122. **The Committee agrees that trends and impacts rather than overall numbers is critical. However, knowledge of the numbers of deer at a local level is essential to understanding impacts and effectively managing deer populations. The Committee welcomes the research currently underway by the James Hutton Institute. The Committee agrees with SNH and stakeholders who have identified the need for further work on roe deer populations and recommends this work is progressed as a matter of urgency.**

123. **Section 81 of the Land Reform (Scotland) Act 2016 provides SNH with the power to require an owner/occupier to state the number of deer they plan to kill. The Committee recommends there should be a requirement placed upon all DMGs to deliver a count, using a clear and agreed methodology, and the count should be conducted every 5 years as a minimum to inform DMPs, and the Scottish Government should act to introduce this requirement.**

124. **The Committee also recommends the Scottish Government, through relevant agencies and Local Authorities, should have responsibility for producing deer counts in areas not covered by DMGs.**

125. **Together this would provide an accurate national and local head and species count, information on densities at the local level and, over time, trends, and would form the basis for local flexibility around planning with all relevant information, including the public interest, taken account of.**

Deer Densities

126. In discussing deer densities in open hill habitat the SNH Report (p19)³ states—

” “... the population of red deer in open-hill ground in Scotland has been increasing. Data from 1960 - 2016 show that deer density increased steadily since 1961 (around 8 deer/km²), and peaked in 2000-01 at around 13 deer/km² – an increase of 60 per cent. In the last 15 years, the population growth appears to have halted and the estimated deer density in 2016 is around 12.5 deer/km².”

127. SNH stated that the trend over the last 10 years is encouraging in that it is flattening off but the levels are still high at a national level which will have an impact on the natural heritage and that masks a tenfold variation across the country. SNH highlighted “distinct complexities” at the regional level and stated –
- ” “We conclude that 12.5 deer per km² at a national level is still high for its impact on the natural heritage”.³⁵
128. There was some discussion with stakeholders about the specific deer densities across Scotland. In oral evidence Duncan Orr-Ewing stated –
- ” “..frankly, whether the density of deer is 12 or 15 per km² is slightly arbitrary. The deer densities are still too high to deliver the public interest. We know that, in other countries, deer density is around 0.5 deer per km² rather than the 12 to 15 that we have been talking about.”³⁶
129. The Committee explored SNH’s view on whether there is an optimum deer density and in oral evidence on 22 November Eileen Stuart from SNH said –
- ” “I do not think that there is some magic number that we are looking for...” But later stated “...a density of 4 to 5 deer per km² is the sort of deer density to look for if you want to establish trees without fencing.”³⁷
130. In written evidence²¹ to the Committee Dr. Duncan Halley argued that lower deer densities lead to higher stag carcass weight. He states –
- ” “Most Scottish red deer are nutritionally stunted due to the effects of competition with each other for food.”
131. And that bigger deer means that -
- ” “...both average trophy head quality and venison weights extracted per unit area are significantly higher.”
132. In oral evidence Dr Halley referred to the experience in Norway –
- ” “...if the weight and condition of the animals are satisfactory by our standards, all the things that you in Scotland have as goals follow more or less automatically. Therefore, most of our work in recent years has involved assessing the weight and condition of animals rather than trying to get measures of densities.”³⁸
133. The Committee questioned Richard Cooke of the ADMG on the evidence from Duncan Halley in relation to Scottish deer being nutritionally stunted and he confirmed that is the case stating it is driven by the habitat in which the deer live.³⁹
134. In discussing whether there was an appropriate number of deer per km² Grant Moir, Chief Executive of the Cairngorms National Park, suggested that the public interest needed to be set out spatially, alongside the private interest in order to have conversations about appropriate deer densities.⁴⁰ Both Grant Moir, and Maggie Keegan of the Scottish Wildlife Trust suggested this links back to the Land Use Strategy.⁴¹

135. **The Committee understands deer densities in Scotland are generally higher than those in many other countries. The Committee also recognises that there are different perspectives on optimum densities that are based on differing objectives for the land, however it is clear that deer densities in many places are too high to deliver the public interest.**
136. **The Committee considers there is a need for much more clarity of the public objectives at a local level and within each DMG area and there is a need for clarity on the relative importance of public and private objectives. Appropriate densities could then be set, based on that agreement, and the densities and impacts monitored on an ongoing basis.**

Methods of Managing Deer – culling

137. The Committee explored the information on page 30 of the Report³ that out of 14 DMGs scrutinised only 5 had culled to the level needed to reduce the population. While cautioning interpretation based on a “snapshot in time” SNH agreed this suggested the current levels of activity are not as high as they need to be and this needed further consideration.
138. Duncan Orr-Ewing referred to the chart on page 20 of the SNH Report and related text suggesting the current levels of deer cull are insufficient to reduce the population— “we need more people to cull and reduce deer”.⁴²
139. Section 81 of the [Land Reform \(Scotland\) Act 2016](#) amends the [Deer \(Scotland\) Act 1996](#) to insert a new section 40A providing for a new power for SNH to require a return from an owner or occupier on the number of deer planned to be killed on their land in the following year. The return is to show how many deer of each species and of each sex are planned to be killed.
140. The RSPB also highlighted the Land Reform Review Group (LRRG) comments on deer management. The LRRG was critical of the pace of change related to deer management plans and suggested –
- ” • “...SNH should be responsible for determining the cull levels required in the public interest in each of these areas, and in different parts of them where there may be particular issues to address. The Group considers that this improvement to the current framework would provide a much clearer context for deer managers determining appropriate culls and cooperating with neighbours over achieving those culls if necessary.”
 - “Land owners should, as part of the system, also have to apply to SNH with the number of deer that they plan to shoot in the coming year. This will enable SNH to identify situations where it considers that proposed culls will not be sufficient to protect public interests and to seek a higher cull. The existing annual cull returns then enable SNH to monitor the extent to which land owners are achieving the culls required to protect public interests.”²²

141. The Committee explored the need for and use of cull targets and the merit of implementing the provisions of the [Land Reform \(Scotland\) Act 2006](#).
142. A number of stakeholders providing written evidence to the Committee suggested options and others suggested the current powers are sufficient.
143. In written evidence to the Committee the National Trust for Scotland ²³ writes that–
- ” “effective deer management for ecological purposes is fundamentally frustrated by the current close season for stags.”
144. It is currently an offence to kill deer during the close season without the permission of SNH. For male red deer the close season runs from October 21st – June 30th. Control of deer in the close season to protect crops etc. is now subject to the terms of a general licence.
145. In written evidence to the Committee RSPB state –
- ” “in our view there needs to be a re-balancing if the deer culling effort between the public and private sectors to ensure the private sector increases its efforts.”
²²
146. In contrast The British Deer Society state that –
- ” “The currently available suite of powers under section 7, 8 and 10 are adequate to manage any eventuality.”²⁴
147. Drew Macfarlane-Slack of Scottish Land and Estates suggested that if SNH set cull rates and the Government imposed its own strategies that would disincentive those private owners from the business they are involved in.⁴³
148. Richard Cooke suggested –
- ” “fixing culls by mandate would, in effect, mean that we have moved away from the voluntary principle, and that is not an option.”⁴⁴
149. Although he agreed with the recommendation of the LRRG that the best proxy for deer populations and carrying capacity is the national cull and suggested it would be valuable to have an accurate understanding of the annual cull and take, as a measure of deer management success or failure. However, he also suggested there would be cost implications of transferring the responsibility for the management of deer from the private individual to the state and participation would be seriously demotivated.⁴⁵
150. The question of SNH’s role in “determining” culls came up in discussion with stakeholders who offered their interpretation of this as not meaning SNH should pre-emptively decide on culls and impose those decisions but would scrutinise and approve proposals, with the option of letting plans proceed or going back to the owner/occupier saying in the public interest more deer need to be culled.⁴⁶

151. **The Committee is of the view that there should be a strategic approach to managing deer numbers and the Committee agrees with the Land Reform Review Group (LRRG) proposals that SNH should be responsible for determining the cull levels required in the public interest and that land owners should be required to apply to SNH with the number of deer they plan to shoot in the coming year, alongside their deer counts. This improvement to the current framework would provide a much clearer context for deer managers determining appropriate culls and cooperating with neighbours over achieving those culls if necessary.**
152. **The Committee considers the provisions within the Land Reform (Scotland) Act 2016 providing for a new power for SNH to require a return from an owner or occupier on the number of deer planned to be killed on their land in the following year should be commenced as a matter of urgency and SNH should set out how it plans to use this power.**
153. **The Committee considers that the current close season for stags should be reviewed with the aim of ensuring the restrictions on shooting promote, rather than hinder, the effective management of deer for both ecological purposes and crop protection.**

Other Management Techniques – Immuno-contraception

154. The Committee explored other techniques for deer management including immuno-contraception with SNH. SNH confirmed it had not considered this technology in the review of data sets because there was no information about its use as a control method but it was one of several techniques that were under consideration along with a variety of remote sensing techniques for counting deer and assessing habitat conditions. ⁴⁷

155. **The Committee encourages SNH to consider other deer management techniques such as immuno-contraception and the role they can play in effective deer management.**

Environmental Impacts of Deer

Key Findings of the SNH Report

Protected Areas

- Of 5,271 natural features assessed across Scotland's protected areas, 81 per cent are in favourable or unfavourable recovering condition. For those features potentially affected by herbivores, (a subset of 1,606 features), the figure drops to 75 per cent.
- Herbivores (deer, sheep, rabbits and hares) continue to be a major driver of unfavourable condition of natural features, particularly for upland, woodland and lowland heath habitats.
- Woodland, upland and bird features have the highest proportion of features remaining in unfavourable condition
- The proportion of features in favourable and unfavourable recovering condition is 10 – 12 per cent lower in areas covered by deer groups compared with the rest of Scotland.
- Section 7 Control Agreements were established in DMGs where there were particular concerns about deer impacts on natural features. The proportion of features in favourable and unfavourable recovering condition in Section 7 Agreement areas is, therefore, 7 per cent lower compared with non- Section 7 areas.
- The Section 7 approach appears likely to improve the condition of features by specifically reducing herbivore pressures through the introduction of agreed management arrangements.

Woodlands

- ” • The Native Woodland Survey of Scotland found that more than a third of all native woodlands were in unsatisfactory condition due to herbivore impacts. About half were within upland DMGs and about half in the ‘lowlands’. Deer were recorded as a significant presence in 73 per cent of native woodland areas.
- Woodlands subject to high herbivore pressure suffer a decline in biodiversity and productivity as a result of loss of regenerating seedlings/saplings due to browsing and changes in the habitat structure.
- The impacts of deer cannot always be disentangled from the impacts of other herbivores, but the evidence supports the view that deer are a major factor in limiting the recovery of woodland condition.
- Two targets for native woodland planting and restoration are identified as in need of further work in Scotland’s Biodiversity: A Route Map to 2020 first progress report 2015/16.
- The Scottish Government has a number of high-level objectives relating to woodland expansion and biodiversity that depend on effective management of deer. The present reliance on fencing to achieve these objectives comes at a cost to the public purse, with wider implications for biodiversity and deer welfare.

Evidence Considered by the ECCLR Committee

156. In its inquiryⁱⁱⁱ of 2013/14 the RACCE Committee heard conflicting evidence about the impact of deer on designated sites. SNH and the ADMG said that it was unrealistic to expect 100 per cent of features on designated sites to be in favourable condition at all times, and that the proportion of features damaged by herbivores was reducing. Scottish Environment Link’s deer task force members pointed to the fact that there remained a substantial number of designated sites that were in unfavourable condition because of deer impacts. There was less information about the impacts of red deer in the wider countryside, and about the impacts of roe, sika and fallow deer.
157. The RACCE Committee also heard evidence that the Forestry Commission’s survey of native woodlands had shown that around 1/3 of native woodlands were showing some signs of damage from deer. There was no consensus about the impacts of declining sheep numbers. Some witnesses thought that the impacts of this had not yet become apparent, others thought that in spite of the declines in sheep, there remain many places where natural heritage impacts can be unequivocally attributed to deer.
158. At the time the Committee reported ¹ (2014) it was of the view that deer populations were impacting on the natural heritage of Scotland and in some areas the Committee considered there was a need to implement further practical measures to protect the biodiversity of designated sites and the wider landscape and

iii Details of the RACCE Committee’s consideration of the deer management can be found [here](#).

environment. However, the Committee also recognised that, in some cases, it can be difficult to distinguish the impact of deer from the impact of other herbivores.

159. The ECCLR Committee considered the impact of deer on restored peatland within its report ²⁵ on the Scottish Government’s draft Climate Change Plan (RPP3). The Committee heard of the need to protect restored peatland from natural hazards such as deer and at that time SNH called for policies to prevent loss and damage.
160. The SNH Report states that the context for considering the environmental impacts of deer is the Scottish Biodiversity Strategy ‘The 2020 Challenge for Scotland’s Biodiversity’ ²⁶. ‘Scotland’s Biodiversity: a Route Map to 2020’ ²⁷ sets out priority projects and targets to help deliver the 2020 challenge. The first progress report ²⁸ for the Route Map shows that two targets on native woodland planting and restoration are identified as in need of further work.
161. On 1 November 2016 the Committee considered biodiversity. In that session Duncan Orr-Ewing of Scottish Environment Link said –
- ” ... we certainly encourage the committee to take a keen interest in deer management matters. Deer management is a key issue in addressing the condition of some of our designated sites and the expansion of native woodland: 18 per cent of protected areas—mostly in upland areas—in Scotland are in unfavourable condition because of the impact of deer browsing.” ⁴⁸
162. The SNH Report considers the condition of natural features across Scotland’s protected areas (Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites). Of particular interest with respect to deer management are those features which are potentially affected by herbivores. Table 4.1 (p 33) ³ shows that 48 per cent of such sites are in a favourable condition, therefore 52 per cent are in a category ranging from unfavourable recovering to unfavourable.
163. The SNH Report confirms the view of Duncan Orr Ewing. It states (p 33) –
- ”Of the 1606 features examined, 56 per cent of features have a negative overgrazing pressure identified, compared with only 9 per cent having negative undergrazing pressures.” ³
164. The Committee understands grazing pressure can be from all herbivores – deer, sheep, rabbits and hares and wished to determine whether it is possible to be clear that environmental impacts are due to deer. The Committee heard evidence from Professor Albon ²⁹ that there has been a decline in hill sheep stocks over the red deer range by as much as 35 to 60 per cent on the North West Highlands and over the same time there has been no increase in deer numbers and a levelling off of deer densities. He suggested that the cull effort may be one of the causal factors.
165. The Committee asked stakeholders if they consider the SNH Report distinguishes between the environmental impact of deer and other herbivores and explored whether deer pressure is the main factor explaining the lack of progress in meeting native woodland planting and restoration targets.

166. In written evidence to the Committee Professor Putman criticises the reporting of all herbivore impacts in the report. He says –
- ” “Citing these overall herbivore impact figures in a report supposedly focused on deer is once again misleading and actually implying the major part of these impacts are attributable to deer (which is not the case).”³⁰
167. Woodland habitats and birds are most affected by features impacted by herbivores³. This indicates to the Committee that there has been more success in putting in place remedial management for lowland features (grassland and heaths) than for uplands or woodlands.
168. The Committee explored why there has been more success in managing lowland features in protected areas (grassland and heaths) than uplands or woodlands and what SNH is doing to rectify this. The Committee also asked whether there had been any analysis of the change in condition of protected sites over time and how deer management has affected this – particularly in the uplands and whether there is an over emphasis on red deer and their impact on designated sites.
169. In their written evidence to the Committee SE Link argue that –
- ” “The overwhelming emphasis of effort is on red deer and designated sites for biodiversity; widespread impacts of all four deer species in the rest of the country are largely neglected.”¹⁸
170. Professor McCracken noted that habitat impact assessment had not been taken up much by the DMGs and Des Thompson of SNH stated –
- ” “It was clear from Professor McCracken’s evidence last week on the SRUC’s review that more effort and resource needs to go into developing habitat impact assessments, working with deer management groups and members, so that we are much clearer about the adjustments in deer management that are needed in order to meet different objectives.”⁴⁹
171. In oral evidence, Maggie Keegan of the Scottish Wildlife Trust, highlighted –
- ” “habitats take a long time to recover, so there should be some urgency about not waiting. That is the point. If we give it another three, four or five years, the habits will continue to deteriorate. We do not have that time to wait in delivering the Scottish biodiversity strategy.”⁵⁰
172. In written evidence to the Committee National Trust for Scotland states that –
- ” “Deer management plans need to take an inclusive habitat approach to grazers rather than focus on deer numbers alone and need to be able to balance different required grazing levels, often in close proximity.”³¹
173. The Committee is concerned that the proportion of features in favourable and unfavourable recovering condition is 10 – 12 per cent lower in areas covered by deer groups compared with the rest of Scotland.³ The Committee considers this reflects a continuing problem in terms of positive impact on the ground.

Environmental Impacts of Deer in Woodlands

174. Some of the key findings in report relate to the impact of deer on woodlands. The Report indicates that culling to maintain deer populations at a level that allows regeneration is unusual in Scotland, especially in semi-natural woodlands, and deer populations are the main factor leading to insufficient progress in native woodland planting and restoration. The Report states (p 42) ³ that 33 per cent of all native woodlands in an unsatisfactory condition due to herbivore impact are unfenced.

175. The Committee explored the impact of deer on woodlands with stakeholders.

176. Duncan Halley stated –

” “the fact is that grazing and browsing pressure in Scotland is generally too high to allow us to bring about the outcomes that we want, such as improvement in forest conditions...you need to reduce the overall level of grazing pressure – that appears to be absolutely understood by everyone. Red deer are a substantial component of that grazing pressure.” ⁵¹

177. The SNH Report ³ highlights that 50 per cent of deer management groups failed to identify actions in deer management plans to deal with deer impacts in designated sites. Duncan Orr-Ewing suggested this is a failure of the current process as SNH has provided information up front but the matter is still not being dealt with.

178. Richard Cooke highlighted the difficulties of assessing the impact of different herbivores and stressed that deer are not a factor in all native woodlands. ⁵²

179. Professor McCracken identified from the SRUC gaps analysis –

” “assessing accurately which herbivore is causing impact is very difficult in many cases. We recommend in our report that there needs to be more work done to help differentiate deer impacts per se from those of other herbivores.” ⁵³

180. The Committee understands there can be issues in differentiating deer impacts from other herbivores and agrees there would be benefit in undertaking work in this area. However, given the evidence presented the Committee is of the view that deer impacts continue to be a significant factor in preventing the achievement of positive outcomes for the planting and restoration of native woodlands.

181. The Committee is aware that 50 per cent of deer management groups failed to identify actions in deer management plans to deal with deer impacts in designated sites. The Committee considers that habitats take a long time to recover and we do not have time to wait in delivering the Scottish Biodiversity Strategy. Deer management plans need to take an inclusive habitat approach rather than focusing on deer numbers alone and need to balance different required grazing levels. The Committee remains concerned that a step change in the delivery of outcomes is required.

Socio-Economic Costs and Benefits of Deer

Key Findings of the SNH Report

- Deer management provides a number of socio economic benefits including supporting employment, contributing to rural tourism, providing sporting income and the sale of venison.
- An estimated 722 full-time equivalent (FTE) direct paid jobs are associated with deer management, and an additional 124 unpaid jobs.
- The estimated annual monetary benefit to the private sector associated with deer management is £15.8m per year. The estimated annual monetary benefit to the public sector is £1.8m per year.
- Estimated annual costs of managing deer (operational and capital expenditure) to the private sector are £36.8m per year (including salary costs of £17m per year). Estimated annual monetary costs to the public sector in managing deer are £12.9m per year (i.e. expenditure on operations, capital items, grants and administration).
- Annual costs related to deer vehicle collisions are estimated to be £13.8m. The proportion of the estimated annual costs of Lyme disease (a minimum of £0.5m) attributable to deer cannot currently be isolated from other factors, but it may be high.
- Total annual costs of deer damage cannot currently be estimated due to uncertainties over costs relating to damage to forestry, agriculture and the natural heritage.
- Evidence gathered to date suggests that management of deer in Scotland results in a net monetary loss for both the private and public sectors. However, many of the impacts and benefits are not easy to assess or do not lend themselves to monetary valuation.
- Calculating the national net socio-economic cost or benefit is likely to be impracticable. There are significant uncertainties about costs and benefits, and expressing 'net impacts' in a single number poses the risk that trade-offs will be 'lost' in the overall calculation.

Evidence Considered by the ECCLR Committee

182. In its inquiry in 2013/14 the RACCE Committee heard the 2006 PACEC study estimated the value of deer to the Scottish economy at c.£100 million and the number of jobs supported by deer management at c.2,500 FTEs. At that time SNH's written evidence stated that there was a lack of authoritative evidence on the impact of different management approaches on local jobs and rural communities. The

Committee did not hear any detailed evidence on the impacts of deer on agriculture, forestry or road safety.

183. The RACCE Committee recognised the value of deer to the Scottish economy and the employment impact of deer management, particularly in remote and rural parts of Scotland. The Committee encouraged the Scottish Government to undertake work to assess the impact of different deer management approaches on local jobs and on rural communities and was interested to hear from the Scottish Government of any research on the impacts of deer on the road network and impacts of deer on the urban environment.

184. The Committee is not aware of further work by the Scottish Government on the wider costs and benefits of deer and deer management. The Committee is disappointed that work on the wider benefits of different deer management approaches has not been undertaken and urges the Scottish Government, in discussion with SNH, to take this forward.

Cost of Deer Management

185. The SNH Report includes consideration of the socio-economic costs and benefits of deer. The key finding 7 states (p 44) ³ –

” “Evidence gathered to date suggests that management of deer in Scotland results in a net monetary loss for both the private and public sectors. However, many of the impacts and benefits are not easy to assess or do not lend themselves to monetary valuation.”

186. Richard Cooke of ADMG challenged the SNH figure that suggested management of deer in Scotland results in a net monetary loss for both the public and private sectors. He suggested that the multiplier effect had been ignored and therefore the figures were not a true reflection of the total. ⁵⁴

187. The Report also identifies the different costs associated with damage caused by deer and costs associated with managing deer. It appears that there are reasons that the costs identified might be an underestimate:

- Whilst the costs are expressed in 2016 figures (i.e. adjusted for inflation), the source of the figures is in some cases quite dated. For example, the information on Lyme disease comes from a 2003 paper.
- Some costs are discussed but not included. For example (p 47) ³, the Report cites Gill et al (2000) with respect to tree damage. Some costs are quantified (3.4% in lost revenue) others are not (The figures do not account for the additional accumulated losses due to stem damage through browsing and fraying (0.03% - 1.03% revenue loss) or from leader loss which leads to poor stem form (0.8% - 8.4% revenue loss).
- Under-reporting of costs (p 49) ³. For example “There is no legal requirement for DVCs to be recorded or reported to any authority, so records are likely to be an underestimate of actual DVCs.”

188. The SNH Report is open about these limitations, however, the Committee was concerned about the age of some of the documents, the inability to quantify and therefore include some costs, and the under reporting of some impacts on the overall estimates of deer damage costs.
189. The Report identifies the different types of cost related to managing deer on both the public and private purse. The Committee considers it is difficult to understand the costs of management, per year, to public and private purse because of:
- the different timescales the costs relate to e.g. from 2003-2012 public-sector funding on deer fencing was £23.3m. Operational expenditure in deer management in Scotland between 1 April 2013 and 31 March 2014 – expressed in 2016 prices - was estimated to be £36.4 million.
 - unquantifiable costs – such as costs associated with access • costs not yet incurred such as new SRDP schemes (p 46-47) ³.
190. The difficulties relating to quantifying deer damage and deer management costs are equally applicable to the estimation of the benefits of deer. Some figures come from old reports, some benefits cannot be quantified, and the timescales of some of the quantified benefits are not consistent.
191. The Committee asked SNH if it is possible to estimate the annual net cost of deer management to the public purse (both new fencing and replacing existing fencing) compared with the costs of culling, how costs and benefits are taken into account in decision making and what action is being taken to reduce costs. The Committee was keen to understand what might be the most cost effective approach. In oral evidence to the Committee on 22 November 2016, Eileen Stuart of SNH stated –
- ” “Fencing allows landowners to have two different management objectives for neighbouring land and to reconcile them. Because there is a fence, different deer densities can be maintained, woodland regeneration can be supported and there can be on-going sporting activities. Fencing has been the practical and pragmatic solution. Nevertheless, you are correct in saying that there has not been a very considered approach to the cost-benefit analysis. Maybe there needs to be more focus on that in the future.” ⁵⁵

Management Approaches – Culling, Fencing and Related Costs

192. The report sets out three management approaches to protect woodland –
- culling deer to reduce and maintain population levels that allow regeneration (rarely used in Scotland)
 - limited culling which allows higher deer populations, the consequences of which restrict or limit the woodland’s ability to regenerate and leads to a long term decline in biodiversity (common in Scotland)
 - erecting fences to exclude deer from woodlands (common in Scotland).

193. In oral evidence SNH confirmed the only figures they had³ relate to the costs of fencing and there is no robust information on the financial impact of deer grazing on commercial forestry or on woodlands. The annual fencing cost was reported as approximately £4.8m but SNH assume that the cost of damage to forestry is more than that.⁵⁶ It was not clear to the Committee where that cost was met from but Ian Ross suggested that a significant amount of that would come via the SRDP or the Forestry Commission. The total annual figure or estimate of deer management to the public purse was not quantified.
194. The Committee noted that the Report highlights the age of fencing is critical and was concerned that given 13,500km of fencing has been built since 1990 (£250m over 10 years) there is an issue in the deterioration of fencing covering huge distances. The Report states that if fences are replaced at the end of their operational life using public funding, this could require a further £100m (2016 equivalent) to replicate the funding which has already been invested. If only 3,000km of deer fencing around the most sensitive woodlands is replaced, this would require £25.5m of public funding at 2016 rates over the next 10 years. The alternative would be to reduce herbivore pressure through increased culling to maintain low deer populations, but this could also require financial support (p 42)³.
195. The Committee questioned why the public purse should continue to fund the replacement of fencing.
196. In discussing cost benefit with stakeholders, Maggie Keegan highlighted that biodiversity and ecosystem services in Scotland are worth around £21 billion each year.⁵⁷
197. The Committee considered concerns in relation to the possible employment impacts of reduced deer densities. Some stakeholders suggested that lower deer densities did not necessarily equate to lower employment levels. Mike Daniels of the John Muir Trust said –
- ” “All the NGOs represented here that cull deer employ people to do that. In some cases, we employ more than were employed under previous owners”. Grant Moir also said there have been a number of estates where there has been a significant reduction in deer numbers but no significant reduction in employment “it is not the case that a reduction in deer numbers leads to a reduction in employment...there is not a simple relationship between the two”.⁵⁸
198. Simon Pepper suggested there will be an ongoing requirement for a skilled active workforce. He suggested the question was - what was the best combination of benefits for all.⁵⁹
199. Other stakeholders highlighted concerns in relation to negative employment impacts of reduced deer densities in written submissions.

200. The Committee considers there is merit in exploring what has happened to employment levels in estates where there has been a reduction in deer

numbers and recommends the Government undertake research into this issue.

- 201. The Committee is concerned that the costs of fencing are considerable and will continue to rise as existing fencing deteriorates. The Committee is unclear if the significant cost to the public purse of fencing is justified set against the benefits of increased culling levels. The Committee considers that the current approach to this may require re-balancing and recommends SNH examines the full costs and benefits of different approaches to deer management based on the available information.**

Planning and Implementation of Deer Management

Key Findings of the SNH Report

Review of Deer Management Group Plans

- Overall, the results for both the benchmark criteria and the public interest criteria were significantly better in 2016 compared with 2014. Each one of the 101 criteria (from both the benchmark and the public interest categories) had a greater number of plans performing well (i.e. rated green) in 2016 compared with the 2014 results.
- There is considerable variability in performance between the DMGs. The best DMG plan was rated green in 91 per cent of public interest criteria while the DMG plan with the poorest performance had no public interest criteria rated green and 78 per cent rated red.
- There has been substantial improvement in the communications categories across both the benchmark and public interest criteria, with ADMG playing an important leadership role. The majority of upland DMGs now have publically available DMPs and have undertaken some public consultation.
- The results of the assessment capture a picture of improvements in quantifying and auditing resources through the planning process. Progress is less positive in linking planning with implementation through identifying specific actions to resolve management issues.
- Fewer than 50 per cent of DMGs adequately identify actions in their plans to manage herbivore impacts on designated features or improve native woodland condition.
- Fewer than 25 per cent of DMG plans adequately identify sustainable levels of grazing for habitats in the wider countryside.

ECCLR Committee Consideration of Evidence

Background - Operation and Effectiveness of Deer Management Groups

202. In its inquiry in 2013/14 the RACCE Committee heard a range of views on the effectiveness of the current voluntary system of management of red deer on the open hill by DMGs. At that time the Committee heard that the work of DMGs is not transparent; it is not possible to find out when they meet; how to attend their meetings; and what, if any arrangements they have in place to plan the management of deer; for the public to contribute to the development of plans; nor how well these plans are working. Some witnesses said that they found the

- atmosphere at meetings could be intimidating, especially for members who are seeking to reduce deer numbers against the wishes of the majority of group members.
203. Other witnesses told the Committee that the groups were increasingly embracing deer management planning, with the majority having either a plan in place, or in preparation, that interested members of the public would be welcome to attend group meetings and that groups were increasingly aware of the need to be more transparent and accountable. The Committee questioned the timescales for the adoption of deer management plans by all deer management groups, and was told by the ADMG that the expectation was that this would be done over the next 5-10 years. The Committee received written evidence from the Lowland Deer Network Scotland but did not explore the arrangements for managing lowland deer in detail.
204. At that time the Committee recognised that some DMGs had embraced deer management planning and had plans in place. At the time of reporting (early 2014), 40 Deer Management Groups (DMGs) were in existence, of which 16 had Deer Management Plans (DMPs) in place. A further 12 were in the process of developing plans. However, it considered the current and predicted pace of movement towards all DMGs having management plans in place was too slow.
205. In 2014 the RACCE Committee wrote ¹ to the Scottish Government and included comment about DMG plans. It stated -
- ” “the current and predicted pace of movement towards all DMGs having demonstrably effective and environmentally responsible management plans in place is too slow. The Committee considers that a reasonable timeframe for all DMGs to have adopted such deer management plans is by the end of 2016. The Committee will monitor progress in this respect and will consider what further action may be required, should the voluntary approach fail, to ensure that deer management plans are adopted and implemented by all deer management groups by the end of 2016. Those plans should be environmentally responsible and demonstrate how they are delivering positive outcomes for deer populations and for the natural heritage. The Committee recommends that all deer management plans should also be publically available.”
206. The RACCE Committee stated it would monitor progress and consider what further action may be required, should the voluntary approach fail, to ensure that DMPs delivering positive outcomes for deer populations and for the natural heritage are adopted by all DMGs by the end of 2016.

Progress - Deer Management Planning

207. In evidence to the RACCE Committee SNH stressed the process of agreeing meaningful and effective DMPs was crucial to improving deer management across Scotland, and also noted that these must fit local priorities rather than adhere to a generic, country-wide, set of objectives. SNH stated that it supports DMGs in helping them develop the plans in the context of ecological objectives, such as the 2020 biodiversity targets.

208. Section 80 of the [Land Reform \(Scotland\) Act 2016](#) amends the [Deer \(Scotland\) Act 1996](#) to give SNH a new power to require a land owner or occupier to produce a deer management plan. SNH can approve the plan with or without modification or reject it. SNH could intervene to require that a plan is developed, agreed and implemented in circumstances where it judges that the public interest is not being protected. Failure to develop or implement a plan would be grounds for SNH to move to the development of a deer control agreement under Section 7 of the 1996 Act. SNH already has the power, where a section 7 agreement fails, or where it is not possible to reach agreement, to proceed to a deer control scheme under Section 8 of the 1996 Act. This amends the 1996 Act to specify that the code of practice on deer management may set out examples of circumstances where SNH may require a deer management plan to be produced.
209. SNH welcomed the new power within the [Land Reform \(Scotland\) Act 2016](#) but noted that, in practice, this was happening already. SE Link also supported this but said it should be implemented immediately rather than deferred until after the completion of the review. Scottish Land and Estates cautioned against the process for developing DMPs becoming too top-down or draconian and said that the balance between public and private interests must be appropriately balanced.
210. The RACCE Committee considered ² the establishment of meaningful, effective and truly collaborative deer management plans, that have the buy-in of all local land owners, managers, and communities, is crucial if deer management across Scotland is to improve. The Committee was of the view Scottish Natural Heritage should have powers to lead on drafting a plan where no satisfactory plan has been agreed.
211. The SNH Report describes progress that DMGs have made between 2014 and 2016, in the development and implementation of effective deer management plans. The approach to this is set out on p 57. ³
212. The Report discusses results relating to 2 different criteria, which were developed separately, but which have some overlap:
- ADMG (Association of Deer Management Groups) Benchmark criteria – these come from ADMG and include 15 benchmark categories and 45 associated criteria.
 - SNH public interest criteria - these come from SNH Deer Management Plans: Setting out the Public Interest, with 14 public interest categories. These are further subdivided into 56 criteria.
213. SNH, in oral evidence stated –

- ” “...where there are the skills on the ground and a deer management group has the bit between the teeth, it can produce extremely good results over a relatively short time in terms of management planning. We hope and expect that would be translated into implementation. We know that the model can be made to work. At the other end of the spectrum of deer management groups, there is next to no delivery of the public objectives...We need to look at that and tease out why that is the case; we cannot just go to the groups and blindly criticise them. Is it a capacity, expertise or funding issue? We need to understand from their perspective why they were not able to reach a higher standard so that we can target effort, resource, incentives, support and regulation at the groups that are finding it difficult to move on.”⁶⁰
214. The Committee sought to explore the extent to which the required “step change” had occurred. In oral evidence SNH suggested that one of the challenges in carrying out the work on the Report was no clear threshold was set for how to determine what would signify a step change. In questioning the Committee sought to determine what percentage of DMGs SNH was satisfied with. However, SNH confirmed “We have not drawn that conclusion; what we have done is to provide the evidence.”⁶¹
215. Eileen Stuart of SNH stated –
- ” “it is easy with hindsight to question whether we would have established that assessment.....Now we have the information, we should look at which criteria are most important and where we would like most progress made. That is the sort of thing to discuss. We must set thresholds so that we can identify the good performers and say to the poorer performers what areas they need to improve and what the thresholds are...”⁶²
216. SNH highlighted the good progress in DMGs response to the benchmark which is about their ways of working, engaging and sharing information. The Committee heard that the foundations have been laid by the vast majority of DMGs but building on those is the issue.⁶³
217. Many of the criteria are what might be called process related – do members attend meetings? Are cull targets reviewed annually? There appears to be less information on what impact on the ground DMPs are having. This point is made in the Report-
- ” “The results of the assessment demonstrate good progress in quantifying and auditing resources through the planning process. There has been less progress in linking planning with implementation through identifying specific actions to resolve management issues.”³
218. And that –
- ” “...DMGs may need further support in developing the capacity to interpret and use results as a management decision making tool.”³
219. In oral evidence SNH referred to page 76 of the Report which considers DMG plans and confirmed –

” “there is a wide variation in how DMGs have approached the task of the DMG assessment and their level of engagement and commitment to action. We hope to work with ADMG and the DMGs so that the good practice, which can be clearly demonstrated, can be used as models to encourage the rest of the DMGs to get up to that standard.”⁶⁴

220. Much of the written evidence to the Committee acknowledges the work of DMGs in producing plans.

221. For example the National Trust for Scotland stated –

” “There has been a significant improvement in the development of deer management plans and the efforts of the group members and ADMG should be recognised.”³¹

222. But the Report appears to suggest that Deer Management Plans (DMPs) are not necessarily leading to action on the ground –

” “The results of the assessment demonstrate good progress in quantifying and auditing resources through the planning process. There has been less progress in linking planning with implementation through identifying specific actions to resolve management issues.”³

223. SNH suggested what was needed next is for all DMGs to identify actions –

” “Some DMGs have done that but others have not. That is the area where we would have expected more progress because identifying actions is a key step in ensuring management action on the ground.”⁶⁵

224. Scottish Environment Link also makes this point –

” “Progress to date is mainly in the form of improved Deer Management Plans – not outcomes on the ground”.¹⁸

225. In oral evidence, Maggie Keegan said the impact and pace of change are what is important.⁶⁶

226. Some DMGs have made the point that impact on the ground takes time and not enough time has passed to enable positive effects from the plans to be shown. In discussing the adequacy of progress and whether the targets will be met, Simon Pepper of the Forest Policy Group was of the view that the Report gives “a clear answer”. He posed the question “whether DMGs have the opportunity to deliver the objectives on time and whether arrangements are in place if there are difficulties in delivery.”⁶⁷

227. The Committee sought to explore whether the majority of deer management plans are environmentally responsible and are delivering change on the ground in terms of outcomes for deer populations and for the natural heritage, and are publicly available” as required by the RACCE Committee. The Committee asked SNH whether the criteria against which DMGs are judged focus on the process of developing a plan rather than focusing on action to reduce deer impacts. The

Committee explored what needs to change to ensure that DMPs are more effective on the ground.

228. The Committee was concerned to hear from Drew Macfarlane Slack in reference to the Monadhliath deer management group-

” “We are considering the plan over a 10 year period to achieve all the objectives that we hope will provide the public benefits that SNH is looking for but we are early in the programme and we have not had enough time to deliver it all yet. We are one of the better groups.”⁶⁸

229. Duncan Ewing-Orr highlighted the issue of timescales –

” “On timescales, “Scotland’s Wild Deer – a National Approach” was published in 2008. It set out quite clearly the public interest tests that needed to be met. We are not talking simply about what has happened since the Rural Affairs, Environment and Climate Change Committee considered the evidence in 2013, because there was the deer code that also set out the public interest criteria...SNH has bent over backwards to make the voluntary approach work. I am coming to the conclusion that the voluntary approach is simply not adequate and that SNH needs support from Government to use the powers that it has to deliver a more functional deer management system.”⁶⁹

230. In providing oral evidence to the Committee Andrew Bachell suggested –

” “there is a wealth of good and practical experience out there, on which future arrangements might be based. There are examples of attempts by managers of private land to deliver on the public interest objectives. However, we did not find a consistent standard or consistent evidence of progress.”⁷⁰

231. The SNH Report concludes with respect to Deer Management Groups–

” “...There has been less progress in linking planning to implementation through identification of specific actions to resolve management issues. The review therefore concludes that it remains a challenge for many DMGs to agree actions, such as managing herbivore impacts, or to deliver environmental improvements at a collaborative Group scale.”³

232. Grant Moir suggested that some of the big issues are between DMGs not within them as different DMGs can have different objectives so there can be issues across boundaries.⁷¹

233. The Committee understands that some DMGs may need further support in developing the capacity to interpret and use results as a management decision-making tool. The Committee also explored what happens to DMGs whose performance is poor and whether there is any sanction available to SNH. The Committee sought to determine whether additional or alternative sanctions were needed. These questions are considered in the following sections of the report.

234. The Committee is surprised that SNH is not in a position to come to a conclusion on the rate of progress of DMGs and is unable to determine

which DMGs are progressing at an acceptable rate and which are not. The Committee is disappointed that this fundamental conclusion is not available as part of the review. The Committee would have expected SNH, at the outset of its work, to have established a baseline on which it could then determine progress.

235. The Committee recognises that some deer management groups have worked to develop deer management plans with the support of the ADMG and SNH, and in some DMGs there has been substantial and rapid change in their performance, and there has been a notable increase in deer management planning across the sector since 2013. However, there is considerable variability in the performance of DMGs and across the categories and it is not yet clear to the Committee that progress on the ground in terms of positive outcomes can be evidenced in all areas.
236. The Committee notes that progress to resolve management issues in terms of public interest categories is slower than in many other categories, with 32 per cent showing no change and 5.5 per cent showing a decline. The Committee is not convinced that all DMGs have a clear action plan that adequately addresses the public interest and will result in positive outcomes for natural heritage on the ground. The Committee considers that a step change is needed in some DMGs to deliver greater public interest objectives.
237. The Committee also notes that considering public interest criteria on a collaborative scale is a challenge for some DMGs and requires to be addressed.
238. The Committee recognises that some DMGs have recently been established and the rate of progress will not be uniform but, on balance, it considers that the Code of Practice came into effect on 1st January 2012 and, given that and the time that has elapsed since the RACCE Committee inquiry, it would be reasonable to have expected a greater rate of progress in terms of implementation and delivery of outcomes. The Committee recognises the efforts of SNH and the ADMG but remains concerned that despite their best attempts there are still gaps in management structures and gaps in the coverage of DMPs. Overall the Committee cannot be confident that the situation at present, without significant further action, is capable of delivering the required change on the ground.
239. Following careful consideration of the Report the Committee can see no compelling reason why the interim measures that allow SNH to intervene to amend and to lead on drafting of a deer management plan should not come into effect immediately. This should provide a backstop to ensure that all DMPs adequately address the public interest. The Committee therefore recommends that the powers under section 80 of the Land Reform (Scotland) 2016 Act come into immediate effect.

Transparency and Accountability of DMGs

240. In its 2013/14 inquiry the RACCE Committee was concerned ¹ that the work of some DMGs was insufficiently transparent and publically accountable and some groups may be failing to include stakeholders with the necessary local knowledge, interest and expertise in deer management. The Committee recommended that meetings of these groups are held locally and those with practical knowledge and expertise both in deer, such as gamekeepers and stalkers, and in habitats, such as ecologists, are active participants in DMGs.
241. The Committee expected a significant proportion of the DMG meetings to be open and accessible to all interested bodies and individuals and recommended details of agendas, papers and minutes of meetings are published. The Committee urged the Scottish Government to ensure that the meetings of all DMGs are effectively publicised and open to all and recommended that SNH supports this work. To facilitate this, the Committee further recommended that funds should be made available to the DMGs via the SRDP. The Committee agreed to monitor the operation of these groups and consider what further action may be required within two years.
242. In oral evidence the ECCLR Committee heard that there is currently no systematic approach to sharing information across the DMGs or to making information about the DMGs publicly available. The Committee explored the benefit of having a publicly accessible register of DMGs and DMPs to share practice, enable the public and stakeholders to access information on the DMGs and identify how they become involved in a DMG. In discussion with SNH the Committee heard it was the intention to have a portal with all DMPs that can be accessed via the ADMG website but DMGs currently make information available in different ways. ⁷²
243. In their written evidence SE Link suggested that a modernised deer management system would require -
- ” “much improved quality and coverage of deer management data”, which is “easily accessible on line to inform local discussions.” ¹⁸

244. **The Committee welcomes confirmation that the majority of upland DMGs now have publicly available DMPs and have undertaken some form of public consultation.**
245. **The Committee considers it is vital that the work of DMGs is transparent and accessible and the level and type of information provided in the public domain is broadly consistent. The Committee is disappointed to hear there is no systematic approach to sharing information across DMGs or to making information about DMGs, beyond the plans, publicly available. As a minimum the Committee recommends that SNH and the ADMG provide advice to DMGs in relation to the information that should be in the public domain, and establish a central point of access to ensure people know how they can get information, and how they can engage with and input into the work of DMGs.**

Code of Practice on Deer Management

246. At the time of inquiry in 2013/14 the RACCE Committee ¹ heard conflicting evidence about the Code of Practice on Deer Management. Some witnesses argued that since the Code had only come into place in 2012, it was premature to make a judgement about how effective it will prove to be, and it is generating a change in deer management – many more DMGs are now preparing deer management plans. Others said that the Code was merely a continuation of the policy of voluntary deer management which had been failing to secure deer management in the public interest for over 50 years. Dr John Milne emphasised the solution that the Deer Commission Scotland had recommended to the Scottish Government, which was a statutory duty of sustainable deer management. This was rejected by the Scottish Government when it developed the [Wildlife and Natural Environment \(WANE\) Bill](#), as it considered it would be difficult to frame a duty that would be compatible with ECHR.
247. The RACCE Committee believed that as the Code had only been in place for a relatively short time it would be premature to make a judgement as to how effective it is going to be in practice. At that point in time the Committee considered there was no clear evidence of the need to introduce a statutory duty of sustainable deer management for deer management groups but agreed to continue to monitor the effectiveness of the Code with a view to reviewing its success in generating changes in deer management by the end of 2016.
248. Section 79 of the [Land Reform \(Scotland\) Act 2016](#) inserts new section 5B into the 1996 Act, requiring SNH to carry out a review into compliance with the Code of Practice on Deer Management. This specifies that SNH must carry out a review into the extent to which the Code is being complied with and is effective in promoting sustainable deer management and must submit a report to Scottish Ministers. It must also include any recommendations SNH consider appropriate. Scottish Ministers are required to lay the report before the Scottish Parliament. The first review must be carried out within 3 years of section 79 of the [Land Reform \(Scotland\) Act 2016](#) coming into force, and subsequent reviews are to be carried out within three years of the date on which the report in respect of the previous review was laid before the Scottish Parliament.

249. The Committee welcomes the provisions in the Land Reform (Scotland) Act 2016 in relation to the Code of Practice but is concerned that the Code has been insufficient in influencing all DMGs. The Committee is of the view that further consideration now needs to be given to the introduction of a statutory duty of sustainable deer management.

Deer Panels

250. Section 78 of the Land Reform (Scotland) Act 2016 amends section 4 of the Deer (Scotland) Act 1996 (appointment of panels) which gives SNH the power to appoint deer panels to act as a source of considered advice.

251. The Land Reform (Scotland) Act 2016 also grants Scottish Ministers the ability to make regulations to give panels further functions relating to community engagement in deer management. These new functions may include –
- encouraging local community engagement in deer management;
 - communicating deer management issues to the local community; and
 - communicating the views of the local community to those involved in deer management.
252. In the Stage One consideration of the Land Reform (Scotland) Bill stakeholders across the deer management sector were content with these provisions and SNH noted that deer panels had not been used as often as they might have been. Scottish Government officials told the Committee that this power could potentially assist with problems currently being experienced in various lowland parts of Scotland where DMGs or similar structures do not exist.

253. The Committee considers the Scottish Government should act to make regulations giving deer panels further functions relating to community engagement and SNH (and any working group that is established) and should give full consideration to the appointment of deer panels, particularly in lowland Scotland.

Scottish Natural Heritage (SNH) Powers of Intervention - Section 7 and Section 8 Agreements

Key Findings of SNH Report

Review of Section 7 Agreements

- Section 7 Control Agreements are ‘voluntary’. They can only be secured if all the relevant parties agree to the proposed measures and the terms can be varied at any time. The voluntary approach requires considerable time investment by SNH and estate staff.
- The success of Section 7 Control Agreements is measured not just in terms of deer numbers or culls achieved, but ultimately by habitat improvement/recovery response.
- Agreements have been in place for periods ranging from 3 – 10 years. Overall, a reduction in deer numbers has been achieved across Section 7 Control Agreement areas.
- Deer density targets have been met for six Agreements; but for five of the 11 Agreements deer density targets have not been met.
- Habitat targets have been met for three Agreements, partially met for two, but for six of the 11 Agreements, habitat targets have not yet been fully met.
- Herbivore impacts are increasing in three of the 11 Agreements reviewed.

ECCLR Committee Consideration of Evidence

Background

254. Section 7 agreements are voluntary and require all parties to agree to the proposed measures. They are put in place for a number of reasons including where deer may have caused, or are causing, damage to the natural heritage.
255. Where it is not possible to secure a Section 7 control agreement, or if an agreement is not being followed, Section 8 of the [Deer \(Scotland\) Act 1996](#) allows SNH to make a Control Scheme whereby owners/occupiers are required to undertake specified measures. No Section 8 control schemes have ever been implemented.

Previous Consideration of Section 7 and Section 8 Agreements

256. In its inquiry in 2013/14 the RACCE Committee heard ¹ conflicting evidence about the effectiveness of the current powers available to SNH to secure deer management using Section 7 and Section 8 of the Deer (Scotland) Act 1996. While

some witnesses thought Section 7 control agreements were securing positive changes in deer management on designated sites and surrounding land, others pointed to the failure to make an agreement work at Ardvar as evidence that control agreements are insufficient.

257. At the time of the inquiry there was no agreement about whether Section 8 control schemes could be made to work. The ADMG said that the available powers had yet to be tested and it was “high time” that the operation of existing regulation alongside the voluntary approach was ascertained. SNH stated that they had been actively considered the use of the Section 8 power at only one site, Caenlochan, and that often the threat of using that compulsory backstop is incentive enough to make the voluntary system deliver.
258. Anticipating use of the powers would be subject to legal challenge, Dr John Milne said that he thought it would be difficult and very costly for SNH to gather sufficient evidence that a control scheme was needed. He and other witnesses highlighted the public resources that SNH put into deer management, and suggested these had become even tighter in the past few years. SNH said that it in the 6 months prior to the evidence session (in November 2013) it had been working to secure two section 7 agreements, and that if it was not be possible to secure agreement on one of those sites (Ardvar), it would ask the Minister for the Environment to sanction the use of section 8 powers for the first time.
259. The RACCE Committee understood while the powers to issue Section 7 orders have been available to SNH for some time their effectiveness had yet to be fully assessed. The Committee recommended the Scottish Government undertake an assessment of the effectiveness of Section 7 agreements and provide a report to the Committee on this.
260. The RACCE Committee also understood Section 8 orders had not yet been utilised and was of the view that as they remain untested it was difficult to judge whether Section 8 control schemes could be made to work. In its 2013/14 inquiry the Committee heard that the (as yet untested) Section 8 powers may soon be used for the first time. The Committee sought an update from the Government on the application and outcome of the use of this power and encouraged SNH and the Government to make full use of Section 8 powers where voluntary agreement cannot be secured or where environmental damage is persisting. The Committee undertook to review the success of the use of Section 8 in generating a change in deer management, by the end of 2016. The Committee also recommended that the Scottish Government undertake an assessment of how workable Section 8 powers are given that they as yet remain unused, and inform the Committee of the outcome.

Review of Section 7 Agreements

261. The review of Section 7 powers is incorporated into the SNH Report.³ The Report assesses eleven current and historic agreements and currently there are eight Section 7 control agreements in Scotland, all of which relate to the protection of habitats on sites designated for nature conservation. The Report states (p 85)³ that success in the application of Section 7 agreements is measured ultimately by habitat improvement/recovery response. All Section 7 agreements pre-date SNH’s

responsibility for deer management. At the time of the Committee's inquiry no Section 8 control schemes had ever been implemented.

262. Information in the Report shows that the impact of Section 7 agreements is variable. The Report states Section 7 agreements have been in place for between 3 and 10 years and these have resulted in an overall reduction in deer numbers but the targets for reducing deer numbers and improving habitat condition have been slow to be addressed and are not uniformly met. Population targets have only been reached in half of the management areas and for 5 of the 11 agreements deer density targets have not been met. Herbivore impacts are increasing in 3 out of the 11 areas and habitat targets have been fully met in only 3 out of 11.

263. It is not clear to the Committee why some Section 7 agreements appear to be working while others are not. This section of the SNH report includes an assessment of section 7 agreements and in the Executive summary SNH state-

” “The analysis of section 7 Control Agreements shows that there has been some reduction in deer numbers across all agreements. However, deer density targets and habitat condition targets have not been met in around half of the Agreements reviewed”.³

264. The Report³ provides the following information in relation to Ardvar:

- The Section 7 agreement was “dissolved in 2012, following ineffective attempts at reconciling differing deer management objectives” (p 85)
- Deer densities are now increasing (Table 6.4, p 86)
- 100 per cent of features (2) are in unfavourable condition and have been since 2005 (Fig 6.2, p 87)
- Herbivore impacts are increasing (Table 6.5, p 89)

265. Alan Cory-Wright, Chairman of Breadalbane DMG stated³² that SNH did not renew a section 7 agreement, when landowners wanted it to continue –

” “Finally, on p84, it says that the Breadalbane Section 7 agreement is current, and was extended for 2016. This is not the case. The agreement ended in May 2015, and was not renewed by SNH, despite almost 100 per cent support from the group for doing that at the time. It is now unlikely that we will enter in to such an agreement again, given the change in circumstances.”

266. The Committee asked SNH why some Section 7 agreements appear to be working whilst others appear not to be and specifically, why deer density and habitat condition targets have not been met. The Committee explored what action SNH consider is now needed to address this. The Committee also asked stakeholders why Section 7 agreements do not seem to be effective in meeting deer density targets and habitat condition targets and as asked what role SNH play in Section 7 agreements and whether that role is positive and sustainable.

267. The Report states (p 90) –

” “The evidence indicates that for a number of Section 7 Agreements progress has not been adequate to reverse the negative impacts of herbivores and additional measures would be needed to deliver the objectives”.³

268. However, the necessary additional measures remain unspecified.

269. Richard Cooke thought there were a number of signs of progress in Section 7 areas but suggested they may take some time to deliver. He likened them to a mini DMP and suggested they are an adaptive process.⁷³

270. The Committee remains unclear as to why some Section 7 agreements are not working and questions whether the barriers relate to the voluntary nature of the agreement and the effectiveness of the “back-stop”.

271. The Committee considers it is clear from the review that Section 7 agreements are not fulfilling their purpose. It recommends the Scottish Government take urgent action to devise alternative measures and simple, provisions that lead to action to protect and restore habitats and sites impacted by deer.

Review of Section 8 Agreements

272. In considering the deer provisions of the Land Reform (Scotland) Bill the RACCE Committee was supportive of the proposed increase in the maximum fine for failure to comply with a Section 8 order to £40,000 bringing it in line with other fines relating to certain wildlife or environmental crime (Section 82 of the Land Reform (Scotland) Act 2016). However, the RACCE Committee remained concerned² about whether section 8 orders were usable within appropriate and practical timescales and asked the Scottish Government to consider whether amendment to the Land Reform Bill was required to these powers to allow SNH to issue orders on the basis of only one assessment of damage. The Bill was not amended with this provision and to date SNH has been reluctant to move away from the current voluntary approach (using Section 7 agreements) to a compulsory approach (using Section 8 control schemes) to deer management.

273. The Committee asked SNH why no Section 8 control schemes have been implemented, specifically why no Section 8 control scheme has been used in Ardvair and what action SNH proposes to take in Ardvair, particularly as one of the key findings of the report states (p iv) –

” “we are not confident that present approaches to deer management will be effective in sustaining and improving the natural heritage in a reasonable timescale...”³

274. In the Evaluation section (p 93) SNH states that this work requires substantial support from SNH and-

” “It is unlikely to be feasible to replicate this across the wider sector without a very significant increase in support from the public sector, with associated resource costs.”³

275. Given that the voluntary approach to deer management (via Section 7 agreements and DMPs) appears to have shown limited progress to date in terms of action on the ground, the Committee asked if SNH would use Section 8 powers in the coming months to ensure that deer management allows biodiversity targets to be met. The Committee also questioned SNH on their reluctance to make use of the Section 8 powers to date; whether they need additional resources in order to be able put in place Section 8 schemes, and if so; what level of resource is needed. The Committee also asked how workable the powers were, highlighting the issues that had been raised by stakeholders around the need to prove beyond reasonable doubt that the impacts are caused only by deer before SNH can pursue a Section 8 order.

276. Andrew Bachell of SNH responded –

” “...in the past SNH – SNH will need to take this criticism on the chin – we perhaps have not used those powers or pushed the use of those powers as quickly as we might have done. However, our hand has sometimes been stayed by threats that our evidence base is not good enough and that therefore there would be a challenge. Using the powers would be very expensive to follow through on. They are not a one off fix; if we go into a section 8 we are probably in for the long haul; we are not in today and out tomorrow. For all those reasons, particularly the issue of the firmness of the evidence, we have been less willing to take a risk with the use of the legislation than perhaps we will be tomorrow”.⁷⁴

277. Speaking to the Committee on 22 November, Ian Ross (SNH) stated –

” “We would be prepared to apply section 8. We would do an assessment and make a decision to apply it. That decision might very well be subject to a legal challenge, but that would not stop us.”⁷⁵

278. Stakeholders have differing views on the use of Section 8 orders and the Committee explored why they thought the powers had not been used. In written evidence to the Committee dated 21 November the Association of Deer Management Groups states–

” “... SNH already has statutory powers of intervention dating back to the 1996 Deer (Scotland) Act, further supplemented this year in the Land Reform (Scotland) Act, which it has yet to use? There have in fact been instances, albeit a small number, when ADMG would have supported the use of those powers to resolve some really difficult situations but SNH has chosen not to do so.”¹⁷

279. In oral evidence, Richard Cooke referred to the backstop provided by Section 8 but stated –

- ” “When failure occurs we would not oppose, and have not opposed – in fact we have proposed – the use of section 8 by SNH to resolve a situation of intractable conflict between participants in a particular area” he went on to say “there have been examples – and there will doubtless be future examples – of problems that cannot be resolved without resort to statutory measures”.⁷⁶
280. He also suggested that we need to see SNH use some of its existing powers before SNH suggests additional measures are necessary.
281. The Forest Policy Group states –
- ” “We are not convinced that the Scottish Government has given adequate support to SNH for the use of its compulsory powers.”³³
282. Stakeholders also questioned the impact of the need for SNH to clearly demonstrate (beyond doubt) that damage was caused by deer and not by other herbivores and the potential risk or threat of a judicial review.
283. Stakeholders commented on the powers available to SNH. In written evidence Scottish Environment Link refer to “addressing weaknesses in the regulatory regime across the country.”and state –
- ” “Without more effective powers and strong support from Ministers to ensure that the public interest is protected, SNH is not in a credible position to deliver Scottish Government’s own public policy objectives.”¹⁸
284. In oral evidence, Simon Pepper of the Forest Policy Group stated –
- ” “The fundamental key to an effective system is whether there is a credible back-up power. At present, with the best will in the world, and given all the difficulties that have been experienced, I do not think that anybody would say that we have a credible back-up power in place. As we discussed before, it has not been used for a variety of reasons; no-one has any faith in it”.⁷⁷
285. He continued –
- ” “We need to look at slight adjustments to the legislation to enable a swifter, more straightforward, entirely accountable and appealable measure that allows SNH to ensure that a cull that is in the public interest is delivered. That would be for cases in which dialogue had come to a halt and no progress was being made, perhaps because the owners were unwilling, unable, or refused to do what was asked of them”.⁷⁸
286. In later discussion he re-iterated –
- ” “We need a nimble, straightforward, clear-cut and effective back up, but the paradox is that it might never need to be used”.⁷⁹
287. In the final oral evidence session SNH confirmed the review and Report did not look at how the existing powers are operating. SNH suggested –

” “As far as this issue is concerned it would benefit from a further careful look at the existing suite of powers and the new powers that have been given to us through the Land Reform (Scotland) Act 2016, and from a bit more analysis of how all that might be streamlined and whether the powers are sufficient. We have not yet done that piece of work”.⁸⁰

288. **The Committee shares the frustration of many that Section 8 remains unused where use of the power might be justified. The Committee questions the ‘risk appetite’ of SNH in this respect.**
289. **The Committee heard from stakeholders who are of the view that whether Section 8 would stand testing in court can only be proven by testing it and if the power is then found to be ineffective that is the time to consider what change may be necessary. However, the Committee is not convinced that the currently available suite of powers (with the attached tests) are adequate to manage any eventuality considers what is needed is a simple, effective back-stop power alongside a predominantly voluntary system to ensure the public interest is delivered.**
290. **Having reviewed all of the evidence the Committee is of the view that given the experience to date there are serious questions as to whether the current legislation is fit for purpose. The Committee considers this question has to be addressed by the Scottish Government as a matter of urgency.**
291. **The Committee notes the comments of the Forest Policy Group in relation to Scottish Government support to SNH to date for the use of Section 8 powers. The Committee has been unable to come to a view as to whether this was, or was not, the case. However the Committee considers that if new backstop powers are to be introduced they must be supported by clear direction from the Scottish Government and SNH must be empowered and resourced to deliver them.**

Use of Incentives

292. In oral evidence SNH suggested that incentives have a role in relation to DMGs ability to deliver what needs to be delivered. Claudia Rowse confirmed “The role of incentives will be important in ensuring the DMGs make progress”.⁸¹
293. In their Report³ SNH highlight the uncertainty and opaqueness of the funding support schemes and the commercial nature of some of the management and contractual obligations of funding have been identified in a number of groups as constraints to setting out clear timescales and mechanisms for delivery. SNH recognise there has not been a detailed assessment of the barriers to improved deer management practice and confirm they have not carried out a full analysis of how incentives are taken up, how effective they are, and how much funding is being delivered for deer managers through SRDP and whether it is at the right level. The

need for more work on the necessary mix of incentives and legislation is highlighted.

294. **The Committee agrees with SNH that the role of incentives will be important in ensuring DMGs make progress. The Committee is disappointed that to date there has been no full analysis of incentives and their use in supporting deer management in the public interest. The Committee recommends the Scottish Government commission this work as a matter of urgency.**

Research and Knowledge Gaps

295. When questioned about gaps in research Professor McCracken suggested the vast majority of gaps were not research gaps but gaps in knowledge exchange or communication. Information is not known about, accessible or translated in a way to allow land managers, their advisors and others to take it into account -a gap in understanding where every individual is coming from - “it is just about getting people into a room with a facilitator to talk through and understand what their objectives are and why they have them and to find a common way forward”.⁸²

296. **The Committee considers that further action is required to address the research and knowledge gaps and this needs to be prioritised by SNH, the partner agencies and the Association of Deer Management Groups and Lowland Deer Management Groups.**

Resources and Capacity of SNH

297. The Committee pressed SNH on the issue of its capacity in relation to deer management and the adequacy of its resources in meeting the current and future challenges. In oral evidence Ian Ross stated –
- ” ...there are significant resource implications that go with the use of Section 7s and which apply if we use Section 8s.....we are managing our labour resource, in particular, to deliver that, but if a number of such activities were on-going, that would have resource implications across our budget as a whole”⁸³
298. In discussion around the approach to deer counts Andrew Bachell of SNH highlighted issues with the SNH resource –
- ” ...the SNH resource is obviously finite, so given the current resource base, we may have to tackle all those issues sequentially, because dealing with them all at the same time would stretch us very severely”.⁸⁴
299. Andrew Bachell later said –

” “Our remit is extremely broad, but our budget has gone down by 30 per cent in the past six years. It is therefore impossible for us to do everything that we used to do – or that we and the Deer Commission for Scotland used to do – so we have to cut our cloth accordingly. As a result, we no longer do as much monitoring; our monitoring programme is more spaced out than it used to be, and we cannot be on the ground to support every action that people are taking or to give advice as we used to because we do not have as many people to do that. I am therefore bound to say that if more is being asked of SNH, it will be a case of making choices...the point is that we can only do so much and we have to look to Government to give us advice – or, in fact, instruction – on what is most important”.⁸⁵

300. The Committee considered this alongside the issues highlighted in the Report – Conclusion of Assessment – which states the scale of action needed to address deer impacts on the natural environment across Scotland and ensure its enhancement is large.³

301. The Committee asked SNH about staffing levels and changes since the transfer of responsibility from the Deer Commission. SNH confirmed that 12 full time equivalent posts were dedicated to deer management and the “pay bill” rose from £0.9m in 2012 to £1.13m in 2016.⁸⁶ SNH undertook to provide further detail on this. In a further written submission SNH clarified that its budget overall had reduced by 30 per cent in the last five years and staffing levels had reduced in the same period by 20 per cent. The numbers of staff working on deer management within SNH varied over the period between 6 and 12. In contrast, the Scottish Deer Commission employed 27 staff in 2009/10 of which 19 were technical, policy and management staff. This equates to an almost 40 per cent reduction in staff on the ground and a reduction of total staff deployed to deer management of approximately 55 per cent since 2009/10.¹⁵

302. The Committee expressed concerns that it understood cuts to SNH’s budget had resulted in the ADMG having to step in and fund the updating of wild deer best practice and to roll out the SWARD data processing model. In evidence SNH stressed the partnership nature of this work with the industry and their intention to continue to engage to support it and encourage private investment.

303. A number of stakeholders commented on SNH’s ability, from a financial and staffing point of view, to meet its responsibilities. When asked whether he thought SNH was sufficiently resourced Richard Cooke responded “SNH needs more funds if it is to deliver the deer management that is clearly in the public interest”.⁸⁷ Maggie Keegan of the Scottish Wildlife Trust also raised concerns about the role of SNH as a regulator and enforcer and also an advisor and a body that seeks conciliation. She suggested-

” “One of the recommendations might be that it has to be much more robust and backed by Government to deliver the policies that everyone wants it to deliver”.⁸⁸

304. This view was echoed by the Forest Policy Group in its written submission.³³ In oral evidence, Simon Pepper suggested “...although it might seem paradoxical, a compulsory backstop is an essential part of a voluntary system...certainly I feel that

stronger, clearer support now from the relatively new Cabinet Secretary, indicating a much clearer Government resolve behind SNH's powers would be very helpful indeed". In seeking clarity Simon Pepper confirmed he was referring to both the existing powers and those conferred by the Land Reform (Scotland) Act 2016.⁸⁹

305. **Given the significant decrease in the budget of SNH in recent years and the related decrease in staffing levels across the organisation, coupled with the increasing calls on it to deliver a range of natural heritage objectives, the Committee is concerned that it may not have the capacity to fully deliver all its duties, including deer management, without additional resource. The Committee recommends the Scottish Government engage in early discussion with SNH in relation to priorities for delivery and the adequacy of resourcing, particularly in light of the potential additional calls upon it and the extension of duties, and report back to the Committee on the outcome of those discussions.**
306. **The Committee welcomes the additional financial support the Scottish Government has made available to support the production of Deer Management Plans, however, the Committee recognises there is more to be done and there will be greater calls on resources to tackle the challenges around effective deer management in the public interest. The Committee recommends the Scottish Government give serious consideration to the resource needs of SNH's partner agencies and the requirement for a redeployment of funds to support deer management measures.**

Moving Forward

307. SNH state that on the basis of the evidence from the analysis of DMG plans, Section 7 Control Agreements and assessments of the impacts of deer on other interests in the uplands and lowlands, "our assessment of the evidence underpinning this review does not enable us to be confident that present approaches will bring about early improvements in the natural heritage or deliver other public benefits. In particular it is unlikely that the present approach to deer management will be able to make a significant contribution to addressing the specific challenges, such as habitat restoration and improved ecological connectivity outlined in 'Scotland's Biodiversity - a Route Map to 2020'²⁷ which underpins the Government's ambitions for the natural heritage."
308. The SNH Report states –
- ” “While the positive progress is encouraging, we remain concerned that tangible improvements on the ground will not meet the expectations of the RACCE Committee for the rapid implementation of environmentally responsible management plans and consequential enhancement of the natural heritage.”³**
309. And that –

” “the review indicates that longer term improvements may not be forthcoming without additional measures to enhance sustainable deer management in Scotland.”³

310. The Committee explored what these additional measures are, and what action Deer Management Groups and SNH need to take, so that quick progress is made. Specifically the Committee asked whether legislation is needed.

311. Ian Ross suggested that ‘additional measures’ include the more effective application of some of the new tools or use of tools that have not yet been applied. SNH was keen to stress that this was not intended to be a short-hand for regulation and suggested that measures could include information gaps and incentives.⁹⁰

312. SNH suggested there is a need to: focus on on-going progress; monitoring the DMPs and their implementation; take forward work in the lowlands as there is no obvious and agreed solution; and give further consideration to setting cull targets.

313. In evidence to the Committee Andrew Bachell of SNH highlighted that –

” “People come to the issue...with different perspectives that are often based on their objectives for the land. Those objectives can be very broad, ranging from purely sporting and commercial interests at one end to purely habitat and conservation interests at the other end”.⁹¹

314. He continued to suggest –

” “...The next steps must involve a closer dialogue on setting objectives, and we need to establish a context in which that can be done openly and fairly”.⁹²

315. He also stated –

” “it is not necessarily on the issue of evidence that more needs to be done to resolve the conflicting demands for deer management. It is vital that we make use of the various policy statements, documents and guidance that exist to deliver action on the ground but, more than anything, we perhaps need clear, settled priorities to bring that into account. I argue that this is the most important piece of work that needs to be done”.⁹³

316. The Committee has considered a number of issues in relation to deer management that go beyond the SNH Report. The Committee would have liked to see SNH provide clear recommendations to Government on the way forward as was anticipated in the debate around deer provisions in the Land Reform Bill now enacted as the Land Reform (Scotland) Act 2016.

317. The Committee understands that progress has been made and welcomes that. The Committee also is aware that deer management is a complex issue and there are competing objectives both within and across deer management groups and in areas which do not have an established deer management group.

318. **The Committee is aware that 50 per cent of deer management groups failed to identify actions in deer management plans to deal with deer impacts in designated sites. The Committee considers that habitats take a long time to recover and we do not have time to wait in delivering the Scottish Biodiversity Strategy. Deer management plans need to take an inclusive habitat approach rather than focusing on deer numbers alone and need balance different required grazing levels.**
319. **The Committee considers what is needed is a deer management system that covers the whole of Scotland, that is based on a clear expression, and spatial articulation, of the public interest, particularly in relation to biodiversity and climate change, and that has been developed collaboratively. The important issues are the trends in local populations, the impacts of local populations and their management in relation to the objective for each area.**
320. **The Committee considers there is work to be done in deciding what societal objectives we have for our different landscapes across the country and the Land Use Strategy has a fundamental role in this.**
321. **The Committee considers a greater focus and urgency is now needed to address the challenges of deer management across Scotland.**
322. **The Committee recommends the Scottish Government establish, as a matter of urgency, a short term working group, independent of Government and chaired independently of deer management interests (but involving SNH, FCS, ADMG, LDNS, Local Authority representatives, and key stakeholders) to provide clear advice on the way forward for deer management in Scotland, reflecting the public interest. The Group should report back to the Scottish Government and Parliament in early autumn 2017. The Group should have a very tight remit and should consider –**
323. **The recommendations contained within this Report reflecting the position of the LRRG and those of the predecessor Committee and how best to establish a framework where:**
- **SNH is responsible for determining the cull levels required in the public interest in each of these areas**
 - **DMGs carry out deer counts in their area, according to a particular methodology, and return them to SNH**
 - **DMGs return planned deer culls and plans to SNH**
 - **SNH consider their deer cull, the deer count, and the planned cull, and go back to DMGs if it is not appropriate**
324. **The Group should also consider:**
- **the cost to the public purse and whether there are alternatives to fencing that could deliver the objective**

- **the approach to Deer Management in the Lowlands**
- **lessons from management approaches elsewhere in Europe**

325. In considering the way forward the Group should take account of relevant academic reports on Deer Management.

326. In addition the Committee recommends the Scottish Government prepare an action plan for wider supply chain development for deer carcasses and deliver public funding for the establishment of a network of deer larders across Scotland, including its islands, to support greater opportunities for taking part in appropriate culling activity.

Annex A - Minutes of Meeting

4th Meeting, 2016 (Session 5), Tuesday 13 September 2016

5. **Work programme (in private):** The Committee agreed its approach to developing its work programme and this will be published on the Committee's website in due course.

11th Meeting, 2016 (Session 5), Tuesday 15 November 2016

5. **Deer management (in private):** The Committee agreed its approach to the forthcoming report from Scottish Natural Heritage on the review of deer management in Scotland.

12th Meeting, 2016 (Session 5), Tuesday 22 November 2016

1. **Decision on taking business in private:** The Committee agreed to take items 5, 6, 7, 8 and 9 in private.

2. **Report on deer management in Scotland:** The Committee took evidence from—

Ian Ross, Chairman, Eileen Stuart, Head of Policy and Advice, and Claudia Rowse, Head of Rural Resources Unit, Scottish Natural Heritage.

Alexander Burnett declared an interest in deer management, forestry and farming.

5. **Report on deer management in Scotland (in private):** The Committee reviewed the evidence heard earlier in the meeting and agreed to invite additional witnesses to its session on 13 December 2016.

15th Meeting, 2016 (Session 5), Tuesday 13 December 2016

1. **Decision on taking business in private:** The Committee agreed to take items 3 and 4 in private.

2. **Deer Management in Scotland:** The Committee took evidence from—

- Richard Cooke, Chair, Association of Deer Management Groups;
- Patrick Creasey, Chair, North Ross Deer Management Group;
- Alex Hogg, Chair, Scottish Gamekeepers Association;
- Drew McFarlane Slack, Highland Regional Manager, Scottish Land and Estates;
- Malcolm Muir, Countryside and Greenspace Manager, South Lanarkshire Council;
- Richard Playfair, Secretary, Lowland Deer Network;
- Mike Daniels, Head of Land Management, John Muir Trust;
- Dr Maggie Keegan, Head of Policy, Scottish Wildlife Trust;
- Grant Moir, Chief Executive, Cairngorms National Park Authority;
- Duncan Orr-Ewing, Convener, Deer Sub Group, Scottish Environment Link;

- Simon Pepper, Forest Policy Group.
- Alexander Burnett declared an interest in matters connected to deer management.

3. Deer Management in Scotland (in private): The Committee considered evidence heard earlier in the meeting and agreed to discuss its future work on deer management at its next meeting.

4. Work programme (in private): The Committee considered its work programme. It agreed its approach to a future Committee session with an expert panel on the environmental implications for Scotland of the UK leaving the EU.

2nd Meeting, 2017 (Session 5), Tuesday 17 January 2017

1. Decision on taking business in private: The Committee agreed to take item 4 in private.

3. Deer Management in Scotland: The Committee took evidence from—

- Professor Steve Albon, Emeritus Fellow, James Hutton Institute;
- Dr Duncan Halley, Researcher I, EU & EEA programmes contact, Norwegian Institute for Nature Research (via video conference);
- Professor David McCracken, Head of Hill & Mountain Research Centre, Scotland's Rural College;
- Professor Rory Putman, Visiting Professor at the Institute of Biodiversity Animal Health and Comparative Medicine, University of Glasgow.

Alexander Burnett declared an interest in relation to deer management.

4. Deer Management in Scotland (in private): The Committee considered evidence heard earlier in the meeting.

3rd Meeting, 2017 (Session 5), Tuesday 24 January 2017

1. Decision on taking business in private: The Committee agreed to take items 4 and 5 in private.

3. Deer Management in Scotland: The Committee took evidence from—

Andrew Bachell, Director of Policy and Advice, Donald Fraser, Operations Manager (Deer and Wildlife), Claudia Rowse, Head of Rural Resources Unit, and Des Thompson, Principal Advisor for Biodiversity, Scottish Natural Heritage.

Alexander Burnett declared an interest in relation to deer management.

5. Deer Management in Scotland (in private): The Committee agreed to defer consideration of the evidence on deer management heard earlier in the meeting until the Committee reconvenes next week.

4th Meeting, 2017 (Session 5), Tuesday 31 January 2017

1. Decision on taking business in private: The Committee agreed to take items 4, 5 and 6 in private. The Committee also agreed to consider any future consideration of evidence and draft reports on the draft Climate Change Plan and Deer Management in Scotland, as well as its draft response to the Commission for Parliamentary Reform, in private at future meetings.

5. Deer Management in Scotland (in private): The Committee considered evidence heard at its last meeting and agreed to consider a draft response to the SNH report on Deer Management in Scotland at a future meeting.

10th Meeting, 2017 (Session 5), Tuesday 21 March 2017

6. Deer Management in Scotland (in private): The Committee considered a draft report. Various changes were agreed to, and the Committee agreed to consider a revised draft, in private, at its next meeting.

11th Meeting, 2017 (Session 5), Tuesday 28 March 2017

7. Deer Management in Scotland (in private): The Committee considered a revised draft report. Various changes were agreed to. The Committee delegated to the Convener responsibility for finalising the draft report for publication.

Annexe B - Evidence

Written Evidence

- [Albon, Steven](#)
- [Association of Deer Management Groups](#)
- [Association of Deer Management Groups \(Supplementary Evidence\)](#)
- [Association of Deer Management Groups \(Supplementary Evidence\)](#)
- [Association of Deer Management Groups \(Supplementary Evidence\)](#)
- [Assynt Crofters' Trust](#)
- [Assynt Peninsula Deer Management Group](#)
- [Breadalbane Deer Management Group](#)
- [British Association for Shooting and Conservation](#)
- [British Deer Society](#)
- [Bruce, John](#)
- [Clements, Victor](#)
- [East Loch Ericht Deer Management Group](#)
- [Forest Policy Group](#)
- [Glenelg Deer Management Group](#)
- [Glenfalloch Estate](#)
- [Glenmoriston Deer Management Group](#)
- [Halley, Duncan](#)
- [Halley, Duncan \(Supplementary Evidence\)](#)
- [Inveraray and Tyndrum Deer Management Group](#)
- [Knoydart Deer Management Group](#)
- [Lowland Deer Network](#)
- [McClellan, Colin](#)
- [McCracken, David](#)
- [National Trust for Scotland](#)

- [Patrick Creasey](#)
- [Putman, Rory](#)
- [Putman, Rory \(Supplementary Evidence\)](#)
- [Putman, Rory \(Supplementary Evidence received post Committee evidence session on 17 January 2017\)](#)
- [Rowantree, Robbie](#)
- [Royal Society for the Protection of Birds](#)
- [Scottish Deer Society](#)
- [Scottish Environment Link](#)
- [Scottish Gamekeepers Association](#)
- [Scottish Land and Estates](#)
- [Scottish Natural Heritage \(Follow up evidence received post Committee meeting on 22 November 2016\)](#)
- [Scottish Natural Heritage \(Follow up evidence received post Committee meeting on 24 January 2017\)](#)
- [Seivwright, Linzi](#)
- [South Lanarkshire Deer Group](#)
- [Thomson, Iain](#)
- [West Grampian Deer Management Group](#)
- [Wilson, Randal](#)
- [Woods, George](#)

Official Reports of Meetings

- [Tuesday 13 December 2016](#) - Evidence from stakeholders
- [Tuesday 17 January 2017](#) - Evidence from stakeholders
- [Tuesday 24 January 2017](#) - Evidence from Scottish Natural Heritage

- [1] Rural Affairs, Climate Change and Environment Committee. (2014, February 5). Letter to Minister for Environment and Climate Change on Deer Management. Retrieved from http://www.parliament.scot/S4_RuralAffairsClimateChangeandEnvironmentCommittee/General%20Documents/2014.02.06_-_Convener_to_Minister_deer_letter.pdf [accessed 2017 March 30]
- [2] Rural Affairs, Climate Change and Environment Committee. (2015, December 4). 10th Report, 2015 (Session 4): Stage 1 Report on the Land Reform (Scotland) Bill. Retrieved from <http://www.scottish.parliament.uk/parliamentarybusiness/CurrentCommittees/94538.aspx> [accessed 30 March 2017]
- [3] Scottish Natural Heritage. (2016, November 18). Deer Management in Scotland: Report to the Scottish Government from Scottish Natural Heritage 2016. Retrieved from <http://www.snh.org.uk/pdfs/publications/corporate/DeerManReview2016.pdf> [accessed 30 March 2017]
- [4] Environment, Climate Change and Land Reform Committee. (2017, September 13). Minutes of Meeting. Retrieved from http://www.parliament.scot/S5_Environment/Minutes/20160913_Minutes.pdf [accessed 30 March 2017]
- [5] Environment, Climate Change and Land Reform Committee. (2016, November 15). Minutes of Meeting. Retrieved from http://www.parliament.scot/S5_Environment/Minutes/20161115_Minutes.pdf [accessed 30 March 2017]
- [6] Environment, Climate Change and Land Reform Committee. (2016, November 22). Official Report of Meeting. Retrieved from <http://www.parliament.scot/parliamentarybusiness/report.aspx?r=10649> [accessed 30 March 2017]
- [7] Environment, Climate Change and Land Reform Committee. (2016, December 13). Official Report of Meeting. Retrieved from <http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=10692> [accessed 30 March 2017]
- [8] Environment, Climate Change and Land Reform Committee. (2017, January 17). Official Report of Meeting. Retrieved from <http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=10741> [accessed 30 March 2017]
- [9] Environment, Climate Change and Land Reform Committee. (2017, January 24). Official Report of Meeting. Retrieved from <http://www.parliament.scot/parliamentarybusiness/report.aspx?r=10750> [accessed 30 March 2017]
- [10] Rural Affairs, Climate Change and Environment Committee. (2013, November 13). Official Report of Meeting. Retrieved from <http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=8873&mode=pdf> [accessed 30 March 2017]
- [11] Minister for Environment and Climate Change. (2014, March 5). Letter on Deer Management. Retrieved from http://www.parliament.scot/S4_RuralAffairsClimateChangeandEnvironmentCommittee/General%20Documents/2014.03.05_-_Ministers_response_on_Deer_Management.pdf [accessed 30 March 2017]
- [12] Scottish Natural Heritage. (n.d.) Code of Practice on Deer Management. Retrieved from <http://www.snh.gov.uk/docs/B949709.pdf> [accessed 30 March 2017]
- [13] Scottish Natural Heritage. (n.d.) Scotland's Wild Deer: A National Approach. Retrieved from <http://www.snh.gov.uk/docs/A1594721.pdf> [accessed 30 March 2017]

- [14] Putman, R. (n.d.) Supplementary Written Submission. Retrieved from http://www.parliament.scot/S5_Environment/General%20Documents/20170106_Rory_Putman_Written_Evidence.pdf [accessed 30 March 2017]
- [15] Scottish Natural Heritage. (n.d.) Supplementary Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/Inquiries/\(039\)_SNH_evidence_post_Committee_evidence_session_on_24_January_2017.pdf](http://www.parliament.scot/S5_Environment/Inquiries/(039)_SNH_evidence_post_Committee_evidence_session_on_24_January_2017.pdf) [accessed 30 March 2017]
- [16] Knoydart Deer Management Group. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(011\)_20161130_Knoydart_Deer_Management_Group.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(011)_20161130_Knoydart_Deer_Management_Group.pdf)
- [17] Association of Deer Management Groups. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Education/General%20Documents/\(001\)_20161121_ADMG.pdf](http://www.parliament.scot/S5_Education/General%20Documents/(001)_20161121_ADMG.pdf)
- [18] Scottish Environment Link. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(007\)_20161206_Scottish_Environment_Link.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(007)_20161206_Scottish_Environment_Link.pdf)
- [19] Scottish Natural Heritage. (n.d.) Supplementary Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(018\)_20161205_SNH_Supplementary_Evidence.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(018)_20161205_SNH_Supplementary_Evidence.pdf)
- [20] Lowland Deer Network Scotland. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(006\)_20161206_LDNS.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(006)_20161206_LDNS.pdf)
- [21] Halley, D. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(020\)_20161208_Duncan_Halley.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(020)_20161208_Duncan_Halley.pdf)
- [22] Royal Society for the Protection of Birds. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(002\)_20161121_RSPB.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(002)_20161121_RSPB.pdf)
- [23] National Trust for Scotland. (, undefined). Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(026\)_20161205_National_Trust_for_Scotland.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(026)_20161205_National_Trust_for_Scotland.pdf) [accessed 31 March 2017]
- [24] British Deer Society. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(009\)_20161206_The_British_Deer_Society.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(009)_20161206_The_British_Deer_Society.pdf)
- [25] Environment, Climate Change and Land Reform Committee. (2017, March 10). 3rd Report, 2017 (Session 5): Report on the Draft Climate Change Plan - the Draft Third Report on Policies and Proposals 2017-2032. Retrieved from <http://www.parliament.scot/parliamentarybusiness/CurrentCommittees/103917.aspx> [accessed 31 March 2017]
- [26] Scottish Government. (2013, June 19). 2020 Challenge for Scotland's Biodiversity - A Strategy for the conservation and enhancement of biodiversity in Scotland. Retrieved from <http://www.gov.scot/Publications/2013/06/5538> [accessed 31 March 2017]

- [27] Scottish Government. (2015, June 25). Scotland's Biodiversity - a route map to 2020. Retrieved from <http://www.gov.scot/Publications/2015/06/8630> [accessed 31 March 2017]
- [28] Scottish Government. (2016). Scotland's Biodiversity A Route Map to 2020 First Progress Report 2015/16. Retrieved from <http://www.snh.gov.uk/docs/A2109026.pdf> [accessed 31 March 2017]
- [29] James Hutton Institute. (n.d.) Written Submission. Retrieved from http://www.parliament.scot/S5_Environment/Inquiries/20170112_Prof_Steve_Albon_Written_Evidence.pdf [accessed 31 March 2017]
- [30] Putman, R. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(025\)_Professor_Rory_Putman.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(025)_Professor_Rory_Putman.pdf) [accessed 31 March 2017]
- [31] National Trust for Scotland. (, undefined). Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(026\)_20161205_National_Trust_for_Scotland.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(026)_20161205_National_Trust_for_Scotland.pdf) [accessed 31 March 2017]
- [32] Breadalbane Deer Management Group. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(003\)_20161201_Breadalbane_Deer_Management_Group.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(003)_20161201_Breadalbane_Deer_Management_Group.pdf) [accessed 31 March 2017]
- [33] Forest Policy Group. (n.d.) Written Submission. Retrieved from [http://www.parliament.scot/S5_Environment/General%20Documents/\(024\)_20161206_Forest_Policy_Group.pdf](http://www.parliament.scot/S5_Environment/General%20Documents/(024)_20161206_Forest_Policy_Group.pdf) [accessed 31 March 2017]

- 1 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 42
- 2 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 45
- 3 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 9
- 4 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 10
- 5 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 9
- 6 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 11
- 7 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 6
- 8 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 7
- 9 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 5
- 10 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 6
- 11 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 8
- 12 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 41
- 13 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 13
- 14 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 42
- 15 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 42
- 16 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016
- 17 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 6
- 18 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 6

Environment, Climate Change and Land Reform Committee

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- 19 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 6
- 20 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 2
- 21 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 12
- 22 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Cols 51-52
- 23 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 8
- 24 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 10
- 25 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 12
- 26 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 50
- 27 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 6
- 28 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 44
- 29 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 15
- 30 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 9
- 31 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 55
- 32 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 11
- 33 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 5
- 34 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 5
- 35 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 8
- 36 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 39

- 37 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 14
- 38 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 8
- 39 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 22
- 40 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Cols 46-47
- 41 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 45
- 42 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 52
- 43 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 35
- 44 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 33
- 45 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 36
- 46 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 53
- 47 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 48
- 48 Environment, Climate Change and Land Reform Committee, Official Report, 1 November 2016, Cols 19-20
- 49 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 53
- 50 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 52
- 51 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 13
- 52 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 18
- 53 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 28
- 54 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 22

- 55 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 23
- 56 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 22
- 57 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 49
- 58 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 50
- 59 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 51
- 60 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 54
- 61 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 28
- 62 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 29
- 63 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 29
- 64 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 18
- 65 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 29
- 66 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 40
- 67 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 40
- 68 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 27
- 69 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 42
- 70 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 40
- 71 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 49
- 72 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 21

- 73 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 31
- 74 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 61
- 75 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Cols 26-27
- 76 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 32
- 77 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 53
- 78 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 53
- 79 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 57
- 80 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 56
- 81 Environment, Climate Change and Land Reform Committee, Official Report, 22 December 2016, Col 26
- 82 Environment, Climate Change and Land Reform Committee, Official Report, 17 January 2017, Col 35
- 83 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 117
- 84 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 56
- 85 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 57
- 86 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 42
- 87 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 38
- 88 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 41
- 89 Environment, Climate Change and Land Reform Committee, Official Report, 13 December 2016, Col 42
- 90 Environment, Climate Change and Land Reform Committee, Official Report, 22 November 2016, Col 32

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- 91 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Cols 47-48
- 92 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 48
- 93 Environment, Climate Change and Land Reform Committee, Official Report, 24 January 2017, Col 40

