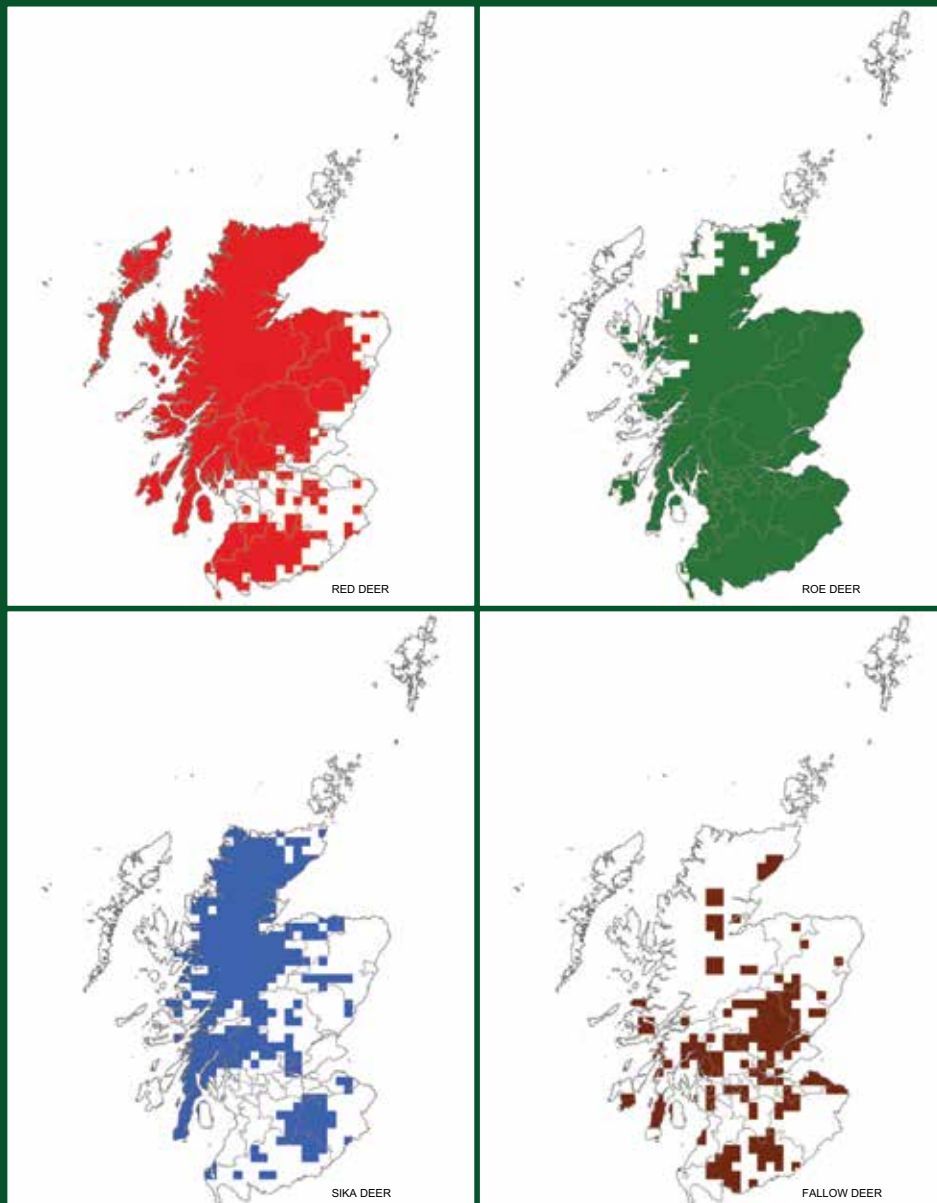


The Management of Wild Deer in Scotland

Report of the Deer Working Group



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Report of the Deer Working Group

Simon Pepper OBE, Andrew Barbour, Dr Jayne Glass

Presented to Scottish Ministers
by the Deer Working Group

December 2019

Front Cover Maps

The maps show the distributions in 2016 of the four species of wild deer that occur in Scotland. The maps are shown at a larger scale in Section 2 of the Report. The Deer Working Group is very grateful to the British Deer Society for providing these maps.

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PREFACE

The Deer Working Group was established by the Scottish Government in 2017, as a result of the Government's concern at the continuing issues over the standards of deer management in Scotland and the levels of damage to public interests caused by wild deer.

The Group was appointed as an independent working group to review the existing statutory and non-statutory arrangements for the management of wild deer in Scotland, taking account of the position with each of the four species of wild deer in Scotland and the varying circumstances across Scotland.

This Report is the result of the Group's review and contains a wide range of recommendations to fulfil the Group's remit to make "recommendations for changes to ensure effective deer management that safeguards public interests and promotes the sustainable management of wild deer".

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Figure 1 A satellite view of Scotland, in which the line of the Highland Boundary Fault across Scotland between the Firth of Clyde and the Aberdeen area can be seen.

INTRODUCTION

The Group

- 1 The Scottish Government concluded that significant issues remain over the management of wild deer in Scotland, following reports on deer management from Scottish Natural Heritage (SNH) in 2016 and the Scottish Parliament's Environment, Climate Change and Land Reform Committee in 2017.^{1,2}
- 2 In June 2017, the Government announced its intention to set up an independent working group to examine current issues over the standards of deer management in Scotland and recommend changes to help resolve these issues in ways that promote sustainable deer management.³
- 3 The establishment of the independent Deer Working Group (DWG) was then announced by the Cabinet Secretary for Environment, Climate Change and Land Reform in October 2017.⁴ The Group's Terms of Reference (Annex 1) included its remit:

“The Group will make recommendations for changes to ensure effective deer management in Scotland that safeguards public interests and promotes the sustainable management of wild deer.”
- 4 The members of the DWG appointed by Scottish Ministers were Simon Pepper OBE (Chairman), Andrew Barbour and Dr Jayne Glass. A fourth member, Robin Callander, was appointed as an independent Special Adviser to provide the Group's secretariat with the part-time support of a member of SNH staff, Becky Shaw, as the Group's Secretary. In addition, two External Advisers were appointed to assist the Group with its work: Richard Cooke and Malcolm Combe. Information about the members and advisers is given in Annex 2.
- 5 The Group's work was led by its Chairman, Simon Pepper. His sudden death some months before the Group had completed its report was both a tragic loss to his family and friends and a major loss for the Group. However, given the progress with the Group's work by the time of his death, the Scottish Government and remaining members agreed that the Group would complete its Report in line as far as possible with the report that Simon Pepper had expected to deliver to the Government.

The Context

- 6 Four species of wild deer occur in Scotland: the two species of native wild deer, red and roe deer, and two non-native species, fallow and sika deer. One or more of these species now occurs more or less throughout mainland Scotland, as well as on some islands. The number of wild deer in Scotland is not known, but the indications are that the total could be approaching 1 million.⁵

¹ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

² ECCLR Committee (2017). Deer Management in Scotland: Report to the Scottish Government from SNH 2016, SP Paper 117, 5th Report (Session 5), 3 April 2017.

³ Scottish Parliament, Written Answer Report, S5W-10023, 29 June 2017.

⁴ Letter from the Cabinet Secretary for Environment, Climate Change and Land Reform to the Convener of the ECCLR Committee, 2 October 2017.

⁵ See Section 2 for distribution maps and population estimates.

- 7 As wild animals, these deer belong to no-one until killed or captured and they are regarded as a national common property resource to be managed for the benefit of the people of Scotland.⁶ Adult deer have no natural predators in Scotland and their numbers need to be controlled to safeguard the welfare of wild deer populations and limit the physical damage that wild deer can cause to public and private interests.
- 8 The right to hunt wild deer generally goes with the ownership of land in Scots law. Well over 100,000 wild deer are currently shot in Scotland each year, producing an estimated annual harvest of over 3,000 tonnes of wild venison.⁷ This cull of wild deer each year might be considered in many respects to be Scotland's largest annual wildlife management operation, excluding marine fisheries.
- 9 The wild deer in Scotland are naturally woodland species and most live in and around woodlands. Most of the annual cull also occurs in that environment. However, a substantial proportion of the wild red deer in Scotland live on open hill ground of moorland and mountains in the Highlands. In this Report, 'the Highlands' are defined as the land north of the Highland Boundary Fault and west of the eastern edge of the Grampian Mountains, and taken to include both the mainland and islands.
- 10 Debates about the management of wild deer in Scotland have been dominated since the 19th century by issues over the damage caused by the high numbers of open hill red deer in the Highlands. Sixty years ago, when the Deer (Scotland) Act 1959 first introduced a statutory framework regulating the management of wild deer, the Act established the Red Deer Commission (RDC) and was only concerned with red deer.
- 11 The RDC's responsibilities were expanded in 1982 to cover all species of wild deer.⁸ The 1959 Act was then amended and consolidated into the Deer (Scotland) Act 1996, which included the modernisation of the RDC into the Deer Commission for Scotland (DCS). The 1996 Act as amended remains the principal Act governing the management of wild deer in Scotland. However, in 2010, SNH replaced the DCS as the public body responsible for implementing Scotland's deer legislation.⁹
- 12 The change to SNH becoming the 'deer authority' in the Deer (Scotland) Act 1996 in 2010, was followed by further significant amendments to the Act in 2011.¹⁰ The Scottish Parliament's Rural Affairs, Climate Change and Environment (RACCE) Committee then held a short inquiry into deer management in 2013 that was critical of the standards of management of the open hill red deer populations in the Highlands.¹¹ The Scottish Government agreed with the Committee's conclusion that the end of 2016 would be a suitable juncture to review progress and, as a result, the Government asked SNH to re-assess the position in 2016 and produce a report on deer management in Scotland.¹²

⁶ Land Reform Review Group (2014). The Land of Scotland and the Common Good. Report to Scottish Ministers. Scottish Government, Edinburgh.

⁷ See Section 11.

⁸ Deer (Amendment) (Scotland) Act 1982.

⁹ Public Services Reform (Scotland) Act 2010.

¹⁰ Wildlife and Natural Environment (Scotland) Act 2011.

¹¹ Letter and 'Themes emerging from evidence' from the Convener of the RACCE Committee to the Minister for Environment and Climate Change, 5 February 2014.

¹² Letter from the Minister for Environment and Climate Change to the Convener of the RACCE Committee, 5 March 2014.

- 13 SNH's report on deer management in 2016 followed the approach of characterising deer management in Scotland as consisting of upland deer management and lowland deer management.¹³ However, this is not a straightforward geographic division. SNH equates upland deer management with the management of open hill red deer in the Highlands and regards lowland deer management as deer management at "*lower altitudes*" in the Highlands and rest of Scotland.¹⁴
- 14 When SNH's 2016 report was published, it was the subject of an inquiry by the Scottish Parliament's Environment, Climate Change and Land Reform (ECCLR) Committee. The Committee's report concluded that further improvement was still required in the management of open hill red deer in the 'uplands', while also concluding that "*There are significant challenges for deer management in lowland Scotland and the Committee is disappointed that there has been so little progress*".¹⁵
- 15 The Scottish Government's response in 2017 to the SNH and ECCLR Committee reports included setting up a Panel to be managed by SNH under the 1996 Act to advise on deer management in the lowlands, and also instructing SNH to reassess the management of open hill red deer in the uplands in 2019. In addition, the Government instructed SNH "*to be proactive in ensuring the public interest is protected and to use the full range of enforcement powers in the Deer (Scotland) Act 1996 where appropriate*", and to submit a further report on deer management in Scotland to the Government in 2019.¹⁶
- 16 As part of the same response, the Scottish Government also announced its intention to establish an independent deer working group. The Group was then given a distinct and broader role in examining the ongoing issues over the management of wild deer in Scotland.
- 17 SNH's 2019 deer report for the Scottish Government, 'Assessing Progress in Deer Management', was submitted to the Government as the Group was very close to finishing this Report. The Group received pre-publication copies of SNH's deer report and two SNH commissioned research reports due to be published with it.^{17,18} The Group has therefore aimed to update this Report with information from those reports where appropriate.
- 18 In addition to the new information about deer management that has become available during the Group's term, the public policy context within which Scotland's system of deer management operates has also continued to evolve. Two topics have been particularly prominent, the UK's plans to leave the European Union or 'Brexit' and the Scottish Government's response to climate change. The Group agreed with the Scottish Government that the continuing uncertainties over Brexit meant that possible implications for deer management in Scotland as a result of Brexit, was not a topic that could be considered in this Report.

¹³ SNH (2016) *Op cit.*

¹⁴ SNH (2016) *Op cit.*, p.10.

¹⁵ ECCLR Committee (2017) *Op cit.*, p.2.

¹⁶ Letter from the Cabinet Secretary for Environment, Climate Change and Land Reform to the Convener of the ECCLR Committee, 29 June 2017.

¹⁷ Albon, S. D., McLeod, J., Potts, J., Irvine, J., Fraser, D. and Newey, S. (2019). Updating the estimates of national trends and regional differences in red deer densities on open-hill ground in Scotland. Scottish Natural Heritage Commissioned Report No 1149.

¹⁸ Langbein, J. (2019). Deer-Vehicle Collision (DVC) Data Collection and Analysis to end 2018. Scottish Natural Heritage Research Report.

- 19 The Scottish Government has had policies related to climate change for over 10 years. However, the Scottish Government's focus on the need to develop and implement climate change mitigation measures has increased notably since the First Minister's declaration of a climate emergency in April 2019 and the subsequent statement to the Scottish Parliament.¹⁹
- 20 The Scottish Government's planned climate change mitigation measures in rural Scotland include creating more woodland and improving the ecological condition of existing woodlands and other habitats. The Group considers that successful implementation of such measures has important implications for the present standards of deer management in Scotland, as discussed in this Report.

The Remit

- 21 The Group's remit has already been quoted above, namely that: "*The Group will make recommendations for changes to ensure effective deer management in Scotland that safeguards public interests and promotes the sustainable management of wild deer*".
- 22 The Group's Terms of Reference also re-enforced that the Group should "*consider the position with all species of wild deer in Scotland and the varying circumstances across Scotland in both the uplands and lowlands*".
- 23 In addition, the Operating Framework that the Government gave the Group to govern its operation as an independent working group, further clarified that the Group had "*been established as a working group so that it can focus at a detailed level on the current statutory and non-statutory arrangements for deer management in Scotland, to make recommendations to fulfil the Group's remit*".
- 24 The Group was therefore set the very broad and challenging task of reviewing how Scotland as a country manages the populations of wild deer that occur here, considering both the statutory and non-statutory arrangements in detail.
- 25 Scotland's system of deer management involves, like those in other European countries, three basic components: property law, regulatory law and the non-statutory arrangements to support the implementation of the legislation and public policy. Scotland's land laws and deer legislation are both devolved to the Scottish Parliament, though Westminster legislation and European regulations are relevant for some specific aspects of deer management.²⁰
- 26 The management of wild deer in Scotland has been a relatively frequent topic in the Scottish Parliament over the last ten years. This has included significant amendments to the Deer (Scotland) Act 1996 in 2010, 2011 and 2016, as well as inquiries by the RACCE and ECCLR Committees in 2013/14 and 2016/17 respectively. The wealth of papers and reports associated with those parliamentary processes provides an extensive record of the ongoing issues over deer management in Scotland.

¹⁹ First Minister's Climate Emergency Statement 28 April 2019; 'The Global Climate Emergency - Scotland's Response' Statement by Climate Change Secretary Roseanna Cunningham to the Scottish Parliament on 14 May 2019.

²⁰ For example, firearms legislation is reserved to Westminster, while the standards for dealing with wild game meat are covered by European regulations.

- 27 The purpose of the statutory framework governing deer management in Scotland and associated non-statutory arrangements is to deliver the public interest. That overall public interest can be considered to be “*the common good of the people of Scotland*”.²¹ The responsibility for determining the public interest at any point in time rests with the Scottish Parliament and Scottish Government as the country’s elected representatives.
- 28 The Group’s remit refers to both ‘effective deer management’ and ‘sustainable deer management’, which are both terms that have been used by the Scottish Government and its agencies for many years to represent the public interest in the context of deer management.²² The remit also reflects the distinction between the two terms.
- 29 The definition of effective deer management is, as the remit indicates, deer management that ensures public interests are safeguarded from unacceptable levels of damage by deer. That is the immediate objective. However, it is to be achieved in ways that promote sustainable deer management as the ultimate goal of deer management in Scotland. Effective deer management is thus a basic requirement for achieving the longer term aim of sustainable deer management, which can be defined as deer management that achieves the optimum combination of benefits for the economy, environment, people and communities for current and future generations.²³

The Report

- 30 The Group’s remit required it to carry out an extensive review of Scotland’s current system of deer management and consider the existing statutory and non-statutory arrangements in detail. This Report therefore covers a wide range of different aspects of deer management, as reflected in its length.
- 31 In considering Scotland’s principal deer legislation, the Deer (Scotland) Act 1996, the Group learnt at an early stage that the structure of that Act and the particular terms of a number of its main provisions, could only be clearly understood by reference to its precursor, the Deer (Scotland) Act 1959.
- 32 The Deer (Scotland) Act 1996 was the product of a two stage parliamentary process at Westminster that involved amending the Deer (Scotland) Act 1959 and then consolidating those and earlier amendments into the 1996 Act. As a result, the 1996 Act still reflects the basic structure of the 1959 Act and incorporates a range of its provisions or amended versions of them.
- 33 This Report therefore includes accounts of the way that particular provisions in the 1996 Act have evolved since the 1959 Act, where the Group considers that is helpful to understanding the terms of the current legislation. For ease of reference, a list of the legislation directly related to deer management in Scotland over the last 60 years is included in Annex 3 and the Table of Contents for the 1996 Deer Act in Annex 4.

²¹ Land Reform Review Group (2014) *Op cit*, p.22.

²² Some examples of the use of ‘effective deer management’ include the Ministerial response to the RACCE Committee in March 2014 and the Cabinet Secretary in her letter to the Convener of the ECCLR committee in June 2017. ‘Scotland’s Wild Deer: A National Approach’ (Scottish Government, 2014) also refers to ‘the need for effective deer management’.

²³ Similar to the definition of ‘sustainable deer management’ in the Code of Practice on Deer Management (SNH, 2011, p.4).

- 34 The submission in 2019 of the Group's Report on its review of the management of wild deer in Scotland, coincides with the 60th anniversary of the original 1959 Act. That Act was intended to resolve what was traditionally known as 'the red deer problem' and initially only covered protecting public interests from damage by red deer.²⁴ Sixty years later, the debate about deer management in Scotland is still dominated by issues over the management of open hill red deer in the Highlands.²⁵ However, during that time, the distributions and numbers of Scotland's four species of wild deer have increased considerably and concerns over damage by wild deer are widespread. This includes damage to agriculture, forestry, the natural environment, parks and other recreation lands, as well as the growing number of road traffic accidents involving wild deer.
- 35 The Group's Report has seven Parts each with a number of Sections. The first Part starts by considering three main factors that tend to influence the basic nature of a country's system for the management of wild deer. The first two of these factors are aspects of property law - the legal status or 'ownership' of wild deer and the distribution or 'ownership' of deer hunting rights. The third factor is the extent and character of the statutory framework which regulates how and when deer hunting rights can be exercised, together with other associated measures.
- 36 The first Part of the Report then reviews the information available on the current national distributions, populations and annual culls of each of Scotland's four species of wild deer, before considering both the statutory functions of the public authority responsible for implementing Scotland's deer legislation and the range of public interests covered by that legislation.
- 37 The following two Parts of the Report review three key aspects of deer management. Part Two considers the standards of public safety and of deer welfare that should apply to deer management in all circumstances. The third Part considers the relationship of wild deer to the environments in which they occur and reviews the information available on the damage that deer can cause to different types of public interests in particular circumstances.
- 38 The fourth Part examines the compulsory powers that SNH has in the deer legislation as the 'deer authority', including both the powers to require information from land owners and occupiers and the powers to regulate deer numbers to protect public interests. The fifth Part of the Report then considers the policies and other non-statutory arrangements that the Scottish Government and SNH have put in place to complement the statutory framework.
- 39 In reviewing the existing statutory and non-statutory arrangements in the first five Parts of the Report, the Group makes a range of recommendations of varying degrees of significance depending on the topics involved. Those recommendations might be seen as modernising or updating the existing arrangements. In Part Six, the Group then discusses both the further refinements to Scotland's deer legislation and the refocused approach in the Scottish Government and SNH's non-statutory arrangements, that the Group considers necessary to deliver effective deer management that will protect public interests from unacceptable levels of damage by wild deer.

²⁴ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland.

²⁵ Stalking red deer stags on the open hill in spectacular mountain landscapes in the Highlands also remains an important cultural image in Scotland. One reflection of this was the purchase for the nation by the National Galleries of Scotland of Sir Edwin Landseer's famous 'Monarch of the Glen' painting in May 2017.

- 40 The final Part of the Report has two sections. In the first, the Group discusses the main conclusions from its review of Scotland's system of deer management. The second section then provides a summary list of the Group's recommendations to fulfil its remit to make recommendations that will *“ensure effective deer management in Scotland that safeguards public interests and promotes the sustainable management of wild deer”*.

Acknowledgements

- 41 This Report is dedicated to the Group's Chairman Simon Pepper OBE, as a tribute to his lead role in shaping the Report before his sudden death. The other members of the Group all held him in the very highest regard.
- 42 The members of the Group are very grateful to everyone else who contributed to its work and in particular, would like to thank the staff at SNH for their very helpful assistance in responding to the Group's formal Information Requests and other questions. We are also especially grateful to the Group's Special Adviser, Robin Callander, for his valuable contribution to the Group's work, and to the Group's Secretary, Becky Shaw, and the Group's External Advisers, Richard Cooke and Malcolm Combe, for all their very helpful assistance.
- 43 As the members of the Group, we take responsibility for the contents of the Report. However, we are very conscious that we have had to cover a very wide range of topics in tackling the Group's remit and writing this Report. We apologise for any factual errors or similar mistakes that we might have unwittingly made in the Report.

PART ONE - WILD DEER IN SCOTLAND

Introduction

- 1 The basic character of a country's system for the management of wild deer tends to be influenced by three main factors in the first instance. Two of these involve aspects of the country's property law. These are the legal status or 'ownership' of the deer and the distribution or 'ownership' of deer hunting rights. The third main factor is the extent and character of the statutory framework which regulates how and when deer hunting rights can be exercised and which may also include a range of other measures.
- 2 Section 1 below considers these three factors in Scotland's system of deer management as part of setting the context for the rest of the Report. Section 2 then reviews the information available on the national distributions, populations and annual culls of each of Scotland's four species of wild deer. The third and final Section in this Part of the Report examines both the statutory functions of the public authority responsible for implementing Scotland's deer legislation and the range of public interests covered by that legislation.

Section 1 Legal Status, Hunting Rights and Regulatory Framework

1.1 Legal Status of Wild Deer

- 3 In Scotland, wild deer are considered to be *ferae naturae* in the traditional Latin phrase for animals which are wild by their nature and classified in Scots property law as *res nullius*. This means that a wild deer is something that is owned by no-one until it is rendered into possession by being killed or captured.
- 4 In the rest of Europe, while wild deer are *res nullius* in some countries, there are also countries where the legal status of wild deer is *res communis*. This means that the deer are owned by the entire community, which in practice is the population of the country involved. There is no country in Europe where wild deer are owned by the owner of the land where they may occur.¹
- 5 The concepts of *res nullius* and *res communis* date from Roman times, when the distinction was based on *res nullius* being 'ownerless property' that could become owned as property and *res communis* being something that could not become property, such as air, rivers and seas.² However, individual animal species can also be classified as *res communis*. Figure 2 lists countries in Europe where the legal status of wild deer is *res communis* and *res nullius* respectively.
- 6 The distinction between the deer being 'owned' by everyone or no-one can, as Putman has commented, be considered "*subtle*".³ It might be expected, for example, that in countries or legal jurisdictions with a history of *res communis*, the state may have developed a more direct role in regulating the management of wild deer as the deer are more explicitly seen as a resource to be managed for the benefit of all. However, in *res*

¹ Putman, R. (2011). A review of the various legal and administrative systems governing management of large herbivores in Europe. In: R. Putman, M. Apollonio and R. Andersen (Eds.), *Ungulate Management in Europe: Problems and Practices*. Cambridge University Press, Cambridge, pp. 54-79.

² In modern times, for example, the use of *res communis* has become associated with global commons such as the oceans.

³ Putman (2011) *Op cit*, p.55.

Figure 2 The legal status of wild deer in some European countries

Wild deer – <i>res communis</i>		Wild deer – <i>res nullius</i>	
Croatia	Poland	Austria	Germany
Finland	Portugal	Belgium	Latvia
Hungary	Romania	Czech Republic	Norway
Italy	Slovenia	England & Wales	Scotland
Lithuania	Switzerland	Estonia	Sweden
Netherlands			

Information collated from: Putman (2011)

nullius jurisdictions where wild deer belong to no-one, the deer are similarly considered to be a national common property resource and the state responsible for ensuring the resource is managed in the public interest.

- 7 In Scotland, where all wild animals have long been considered *res nullius*, it is well established that wild deer are “a shared resource for the people of Scotland” and that the Scottish Government and Scottish Parliament have a responsibility for ensuring that wild deer are managed in ways that are in the public interest.^{4,5}
- 8 Thus, while it might be considered that the Scottish Parliament could legislate to convert wild deer to *res communis* to assert the public interest in their management, the Group considers that the status of wild deer as *res nullius* is not an obstacle to achieving the effective deer management required by the Group’s remit.

1.2 Deer Hunting Rights

- 9 The right to hunt wild deer in some *res communis* countries is not related to the ownership of land, but is allocated by the state to hunting associations or groups. However, in most European countries, whether the deer are *res communis* or *res nullius*, there is some degree of relationship between deer hunting rights and the ownership of land.⁶
- 10 The nature of that relationship varies in different countries under their respective statutory frameworks governing the use of the hunting rights. In some, while the hunting rights go with the ownership of land, the state sets minimum areas over which deer hunting requires to be managed and owners have to cooperate over the hunting in these ‘game management districts’. In others, the state controls the use of the hunting rights by land owners by setting the culls to be achieved by owners.
- 11 In Scotland, it had been established by the 18th century that no-one could hunt wild deer over any land without the permission of the owner of the land. This remains the position and deer hunting rights and sporting rights generally go with the ownership of land.⁷ The owner’s right is based on the ability to exclude others and is an ancillary benefit of land ownership, often referred to as either a pertinent, incident or privilege of

⁴ Gordon, W. and Wortley, S. (2009). *Scottish Land Law Volume 1* (Third Edition). W. Green, UK.

⁵ SNH (2011). Code of Practice on Deer Management, p. 9.

⁶ Putman (2011) *Op cit*.

⁷ ‘Sporting rights’, in s.65A of the Abolition of Feudal Tenure etc. (Scotland) Act 2000, means “a right of fishing or game”.

land ownership. The hunting rights are not a distinct property right that can be acquired and disposed of separately from the land, subject to the exceptions discussed below.

- 12 The limited exceptions in Scotland to sporting rights going with the ownership of land appear to be of two types, both of which derive from Scotland's history of feudal land tenure. Firstly, there are rare cases where it may have been established in the past through the Courts that the hunting rights over an area of land are held by a different party from the ownership of the land. Secondly, there are situations where this separation has been established through a provision in the Abolition of Feudal Tenure etc. (Scotland) Act 2000.
- 13 The 2000 Act was amended by the Title Conditions (Scotland) Act 2003, which introduced a new section 65A. This section allowed feudal superiors in certain restricted circumstances to register an appropriate notice before the date for the abolition of feudal tenure (28 November 2004), to establish that they held the sporting rights over land for which they were the superior.⁸ If the notice was successfully registered, this created the sporting rights as a separate tenement or property right distinct from the ownership of the land.
- 14 There were 65 notices successfully registered under s.65A of the 2000 Act.⁹ However, there appears no readily accessible information on the extent of land they might cover.¹⁰ It is also not clear if that information will become more transparent when the process of land registration is completed in Scotland in 2024. The Group considers that this separation of the ownership of the deer hunting rights from the ownership of the land could lead to conflicting objectives and work against effective deer management.
- 15 In the rest of this Report, sporting rights including deer hunting rights are treated as going with the ownership of land. The distribution of deer hunting rights therefore reflects the pattern of land ownership, including the pattern of relatively large scale private land ownership in parts of Scotland.¹¹
- 16 The land owner who holds the deer hunting rights can be considered to be the person who holds the title to the land as recorded in the Register of Sasines or registered in the Land Register.¹² However, statutory definitions of the owner of land in Scots law are usually more complex and, while current, can appear archaic as illustrated by s.45(1) of the Deer (Scotland) Act 1996.¹³
- 17 While the owners of land have a monopoly over deer hunting rights on their land in Scots property law, the statutory framework regulating the use of deer hunting rights has also given the authority to shoot deer to others without the permission of the land owner. These others are occupiers of land, such as agricultural tenants, and Scottish Natural Heritage (SNH) as the public body responsible for implementing the Deer (Scotland) Act 1996 and associated secondary legislation.

⁸ Reid, K. (2003). *The Abolition of Feudal Tenure in Scotland*. Bloomsbury Professional, UK.

⁹ Reid, K. and Gretton, G. (2005). *Conveyancing 2004*. Avizandum Publishing Ltd., Edinburgh.

¹⁰ Registers of Scotland were unable to readily provide this information to the DWG.

¹¹ Glass, J., Mc Morran, R. and Thomson, S. (2019). The effects associated with concentrated and large-scale land ownership in Scotland: a research review. Scottish Land Commission, Inverness.

¹² Person in the sense of a legal person, whether people or a body with legal identity.

¹³ s.45(1) of the 1996 Act includes the same interpretation of 'owner' as its predecessor, the Deer (Scotland) Act 1959 - "owner" in relation to any land includes any person who under the Land Clauses Acts would be enabled to sell and convey the land to promoters of an undertaking". If one then refers to the Interpretation Act 1978, it clarifies that 'Land Clauses Acts' mean "in relation to Scotland, the Land Clauses Consolidation (Scotland) Act 1845 and the Land Clauses Consolidations Acts Amendment Act 1860 and any Acts for the time being in force amending those Acts".

- 18 In the 1996 Act, many of the provisions refer to land owners and occupiers together.¹⁴ The definition of an occupier in the Act states that “*occupier*” *in relation to any land includes any tenant or sub-tenant, whether in actual occupation of the land or not*.¹⁵ Whether a person is a tenant or not can be established through whether they have a valid lease, for example, for agricultural, forestry or conservation purposes. However, while tenants are clearly included, the definition is unrestrictive because others might count as occupiers in particular circumstances.¹⁶
- 19 Land owners can also lease out their deer hunting rights separately to another person as a sporting lease. Historically, until the 19th century, the nature of a land owner’s sporting rights as an incident or privilege of owning the land, meant that the Courts considered that deer hunting rights could not be formally leased under Scots law. However, a case in 1839 started to change this and through other cases it became clearly established that deer hunting rights and sporting rights more generally could be leased.¹⁷
- 20 A key test as to whether an arrangement amounts to a sporting lease is whether the lease provides the degree of ‘occupation’ of the land and control over it required to constitute a lease of land.¹⁸ It appears that many arrangements which people refer to as ‘sporting leases’ do not actually constitute a formal lease due to the lack of adequate occupation. These sporting lets or agreements are generally contractual arrangements between parties outwith the scope of the law of landlord and tenant.
- 21 The Group considers that the longstanding position in Scotland and many other European countries where deer hunting rights, other ‘sporting rights’ and the right to manage wild animals generally go with the ownership of land, is a sound principle on which to base the management of deer and other wild animals. The question with wild deer is the extent to which the right to kill and capture wild deer needs to be regulated to ensure that public interests are adequately safeguarded from damage by deer.

1.3 Regulatory Framework

1.3.1 Background

- 22 In Scotland at the beginning of the 20th century, there was essentially no statutory regulation of deer hunting rights or the management of wild deer more generally other than having offences for poaching to protect land owners’ property rights. However, as the century progressed, there was an increasing volume of legislation to protect public interests from damage by wild deer.
- 23 The initial concern was protecting agriculture from damage by marauding red deer in the Highlands. The longstanding issues over this in the 19th century continued into the 20th century, and during the First World War, Parliament passed the Killing Deer (Scotland) Order 1917. This temporary measure gave agricultural occupiers the right for the first time to kill deer on their grazings or on their cropland, subject only to the occupier having a

¹⁴ The main exceptions appear to be s.26 on specific rights of occupiers and ss.41(1) and 42 concerning aspects of the relationship between land owners and occupiers.

¹⁵ s.45(1) of the 1996 Act.

¹⁶ Rennie, R., Brymer, S., Mullen, T., Blair, M. and McCarthy, F. (2015). *Leases*. Scottish Universities Law Institute. W. Green, UK.

¹⁷ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland.

¹⁸ In Scotland, while leases over 20 years have to be registered, the duration of leases can be up to 175 years. Long sporting leases for deer hunting can give rise to issues due to changing statutory requirements affecting deer management.

gun licence.¹⁹ Similarly, during the Second World War, the killing of deer by contractors organised by Agricultural Executive Committees was carried out compulsorily over land under war time measures to produce food and protect agriculture.²⁰

- 24 After the war, the Agriculture (Scotland) Act 1948 included measures related to the protection of agriculture and forestry from damage by wild deer of any species. In the Act, under the cross-heading '*Prevention of Damage by Deer*', the main sections dealing with deer (ss.43-47) gave the occupiers of agricultural holdings and enclosed woodland the right to kill deer on their enclosed ground at any time of year, and also empowered the Secretary of State for Scotland to reduce deer numbers "*on the land of any owner who has failed to take reasonable steps to control the number of deer on his land*".²¹
- 25 Those powers and other measures in the 1948 Act were the precursors of the modern statutory framework for deer management in Scotland, first through the Deer (Scotland) Act 1959 and then its successor, the current Deer (Scotland) Act 1996.²² Thus, when the 1959 Act established the Red Deer Commission (RDC): "*the main powers and duties already existed under Sections 39-54 of the Agricultural Holdings (Scotland) Act 1948 and had previously been delegated by the Secretary of State to eleven Agricultural Executive Committees. The RDC was therefore essentially a new vehicle for these duties and powers and for the introduction of close seasons*".²³
- 26 The 1959 Act set the template for Scotland's current deer legislation under the 1996 Act, and the evolution of the statutory framework over the last 60 years is briefly outlined below. Annex 3 lists the two principal Acts (1959, 1996), the main amending Acts and the most directly relevant secondary legislation during that 60 year period.

1.3.2 Deer (Scotland) Act 1959

- 27 The longstanding nature of the issues over the management of wild red deer in Scotland by the time of the 1959 Act, is reflected in the fact that there had been seven government appointed inquiries into red deer between 1872-1954.²⁴ It was also only protracted negotiations after the last inquiry that led to the 1959 Act, because of the conflicting interests of agriculture and forestry and those of Highland sporting estates.
- 28 The 1959 Act established the RDC and its general function in the Act of "*furthering the conservation and control of red deer*" reflected the tensions underlying its creation.²⁵
- 29 The 1959 Act set a number of basic standards including that red deer could only be killed with a firearm, and introduced close seasons for red deer with the power to introduce them for other species of wild deer. The Act also carried forward from the Agriculture (Scotland)

¹⁹ Callander and MacKenzie (1991) *Op cit* and also Ritchie, J. (1920), *The influence of man on animal life in Scotland*, Cambridge University Press, Cambridge.

²⁰ Callander and MacKenzie (1991) *Op cit*.

²¹ Agriculture (Scotland) Act 1948, s.44(1)(b).

²² Other measures in addition to occupiers' rights and Secretary of State's control powers included: the right of the Secretary of State to recover expenses from control operations; the right of the Secretary of State to incur expenditure assisting culls to reduce numbers; statutory cull returns; a prohibition against night shooting; and a close season (10th Feb. to 16th Oct.), during which the Secretary of State could not authorise an occupier to cull deer on unenclosed land.

²³ Callander and MacKenzie (1991) *Op cit*, p.39.

²⁴ The inquiries and their main findings are listed in Callander and Mackenzie (1991) *Op cit*, Appendix A.

²⁵ Deer (Scotland) Act 1959, s.1(1).

Act 1948 the rights of the occupiers of enclosed agricultural land and enclosed woodland to shoot deer at any time of year to prevent damage, while giving the RDC a number of powers. These included the power to require returns from land owners recording the deer they had killed and also the authority to carry out compulsory control measures over an owner's land to prevent damage or further damage to agriculture or forestry. These control powers covered both short term measures for marauding red deer and wider control schemes where the numbers of red deer in a locality needed to be reduced.

- 30 In the period of over 35 years before the 1959 Act was replaced by the 1996 Act, the Deer (Amendment) (Scotland) Act 1982 can be considered the only legislation to make significant changes to the 1959 Act. This Act resulted from a Private Member's Bill introduced through the House of Lords, because of the difficulty of finding government time at Westminster for Scottish deer legislation compared to other priorities.
- 31 An important part of the impetus for the 1982 Act was to clarify the legal position following recognition that red deer and sika deer were interbreeding to produce hybrids. The Act amended the 1959 Act to expand the RDC's role to cover all wild deer species, including red/sika hybrids, while also introducing a definition of farmed deer to distinguish them from wild deer. Many of the other amendments made by the Act to the 1959 Act were to refine or update existing provisions. However, new measures included arrangements for authorising night shooting and for licensing venison dealers, as well as the power through secondary legislation to specify the firearms and ammunition that could be used to shoot wild deer.
- 32 The 1982 Act was then followed shortly afterwards by three pieces of secondary legislation to implement some of its provisions. These were The Deer (Close Seasons) (Scotland) Order 1984, The Licensing Venison Dealers (Prescribed forms, etc) (Scotland) Order 1984 and The Deer (Firearms, etc) (Scotland) Order 1985. The last two of those Orders remain in force.
- 33 By the end of the 1980s, while the RDC had been advocating a reduction in the number of red deer for 30 years to reduce their impact, the population had doubled and significantly expanded its range by colonising the increasing area of forestry plantations.²⁶ In addition to continuing issues over damage by deer to agriculture and forestry, there were concerns that the RDC lacked powers to intervene to prevent damage to natural heritage interests and to protect public safety (for example, to deal with deer on airport runways or roads).
- 34 Following a report from the House of Commons Agriculture Select Committee in 1990, the UK Government agreed to review Scotland's deer legislation.²⁷ The Government's position, however, was that it would only take forward new legislation if the proposals were agreed by all key interests in Scotland. This led to protracted consultations and negotiations between 1991 and 1995. This process included the establishment of the current Deer Management Round Table as a forum involving all the main interest groups. In 1995, as a result of all the detailed discussions, sufficient consensus was reached for the Government to take forward its proposals for changes to the 1959 Act.

²⁶ The RDC estimated at that time that 10% of the estimated 300,000 red deer in Scotland lived in forestry (Scottish Development Department, 1990, *The Scottish Environment – Statistics*, Government Statistical Service, Edinburgh).

²⁷ House of Commons Select Committee on Agriculture (1990). *Land Use and Forestry: HC16 (89-90)*. HMSO, London. Also in Callander and MacKenzie (1991) *Op cit*.

1.3.3 Deer (Scotland) Act 1996

- 35 The Government implemented its proposals through two pieces of legislation: an amending Act followed by a consolidating Act. In 1995, the Government introduced the Deer (Amendment) (Scotland) Bill into Parliament through the House of Lords. This Bill included all the proposed amendments to the 1959 Act and, notwithstanding the previous consensus in Scotland, was subject to a number of amendments of varying significance as a result of the debates in the House of Lords. This Bill subsequently became the Deer (Amendment) (Scotland) Act 1996.
- 36 The Government also incorporated the agreed Amendment Bill changes to the 1959 Act and all the previous amendments to that Act, into a Deer (Scotland) Bill 1996. This process did not involve making any significant changes to the terms of the legislation. It was an exercise in parliamentary drafting to consolidate all the changes into one Act and replace the 1959 Act with a new un-amended Act for clarity and ease of use.²⁸
- 37 Both Bills received Royal Assent in July 1996. The Deer (Amendment) (Scotland) Act 1996 came into force three months after Royal Assent (i.e. in October), while the Deer (Scotland) Act 1996 came into force one month after the Amendment Act came into force (i.e. in November). At that point in November 1996, the Amendment Act was repealed and the Deer (Scotland) Act 1996 became Scotland's new primary deer legislation.
- 38 While the 1996 Act 'replaced' the 1959 Act, the changes were simply amendments to the 1959 Act. This approach introduced significant changes, but it was an evolutionary process. The basic structure and composition of the legislation remained the same. Main changes involved the RDC becoming the Deer Commission for Scotland (DCS) with modernised arrangements for the appointment of the Commissioners, and the addition of deer welfare, the natural heritage and public safety to the interests covered by the DCS's powers. There were also a wide range of other changes of varying significance, from a new arrangement for authorising out of season culling and an expansion of the provisions for voluntary control agreements, down to changes that were simply the result of changes between 1959 and 1996 in the styles for drafting legislation.
- 39 Since that time, the 1996 Act has been amended by the legislation listed in Annex 3. Some of the changes have been minor consequential amendments (for example, resulting from the Crofting Reform etc. Act 2007 and The Crown Estate Transfer Scheme 2017).²⁹ Some of the other changes have been significant, but with limited direct impact on deer management (for example, The Electronic Communications (Scotland) Order 2006). Three of the Acts have, however, been more important.
- 40 The first of those Acts was the Public Services Reform (Scotland) Act 2010, which replaced the DCS with SNH in the 1996 Act. While this was essentially the only change made to the 1996 Act by the 2010 Act, it might be considered to have been a very significant change for deer management in Scotland. The move from having a standalone Commission to the deer legislation being part of the wider wildlife responsibilities held by SNH has inevitably meant some differences in approach, as discussed later in this Report.³⁰

²⁸ Hansard, House of Lords, 21 March 1996, col. 1412-1460, Earl of Lindsay.

²⁹ The Crown Estate Transfer Scheme 2017 was a statutory instrument of the Westminster Parliament.

³⁰ See Part Five.

- 41 The other two important Acts were the Wildlife and Natural Environment (Scotland) Act 2011 ('the WANE(S) Act') and the Land Reform (Scotland) Act 2016 ('the LR(S) Act'). These Acts each had seven sections amending the 1996 Act. The changes to the 1996 Act by these two Acts are briefly summarised in Annex 5.
- 42 The WANE(S) Act further expanded the interests covered in the 1996 Act, including the need to manage deer in urban and peri-urban areas and the inclusive scope for SNH to use its control powers to protect "*public interests of a social, economic and environmental nature*".³¹ The Act also amended the provisions related to close seasons and made some significant changes affecting the implementation of compulsory control schemes. In addition, new sections were added to provide for a voluntary Code of Practice for Deer Management and enable the establishment of a register of people competent to shoot deer.
- 43 While the amendments through the LR(S) Act were less extensive than under the WANE(S) Act, they included creating two new powers - the authority in s.40A for SNH to require a return from an owner or occupier of the number of deer they plan to cull and, in s.6A, the authority for SNH to require owners and occupiers to produce a Deer Management Plan for SNH's approval.
- 44 As outlined above, the Deer (Scotland) Act 1996 has been modified by relatively numerous amendments since it became law. These amendments are all shown on the only publicly available version of the Act as it currently stands, which is on the *legislation.gov.uk* website maintained by the National Archives at Kew. While the annotations on the 1996 Act to record the amendments are very valuable for showing when and how changes were made, the extent of the annotations for the Act can be unhelpful in places in trying to follow and understand the actual terms of the current Act.
- 45 The Group asked the National Archives whether it was possible to 'switch off' the annotations on *legislation.gov.uk*, so that the Group could have a version of the Act that just showed the current terms of the Act. The National Archives, while confirming that this was not an option on the website, agreed that this would be a useful functionality to have and that they would include it in their development plan.³² The Group therefore produced its own 'clean' copy of the Act for its own use. However, at a wider level, it seems surprising as a matter of principle and good practice that those affected by the Act and members of the public more generally are not able to read a version of an Act as it stands online without the technical annotations of all past amendments.
- 46 The Group considers that the Scottish Parliament should encourage the National Archives to introduce for Acts which the Parliament passes, the functionality of being able to read an Act online without the annotations of past amendments.

1.3.4 Current Framework

- 47 The two main elements of the current regulatory framework for deer management are:
- The deer legislation concerned directly with deer as outlined above and consisting of the Deer (Scotland) Act 1996 as amended and the three statutory instruments under its authority: The Licensing Venison Dealers (Prescribed forms etc.) (Scotland) Order

³¹ Deer (Scotland) Act 1996, s.7(1)(a)(ia).

³² DWG correspondence with the National Archives, April 2018.

1984; The Deer (Firearms etc.) (Scotland) Order 1985: and The Deer (Close Seasons) (Scotland) Order 2011. Responsibility for this deer legislation is devolved to the Scottish Parliament.

- The wide range of other statutory measures with which deer management interacts, including legislation on animal health and welfare, firearms and food safety. The responsibility for the legislation involved varies from devolved and partially devolved to reserved and also includes European Union regulations in UK law (for example, on game meat).

- 48 This Report is focused on reviewing the deer legislation, while references will be made to other legislation when appropriate. The Report also reviews the non-statutory arrangements to support the use of the legislation and tailor its implementation to the many different circumstances in which wild deer occur in Scotland.³³
- 49 The extent of Scotland's regulatory framework for deer management is considered relatively limited compared to many other countries. In Putman's review of the legal and administrative systems governing the management of wild deer and other large herbivores in Europe, he classified the countries he considered into five groups according to their level of government regulation. The UK and Ireland are in the least regulated group.³⁴ The only other country in that group is Sweden with its long and different hunting traditions.
- 50 Scotland does have, as Putman recognised, a significantly greater regulatory framework for deer management than in the law of England and Wales. It might also be considered that Scotland's system to ensure wild deer are managed in the public interest shares many elements with the equivalent frameworks in other European countries, even though it does not have some specific measures that are common to many European countries.³⁵
- 51 The starting point in Scotland's system based on wild deer as *res nullius* and hunting rights going with the land, is that an owner of land does not by virtue of being the holder of the deer hunting rights over that land, have any legal duty to manage or control wild deer that may occur on that land.³⁶ The owner's only legal requirement is to conform to the statutory regulations governing the management of wild deer.
- 52 At the time of the WANE(S) Bill, the Scottish Government consulted on a proposal that the owners of land should be given a general statutory duty of 'sustainable deer management'. However, the Government did not take the proposal further as it recognised that such a duty would be too "*unreasonably vague*" to be enforceable as an offence and would therefore not meet the standards required by Article 7 of the European Convention on Human Rights.³⁷ The Government therefore developed a voluntary Code of Practice for Deer Management instead.³⁸

³³ See Part Five.

³⁴ Putman (2011) *Op cit.*

³⁵ Examples of features shared with Scotland include permitted hunting methods, firearms and ammunition, close seasons, cull returns, and venison handling arrangements. Examples of other common features elsewhere include a formal qualification for hunters, the mandatory organisation of landholdings into 'game management districts' and either the setting of cull levels by a public authority or the formal approval of planned culls by a public authority. See Putman (2011) *Op cit.*

³⁶ In theory, a land owner could potentially be subject in extreme circumstance to a private law action by a neighbour for the delict (or civil wrong) of nuisance (i.e. forcing them to put up with an activity that is beyond what they can reasonably be expected to tolerate).

³⁷ Rural Affairs and Environment Committee (2010). Wildlife and Natural Environment (Scotland) Bill, Stage 1 Report, Paper RAE/S3/10/R8, para 559.

³⁸ See Section 25.

- 53 The proposed statutory duty and the Code of Practice, together with a range of statements and other non-statutory initiatives, all reflect the longstanding concern of government and others to encourage land owners to take a socially responsible approach to managing the wild deer that may occur on their land. The other initiatives are also supported by wider policy statements, such as the Scottish Government's 'Land Rights and Responsibilities Statement'.³⁹
- 54 However, as land owners in Scotland only require to conform to the regulatory framework for deer management, it is also the responsibility of Scottish Parliament and Scottish Government to have in place an appropriate regulatory framework and non-statutory arrangements to ensure that there is effective deer management that safeguards public interests and promotes the sustainable management of wild deer.
- 55 The purpose of the regulatory framework in Scotland has always been to protect public interests. While this has involved setting legal standards for how and when wild deer can be killed to protect the public interest in deer welfare, there have always also been statutory powers to intervene over the level of the culls in particular situations to protect public interests from damage by deer.
- 56 The scope of those public interests in the legislation has expanded over the decades from the interests of agriculture and forestry to the inclusiveness of "*public interests of a social, economic or environmental nature*".⁴⁰ However, the approach of the regulatory framework in Scotland continues to be based on only intervening in the culls required on any land where there is evidence of either damage or the risk of damage to public interests.
- 57 The use of the powers of intervention held by the public authority has always been intended to protect the interests of land owners and occupiers from damage where those interests are considered to be in the public interest, as well as to protect any public interests that are considered to be wholly or largely in the wider public interest.⁴¹ The approach is also intended to avoid placing undue restrictions on the scope for land owners and occupiers to be able to protect their interests themselves, for example, with the powers of the public authority to grant authorisations to land owners and occupiers to cull deer out of season or at night to prevent damage in appropriate situations.
- 58 In Scotland, a land owner decides how many deer they shoot on their land and the public authority only intervenes in an owner's cull if there is a need to protect public interests from damage. This approach contrasts with that in some other European countries, where land owners are required to combine in deer management areas and a public authority sets the cull to be taken by an owner each year.⁴²
- 59 The approach in Scotland where a land owner decides how many deer they shoot and the public authority only intervenes to protect public interests from damage is referred to in this Report as the 'voluntary principle'. This label is an often used but seldom defined term in debates about deer management in Scotland. While Scotland has a wide range of statutory provisions relating to deer management, the key attribute of the 'voluntary

³⁹ Scottish Government (2017). Land Rights and Responsibilities Statement.

⁴⁰ Deer (Scotland) Act 1996, s.7(1)(a)(ia).

⁴¹ These private interests include agricultural production, forestry management, enhancing the natural heritage and other interests. The direct public interests might include, for example, intervening to protect a site designated because of the national importance of its natural heritage. See also Part Three.

⁴² Putman (2011) *Op cit.*

principle' is that land owners decide in the first instance how many deer they shoot. This contrasts with 'statutory deer management' where the public authority sets the culls that owners should take each year.

- 60 The approach in Scotland's regulatory framework of only directly intervening in response to damage or the threat of damage might be considered, as with *res nullius* and hunting rights going with the ownership of land, to be a basic characteristic of Scotland's system of deer management.
- 61 The alternative approaches found in Europe, such as those described above where the public authority sets every land owner's cull or owners are compelled to group together in deer management areas and the public authority set the culls at that level, would be a profound and disruptive change of approach in Scotland. As a result, their introduction might be considered unworkable. On the other hand, the Group also considers that there is no inherent flaw in having an approach like that in Scotland where there is only direct intervention to prevent damage to public interests.
- 62 The nature of the approach in Scotland might be considered to owe much to the longstanding political influence of the owners of Scotland's pattern of large scale private estates, both directly and through the House of Lords on Scotland's deer legislation prior to devolution. However, the approach is predicated on the view that, with large mobile species like deer whose presence and impacts can vary over short distances relatively quickly, those on the ground should be well positioned to decide the deer that could and should be culled to protect their welfare or prevent damage.
- 63 With Scotland's regulatory approach, the carrying capacity of an owner's land can be considered to be determined by the public interests involved or linked to that land.⁴³ If the owner's deer management is avoiding damage or the risk of damage to those interests by wild deer, the owner can be viewed as carrying out socially responsible culls and there will be no direct intervention by the public authority.⁴⁴ This reflects that the regulatory framework is not concerned in the first instance with the numbers of deer, but their impacts and whether these might be judged to constitute damage to one or more public interests.
- 64 The approach in Scotland is thus focused on the individual owners of land as the owners of the deer hunting rights, both in the scope they have to decide the management of the deer that may occur on their land, and as the subject of the regulatory powers if they do not do that in ways that adequately protect public interests.
- 65 The challenge in Scotland with its approach is, however, to have a statutory framework and associated non-statutory arrangements that actually deliver deer management that adequately protects public interests. The appointment of the Group and its remit reflect that the Government and others do not consider that to be the case at present.

⁴³ Land Reform Review Group (2014). *The Land of Scotland and the Common Good*. Report to Scottish Ministers. Scottish Government, Edinburgh.

⁴⁴ There may be a need to distinguish between the impacts of wild deer and other herbivores in some situations, most notably sheep.

1.3.5 The Primary Legislation

- 66 Scotland has had a statutory framework governing deer management for 60 years, initially with the 1959 Act and now with the 1996 Act as amended. While the 1959 Act was designed to regulate the damaging impacts of the populations of red deer on the open hills in the Highlands, the substantial increases since then in the numbers and distributions of Scotland's four species of wild deer have created a very different context.
- 67 While the provisions of the deer legislation have been amended over the years to try to adapt them to the changing context, there has also been a high degree of continuity in the structure, components and provisions of the 1959 and 1996 Acts during this evolution. As a result and as reflected in parts of this Report, the Group found it very helpful and fairly essential in trying to understand the terms of some of the current sections in the 1996 Act to trace the previous legislative histories of those sections.
- 68 More generally, the Group does not consider the 1996 Act to be a straightforward piece of legislation to understand. Its origins in the 1959 Act and the extent of amendments since 1996 have created anomalies and inconsistencies in the Act which the Group comments on later in appropriate parts of this Report, and there appears limited logic to the order and distribution of some of the Act's provisions. There is no official guide to the Act available. While the DCS published a guide to the 1996 Act in 1997, that largely focused on explaining the changes being introduced with the new Act. The guide is no longer available and is out of date due to the amendments to the Act since then.
- 69 The Group supports the general legal principle that people should be able to understand the laws that affect them, as reflected in the aim of the Parliamentary Counsel Office's guidelines for drafting Scottish legislation: "*to draft clear, effective, accessible law which can be easily understood by everyone affected by it.*"⁴⁵ Deer management should be a relative straightforward topic on which to achieve those aims compared to many subjects. The Group's view, however, is that the 1996 Act fails those tests and as discussed later in the Report, should be considered as due to be replaced.
- 70 A simple, albeit minor, improvement to the 1996 Act in this context would be to replace the references to three redundant identities that still occur in the Act. These redundant identities are: (a) the Deer Commission for Scotland; (b) the Secretary of State; and (c) the Houses of Parliament. These are explained in the following sub-paragraphs:
- (a) Deer Commission for Scotland: Despite the Public Services Reform (Scotland) Act 2010 replacing the DCS with SNH, the Commission still appears in three section titles in the 1996 Act (s.1 The Deer Commission for Scotland; s.12 Power of Commission to...; s.40 Power of Commission to...). This results from shortcomings in the drafting of the 2010 Act. In amending the 1996 Act, Schedule 1 paragraph 6 of the 2010 Act states "*For "the Commission" and "the Commission's" ...substitute respectively "SNH" and "SNH's".*" However, this did not cover the wording in the three titles quoted above with the DCS in full and "*of Commission*". The titles therefore remained part of the current law.

⁴⁵ Parliamentary Counsel Office (2016). Drafting Matters (Second Edition). Scottish Government, Edinburgh.

(b) Secretary of State for Scotland: In the 1996 Act, the Secretary of State and Scottish Ministers are each mentioned many times in a wide range of sections in the Act, including in the same sections (for example, ss.4 and 40). This has resulted from the Scottish Parliament using Scottish Ministers in its amendments to the Act since devolution, but not replacing any of the other references to the Secretary of State. There is no legislative or parliamentary reason why this could not have been done. It could be done by the simple type of amendment used in 2010 to replace the DCS (for example, *‘For “Secretary of State”...substitute “Scottish Ministers”’*).

(c) Houses of Parliament: The two references to the Houses of Parliament in the 1996 Act quoted below could also be straightforwardly replaced with *“the Scottish Parliament”*:

s.21 *‘Firearms and Ammunition’* in (4) *“...approved by a resolution of each House of Parliament.”*

s.47 *‘Orders, regulations etc.’* in (1) *“...a resolution by either House of Parliament.”*

- 71 Parliamentarians, solicitors, government officials and a range of others may read the Act knowing the correct identities. However, the correct position may not be so apparent to others with an interest in the deer legislation. For example, with s.21 and its title of *‘Firearms and Ammunition’*, someone might consider that the references to the Secretary of State and Houses of Parliament are still accurate as firearms legislation is still reserved to Westminster, when in fact the powers in the section are devolved to the Scottish Parliament with the rest of the 1996 Act.⁴⁶
- 72 **The Working Group recommends that the Scottish Parliament should amend the Deer (Scotland) Act 1996 to replace the references in the Act to the Deer Commission for Scotland, Secretary of State and the Houses of Parliament with Scottish Natural Heritage, Scottish Ministers and the Scottish Parliament respectively.**
- 73 In the rest of this Report, many of the sections of the 1996 Act are discussed and a copy of the Table of Contents from the Act is included in Annex 4 for ease of reference. While the Act originally had 48 sections, three have been repealed and seven have been added to give 52 current sections.⁴⁷
- 74 The most recent section to be repealed was s.28 *‘Power of Arrest’* in January 2018. While the terms of that section had remained very largely unchanged since 1959, the current power of arrest in Scots law is now defined in the Criminal Justice (Scotland) Act 2016. Section 28 is or was one of 10 sections in the Act concerned with criminal justice considerations, most of them under an *‘Enforcement’* cross-heading in the Act.⁴⁸ The Group did not consider the terms of the remaining nine criminal justice sections in detail as part of its review of the legislation.

⁴⁶ The Group notes in this context that a response that it received from a Scottish public authority to a question about firearms, referred to the Deer Act 1991. That Act only covers England and Wales. However, when the Group used the geographic indicator option on the legislation.gov.uk website, a wide range of sections including the one on firearms were shown as applying to Scotland. The Group therefore contacted the National Archives about this and the website has been corrected.

⁴⁷ Repealed sections: 28, 38 and 46. Added sections: 5A, 5B, 6A, 17A, 17B, 29A and 40A.

⁴⁸ Sections: 22, 23, 24, 27, 29, 29A, 30, 31, and 32.

Section 2 National Distributions, Populations and Culls

- 1 In the 60 years since the Deer (Scotland) Act 1959 came into effect, there have been substantial increases in the distributions and numbers of Scotland's four species of wild deer. The number of deer shot in Scotland has also increased considerably over that time. This Section outlines those trends from the information available at a national level to provide an overview and context to the more detailed discussions later in the Report.

2.1 National Distributions

2.1.1 Background History

- 2 Wild red and roe deer are naturally woodland species and they have been in Scotland for around 10,000 years since the land was colonised by forests following the last glaciation. Their distribution had already been greatly reduced by forest clearance and hunting by 1,000 years ago. The development of feudalism in Scotland from that time included the establishment of a system of hunting forests and other enactments to restrict the hunting of red deer.¹
- 3 The continuing loss of tree cover and pressure from hunting meant that wild red and roe deer only survived north of the Highland Boundary Fault by the 18th century.² That century is considered the low point for the numbers of both species in Scotland, with the main concentrations of red deer surviving in parts of the Central Highlands around Atholl, Black Mount, Glenartney, Glen Fiddich, Invercauld and Mar.³
- 4 By that time, the red deer had adapted to living on the open hill all year with little or no access to woodlands and, during the 19th century, their numbers and range increased as a result of the growing interest in deer stalking and the establishment of open hill range 'deer forests' on private estates in the Highlands.⁴ The population of roe deer also grew significantly as its range expanded fairly rapidly on lower ground due to increased tree planting during the 19th century.
- 5 At the beginning of the 20th century, when the area of deer forests peaked, it is estimated that there were 150,000 red deer on the open hill range.⁵ Red deer were also colonising new areas by that time, including the re-establishment of woodland populations of red deer for the first time in many centuries. It appears that the first of these was when red deer colonised the Water Board plantations on the Cowal peninsula in the first decade of the 20th century.⁶
- 6 Scotland's two non-native species of wild deer, fallow and sika, had also become established at a number of locations by the 20th century due to escapes and deliberate releases from the deer parks kept by some land owners. Fallow deer are native to mainland Europe and have a long history in Scotland, having first been introduced to Scotland as park deer in the 13th century.⁷ By the early 20th century, the locations where wild populations had become established included Dumfriesshire, Argyll, along the Tay Valley, at Dornoch in Sutherland and on Mull.⁸

¹ Gilbert, J. (1979). *Hunting and Hunting Reserves in Medieval Scotland*. John Donald, Edinburgh.

² Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland.

³ Clutton-Brock, T. and Albon, S. (1989). *Red Deer in the Highlands: Dynamics of a Marginal Population*. BSP, London.

⁴ See Section 20.

⁵ Callander and MacKenzie (1991) *Op cit*.

⁶ Callander and MacKenzie (1991) *Op cit*.

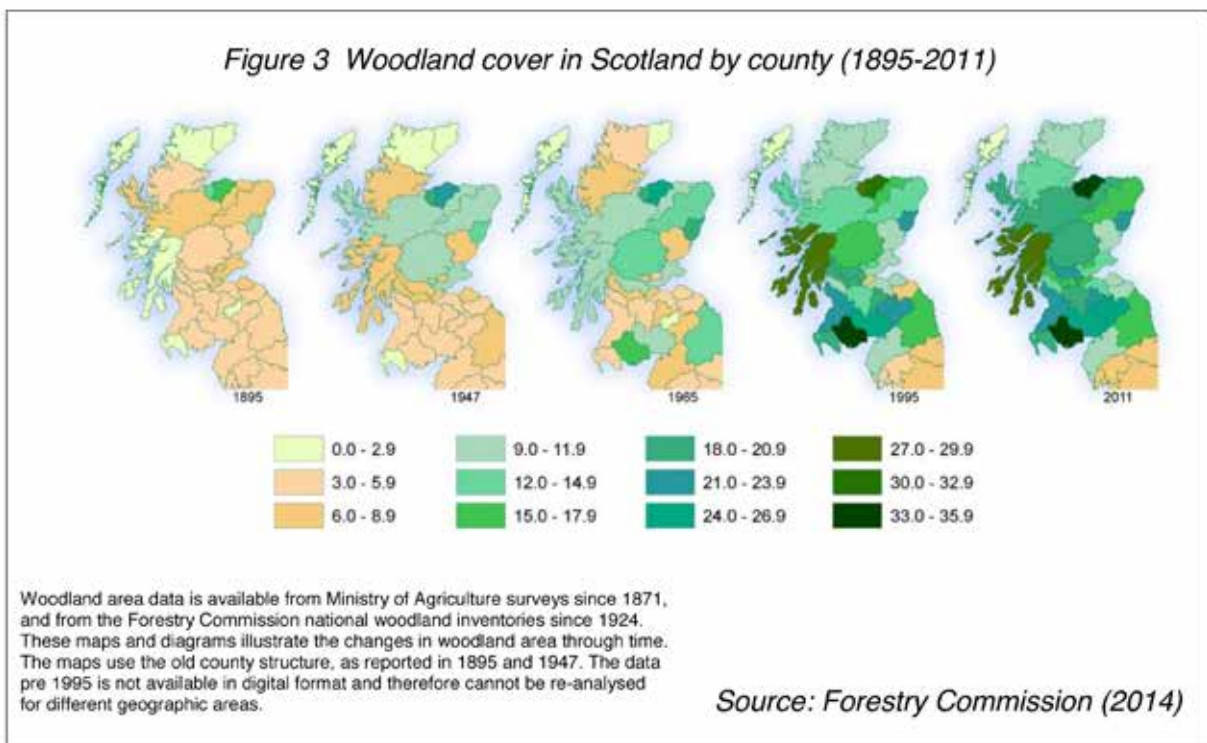
⁷ Ritchie, J. (1920). *The influence of man on animal life in Scotland*. Cambridge University Press, Cambridge.

⁸ Ritchie (1920) *Op cit*.

- 7 Sika deer from Asia were, in comparison, only introduced into Britain in the second half of the 19th century. However, by the early 20th century, there had been escapes and releases at a range of locations in Scotland, including in Peebleshire, Fife, Argyllshire, Inverness-shire, Ross-shire and Sutherland.⁹

2.1.2 The Last 60 Years

- 8 While each of the four wild deer species have continued to expand their range in Scotland since the early 20th century, the extent and rate of the continuing expansion has been particularly marked since the 1950s.
- 9 A dominant factor in this expansion has been the increase in tree cover in Scotland creating more woodland habitat for the deer to colonise. The maps in Figure 3 show the increasing percentage of tree cover in the different parts of the country from 1947 to 2011, during which time Scotland's tree cover increased from 6.6% to 18.0% of the total land area.



- 10 The maps in Figure 4 show the distribution of the four wild deer species in Scotland by 1990, shortly before the Deer (Scotland) Act 1996 replaced the 1959 Act.¹⁰ By that time, the range of red deer had spread out around their previous range in the Highlands, with particular expansions into the Eastern Highlands and southwards in the Central Highlands towards the Central Belt. The isolated population in Dumfries and Galloway had also expanded its range as it increased from Fraser Darling's estimate of around 415 animals in 1954 to approximately 10 times that number by 1990.¹¹
- 11 The maps also show the major spread of roe deer, while the scattered distributions of the fallow and sika populations reflected the patterns of their original escapes or releases.

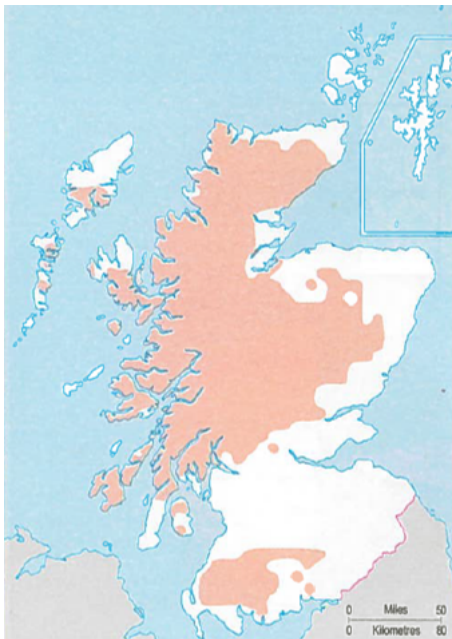
⁹ Ratcliffe, P. (1987). Distribution and current status of Sika Deer, *Cervus Nippon*, in Great Britain. *Mammal Review*, 17 (1), 39-58.

¹⁰ Scottish Development Department (1990). The Scottish Environment – Statistics. Government Statistical Service, Edinburgh. There are also maps of red deer distribution from around that time in Callander and Mackenzie (1991) *Op cit* and SNH (1994), Red Deer and the Natural Heritage.

¹¹ DCS response to Freedom of Information Request about red deer counts in Dumfries and Galloway, 15 April 2010.

Figure 4 Distributions of wild deer in Scotland in 1990

Red deer



Roe deer



Sika deer



Fallow deer



These maps were based on data held by the Biological Records Centre in Huntingdon, the British Deer Society and the Mammal Society.

Source: Scottish Development Department (1990)

- 12 Since the 1970s, distribution maps for deer species have tended to be based on the presence or absence of deer in 10 kilometre squares. Maps at that scale showing the distribution of all four species in Britain in 1972 have been compared to show the expansions in their respective ranges by 2002.¹² The total number of squares occupied by each species in Britain in 1972, 2002 and 2007 have also been compared to show the on-going expansion in the distribution of each species.¹³
- 13 The main distribution maps for deer in Scotland are currently those that result from the five-yearly 10 kilometre square surveys carried out by the British Deer Society (BDS) in 2007, 2011 and 2016. The 2016 Scottish Natural Heritage (SNH) report on Deer Management in Scotland used BDS maps based on the surveys in 2007 and 2011.¹⁴ In Figure 5, the maps have been updated as a result of the BDS's 2016 survey to provide a more recent indication of the distributions of the species of wild deer in Scotland.¹⁵
- 14 The 2016 distribution maps show that red deer have continued to expand their range into the north-east of Scotland and south into the Central Belt, with the population in Southern Scotland also spreading further. Roe deer now occur more or less throughout mainland Scotland, including the colonisation of an increasing number of peri-urban and urban areas. The distribution of sika deer has increased significantly compared to its 1990 distribution and sika now occur in 40% of the red deer range.¹⁶ Similarly, fallow deer have also expanded over that period with a number of previously localised populations coalescing over wider areas.

2.1.3 Current Position

- 15 The distribution maps reflect the major change in context since the 1959 Act was introduced 60 years ago. That Act originally only dealt with red deer and was designed to protect agricultural and forestry interests from damage by marauding open hill red deer in the Highlands. Now, its successor, the 1996 Act, is intended to deal with all four species in a wide range of environments across the whole of Scotland to protect a much wider range of public interests.
- 16 Those many and varied environments where deer need to be managed might be considered to be broadly characterised by three basic types of landscape: the largely treeless hill and mountain areas north of the Highland Boundary Fault occupied by open hill red deer populations; the large proportion of Scotland where the landscape consists predominantly of a mix of woodland and farmland covering the full spectrum of possible balances between them; and the most recent environment to be colonised by deer - peri-urban and urban areas. While it has been roe deer that have moved into those latter areas so far, current expansion patterns and experience in England suggest that fallow and red deer will follow them in places.¹⁷

¹² Ward, A. (2005). Expanding ranges of wild and feral deer in Great Britain. *Mammal Review*, 35 (2), 165-173. Pre- and post-1972 distributions are also shown in maps in the JNCC/Tracking Mammals Partnership report (2005): UK Mammals: Species Status and Population Trends. The expansions in range between 1960 and 1999 are also shown by the sequences of maps for each species on the Game and Wildlife Trust website ('Changes in distribution of deer in Britain since 1960').

¹³ British Deer Society (2016). How many deer are there in Britain and are numbers really increasing? BDS Journal 'Deer', Spring 2016.

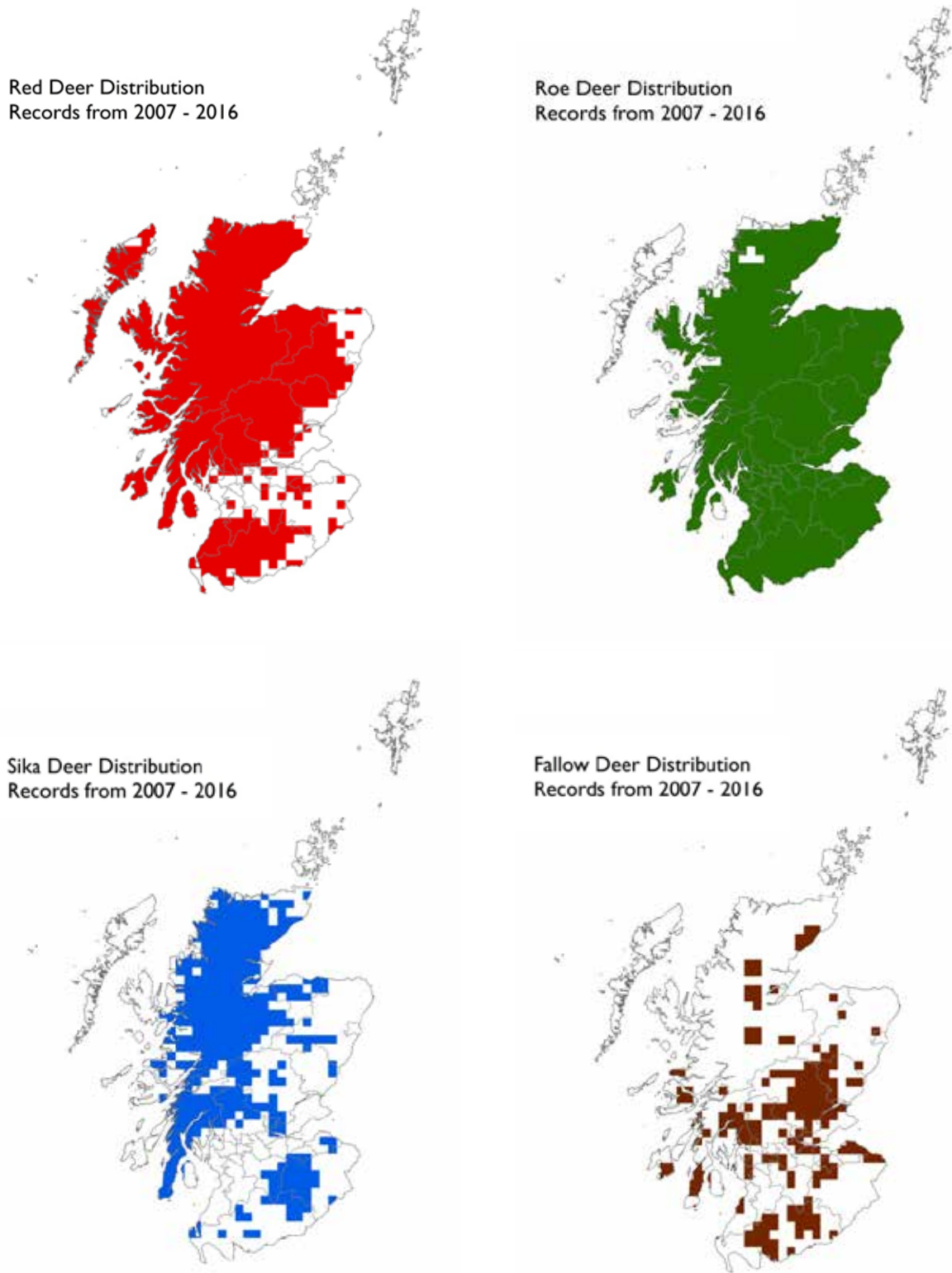
¹⁴ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

¹⁵ The Group is very grateful to the British Deer Society for all its help in producing these maps.

¹⁶ SNH (2016) *Op cit*.

¹⁷ Watson, P., Putman, R. and Green, P. (2009). Methods for control of wild deer appropriate for use in the urban environment in England. Report to Defra.

Figure 5 Distributions of wild deer in Scotland in 2016



Source: British Deer Society

- 17 The Scottish Government's continuing policy of encouraging the creation of new woodlands will provide further habitat for deer, and in an increasing number of localities in Scotland, the question is no longer whether wild deer occur but how many species of them occur.¹⁸
- 18 In considering the current distribution of each wild deer species in Scotland, the Group was surprised that SNH does not produce its own distribution maps. The Group recognises that SNH is one of the many contributors to the results shown in the BDS's five-yearly surveys. However, the Group had anticipated that SNH might have considered those maps too coarse grained at 10 kilometre squares for its purposes. There is also a time gap between the BDS surveys and ambiguity regarding areas where a species has been recorded as present in a previous survey but not the current one. SNH is, for example, responsible for implementing a longstanding public policy of limiting or slowing the expansion of Scotland's non-native deer species, and it might have been considered that distribution maps at a more detailed scale would be helpful as part of that.
- 19 The Group considers that SNH should develop more detailed distribution maps using the returns that it can require land owners and occupiers to submit of the species, numbers and sexes of the deer shot on their land. However, while that power has existed since 1959, SNH's current use of cull returns covers less than half of the land area of Scotland and is very largely concentrated in the areas in the Highlands that have open hill red deer. The cull return system is considered in detail later in this Report.¹⁹

2.2 National Population Estimates

- 20 Estimates of the total number of a species of wild deer in Scotland can be helpful at a national level, as they can indicate the scale of the resource to be managed and also trends in the overall population. However, as is widely recognised, national estimates should only be viewed as indications because of the difficulty of measuring deer populations. While visual counts can be made of red deer on open hill range, indirect methods such as dung counting techniques have to be used in woodlands to try to assess deer numbers.²⁰

2.2.1 1959 - 1996

- 21 When the Red Deer Commission (RDC) was established by the Deer (Scotland) Act 1959, Scotland's population of red deer was estimated to be around 155,000.²¹ The RDC then continued to produce national estimates from time to time based on the counts of open hill red deer range. After 30 years, the RDC estimated for a report published in 1990 that the national population of red deer had doubled to 300,000, with an estimated 30,000 or 10% of those living in woodlands.²²
- 22 Shortly before the RDC had become responsible for all species of wild deer in 1982, it commissioned an estimate of Scotland's roe population.²³ However, the report in 1990 appears to be the first occasion that it published estimates for all four species. The RDC estimated with the 300,000 for red deer, that there were 200,000 roe, 10,000 sika and 1,000-2,000 fallow deer.

¹⁸ At a rate rising to 15,000 ha per year from 2024/25 (Scotland's Forestry Strategy, 2019-2029).

¹⁹ See Section 21.

²⁰ Swanson, G., Campbell, D. and Armstrong, H. (2008). Estimating deer abundance in woodlands: the combination plot technique. Forestry Commission Bulletin 128.

²¹ Callander and MacKenzie (1991) *Op cit.*

²² Scottish Development Department (1990) *Op cit.*

²³ The 1980 estimate was 150,000-175,000, cited in: Harris, S., Morris, P., Wray, S. and Yalden, D. (1995), A review of British mammals: population estimates and conservation status of British mammals other than cetaceans, JNCC report.

- 23 In a wider review published in 1995 shortly before the 1959 Act was replaced by the 1996 Act, Harris *et al* gave a higher estimate of 347,000 for the number of red deer in Scotland.²⁴ This estimate took account of the estimates by Clutton-Brock and Albon (1989) for red deer in Scotland (297,000+/-40,000) and by Staines and Ratcliffe (1987) for the numbers of red deer in woodlands (27,000-50,000).²⁵ As a result of their review of available sources, Harris *et al* also gave a substantially higher estimate of Scotland's roe population (350,000), while giving similar estimates to those of the RDC for sika and fallow.

2.2.2 1996-Present

- 24 Early in its work for this Report, the Group asked SNH for the figures that it currently uses for the estimated national populations of Scotland's species of wild deer. SNH referred the Group to the estimates in its evidence to the Scottish Parliament's RACCE Committee in 2013. These estimates are given in Figure 6. In SNH's evidence, the estimates were not referenced but described as "*the most recent population counts*".²⁶

Figure 6 National population estimates for wild deer in Scotland (1990-2013)

Species	1990 Scottish Development Department	1995 Harris et al.	2004 Ward and Young	2005 Battersby	2007 Ward	2010 Putman	2013 SNH evidence to RACCE Committee
Red	300,000	347,000	301,500	347,000	381,600 (360,400- 404,300)	347,000 (360,000- 400,000)	360,000- 400,000
Roe	200,000	350,000	>200,000	350,000	>200,000 (185,500- 214,000)	200,000- 350,000	200,000- 350,000
Sika	10,000	9,000	25,000	9,000	25,000	Perhaps 25,000	25,000
Fallow	1,000-2,000	<4,000	17,000	<8,000	20,700 (15,600- 26,600)	Uncertain: <2,000?	8,000
Total	511,000- 512,000	710,000	543,500	714,000	586,500- 669,900	574,000- 777,000	593,000- 783,000

The sources cited in this table can be found in the footnotes for this Section of the Report.

- 25 The estimates given by SNH to the Committee have been widely quoted elsewhere, where they are also usually described as the "*most recent population counts*". An example is the Scottish Government's 'Wild Deer: A National Approach'.²⁷ In that document and elsewhere, the estimates are referenced to evidence to the Committee, which then gives no further information on the basis of the estimates. The Group therefore investigated the topic further.

²⁴ Harris *et al.* (1995) *Op cit.*

²⁵ Harris *et al.* (1995) *Op cit.*

²⁶ Written submission from SNH to RACCE Committee, 20 November 2013 (34th Meeting, Session 4, RACCE/S4/13/34/A).

²⁷ SNH (2014). Scotland's Wild Deer: A National Approach. Including 2015-2020 Priorities.

- 26 The month before SNH's evidence to the RACCE Committee in 2013, in a written answer in the Parliament, the then Minister had also given national population estimates supplied by SNH.²⁸ The national totals were the same except that the fallow population was estimated at 2,000 compared to 8,000. As a result of that answer, a number of bodies including the Scottish Parliament Information Centre (SPICe) subsequently published national totals with the 2,000 estimate for fallow deer.²⁹
- 27 The Minister's written answer did, however, give the sources of SNH's figures as Ward (2007) and Putman (2010).³⁰ SNH confirmed to the Group that these were also the sources of its estimates to the RACCE Committee. The national population estimates given in those two sources are shown in Figure 6.
- 28 The national population estimates that SNH continues to use from those two sources can not realistically be described as based on the "*most recent population counts*". The basis of the estimates in Putman (2010) and Ward (2007) are described below:
- In Putman (2010), the estimate of 347,000 red deer was from Harris *et al* (1995), and the 360,000-400,000 range was from Ward (2007). Putman's 2010 estimate of 200,000 roe was from Ward, and the 350,000 estimate from Harris *et al*. Putman's estimate of 25,000 sika in Scotland appears to be a point selected between the Great Britain (GB) estimate of 11,500 made by Harris *et al* and the 26,600 estimate for Scotland and England made by Ward. The figure that Putman gives for the Scottish fallow population appears to have been his best estimate from the estimated GB populations given by Harris *et al* and Ward.
 - Ward based his national estimates on the same methodology as used by Ward and Young (2004) and updated the figures in that paper (see Figure 6). National estimates were derived by calculating the average woodland density estimate for each species in nine regions of the UK in 2004 (including the regions of Northern Scotland and Southern Scotland). Information used for Scotland included the DCS red deer counts on open range in Northern Scotland and cull returns for all four species in Scotland, and data from the Forestry Commission. Local estimates were then applied in a Geographic Information System to areas of woodland within each 10 kilometre square in which each species was recorded from the BDS distribution surveys in each region. Figure 6 also includes, for comparison, the national estimates given in a JNCC/UK Mammal Tracking Partnership from the same period, which was based on considering a range of sources in 2002.³¹
- 29 The commentary above reflects, firstly, that the national populations estimates given by SNH in 2013 and since, are not based on "*population counts*" beyond incorporating the open hill red deer counts in the estimates for that species. Secondly, it reflects with the sequence of figures in Figure 6 that "*most recent*" might be considered misleading, given the dates of the two sources quoted by SNH and the earlier dates of some of the estimates used in those sources.

²⁸ Scottish Parliament, Written Answer Report, S4W-17132, 2 October 2013.

²⁹ Edwards, T. and Kenyon, W. (2013). Wild Deer in Scotland. SPICe Briefing 13/74. Also see: Forestry Commission Scotland (2014), Deer Management on the National Forest Estate: Current Practice and Future Directions 1 April 2014 to 31 March 2017.

³⁰ Putman, R. (2010). Ungulates and their management in Great Britain and Ireland. In: Apollonio, M., Andersen, R. and Putman, R. (eds.) *European Ungulates and their Management in the 21st Century*. Cambridge University Press, Cambridge. Ward, A.I. (2007). Trends in deer distribution and abundance within the UK. Presentation to 'Deer, Habitats and Impacts', the Deer Initiative Conference, Buxton, 23rd March 2007.

³¹ Battersby, J. (ed.) (2005). UK Mammals: Status and Population Trends. JNCC/Mammal Tracking Partnership.

2.2.3 Current Position

- 30 SNH, in its 2016 report to the Scottish Government on Deer Management in Scotland, referred to the national estimate of 360,000-400,000 red deer given in its evidence to the RACCE Committee in 2013. However, in contrast to the sources quoted in the subsection above for this estimate, SNH describe the figure in its 2016 report as based on an estimate by Clutton-Brock *et al* of the red deer on open hill range in 2004.³²
- 31 A review commissioned by SNH for its 2016 report of the count data available on the open hill red deer population did not provide an overall estimate for the population.³³ However, the report concluded that, after decades of increases, the size of the open hill red deer population had levelled out during the last 10-20 years.³⁴ At the same time, SNH also commissioned a study that gave a “*rough estimate*” of the number of red deer in woodlands in Scotland as 85,000-105,000.³⁵ This compares, for example, with the RDC estimate of 30,000 in 1990 mentioned in 2.2.1 above.
- 32 In the 2016 report, SNH also referred to its 2013 estimate for roe deer of 200,000-350,000.³⁶ The total is described as the “*most recent*” estimate that “*was documented in the report to RACCE in 2013*”. In the next sentence in the 2016 report, SNH stated without further comment that “*Previous estimates have included one from Shedden who reported a population of 305,000-400,000 in 1993*”. However, Harris *et al* (1995) had based their estimate of 350,000 roe on Shedden (1993), noting that he “*calculated a roe deer population in Scotland of 305,000-400,000 based on the number of stalkers, the estimated cull size, and the assumption that this represented 10% of the total roe deer population in Scotland. Despite the number of assumptions, this probably provides the most realistic population estimation for Scotland*”.³⁷
- 33 SNH did not mention national population estimates for sika and fallow deer in their 2016 report. However, it might be questioned whether the estimates given by SNH for these species remain realistic taking account of their continued range expansion, particularly sika, and factors such as the numbers of each species now shot each year in Scotland.
- 34 In the 2016 report, SNH’s estimates for the numbers of deer living in Scotland’s woodlands do include a combined total for roe, sika and fallow deer of 125,000-145,000.³⁸ It is not clear how this estimate relates to the higher estimates for roe quoted above. There are also indications that there has been a significant increase in the abundance of roe deer in recent decades. Anecdotal evidence indicates that roe deer in particular appear to have been benefiting from the climate change trends towards milder winters.³⁹

³² SNH (2016) *Op cit*. Clutton-Brock, T., Coulson, T. and Milner, J. (2004), Red deer stocks in the Highlands of Scotland, *Nature*, 429, pp. 261-262.

³³ Albon, S.D., McLeod, J., Potts, J., Brewer, M., Irvine, J., Towers, M., Elston, D., Fraser, D. and Irvine, J. (2017). Estimating national trends and regional differences in red deer density on open-hill ground in Scotland: identifying the causes of change and consequences for upland habitats. Scottish Natural Heritage Commissioned Report No. 981.

³⁴ Albon *et al*. (2017) *Op cit*.

³⁵ SNH (2016) *Op cit*, p.19, referring to Campbell, D., Marchbank, M., Watson, M. and Quin, S. (2017), Trends in woodland deer abundance across Scotland: 2001-2016, Scottish Natural Heritage Commissioned Report No. 948.

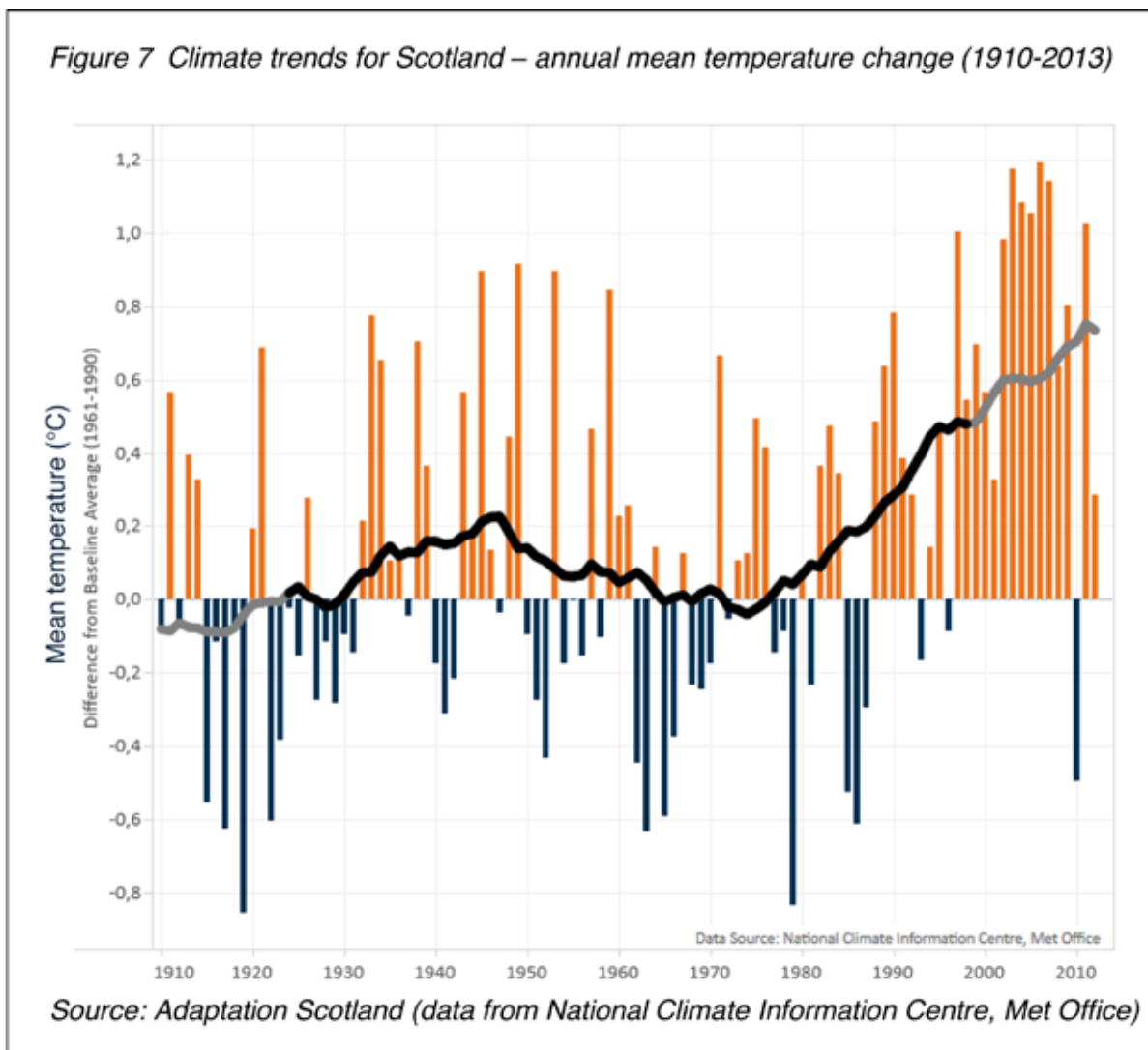
³⁶ SNH (2016) *Op cit*, p.18.

³⁷ Harris *et al*. (1995) *Op cit*, p.100.

³⁸ SNH (2016) *Op cit*, p.19.

³⁹ Recent research on Rum shows how red deer are responding to the changing climate: Bonnet, T., Morrissey, M.B., Clutton-Brock, T.H., Pemberton, J. and Kruuk, L.E.B. (2019), The role of selection and evolution in changing parturition date in a red deer population, draft paper shared with DWG.

- 35 Those climatic trends are illustrated in Figure 7, while Albon *et al* writing about red deer on open hill range commented in 2017 that “*climate warming has seen earlier springs, longer growing seasons, and hence higher plant productivity, as well as more benign winters, all of which should enhance birth rates and survival*”.⁴⁰



- 36 These climatic factors and the increases in the area of woodland both suggest that Scotland will continue to improve as a habitat for wild deer. While national population estimates will continue to be useful, the difficulties of estimating the number of deer in woodland will mean national estimates are only very approximate estimates.
- 37 SNH did identify in its 2016 report that “*Up to date national population estimates for red and roe deer are required*”.⁴¹ The Group’s view is that the statement should also have included sika and fallow deer. The Group considers that SNH should be much more accurate meantime in reporting the dates and sources of the national population estimates that it currently uses. While the estimates shown in Figure 6 indicate that the overall population of wild deer in Scotland could be up to around 750,000, there are also indications discussed in Section 2.3 below that there could now be approaching a million wild deer in Scotland.

⁴⁰ Albon *et al.* (2017) *Op cit*, p.2

⁴¹ SNH (2016) *Op cit*, p.16.

38 As mentioned previously, while national population estimates are of value, the main issue is the impacts of deer rather than their overall numbers. The Group also considers that, as with information on deer distributions, greater use by SNH of the cull return system to cover more of the country would help give clearer indications of the numbers of deer in different areas and identify trends both locally and nationally.⁴²

2.3 National Cull Statistics

2.3.1 1959-1996

39 In the Deer (Scotland) Act 1959, s.5 empowered the RDC to serve notice on an owner requiring them to submit a 'return' recording the species, numbers and sexes of the deer that had been killed or taken on their land during a specified period not exceeding five years.

40 When the RDC was established, it started requiring annual cull returns from a growing number of land owners. However, it did not publish the total annual red deer culls recorded by the returns in its Annual Reports until 1973.⁴³ The total red deer cull was reported as 24,273 that year and the total recorded from returns continued on an upward trend until the RDC was replaced by the Deer Commission for Scotland (DCS) in the Deer (Scotland) Act 1996. In 1995/96, the total was 53,789.

41 While the RDC had responsibility for all four wild deer species from the Deer (Amendment) (Scotland) Act 1982 and did start to publish annual cull totals for sika deer in addition to red deer, it appears never to have published tables giving the annual cull totals for all four deer species in its Annual Reports.⁴⁴

2.3.2 1996-Present

42 When the DCS took over from the RDC in 1996, it also continued to publish only the annual cull return totals for red and sika deer. However, this changed in 2000, when the DCS included totals for all four species for that year, as well as previous annual totals back to 1996/97 as the first year of the 1996 Act.

43 The annual totals recorded for each species from cull returns have continued to be published since 2000. The species totals and overall cull totals are shown in Figure 8. The annual total cull has been over 100,000 deer in a majority of the 21 years shown and has averaged over 100,000 during the period. These cull totals represent a substantial wildlife management operation every year.

44 Red deer have made up over 50% of the recorded cull each year. However, increases in the culls of the other species while the red cull has tended to remain relatively level, have meant the other species have accounted for a growing proportion of the annual cull. A factor in this has been the increase in the number of cull returns obtained from land owners by the DCS and then SNH over the period.⁴⁵

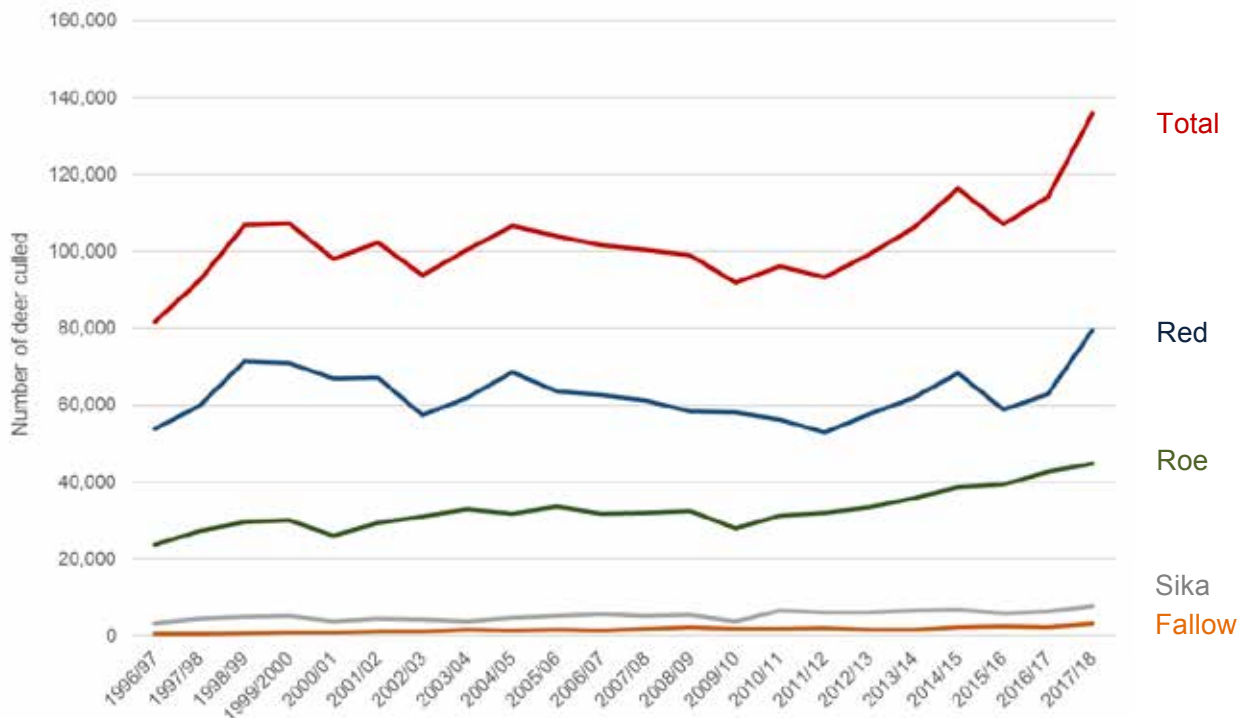
⁴² Population numbers can only be estimated by making an assumption on the proportion of the population being culled, and this is an unknown in most cases. This is an approach used occasionally, for example by Harris et al (1995) *Op cit*, p.100.

⁴³ The RDC reported cull return totals to 15 February each year until the early 1990s, with that date being the last day of the shooting seasons for female sika, red/sika hybrids and fallow.

⁴⁴ It did publish annual tables for the number of sika culled from 1991, with the tables going back to 1986/87.

⁴⁵ See Section 21.

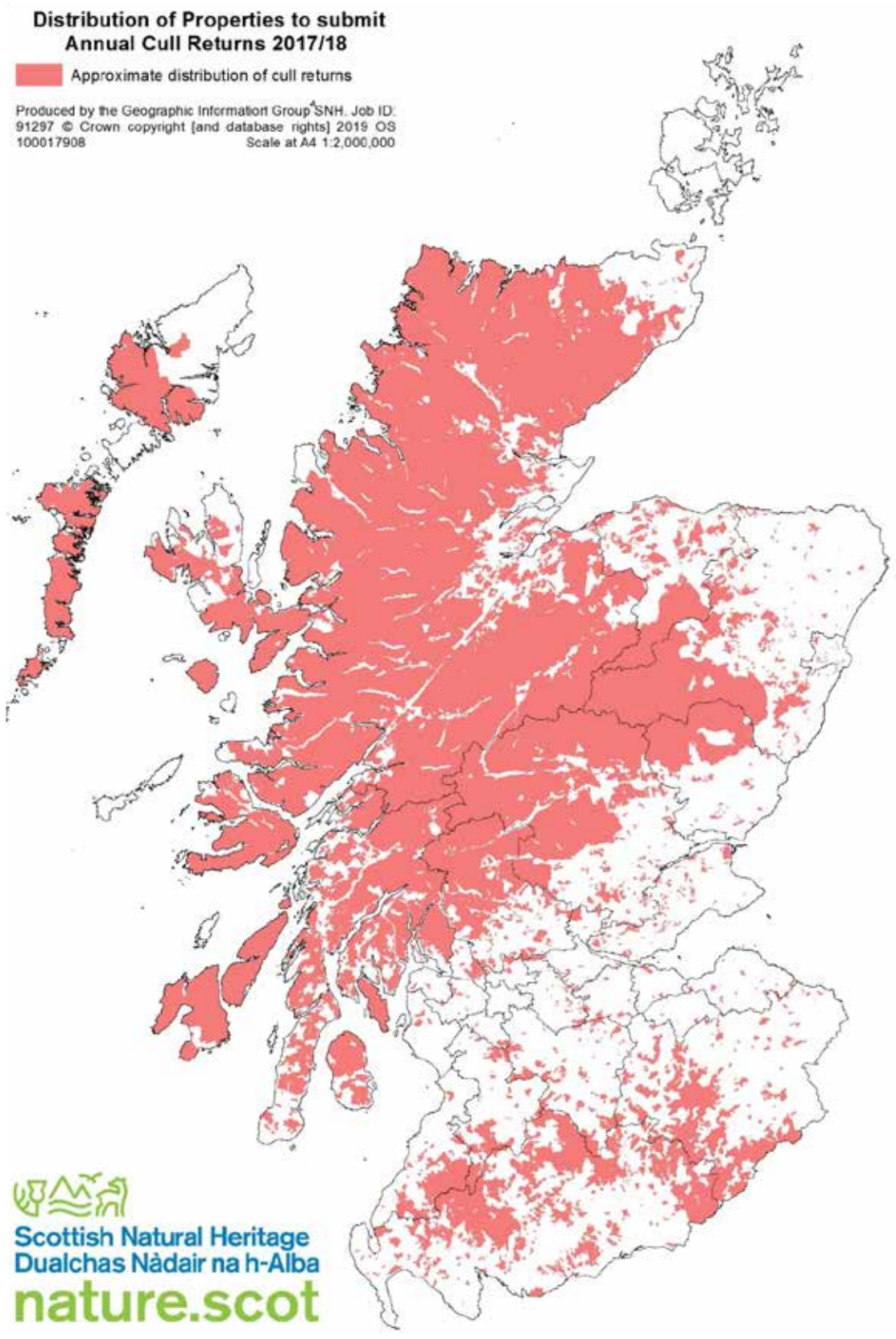
Figure 8 National cull statistics (1996/97 to 2017/18)



Season	Red	Roe	Sika	Fallow	Total
1996/97	53,950	23,794	3,429	548	81,721
1997/98	59,894	27,307	4,515	569	92,285
1998/99	71,536	29,668	5,010	691	106,905
1999/2000	70,962	30,222	5,308	878	107,370
2000/01	66,931	26,214	3,863	1,025	98,033
2001/02	67,282	29,392	4,515	1,195	102,384
2002/03	57,363	31,117	4,192	1,172	93,844
2003/04	61,957	32,913	3,900	1,645	100,415
2004/05	68,685	31,781	4,735	1,352	106,553
2005/06	63,611	33,597	5,110	1,634	103,952
2006/07	62,625	31,787	5,765	1,398	101,575
2007/08	61,354	32,058	5,167	1,818	100,397
2008/09	58,496	32,626	5,465	2,306	98,893
2009/10	58,185	28,076	3,733	1,828	91,822
2010/11	56,328	31,322	6,528	1,923	96,101
2011/12	53,010	31,953	6,235	2,008	93,206
2012/13	57,764	33,573	6,099	1,696	99,132
2013/14	61,860	35,846	6,679	1,662	106,047
2014/15	68,443	38,692	6,781	2,465	116,381
2015/16	58,919	39,426	6,017	2,677	107,039
2016/17	62,910	42,619	6,312	2,284	114,125
2017/18	79,568	44,917	7,911	3,319	135,715

Source: SNH Information Response 7

Figure 9 National cull return coverage (2017/18)



Source: SNH Information Response 15

- 45 The extent of coverage by cull returns is still less than half Scotland's land area and mainly concentrated north of the Highland Boundary Fault, as illustrated by Figure 9. However, even on the basis of the cull totals from cull returns in Figure 8, it might be noted that the average annual culls over the last five years shown for sika (6,740) and fallow (2,481) are equivalent to culling 27% and 31% respectively of the estimated populations of these species in Scotland quoted in 2.2.2 above. The Group considers that these relatively high cull rates based only on the records obtained from cull returns, indicate that the national populations are larger than suggested in SNH's estimates of 25,000 and 8,000 respectively.
- 46 The fact that the 'national cull statistics' published by SNH do not represent the actual total cull of each species in Scotland each year, is a significant distinction that appears often not to be recognised. The Group asked SNH for their estimate of the percentage of the actual total annual cull that might not be recorded each year by cull returns, recognising fully that SNH's answers would be speculative figures. SNH's view based on its experience and subject to appropriate caveats, was that the cull returns might cover approximately 90% of the red cull, 75% of the sika cull, 75% of the fallow cull and only 40% of the roe cull.⁴⁶
- 47 The Group considers that SNH's speculative estimates appear reasonable, based on its experience and other consultations. The Group therefore applied the estimates to the national cull statistics for 2016/17 to indicate how many additional deer might be involved. The results in Figure 10 suggest over 70,000 additional deer, which would indicate an actual total cull of over 180,000.
- 48 On top of the overall total in Figure 10, there will be several thousand deer killed in deer vehicle collisions each year and a further several thousand deer that die due to 'winter mortality' each year.⁴⁷ This could suggest that the number of wild deer that die each year in Scotland is approaching 200,000. This level of annual mortality could be considered to suggest that the overall population of wild deer in Scotland is higher than the previous estimates that SNH cites and could potentially be approaching a million.
- 49 The biggest variable in the figures above is the size of the estimate made by SNH for the extent of the roe cull not recorded by cull returns. However, even if the estimates for the percentages of the recorded/unrecorded roe culls are reversed to 60:40, the unrecorded cull remains a significant addition to the national cull statistics total. The notion that Scotland could sustain an annual roe cull twice the currently recorded level, seems a reasonable proposition to the Group. More generally, it might be expected that Scotland would have a higher cull of roe than red deer, given that roe are a significantly smaller species that can live in a wide range of environments and achieve high densities in favourable habitats.

⁴⁶ SNH Information Response 39.

⁴⁷ See Sections 15 and 18.

Figure 10 National cull totals from cull returns as a percentage of the estimated total cull in 2016/17

Species	Cull total from cull returns	Estimated % of total cull	% unrecorded	Estimate of unrecorded cull	Estimated total cull
Red	60,624	90%	10%	6,736	67,360
Roe	41,812	40%	60%	62,718	104,530
Sika	6,373	75%	25%	2,214	8,587
Fallow	2,282	75%	25%	761	3,043
Total	111,091			72,339	183,520

- 50 While the Group makes further references in the rest of this Report to the distinction between the cull return totals in the national cull statistics and the potential actual total culls, all the cull statistics quoted in the Report are based on the data collected through the cull return system.
- 51 The largest single contributor to the annual cull totals is Forestry and Land Scotland (FLS), which manages Scotland's National Forest Estate (NFE) on behalf of Scottish Ministers.⁴⁸ The NFE covers approximately 650,000 hectares or 9% of Scotland's land area.⁴⁹ FLS publishes its annual cull totals and Figure 32 in Section 14 of this Report shows these totals for each deer species for 2009-2018, including the cull totals from its predecessor, Forest Enterprise Scotland, as a percentage of the national cull statistics. FLS generally accounts for relatively high proportions of the recorded roe and sika deer national culls, around 40% and 45-50% respectively each year, compared to red deer (c.15-20%) and fallow deer (c.20-25%).
- 52 FLS is a public body and culls around 30% of Scotland's recorded cull total each year, while other public bodies generally contribute another few percent, for example, from SNH's land and the Scottish Government's crofting estates.⁵⁰ This indicates that the public sector is currently carrying out around a third of the recorded annual cull of wild deer in Scotland each year.
- 53 SNH does not publish any geographic breakdown of the annual national cull statistics. However, the distribution of the culls in Scotland can be illustrated by sub-dividing national statistics by Local Authority area. This is shown in Figure 11 with the overall level of cull per 100 hectares in each area.⁵¹ While the Highland Council area dominates the statistics because it accounts for 33% of the total land area and 39% of the total cull, Figure 11 shows that some other areas such as Perth and Kinross have higher cull levels relative to their size.

⁴⁸ On 1 April 2019, Forest Enterprise Scotland became Forestry and Land Scotland.

⁴⁹ The NFE covers 32% of Scotland's woodland area (Forest Research, Provisional Woodland Statistics: 2019 Edition).

⁵⁰ SNH Information Responses 7 and 9; Scottish Government Information Response 21.

⁵¹ SNH Information Response 42.

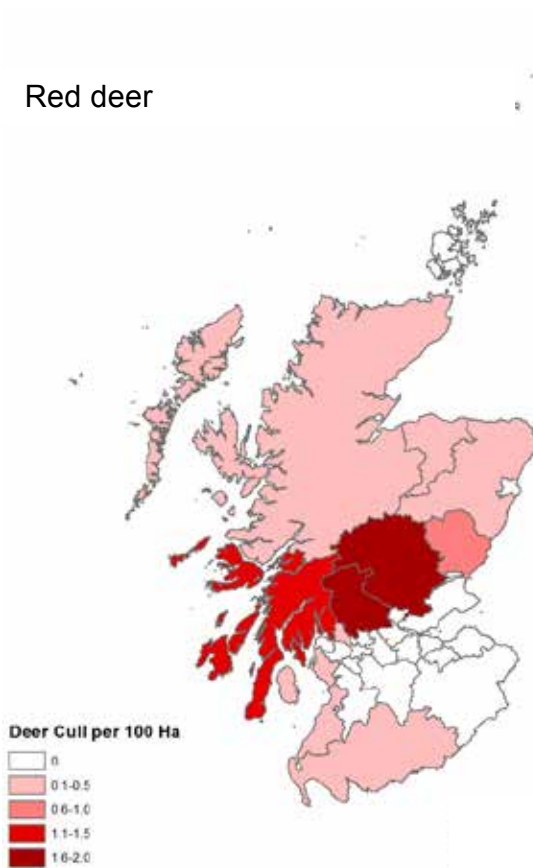
Figure 11 Cull statistics by local authority area (2016/17)

Local Authority	Area (ha)	Red	Roe	Sika	Fallow	Total	Total cull/ 100ha
Aberdeen City	18,571	0	130	0	0	130	0.7
Aberdeenshire	631,264	2,754	4,742	0	2	7,498	1.2
Angus	218,180	1,544	1,017	0	10	2,571	1.2
Argyll & Bute	690,833	9,115	2,784	1,329	68	13,296	1.9
Clackmannanshire	15,864	5	17	0	0	22	0.1
Dundee City	5,983	0	0	0	0	0	0.0
Dumfries & Galloway	642,596	1,357	8,359	40	792	10,548	1.6
East Ayrshire	126,212	29	718	0	0	747	0.6
East Dunbartonshire	17,449	11	287	0	0	298	1.7
East Lothian	67,918	0	258	32	0	290	0.4
East Renfrewshire	17,379	0		0	0	0	0.0
Edinburgh City	26,329	0	15	0	0	15	0.1
Falkirk	29,736	3	237	0	0	240	0.8
Fife	132,503	8	950	10	0	968	0.7
Glasgow City	17,468	0	58	0	0	58	0.3
Highland	2,568,393	32,449	7,064	3,884	11	43,408	1.7
Inverclyde	16,043	0	65	0	0	65	0.4
Midlothian	35,369	0	342	2	1	345	1.0
Moray	223,756	1,040	3,397	112	0	4,549	2.0
North Ayrshire	88,534	600	24	0	0	624	0.7
North Lanarkshire	46,989	0	121	0	0	121	0.3
Orkney	98,981	0	0	0	0	0	0.0
Perth & Kinross	528,541	8,348	3,077	6	1,345	12,776	2.4
Renfrewshire	26,194	0	155	0	0	155	0.6
Scottish Borders	473,174	6	4,295	768	29	5,098	1.1
Shetland Isles	146,664	0	0	0	0	0	0.0
South Ayrshire	122,198	419	1,262	73	2	1,756	1.4
South Lanarkshire	177,192	4	1,406	0	0	1,410	0.8
Stirling	218,704	2,934	1,589	1	11	4,535	2.1
West Dunbartonshire	15,883	0	36	0	0	36	0.2
West Lothian	42,774	0	130	0	12	142	0.3
Western Isles	305,617	799	0	0	0	799	0.3
Total	7,793,291	61,425	42,535	6,257	2,283	112,500	1.4 (mean)

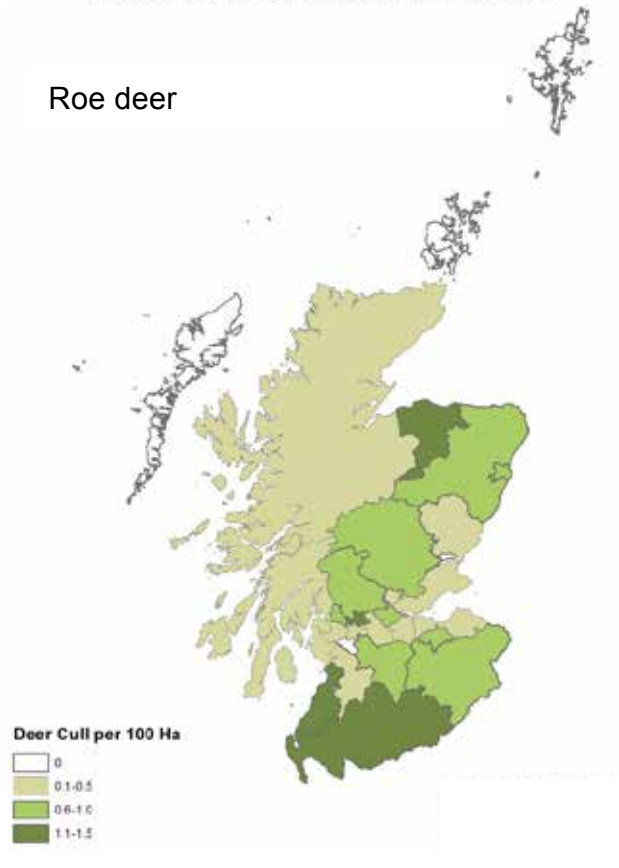
Source: SNH Information Response 42

Figure 12 Number of deer culled in each Local Authority area (2014/15)

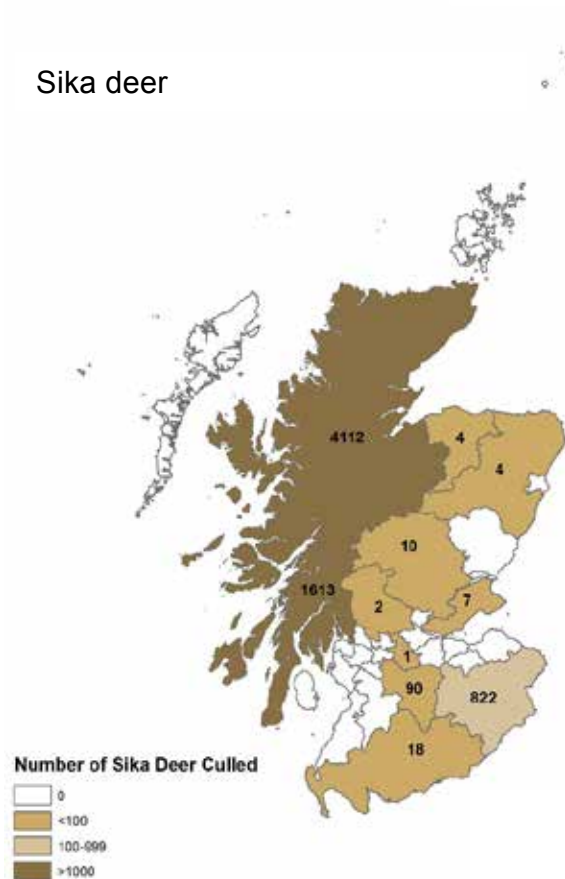
Red deer



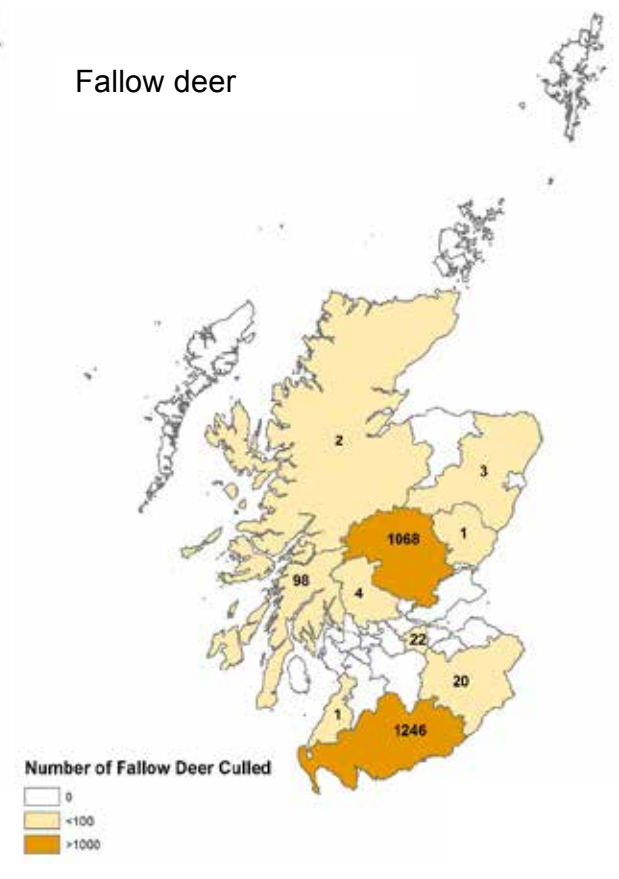
Roe deer



Sika deer



Fallow deer



Source: Data from Scottish Parliament Written Answers S5W-00703/S5W-00705, 29 June 2016

- 54 The significance of each species in different parts of the country is also illustrated by the maps in Figure 12 (based on cull data for 2014/15). While the maps for red and roe culls show the level of culls per 100 hectares, the maps for sika and fallow show the actual cull totals because of the smaller numbers culled. These latter two maps illustrate the core areas for sika and fallow deer, as well as the areas into which they are potentially expanding. The impression of range expansion is reinforced by comparing the data shown in Figure 11, with the information available for the three years 2012/13-2014/15. That information was in a written answer to questions in the Scottish Parliament in 2016 and appears to be the only other time national cull statistics have been published at a Local Authority scale.⁵²
- 55 A further perspective on the national cull statistics can be obtained by dividing them according to the land use types where the deer were culled. On the annual cull return forms used by SNH, it asks the respondents to record the numbers of deer they cull under one of three dominant land use types: agriculture, woodland or open range. SNH does not routinely publish this data. However, SNH has used it, for example, in a graph in its 2016 report to the Scottish Government which illustrated the relative cull levels of red and roe deer on open range and in woodland between 2006 and 2016.⁵³ Figure 13 shows the national cull statistics sub-divided by land use type for both each species and the overall cull for the five years 2011-16.
- 56 The land use types used by SNH are broad and undefined and, for example, most deer killed on agricultural land are likely to be resident in adjoining woodland. However, the percentages in Figure 13 illustrate a range of points about the national cull. They show, for example, that only a small proportion of the culls are on agricultural land, although there is a noticeably higher proportion for fallow. The majority of deer are shot in woodland environments (and the proportion would be significantly higher if the table was analysing the actual total cull, rather than just the numbers recorded in cull returns). Figure 13 also shows that a third of the recorded red deer cull is now in woodland, while it can be calculated from the tables in the Figure that red deer shot on open hill range accounted for 92-93% of all the deer culled in that environment.

2.3.3 Changing Context

- 57 This Section has reviewed the information available at a national level on the distributions, population sizes and annual culls of Scotland's four species of wild deer, to provide an overview as part of the context for the more detailed considerations later in this Report.
- 58 Despite a succession of public bodies responsible for the management of all four species for nearly 40 years since 1982, the picture at a national level is still unclear. There is a long historical sequence of detailed information and analysis of the size of the population of red deer living on open hill range in the Highlands, but there appears to be limited information on red deer in the rest of Scotland and the other three species generally.
- 59 The Group considers that SNH should have its own more detailed maps of the distribution of each of the deer species in Scotland, showing established range and indicating areas or directions of current range expansion. While roe deer are now

⁵² Scottish Parliament, Written Answer Report, S5W-00703 and S5W-00705, 29 June 2016.

⁵³ SNH (2016) *Op cit*, p.29.

*Figure 13 National cull statistics by species and land use type (2011-16)***All species**

	2011/12	2012/13	2013/14	2014/15	2015/16
Agriculture	5,241 (6%)	5,372 (5%)	5,436 (5%)	7,032 (6%)	6,305 (6%)
Woodland	52,006 (56%)	54,336 (55%)	57,953 (55%)	65,140 (56%)	61,881 (58%)
Open Range	35,959 (38%)	39,424 (40%)	42,658 (40%)	44,193 (38%)	38,799 (36%)

Red

	2011/12	2012/13	2013/14	2014/15	2015/16
Agriculture	2,171 (4%)	1,907 (3%)	2,314 (4%)	3,110 (5%)	2,563 (4%)
Woodland	17,372 (33%)	19,453 (34%)	19,932 (32%)	24,398 (35%)	20,751 (35%)
Open Range	33,467 (63%)	36,404 (63%)	39,614 (64%)	40,919 (60%)	35,520 (61%)

Roe

	2011/12	2012/13	2013/14	2014/15	2015/16
Agriculture	2,383 (7%)	2,679 (8%)	2,521 (7%)	2,833 (7%)	3,047 (8%)
Woodland	27,651 (87%)	28,617 (85%)	30,822 (86%)	33,260 (86%)	33,929 (86%)
Open Range	1,919 (6%)	2,277 (7%)	2,475 (7%)	2,599 (7%)	2,478 (6%)

Sika

	2011/12	2012/13	2013/14	2014/15	2015/16
Agriculture	161 (3%)	224 (4%)	275 (4%)	165 (2%)	158 (2%)
Woodland	5,668 (91%)	5,271 (86%)	6,038 (90%)	6,064 (90%)	5,397 (90%)
Open Range	406 (6%)	604 (10%)	394 (6%)	552 (8%)	465 (8%)

Fallow

	2011/12	2012/13	2013/14	2014/15	2015/16
Agriculture	526 (26%)	562 (33%)	326 (20%)	924 (37%)	537 (20%)
Woodland	1,315 (66%)	995 (59%)	1,161 (70%)	1,418 (58%)	1,804 (67%)
Open Range	167 (8%)	139 (8%)	175 (10%)	123 (5%)	336 (13%)

Source: SNH Information Response 22

established across more or less the whole of mainland Scotland, the impression from the evidence available is that red, sika and fallow are continuing to expand their range in a significant number of areas of the country.

- 60 Estimates of the national population sizes of the deer species are destined to be of limited accuracy and might be considered of limited value beyond a general indication of trends. However, the Group considers that SNH should have a clearer account of the current position with each species, rather than their “*most recent estimates*” being based on estimates made 10 years or more ago and some of which appear out of date. While SNH considers the overall population of red deer on open hill range in the Highlands to be no longer increasing, the evidence available suggests that the overall deer populations elsewhere in Scotland continue to increase due to more habitat availability, expanding range and climate change.
- 61 There is also the implication from the information on distributions and population sizes that, overall, the current levels of the annual culls of each species nationally are less than population growth. The only data that SNH publishes on national cull statistics was shown in Figure 8, while the Group has included Figures 11 and 13 to illustrate that SNH has other information about the national culls than its current simple table. SNH could be publishing such information as part of providing a clearer picture of the position.
- 62 A key distinction that should also be made more clearly by SNH, is that the ‘national cull statistics’ are potentially significantly less than the actual total number of wild deer culled each year in Scotland. In the speculative example using SNH’s estimates as described above, SNH’s national cull statistics may only be recording around 60% of Scotland’s national cull each year.
- 63 **The Working Group recommends that Scottish Natural Heritage should develop its own more detailed distribution maps for wild deer in Scotland; that Scottish Natural Heritage should more accurately report the basis of national population estimates for wild deer which it publishes; and that Scottish Natural Heritage should make clear that the national cull statistics which it publishes are based only on the numbers reported through cull returns.**
- 64 The circumstances where deer occur vary very considerably across Scotland and, as commented previously, information at a national level should be built up from information at a local level. That is considered further later in Part Six of this Report. However, it is now 60 years since the 1959 Act first introduced a statutory framework to regulate deer hunting rights to protect public interests. While that framework has evolved into the 1996 Act as amended, it is clear that there have also been major increases over that time in the distributions and numbers of wild deer in Scotland.
- 65 The 1959 Act was designed to cover red deer on the open hill and the legislation now has to cover all species of wild deer across the whole of Scotland, with two or more species present in an increasing percentage of the area. This Report considers whether that regulatory framework and associated non-statutory arrangements are delivering the public policy aim of effective deer management that safeguards public interests and promotes sustainable deer management.

Section 3 Public Authority, Functions and Interests

- 1 In the Deer (Scotland) Act 1959 and its successor, the current Deer (Scotland) Act 1996, s.1 has always dealt with three key topics: the public authority with functions under the Act; its functions; and the public interests to be taken into account by the authority in exercising its functions.¹
- 2 During the last 60 years, the public authority has changed from the Red Deer Commission (RDC) to the Deer Commission for Scotland (DCS) and now Scottish Natural Heritage (SNH), while the functions and the public interests involved have also evolved over that time. This Section of the Report traces that evolution as part of reviewing the terms of s.1 of the 1996 Act as a core component of the legislation.
- 3 The current terms of s.1 of the 1996 Act are shown in Figure 14. The fact that the title of s.1 incorrectly refers to the Deer Commission for Scotland was discussed earlier in Section 1.3.
- 4 In both the 1959 and 1996 Acts, s.1(1) has included the relevant authority's main functions under the respective Acts. These functions can be regarded as the overall purpose of the legislation in terms of what the authority is to achieve through its powers and duties in implementing the legislation. While this purpose or remit has evolved over the last 60 years, there has also been a strong element of continuity.

Figure 14 Section 1 of the Deer (Scotland) Act 1996 as amended

PART I

SCOTTISH NATURAL HERITAGE'S DEER FUNCTIONS

1. The Deer Commission for Scotland

- (1) Scottish Natural Heritage (in this Act referred to as "SNH") has the following general aims and purposes in relation to deer—
- (a) in accordance with the provisions of this Act to further the conservation of deer native to Scotland, the control and sustainable management of deer in Scotland, and keep under review all matters, including their welfare, relating to deer; and
 - (b) to exercise such other functions as are conferred on it by or under this Act or any other enactment.
- (1A) In this Act references to SNH's deer functions are to the functions relating to deer conferred on it by or under this Act or any other enactment.
- (2) It shall be the duty of SNH, in exercising its deer functions, to take such account as may be appropriate in the circumstances of—
- (a) the size and density of the deer population and its impact on the natural heritage;
 - (b) the needs of agriculture and forestry;
 - (c) the interests of owners and occupiers of land.
 - (d) the interests of public safety; and
 - (e) the need to manage the deer population in urban and peri-urban areas.

Source: legislation.gov.uk

¹ The interpretation given in both Acts for "functions" is that the word "includes powers and duties" - 1959 s.20; 1996 s.45(1).

- 5 When the 1959 Act was passed, the functions in it reflected the compromise that had been brokered between the sporting estate interests that wanted to ‘conserve’ the population of red deer and the agricultural, forestry and other interests that wanted to ‘control’ the numbers of red deer. Thus, in s.1(1) of the 1959 Act, the RDC was given the “*general functions*” of “*furthering the conservation and control of red deer and keeping under review all matters relating to red deer*”.
- 6 Those general functions were only amended once before the 1959 Act was replaced by the 1996 Act. The need arose as a result of the recognition of red/sika hybridisation and the move to give the RDC responsibility for all species of wild deer. The change was achieved through the Deer (Amendment) (Scotland) Act 1982, which adapted the RDC’s general functions in s.1(1) of the 1959 Act by adding after each relevant mention of red deer: “*or sika deer or such other deer as may be specified from time to time by direction of the Secretary of State*”.
- 7 The 1996 Act continued the Commission that had been the RDC, but modified it into the DCS. The Act when passed also retained the same basic general functions as the 1959 Act, but amended them so that they became: s.1(1)(a) “*in accordance with the provisions of this Act, further the conservation, control and sustainable management of deer in Scotland, and keep under review all matters, including their welfare, relating to deer*”.
- 8 The modified general functions in the 1996 Act differed from those in the 1959 Act in three main respects:
- Firstly, “*sustainable management*” was added to “*conservation and control*” to reflect the aim of public policy at the time of the 1996 Act.
 - Secondly, the long reference to deer species added by the 1982 Act was replaced by referring simply to “*deer*” as the 1996 Act covered all species.
 - Thirdly, “*welfare*” was added to the matters to be kept under review. This seems to have been added for clarity. Deer welfare had always been an important consideration in deer management and the 1959 Act included provisions based on deer welfare.² However, as the term ‘welfare’ did not at that time appear in the legislation, its addition in s.1(1)(a) appears to have been intended as clarifying the scope of the DCS’s interests under the Act.
- 9 When the DCS was replaced by SNH through the Public Services Reform (Scotland) Act 2010, s.1(1) of the 1996 Act was amended so that SNH would have “*the following general aims and purposes in relation to deer*”. That wording reflected that when SNH was created by the Natural Heritage (Scotland) Act 1991, s.1(1) of that Act gave it “*general aims and purposes*”.
- 10 Thus, while the cross-heading above Part 1 in the 1996 Act is “*Scottish Natural Heritage’s Deer Functions*”, the preamble in s.1(1) is only expressed in terms of the “*general aims and purposes*” of SNH as an organisation. However, as discussed later in the Report, there is a need for adequate clarity and separation in how SNH exercises its different responsibilities under its 1991 Act and the Deer Act.³ The Group considers therefore, that there would be merit in making it explicit that SNH has specific functions in relation to deer under the 1996 Act. That might be achieved by re-wording the preamble to read as follows:
- ‘The general aims and purposes of Scottish Natural Heritage (in this Act referred to as “SNH”) include the following general functions in relation to deer’

² For example, closed seasons for female deer and the provision to end suffering by a deer.

³ See Part Five.

- 11 The main function or purpose of the legislation in s.1(1)(a) of the 1996 Act has been amended once since the Act was passed. The Wildlife and Natural Environment (Scotland) Act 2011 ('the WANE(S) Act') modified the wording to clarify that "conservation" only referred to native deer, as it is not public policy to conserve non-native species of deer. As a result, s.1(1)(a) of the 1996 Act currently states:
- "in accordance with the provisions of this Act, further the conservation of deer native to Scotland, the control and sustainable management of deer in Scotland, and keep under review all matters, including their welfare, relating to deer"*.
- 12 While the changes since 1959 to cover all species and to include the concept of sustainable deer management have been significant modifications to the main function in s.1(1) of the legislation, it might be considered that its main terms have changed little over the last 60 years. The brokered compromise of 'conservation' and 'control' from 1959 remains, but qualified by various additions at different times.
- 13 The Group's view is that the current terms of s.1(1)(a) do not provide a sufficiently clear statement for the overall purpose of Scotland's deer legislation, either in terms of public policy or for the public authority charged with implementing it. The Group considers that the current statement should be replaced by a clearer statement to guide the interpretation and use of the provisions of the Act, to help ensure effective deer management in the public interest.
- 14 The Group considers that there should be two elements to a clearer statement in s.1(1)(a). Firstly, it should make clear that the purpose of the legislation includes, as its powers reflect, ensuring effective deer management that safeguards public interests. The scope of those interests is discussed in Section 3.2 below. Secondly, the statement should include the current public commitment to promoting sustainable deer management.
- 15 Both 'effective deer management' and 'sustainable deer management' have been used by the Scottish Government and its agencies over the years to represent the overall public interest in deer management.⁴ Both terms are also included in the Group's remit. While effective deer management is used to mean safeguarding public interests from damage by deer, sustainable deer management is now defined in the Code of Practice for Deer Management introduced under s.5A of the 1996 Act:
- "Sustainable Deer Management is about managing deer to achieve the best combination of benefits for the economy, environment and communities for now and for future generations."*⁵
- 16 That definition sets sustainable deer management as a horizon which deer management in Scotland should be working towards, with the need to ensure during that journey that public interests are adequately protected. The Group's view is that these two elements, effectively safeguarding public interests and promoting sustainable deer management, are the only ones required to provide a clear purpose for the legislation in s.1(1)(a).

⁴ Examples of the use of 'effective deer management' were given in the Introduction to this Report.

⁵ Scottish Natural Heritage (2011). Code of Practice on Deer Management, p.4.

- 17 The Group considers that both elements could be incorporated into s.1(1)(a) by amending the sub-section to read as follows:
- ‘in accordance with the provisions of this Act, to further effective deer management that safeguards public interests and promotes sustainable management, and to keep under review all matters relating to deer;’

3.2 The Public Interests Involved

- 18 In the 1959 and 1996 Acts, it has always been judged to be in the public interest that particular land use interests are represented in s.1 dealing with the public authority and its functions. During the 60 years since 1959, both the types of interests represented in s.1 and how they are represented in the section have been amended as the interpretation of public interests have evolved.
- 19 Section 1 of the 1959 Act constituted the RDC with a Chairman and 12 Commissioners making up the governing Board of the Commission. These Commissioners were appointed by the Secretary of State from nominees from organisations representing different interests. Reflecting the difficult origins of the 1959 Act, the specific numbers of Commissioners required to represent each different interest were set out in s.1(4) of the Act. Those interests were “*the owners of land used for agriculture and forestry*”; “*the sporting interest in deer*”, “*farmers and crofters*”, “*hill sheep farmers*” and nature conservation (with the latter from nominees by the Nature Conservancy and Natural Environment Research Council).
- 20 The 1996 Act, in s.1(4)-(6) as originally enacted, then modified the arrangements for selecting not less than nine and no more than 12 DCS Commissioners. The requirement to appoint particular numbers of Board members to represent different interests was removed. In the new arrangements:
- to be appointed a member, someone had “*to have knowledge or experience of one or more of the following interests: (i) deer management; (ii) agriculture (including crofting); (iii) forestry and woodland management; and (iv) the natural heritage*”;
 - the Secretary of State had to afford the opportunity for organisations representing those interests to nominate persons and, while the Secretary of State had discretion over whom was appointed, three of the 12 members had to be from names nominated by organisations representing deer managers.
- 21 The second bullet point above resulted from an amendment introduced during the passage of the Deer (Amendment) (Scotland) Bill 1996 to satisfy concerns in the House of Lords. The first set of members appointed under these new arrangements in the 1996 Act was also not appointed until 1999, because the Secretary of State had appointed/re-appointed a set of members under the old arrangements in the lead up to the 1996 Act.
- 22 The other related change in the 1996 Act to the interests in s.1, was to place a new duty on the DCS in s.1(2) “*to take such account as may be appropriate in the circumstances of*”
- (a) *the size and density of the deer population and its impact on the natural heritage;*
 - (b) *the needs of agriculture and forestry; and*
 - (c) *the interests of owners and occupiers of land.”*

- 23 The Public Services Reform (Scotland) Act 2010 then replaced the DCS with SNH in s.1 of the 1996 Act, with the consequent repeal therefore of s.1(4)-(6) with their provisions concerning the interests to be involved in the appointment of members to the Commission. As a result of this change, the only interests represented in s.1 became those quoted in the previous paragraph. The WANE(S) Act 2011 then added two further interests to s.1(2):
- “(d) *the interests of public safety; and*
 (e) *the need to manage the deer population in urban and peri-urban areas.*”
- 24 The current position is that SNH is therefore required in the 1996 Act “*to take such account as may be appropriate in the circumstances*” of the five interests as quoted in the two paragraphs above.⁶ However, the two additions in 2011 illustrate some of the difficulties of having an exclusive list that specifies each interest to be taken into account.
- 25 The scope to protect public safety had been added to the regulatory powers in the 1996 Act at the time it was passed. The inclusion in 2011 of public safety to the list in s.1(2) of interests to be taken into account, might therefore be considered to have been done to improve consistency in the Act.
- 26 However, the inclusion of the reference to urban and peri-urban areas in s.1(2) is the only mention of those types of the areas in the Act, and might be considered to raise wider questions about what other interests should perhaps be included. Simple examples might be:
- if the natural heritage is included, what about the interests of cultural heritage given that deer can have positive and negative impacts on the conservation of certain types of cultural heritage sites?; or
 - if the interests of land owners and occupiers are included, what about the interests of local communities and the positive or negative impacts that deer can have on them?
- 27 The Group’s view is that the approach of limiting the public interests in s.1(2) to a list of specific interests should be regarded as a legacy of the history of the legislation. The Group considers that it is not in the public interest that SNH should be limited in the types of interests which it can take account of as appropriate in any given circumstances. As history has demonstrated, the nature of the public interests that might be of concern and the values attributed to them tend to evolve over time. The Group therefore considers that the exclusive list in s.1(2) should be replaced by a non-exclusive approach.
- 28 Significantly, appropriate wording for a non-exclusive approach to identifying the public interests involved already exists in the 1996 Act with the phrase “*public interests of a social, economic or environmental nature*” in ss.6A and 7.⁷
- 29 The phrase was first introduced to the 1996 Act by the WANE(S) Act 2011. The Act amended s.7 to include in s.7(1)(a)(ia) “*damage to public interests of a social, economic and environmental nature*” as a basis for a s.7 voluntary Control Agreement. The phrase can thus be the basis of a compulsory s.8 Control Scheme if required. The Land Reform (Scotland) Act 2016 then included the same phrase in s.6A(2)(a)(ii) of the 1996 Act, as a reason for requiring owners and occupiers to produce a deer management plan.⁸

⁶ This list of interests is also referred to in Section 27 in the context of SNH’s responsibilities under the Scottish Regulators’ Strategic Code of Practice (Scottish Government, 2015).

⁷ In ss.6A and 7.

⁸ s.6A(2)(a)(ii).

- 30 The Group considers that it is in the public interest that SNH should be able to take account of all types of public interests.⁹ The Group therefore considers that the phrase “*public interests of a social, economic and environmental nature*” should be used in s.1(2). The phrase would provide a robust statutory context within which the nature and relative values of public interests can evolve over time.
- 31 The phrase also makes clearer than at present that it is *public* interests that SNH is required to take account of, recognising that these public interests include private interests that are considered in the public interest as discussed earlier in Section 1.3 of this Report. In addition, the phrase also includes the three recognised dimensions of sustainability embodied in the “*sustainable management of deer*” that is included in the purpose of the Act in s.1(1)(a).
- 32 The social, economic and environmental dimensions of the phrase also link to the Scottish Government’s policy guidance in ‘Wild Deer: A National Approach’ (WDNA). The current version, in considering the public interest in deer management, sub-divides the WDNA Vision and associated Objectives into social, economic and environmental categories.¹⁰
- 33 The fact that the inclusive scope of “*public interests of a social, economic and environmental nature*” is not already represented in s.1(2), might be considered anomalous given its existing use in some of the regulatory powers in the Act. There is, however, no direct relationship between the interests that can be taken into account under s.1(2) and the interests that can be protected from damage by deer under the various regulatory powers in the Act.
- 34 Those regulatory powers in the 1996 Act include authorisations for out of season and night shooting under ss.5 and 18 respectively; requiring a deer management plan to be produced under s.6A; control agreements and control schemes under ss.7 and 8; and emergency measures under ss.10 and 11. Each of those powers is discussed in the following Parts of this Report and a consistent theme is the anomalies, inconsistencies and limitations in the types of public interests that can be protected from damage by deer under the various powers.
- 35 Those anomalies, inconsistencies and limitations are a product of the history of the legislation over the last 60 years and the ways in which the various powers have been amended during that time. The Group considers that it is not in the public interest that the use of some of the regulatory powers should be restricted to a number of specific interests. The question should not be whether a particular public interest is in a list in the Act, but whether the use of a regulatory power is warranted to protect that interest.
- 36 At present, it is only under three of the regulatory powers (ss.6A, 7 and 8) that there is scope to protect “*public interests of a social, economic and environmental nature*”. The Group argues in the rest of the Report that the inclusive scope of that phrase should also apply to each of the other regulatory powers in the Act.

⁹ It might be noted that the Group’s remit is about deer management that “*safeguards public interests*”, not just some.

¹⁰ SNH (2014). Scotland’s Wild Deer: A National Approach (2014 Review). Including 2015-2020 Priorities.

3.3 Amending Section 1 of the 1996 Act

- 37 **The Working Group recommends that section 1 of the Deer (Scotland) Act 1996 should be amended to make explicit that Scottish Natural Heritage has distinct functions under the Act, to modernise the stated purpose of the Act to reflect contemporary public policy objectives, and to convert the list of interests to be taken into account into an inclusive rather than exclusive list.**
- 38 The terms of this recommendation are illustrated in the following amended version of s.1:
1. **Scottish Natural Heritage**
 - (1) The general aims and purposes of Scottish Natural Heritage (in this Act referred to as “SNH”) include the following general functions in relation to deer —
 - (a) to ensure effective deer management that safeguards public interests and promotes sustainable management;
 - (b) to keep under review all matters relating to deer; and
 - (c) to exercise such other functions as are conferred on it by or under this Act or any other enactment.
 - (2) In this Act references to SNH’s deer functions are to the functions relating to deer conferred on it by or under this Act or any other enactment.
 - (3) It shall be the duty of SNH, in exercising its deer functions, to take account of public safety and deer welfare in all circumstances and to take such account as may be appropriate in particular circumstances of other public interests of a social, economic or environmental nature.
- 39 In the current s.1, deer welfare is mentioned in the phrase in s.1(1) “*and keep under review all matters, including their welfare, relating to deer*”. However, the Group’s view is that it is an anomaly that public safety is not also covered. Therefore, in the amended s.1(3) above, public safety and deer welfare are both identified as factors that should be considered in all circumstances.
- 40 Part Two of this Report considers the need in deer management for high standards of public safety and deer welfare in all circumstances. Part Three then considers the damage that can be caused by deer to public interests in particular circumstances.

PART TWO - PUBLIC SAFETY AND ANIMAL WELFARE

Introduction

- 1 Wild deer need to be culled each year in Scotland as part of managing their population levels. This annual cull can be carried out either by shooting the deer or by using live capture. Currently, over 100,000 wild deer are shot annually, while the number taken by live capture is considered to be small.
- 2 A basic public interest requirement is that, independent of who might have the legal right to kill or take wild deer on particular land, there should be adequate statutory provisions in place to ensure that the killing or taking is carried out to appropriately high standards of animal welfare and public safety in all circumstances.
- 3 Section 4 below considers the standards for how wild deer can be killed under the current provisions of the Deer (Scotland) Act 1996 and related legislation. The next two Sections then review when deer can be killed, while Section 7 examines how and when deer can be taken by live capture. Section 8 considers who can kill deer lawfully, before Section 9 describes the exemptions to standards of how and when and by whom deer can be killed provided by s.25 of the Act to prevent suffering by deer.
- 4 The final three Sections in this Part of the Report consider further aspects of the management of wild deer where basic standards of animal welfare and public safety should apply in all circumstances. Section 10 considers wild deer and diseases, while Section 11 examines wild venison and food safety. Section 12 then considers the distinctions between wild deer and captive deer, because of the implications for animal welfare and food safety of deer that might be regarded as captive deer being managed as if they are wild deer.

Section 4 How wild deer can be killed lawfully

4.1 Shooting

- 5 Wild deer are Scotland's largest wild land animals.¹ Due to welfare considerations, it has been an offence in Scotland's deer legislation since the Deer (Scotland) Act 1959 to kill a wild deer "*otherwise than by shooting*" with a firearm.² It is also an offence to shoot at deer from a moving vehicle,³ while a vehicle cannot be used to drive deer with the intention of killing them without authorisation from Scottish Natural Heritage (SNH).⁴
- 6 In 1982, the 1959 Act was amended to include a new s.23A that enabled the Secretary of State to specify the "*firearms, ammunition, sights and other equipment which may be lawfully used in connection with killing or taking deer*". This power was then carried forward as s.21 in the 1996 Act. The only use of the power to date has been to make The Deer (Firearms, etc.) (Scotland) Order 1985, which continues in force.

¹ Excluding feral pigs established from escapes or release, which can grow to heavier weights than wild deer.

² Deer (Scotland) Act 1959, s.23(2); Deer (Scotland) Act 1996, s.17(3).

³ Deer (Scotland) Act 1996, s.20(1)(a).

⁴ Deer (Scotland) Act 1996, s.19. SNH has never granted an authorisation under s.19(2) and it appears that there have been no s.19(2) authorisations for at least 15 years and possibly much longer (DWG and SNH correspondence, 27 February 2018). SNH does not have a standard form for an application as they are so rare.

- 7 The 1985 Order has three main paragraphs, 3, 4 and 5, which deal with rifles, shotguns and other equipment respectively, while paragraph 6 enables Scottish Ministers to authorise a person to kill or take deer by other means for scientific, veterinary or related purposes.

4.2 Rifles

- 8 Paragraph 3 of the 1985 Order specifies the rifle ammunition that can be used to shoot deer, including the minimum bullet weight, minimum muzzle velocity and minimum muzzle energy.⁵ These requirements determine the calibre of rifles that can be used legally and the stipulations on ammunition were seen by the Red Deer Commission (RDC) at the time of the Order to be over-specifications to take account of inaccurate shots.⁶
- 9 The Group considers that the only concern over the current specifications in the Order is the extent to which they will constrain the change to the use of non-lead ammunition to shoot deer. The Group's view is that the continued use of lead ammunition is an issue that needs to be addressed, as highlighted by the Lead Ammunition Group (LAG) established by the UK Government's Department of Environment, Food and Rural Affairs (DEFRA) and the Food Standards Agency (FSA) in 2010. The LAG continues, in its authoritative reviews of the information available on the use of lead ammunition, to increase the level of its concerns over the impacts of lead on human food safety and on wild species in the wider environment.⁷
- 10 The Group considers that the scale of the impact of lead ammunition contamination on the wider environment is not widely enough recognised. However, the Group's particular concern in this context is lead contamination in wild venison because of its serious implications for human health.⁸ The Group also considers that concern over this contamination, or the risk of it, could possibly develop in ways that have an adverse impact on the market for "*healthy eating qualities*" of Scotland's wild venison.⁹
- 11 The Group recognises that SNH, using the Wild Deer Best Practice (WDBP) guidance, is working "*with sporting organisations, stalkers and processors to encourage the removal of meat around the wound channel, bruised and bloody meat and an additional 10cm visibly unaffected by the bullet*" to reduce the risk of lead contamination in carcasses.¹⁰
- 12 However, a substantial proportion of the approximately 3,500 tonnes of wild venison produced each year in Scotland does not go through a licensed venison dealer where this recommended best practice can be monitored.¹¹ There also appears to be no information on the extent to which SNH's 'encouragement' is being followed more generally to reduce the lead contamination. Lead intake accumulates in the body and as the FSA has noted, this can have particular health implications for pregnant women and young children.¹²

⁵ The specifications are set out in the Wild Deer Best Practice guide: 'Rifles and Ammunition'.

⁶ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland, p.53.

⁷ Lead Ammunition Group (2018). Update Report from the Lead Ammunition Group, April 2018.

⁸ The Group notes that lead contaminated gralloch could be consumed by carrion eaters including, for example, golden eagles in some situations.

⁹ Scottish Venison website: www.scottish-venison.info.

¹⁰ SNH Information Response 26 (SNH position paper on the use of lead ammunition to kill deer, September 2016).

¹¹ See Section 11.

¹² Food Standards Agency (2012). Risk to human health from exposure to lead bullets and shot used to shoot wild game, cited in SNH Information Response 26 position paper, *Op cit*.

- 13 The essential requirement in order to address the lead issue is the use of non-lead ammunition. The Group acknowledges that Forestry and Land Scotland (FLS) and SNH have been at the forefront of this.¹³ FLS's Wildlife Rangers currently use non-lead ammunition in over 95% of instances and FLS plans to have specified the use of non-lead ammunition in all agreements with contractors and recreational hunters by 2022.¹⁴ SNH also uses non-lead ammunition in around 95% of instances.¹⁵
- 14 As a result of FLS and SNH's approach, the great majority of deer shot on public land are already killed using non-lead bullets. FLS and SNH also account for over 30% of the recorded annual cull of deer in Scotland.¹⁶ However, wider use of this practice appears to be constrained at present by the limited availability of non-lead, copper bullets with an appropriate standard of efficacy for killing deer using some of the most suited smaller calibres of rifles.¹⁷
- 15 FLS and SNH tend to use larger calibre rifles, such as 0.270, and have been involved in commissioning the production of specific batches of suitable non-lead ammunition for their use. However, a particular constraint on the wider use of non-lead ammunition appears to be the lack of availability of copper bullets suitable for shooting red deer using a 0.243 calibre rifle and for the use of 0.223 rifles used by many recreational hunters for shooting roe deer.¹⁸
- 16 SNH's hope is that continuing to encourage the use of non-lead ammunition will increase the demand for non-lead ammunition and promote the availability of suitable copper bullets on the market. However, the Group considers that SNH should, with Scottish Government support, be taking a more vigorous approach than at present to promote the use of non-lead ammunition by the deer hunting sector.
- 17 The Lead Ammunition Group's view is that there is considerable experience from countries where the change has already been made, that could be used in making the change to non-lead ammunition in the UK.¹⁹ However, the 1985 Order contains a particular constraint on the use of non-lead bullets for deer hunting in Scotland.
- 18 Paragraph 3(a) of the 1985 Order requires a bullet weight of not less than 100 grains for shooting deer species other than roe. SNH considers that this would need to be reduced to not less than 80 grains to enable a full switch to non-lead ammunition.²⁰ However, the research that will be necessary before making that change to ensure it would not increase welfare issues, has not been carried out so far.²¹
- 19 The Group's view is that the change away from lead ammunition is an issue on which the Scottish Government needs to provide more leadership. The Group considers that the Government should give greater priority to increasing the use of non-lead ammunition to kill deer and make a commitment to ending the use of lead bullets after an adequate transition period. The Government should instruct SNH to promote the use of non-lead bullets more vigorously and also give a clear direction on this issue to its other agencies, including Scottish Forestry and Forestry and Land Scotland.

¹³ FES changed into Forestry and Land Scotland on 1 April 2018.

¹⁴ Deer Management Round Table, Minutes of Meeting on 20 November 2018.

¹⁵ Deer Management Round Table, *Op cit.*

¹⁶ See Section 2.

¹⁷ SNH Information Response 26 (follow-up email correspondence from SNH, 10 July 2018).

¹⁸ SNH Information Response 26 follow-up, *Op cit.*

¹⁹ Lead Ammunition Group (2018) *Op cit.*

²⁰ SNH Information Response 26 follow-up, *Op cit.*

²¹ SNH Information Response 26 follow-up, *Op cit.*

- 20 The Group considers that the Scottish Government should also instruct SNH to produce a report reviewing the information available in the UK and elsewhere on the use of non-lead bullets and identifying any necessary ballistic research and associated work that needs to be carried out, including the amendment of paragraph 3(a) in the 1985 Order. SNH's report should enable the Government to set out a schedule for reducing the use of lead ammunition to kill deer and then ending its use altogether.
- 21 **The Working Group recommends that the Scottish Government should make a clear commitment to end the use of lead bullets to shoot deer in Scotland, carry out the necessary research and promotion to enable that change to be made after a transition period and, as a part of that, amend The Deer (Firearms, etc.) (Scotland) Order 1985 so that the specifications in paragraph 3(a) of the Order are suitable for the use of non-lead bullets.**

4.3 Shotguns

- 22 Paragraph 4 of the 1985 Order allows the occupiers of agricultural land or enclosed woodland to use a 12 bore shotgun with the type of cartridge specified in the Order, to shoot deer to prevent them causing "*serious damage*" to "*crops, pasture, trees or human or animal foodstuffs on that land*".
- 23 In paragraph 4, there is reference to s.33(3) of the Deer (Scotland) Act 1959 to identify those who can exercise the right of occupiers to use a shotgun. That reference should now be to s.26(2) of the Deer (Scotland) Act 1996, but the list of persons remains essentially the same.²² They include the occupier in person and a restricted list of others with the occupier's permission, including the land owner, the land owner or occupier's employees, or any person authorised by SNH as "*fit and competent*" for the purpose.
- 24 Traditionally, farmers and crofters used shotguns to defend their crops from marauding deer and the influence of agricultural interests safeguarded this option in the 1985 Order, despite the welfare concerns over using shotguns on deer. However, as the RDC had noted in the 1960s, increases in the price of venison meant that more farmers and crofters were acquiring a rifle or coming to an arrangement with someone who did.²³
- 25 There is no information available on the extent to which the occupiers of agricultural land or enclosed woodland are using shotguns against deer. However, the Group's inquiries suggested that there are relatively few situations where shotguns might still be used. These situations appear to be mainly to protect specialist crops (such as berry crops and Christmas trees) from damage by roe deer in circumstances where there are few if any safe opportunities to use a rifle.
- 26 The Group's view is that there is no longer justification for the occupiers of agricultural land or enclosed woodland to have a general right to use of a shotgun to shoot deer. However, the Group considers that the option of using a shotgun with the correct ammunition to prevent damage by deer should be retained in the legislation in a modified and updated form. This would allow a shotgun to be used in appropriate situations such as the examples above, as well as others where a rifle is not a safe option and the control can be carried out at close quarters (for example, roe deer in urban parks).²⁴

²² Subject to an amendment to s.26(2) by the Crofting Reform etc. Act 2007 that clarified the position on common grazings.

²³ Callander and MacKenzie (1991) *Op cit.* Factors other than the price of venison are likely to have included the general increased familiarity with rifles from the War and subsequently, National Service in the armed forces.

²⁴ Under s.25 of the 1996 Act, it would continue to be legal to use a shotgun as an effective means of despatch at close range to

- 27 The Group also considers that the use of a shotgun to shoot deer should be more accountable by requiring it to be authorised by SNH, due to concerns over the risk to deer welfare and in some situations, human safety. However, the Group considers that the option to apply for an authorisation should be less restrictive by being open to the owners and occupiers of any land, rather than just the occupiers of agricultural land and enclosed woodland.
- 28 An authorisation process would enable SNH to judge both whether a situation warrants the use of a shotgun as the only or best practical option and whether the person to be authorised is considered “*fit and competent*” to use a shotgun in the circumstances. SNH would need to consider how fitness and competence are to be assessed for the use of a shotgun, as SNH’s current use of these standards is based on the use of rifles.²⁵
- 29 The proposals above would require the terms of paragraph 4 of the 1985 Order to be amended and as part of that, the Group considers that the current specifications in the paragraph for shotgun ammunition should be reviewed against current standards and the opportunity to require the use of non-lead cartridges.
- 30 The proposals would also require a new provision in the 1996 Act to enable SNH to authorise an owner or occupier to use a shotgun where appropriate to protect “*public interests of a social, economic or environmental nature*” from damage by deer.²⁶ The authorisation should be for a period not exceeding 12 months. The Group anticipates that there would be relatively few applications for this type of authorisation, particularly compared to the numbers of out of season and night shooting authorisations granted by SNH each year.²⁷
- 31 The Working Group recommends that the use a shotgun to kill wild deer should be made subject to authorisation by Scottish Natural Heritage through a new provision in the Deer (Scotland) Act 1996, that the owner or occupier of any land should be able to apply for such authorisation and that the terms of paragraph 4 of The Deer (Firearms, etc.) (Scotland) Order 1985 should be amended accordingly.**

4.4 Other Equipment

- 32 Paragraph 5 of the 1985 Order covers two topics. Firstly, it states that it shall be lawful to use “*a slaughtering instrument using any ammunition intended for use in it*”. This provision was to accommodate the position with farmed deer, with a ‘slaughtering instrument’ being defined as “*a firearm which is specially designed or adapted for the instantaneous slaughter of animals or for the instantaneous stunning of animals with a view to slaughtering them*”.²⁸

prevent suffering by a wounded or injured deer.

²⁵ See Section 8.

²⁶ For discussion of the phrase quoted, see Section 1.3 of this Report.

²⁷ Statistics for out of season and night shooting authorisations are given in Sections 5 and 6.

²⁸ The Deer (Firearms etc.) (Scotland) Order, paragraph 1(2), with the meaning as in s.57(4) of the Firearms Act 1968.

- 33 Secondly, paragraph 5 states that it shall be lawful to use “*a sight which is not a light-intensifying, heat-sensitive or other special device for night shooting*”. While framed as a permission, this provision has the effect of prohibiting any sights that fall outwith the permission. This prohibition on the use of any type of ‘night sight’ reflected the concern expressed in the House of Lords at the time, that such devices might assist poachers taking deer illegally.²⁹ As a result, over 30 years later, all shooting of deer at night still has to be carried out with a telescopic sight and a separate light or ‘lamp’.
- 34 The context has changed considerably over that period. The current extent of deer poaching is limited as discussed in Section 9 of this Report, and good quality night sights are now widely available. Night sights can also be used legally for shooting species other than deer. As SNH’s Authorisation Review Panel noted, they are already “*used effectively for controlling other wildlife species*”.³⁰
- 35 Shooting deer at night requires to be authorised by SNH and carried out by a hunter deemed “*fit and competent*” by SNH, as discussed in Section 8 of this Report. Night shooting is a valuable part of controlling deer in some situations to prevent damage and the option to use night sights offers a number of potential benefits. The improved vision could help ensure public safety in some locations, while clearer sight of the deer could help reduce the chances of wounding it. There could also be other benefits in particular situations.³¹
- 36 SNH’s Authorisations Panel recommended in 2016 that “*SNH should consider undertaking work to establish whether there are benefits for safety, efficacy and deer welfare associated with permitting use of night vision and image intensifying scopes for culling deer*”.³² While night sights are already legally used to shoot other wild animals, their use on deer has to be tested through controlled shooting trials as part of ‘due diligence’.
- 37 In response to the Panel’s recommendation, SNH commissioned an independent expert to design the trials required and agreed FLS’s involvement in carrying out the trials and purchasing the necessary equipment.³³ As the trials counted as animal research, SNH also required a licence from the UK Home Office to carry them out. Delays in receiving the licence meant the trials were scheduled for late October 2018, with the findings due in March 2019.³⁴ However, SNH did not carry out the trials as scheduled due to other “*staff priorities*” and related factors.³⁵
- 38 The Working Group recommends that the Scottish Government should instruct Scottish Natural Heritage to carry out the planned trials into the use of night sights without further undue delay.**

²⁹ ‘Night sights’ is used as a generic term in this report recognising, for example, that some people use terms such as ‘night vision’ and also that thermal imaging sights can be useful for locating deer in thick cover during daylight hours.

³⁰ Deer Panel – Review of Authorisations, Report to SNH, September 2016.

³¹ For example: (a) in situations that require an intense level of night shooting, the use of night sights could avoid the stress to the deer reflected in them becoming ‘lamp-shy’; (b) the use of lamps in woods at night can be conspicuous from a distance and lead to someone viewing it as suspicious activity and reporting it to the police.

³² Deer Panel – Authorisations Review *Op cit*, Recommendation 11.

³³ The agreement was when FLS was still Forest Enterprise Scotland; SNH Information Response 32

³⁴ SNH Information Response 32.

³⁵ Correspondence between DWG and SNH, 30 May 2019.

- 39 The Group is not aware of any potential disadvantages of removing the prohibition on the use of night sights to shoot deer. The Group therefore considers that there is no public interest case for continuing to deny land owners, occupiers and those with their permission the option of using night sights to control deer to prevent damage. The Group considers that the prohibition is now an historical anomaly and that, subject to the outcome of SNH's trials, it should be removed by repealing paragraph 5(b) in the 1985 Order.
- 40 **The Working Group recommends that, subject to the successful outcome of Scottish Natural Heritage's trials, paragraph 5(b) of The Deer (Firearms, etc.) (Scotland) Order 1985 should be repealed to allow the use of night sights to shoot deer.**
- 41 The Group considers that the 1985 Order should be replaced in due course to revise the terms of the current paragraphs 3, 4 and 5, as discussed above. The Group recognises that further work is required by SNH and others to clarify the specifications for non-lead bullets, and also to review the ammunition that can be used in shotguns. However, the Group considers an earlier legislative opportunity should be taken to repeal paragraph 5(b) in the Order to enable the use of night sights, if SNH's trials are completed successfully. The 1996 Act could also be amended to require the authorisation of any use of a shotgun to shoot deer, independent of whether the terms of paragraph 4 in the Order have been replaced.

Section 5 Times of year when wild deer can be killed lawfully

- 1 A basic public interest requirement is that, independent of who might have the legal right to kill wild deer on particular land, there should be adequate statutory provisions in place to ensure that the killing is carried out to appropriately high standards of animal welfare and public safety.
- 2 The previous Section reviewed *how* wild deer in Scotland can be killed lawfully under the current provisions of the Deer (Scotland) Act 1996 and related legislation. This Section reviews the times of year when deer can be killed lawfully under the legislation, while the following Section reviews the times of day when deer can be killed lawfully.

5.1 Close Seasons 1959-1996

- 3 Statutory close seasons restricting the right to shoot male and female red deer at specified times of year, were first introduced by the Deer (Scotland) Act 1959. While the purpose of the Act was to improve the protection of agriculture and forestry from damage by marauding red deer, the inclusion of close seasons was a key demand of sporting estate interests and the main contested issue in the protracted negotiations leading to the 1959 Act.
- 4 The Government Committee appointed in the early 1950s to consider close seasons had failed to reach agreement and the eventual compromise was to delay the introduction of close seasons for three years after the 1959 Act was passed.¹ This was on the basis “*that during that time substantial progress would be made towards getting marauding under control*”.² However, as the Red Deer Commission (RDC) reported in 1962, when the close seasons came into effect, “*it cannot be claimed that this desirable objective has been achieved*”.³
- 5 The specific dates for the close seasons for female and male red deer were included in the 1959 Act itself, while the Act also enabled statutory close seasons to be set for other species of wild deer by statutory instrument.⁴ This was first done for roe, fallow and sika deer by The Deer (Close Seasons) (Scotland) Order 1966. This Order was then replaced by The Deer (Close Seasons) (Scotland) Order 1984 to include close seasons for red/sika hybrids following the Deer (Amendment) (Scotland) Act 1982.
- 6 The introduction of the close seasons from 1962 did not affect the right of occupiers under s.33(3) of the 1959 Act, to kill deer on enclosed agricultural land and in enclosed woodland at any time of year. However, the close seasons meant that the only way that land owners could cull deer out of season on unenclosed land prior to the Deer (Scotland) Act 1996, was to apply for an authorisation from the RDC under the measures in s.6 of the 1959 Act for dealing with marauding red deer, and from 1982, red or sika deer. During the period 1963-1996, the number of authorisations issued each year was generally around 50-70 and the numbers of deer shot under them generally around 300-500 annually.⁵

¹ Report of the Committee on Close Seasons for Deer in Scotland (HMSO, 1954). The Committee concluded that the principle need for close seasons was as a “*deterrent to poaching*”. Animal welfare was seen as a “*supplementary*” consideration with others, as described in Callander, R. and MacKenzie, N. (1991), *The Management of Wild Red Deer in Scotland*, p.53. Also see SNH (1994), *Red Deer and the Natural Heritage*, p.18: “*Close seasons were introduced... primarily as a deterrent to poaching, with welfare aspects as a secondary consideration*”.

² Red Deer Commission (1962) Annual Report, para. 3.

³ RDC (1962) *Op cit*.

⁴ Deer (Scotland) Act 1959, s.21(1) and (2) respectively.

⁵ Callander and MacKenzie (1991) *Op cit*, p.20; Red Deer Commission Annual Report, 1996-1997.

5.2 Close Seasons 1996-Present

- 7 During the debate leading to the 1996 Act, a range of interests questioned the need to continue to have close seasons for male deer.⁶ As a result, while the 1996 Act required that the Secretary of State “*shall*” set a close season for female deer of each species, the Act only states that he “*may*” set close seasons for male deer.⁷
- 8 The 1996 Act also enabled the dates for the close seasons for red deer to be set by statutory instrument for the first time like the other species, and this change was subsequently consolidated by replacing the 1984 Order with The Deer (Close Seasons) (Scotland) Order 2011. The current close seasons under that Order are shown in Figure 15.

Figure 15 Current close seasons for wild deer in Scotland

Species	Females	Males
Fallow deer (<i>Dama dama</i>)	16 th February - 20 th October	1 st May - 31 st July
Red deer (<i>Cervus elaphus</i>)	16 th February - 20 th October	21 st October - 30 th June
Red/Sika deer hybrid	16 th February - 20 th October	21 st October - 30 th June
Roe deer (<i>Capreolus capreolus</i>)	1 st April - 20 th October	21 st October - 31 st March
Sika deer (<i>Cervus nippon</i>)	16 th February - 20 th October	21 st October - 30 th June

Source: The Deer (Close Seasons) (Scotland) Order 2011

- 9 Two other significant changes were made to close seasons by the 1996 Act. Public safety and the natural heritage were added to the interests that could be protected by an out of season authorisation, while the authorising of out of season culling was separated from the provisions for dealing with marauding deer.⁸ Following the 1996 Act, the number of out of season authorisations under s.5(6) initially continued at a similar level as before, but the number of deer killed under the authorisations started to increase. Within 10 years, over 2,000 deer a year, very largely red deer, were being culled under s.5(6) authorisations, with much of the increase due to the new scope under the 1996 Act to protect natural heritage interests.⁹
- 10 By the time Scottish Natural Heritage (SNH) replaced the Deer Commission Scotland (DCS) in 2010, the number of s.5(6) authorisations issued annually was around 70-80 a year and the number of deer shot was still just over 2,000 a year, the majority of them red deer.¹⁰ The out of season totals under s.5(6), however, did not include deer killed out of season on enclosed agricultural land and in enclosed woodland, as that did not require authorisation to prevent damage until 2011.

⁶ Callander and MacKenzie (1991) *Op cit*, p.53; SNH (1994) *Op cit*, p.18.

⁷ Deer (Scotland) Act 1996, s.5(1)(a) and (b) respectively.

⁸ This left close seasons at the start of the 1996 Act in s.5, as the powers to deal with marauding deer were moved from s.6 in the 1959 Act to s.10 in the 1996 Act as part of the consolidation process following the Deer (Amendment) (Scotland) Act 1996.

⁹ For example, DCS Annual Report, 2003-04.

¹⁰ The number of s.5(6) authorisations issued in 2009-10 was 84, but the number of deer killed under them was not included in the DCS's Annual Report of that year. In the DCS's Annual Report 2008-09, there were 71 authorisations and 2,146 deer shot under them, of which 1,502 were red deer.

- 11 The Wildlife and Natural Environment (Scotland) Act 2011 ('the WANE(S) Act') also made significant changes to the arrangements in the 1996 Act governing close seasons on deer welfare grounds. Firstly, it ended the right of occupiers to cull out of season on enclosed land.¹¹ Secondly, it enabled SNH to issue either General or Specific Authorisations for out of season shooting.¹² SNH has since issued General Authorisations annually for each year from 2012. While General Authorisations are taken by SNH as covering both owners and occupiers, the legislation only refers to occupiers. The reason for this anomaly is explained below.
- 12 These General Authorisations allow the occupiers of enclosed land to kill male deer throughout the close seasons for male deer to protect the agricultural and woodland interests described in s.5(6)(a). They also allow those occupiers to kill female deer during part of their close seasons, but not from 1st April to 31st August, during which period a Specific Authorisation is required to kill female deer.
- 13 Thus, while the WANE(S) Act 2011 amendments removed the statutory right of occupiers to shoot deer at any time of year to prevent damage on their enclosed land, that scope was given back through the General Authorisations, subject to not shooting females during a more restricted female close season.
- 14 However, as General Authorisations have not covered the interests in s.5(6)(b), owners and occupiers wanting to shoot deer out of season to protect unenclosed woodland, the natural heritage or public safety still have to apply for Specific Authorisations during the full extent of both male and female close seasons. The reason that s.5(6)(b) interests have been excluded from the General Authorisations appears to be a concern that this would be seen as an indirect approach to removing close seasons for male deer.¹³
- 15 The number of Specific Authorisations issued by SNH in each of the five years 2012/13-2017/18 is shown in Figure 16, which also shows the total number of deer of each species

Figure 16 Total number of deer of each species reported as killed out of season each year under Specific Authorisations

Species	2013/14	2014/15	2015/16
Red	4,457	7,449	5,857
Roe	3,464	5,450	5,443
Sika	1,738	2,007	1,459
Fallow	90	127	78
Total	9,749	15,033	12,837

Source: SNH Information Response 25

¹¹ By inserting s.26(1A) and amending s.5(6) to incorporate that enclosed land under 5(6)(a) with other interests under s.5(6)(b).

¹² By introducing a new s.5(8)

¹³ DWG meeting with SNH, 13 March 2018.

reported as killed out of season each year. The total includes the deer shot out of season under both Specific and General Authorisations, as the cull return form required by SNH from owners and occupiers simply asks for the cull figures to be divided between in-season and out of season.

- 16 The number of deer shot out of season is a significant component of the total annual culls, at around 15% each year. The proportion is broadly similar to that for the numbers of deer shot under authorisations for night shooting each year, as has appears to have generally been the case since authorisations for night shooting were introduced from 1982.
- 17 The distribution of out of season and night shooting authorisations by Local Authority area in 2016/17 are given in Figure 17. This shows that, while both are widely distributed across Scotland, both are also mainly concentrated in particular Local Authority areas. This also reflects in part that many properties that have a Specific Authorisation for out of season shooting, also have a night shooting authorisation. Over the two years 2015/16 and 2016/17, for example, this was the case with 89% of the properties with a Specific Authorisation.¹⁴
- 18 During the last 60 years, while there have been several changes in the arrangements governing close seasons, there have only been two changes to the dates of the close seasons since they were first set in the 1959 Act and 1966 Order. These changes were made in the 1984 Order.
- 19 The changes were, firstly, that the close season for male sika deer which had been the same three months as for fallow, was made the same as the eight month close season for male red deer due to hybridisation. The female red/sika seasons were already the same. The other change was that roe deer seasons were adjusted, with the start of the female close season moved back from 1st March to 1st April and the end of the male close season moved forward from 30th April to 31st March.
- 20 The purpose of statutory close seasons for deer is to restrict the scope for land owners and occupiers to shoot them at certain times of year, on the basis that this restriction is justified to protect public interests. However, the current dates and arrangements for close seasons in Scotland can be considered to owe more to history than a rational assessment of current needs.
- 21 The current dates for the close seasons reflect the traditional red deer stag stalking seasons maintained on many Highland sporting estates over 60 years ago. During the passage of the 1959 Act at Westminster, the end of the stag season in Scotland was debated given the varying circumstances across the Highlands, and the date chosen (20th October) “*was a compromise for those deer forests that did not get sufficient stags until the rut was well underway because the original dates proposed were much earlier*”.¹⁵ With the end of the stag stalking season on 20th October until the following July, the hind stalking season was then set to start on 21st October until the traditional end of the hind season on 15th February.

¹⁴ SNH Information Response 47.

¹⁵ Staines, B (2000). Wild Deer: issues concerned with deer welfare and public safety. Deer Commission for Scotland.

Figure 17 Distribution of out of season and night shooting authorisations by Local Authority area in 2016/17

Local Authority	No. of out of season authorisations, s.5(6)	No. of night shooting authorisations, s.18(2)
Aberdeen City	3	3
Aberdeenshire	15	21
Angus	6	3
Argyll & Bute	47	38
Clackmannanshire	1	1
Dumfries & Galloway	24	21
East Ayrshire	7	6
East Dunbartonshire	1	1
East Lothian	2	2
Edinburgh City	0	1
Falkirk	3	3
Fife	2	2
Glasgow City	0	2
Highland	66	108
Midlothian	0	1
Moray	13	19
North Ayrshire	2	4
North Lanarkshire	2	4
Perth & Kinross	18	21
Renfrewshire	3	4
Scottish Borders	23	17
South Ayrshire	6	4
South Lanarkshire	6	10
Stirling	12	19
West Dunbartonshire	0	3
West Lothian	2	4
Western Isles	0	1
Total	264	323

Source: SNH Information Response 47

- 22 The 16th February - 20th October dates set for the close season for red deer hinds in the 1959 Act were then used for female fallow, roe and sika in the 1966 Order, except for the start of the female roe close season two weeks later on 1st March (and subsequently adjusted to 1st April in 1984). The start of the close season for red deer stags set in 1959 is also the start of the male close season for sika and roe. The lengths of the male close seasons therefore vary from eight months for red and sika and five months for roe to three months for fallow.
- 23 In addition, the way that the current arrangements over close seasons in the 1996 Act apply to different extents depending on the types of land and interests involved, is also still a reflection of the original tension over close seasons between sporting estate interests and those of agriculture and forestry. The Group considers that, as discussed below, both the dates for close seasons and the arrangements governing them should be revised so that they are fit for purpose in contemporary circumstances.

5.3 Female Close Seasons

- 24 There is general recognition that there should be a close season for female deer to avoid orphaning dependent juveniles on animal welfare grounds. The period of the close season should therefore be defined by the risk of that occurring.
- 25 The date of the current start of the female close seasons reflects the traditional dislike of many deer hunters of gralloching (disembowelling) increasingly pregnant females. However, there is no direct animal welfare issue involved as the foetus dies at the same time as its mother.¹⁶ The date of the end of the current female close seasons is also not based on welfare concerns, but the traditional start of the red deer hind stalking season to follow the end of the stag season as described above.
- 26 SNH based the dates of 1st April - 31st August used for the more restricted female close seasons in the General Authorisations, on the research and other information available into the times for each deer species when there may be a risk of the orphaning of dependent calves (known as kids in roe deer).¹⁷ While setting dates for the start and end of the female close season involves making balanced judgement of the level of risk of orphaning, SNH remain of the view that the dates represent a suitably sound basis for the period of the restricted close season.¹⁸
- 27 SNH also linked the introduction of the dates to setting a higher threshold for granting an authorisation for killing female deer out of season during the restricted period. This threshold should include, amongst other factors, the significance of the damage being caused or likely to be caused, the scope for other means of addressing the issue, the risk of orphaning during culling in the particular circumstances and the experience of the person who would carry out the culling.
- 28 The Authorisations Review Panel set up by SNH at the end of 2015 considered the dates for the restricted close season as part of its work. In the Panel's final report, it endorsed the dates as covering the period of greatest welfare concern for dependent juveniles.¹⁹ However, the Panel also noted that the submissions which it had received contained a range of views, and it therefore recommended that "*SNH should review the demand for, and the likely welfare implications of, April and September shooting of females*".²⁰

¹⁶ For example, Staines (2000) *Op cit*.

¹⁷ For example, Irvine, J. (2004), Calving dates: literature review and data analyses, DCS.

¹⁸ DWG and SNH meeting, 13 March 2018.

¹⁹ Deer Panel – Review of Authorisations (2016). Report to Scottish Natural Heritage, September 2016.

²⁰ Deer Panel – Review of Authorisations (2016) *Op cit*, Recommendation 12.

- 29 SNH's response to the recommendation was to include a question on cull return forms for 2017/18. Those completing the forms were asked if they have a need to control female deer in the months of April or September, with yes/no boxes for each month. On the form, no context was given to the voluntary question. SNH received a total of 233 responses on the 2017/18 forms, amongst which 56 responses said 'no' to both April and September.²¹ The remaining responses included 120 responding 'yes' to April and 163 responding 'yes' to September, with 103 of these 'yes' responses saying 'yes' to both months. The question is also on the current 2018/19 form and the results to date show a similar pattern.²²
- 30 Those receiving cull return forms are an obvious constituency to survey on the need to shoot females in April and September, although the limited extent of the coverage of landholdings in Scotland by cull return forms and the strong bias in the current distribution towards the Highlands and open hill red deer range need to be recognised.²³ The results do indicate a need to shoot female deer in both months. However, the Group considers that SNH's inclusion of the question on the cull return form, was a very limited approach to following up the Panel's recommendation and that the results give little helpful information by themselves.
- 31 The Panel's recommendation asked about the month after the start of the restricted close season and the month after its end. The implication with the other comments in the Panel's report, is that the Panel considered that there are still questions over whether the restricted close season should start and end later.
- 32 The Group considers that the need to shoot female deer in April and September to protect public interests from damage, is an important factor to be weighted against the risk that some calves might be orphaned and possibly not survive depending on the stage of their development at the time. As discussed below, the Group considers there is a greater risk of orphaning and therefore welfare issues, at the end of the current restricted close season than at the start.

5.3.1 Start of Female Close Season

- 33 The risk of orphaning starts with the beginning of calving amongst Scotland's four species of wild deer. The pattern of the births with each species is a general distribution curve starting with few births before the rate rises steeply to a main calving period and then tails off steeply. The main calving period is regarded as the period within which 80% of the births have occurred and this is also used to give a median calving date.²⁴
- 34 The main calving period for wild red deer is very similar across Europe and is considered to be mid-May to late June in Scotland.²⁵ There is very little data on the main periods in Scotland for sika and fallow deer. However, sika are considered to be the same as red deer, while the main calving period for fallow is viewed as mid-June to mid-July.²⁶ The main period for roe deer in Scotland is considered to be mid-May to mid-June, with some studies suggesting a 20-30 day calving period.²⁷

²¹ SNH correspondence with DWG, 16 July 2019.

²² SNH correspondence with DWG, 16 July 2019.

²³ See Section 2.

²⁴ Irvine (2004) *Op cit*.

²⁵ Apollonio, M., Putman, R., Grignolio, S. and Bartos, L. (2011). Hunting seasons in relation to biological breeding seasons and the implications for the control or regulation of ungulate populations. In: Putman, R., Apollonio, M. and Andersen, R. (eds.) *Ungulate Management in Europe: Problems and Practices*. Cambridge University Press, Cambridge.

²⁶ Irvine (2004) *Op cit*.

²⁷ Apollonio *et al.* (2011) *Op cit*.

- 35 Within the overall pattern of the main calving periods, studies of red and roe deer show that the median calving date in Scotland can vary due to environmental factors. Open hill red deer tend to calve later than those living in forests, with the earlier calving reflecting the more favourable forest environment.²⁸ Similarly, deer at lower densities tend to calve earlier than deer at high densities due to improved body condition from less competition for food.²⁹ The median date for roe can also vary markedly between locations, while wider weather patterns can influence the dates for red and roe year to year.³⁰ There is already evidence that climate change is having an effect.³¹
- 36 The general distribution of the pattern of calving in each species means that instances of early and late outlying calving dates are sometimes reported. However, even allowing for variation in median calving dates, the available evidence indicates that red and sika births before the 1st April start of the restricted close season are very uncommon, while calving by fallow then might be considered rare. The indications are that there will be more instances of roe deer calving before the 1st April, but they might still be considered generally uncommon.
- 37 On the basis of the very small number of calves that might have been born by 1st April, the risk of orphaning through a mother being shot is particularly limited. The Group therefore considers that there is not a justifiable case for starting the close season earlier. However, the Group also considers that the case for delaying the start of the closed season into April should be examined.
- 38 As April progresses, the number of births starts to increase and with it, the possibility of orphaning. However, the level of calving in the first half of April is well ahead of the main calving period and still low. Mid-April is also in advance of the 10 days that have been suggested before the main calving period for red deer, as the time to use “*as a buffer zone to minimising the risk of shooting a female which may have a hidden dependent calf*”.³²
- 39 Another factor affecting the risk of orphaning from shooting female deer in the first half of April, is that not all the females in a population will be giving birth in a particular year. The calving rates in local populations vary. There are, firstly, yeld hinds or does that are not calving that year. Secondly, there are the female calves or kids from the previous season that have become yearlings.
- 40 The proportion of yeld females is generally determined by the two environmental factors of habitat quality and deer density. The proportion of red deer yeld hinds can be relatively high on open hill range, but low in more productive forest environments.³³ Roe deer can have calving rates over 100% in woodland habitats due to twins. However, high deer densities relative to the food resources reduce the fecundity of populations in all environments and thus the proportion of breeding females in the population.³⁴ While yeld females are generally not distinguishable in the field from other adult females, their presence to whatever degree dilutes the risk of orphaning from shooting a female deer.

²⁸ Irvine (2004) *Op cit.*

²⁹ Irvine (2004) *Op cit.*

³⁰ Irvine (2004) *Op cit.*

³¹ Recent research on Rum shows how red deer are responding to the changing climate: Bonnet, T., Morrissey, M.B., Clutton-Brock, T.H., Pemberton, J. and Kruuk, L.E.B. (2019), The role of selection and evolution in changing parturition date in a red deer population, draft paper shared with DWG.

³² Irvine (2004) *Op cit.*, p.1.

³³ Clutton-Brock, T. and Albon, S. (1989). *Red Deer in the Highlands*. BSP Professional Books.

³⁴ Clutton-Brock and Albon (1989) *Op cit.*

- 41 The proportion of yearlings or juveniles in a population varies due to the same environmental factors as fecundity. Also, as with the level of deer density, the proportion of yearlings may be significantly altered by the culling regime in any particular situation. The control of juveniles is a key component of managing deer populations and densities, especially the number of female juveniles before they reach reproductive age. In the context of the risk of orphaning, yearlings are not adding to the risk and are generally identifiable in the field.
- 42 Thus, in the first half of April, a proportion of the female deer population will not be pregnant and the level of births by those that are, will still be low. A proportion of those calves are also likely to die due to natural mortality during their first year, though there is little data on juvenile mortality rates other than for open hill red deer.³⁵ Early red deer calves appear to survive less well than later calves and juvenile mortality rates can be high in some years amongst open hill red deer.³⁶
- 43 Delaying the start of the close season over the first two weeks of April, would not require land owners and occupiers to shoot female deer on their land during that period unless they chose to do so.³⁷ However, if shooting took place, the risk of one of the few females to have calved by that stage being shot, may be further reduced by shooter competence. There is a strong ethos against orphaning calves amongst the deer sector in Scotland and this is reflected, for example, in Wild Deer Best Practice (WDBP) guidance and Deer Stalking Certificate qualifications.
- 44 While there is a risk of orphaning in the first half of April, the Group considers that the risk of it actually happening is very low and the actual number of individual cases that might be involved would be even smaller. Those few orphaned deer will die, but the weight to be put on their suffering has to be considered in context.
- 45 The first half of April can be an important period for deer control with, for example, the possibility of hinds marauding onto the new growth of grass on agricultural land and yearling roe dispersing in woodlands as they become independent of their mothers. There is also the wider context described in the following Parts of the Report, of the general need to reduce the current levels of damaging impacts by wild deer in Scotland.
- 46 Given the very low risk of orphaning occurring in the first two weeks of April and the freedom of owners and occupiers to decide whether they shoot female deer during that time, the Group's view is that the start of the restricted close season for female deer should be delayed to 15th April. The Group considers that restricting the right of owners and occupiers to shoot female deer before then is not warranted by the available evidence. Thus, while the Group agrees with SNH that the restricted close season does not need to start before 1st April, the Group considers the start should be delayed to the 15th April.

³⁵ Irvine (2004) *Op cit.*

³⁶ For example, Clutton-Brock and Albon (1989) *Op cit.*

³⁷ Except in situations involving compulsory regulation by SNH.

5.3.2 End of Female Close Season

- 47 The calves of the four deer species are considered to be nutritionally dependent on their mother's milk for three to five months after birth, with the period generally described as four months.³⁸ Therefore, by around four months after the mean calving date, the proportion of calves that are weaned is increasing rapidly. While this is reflected in the decline in the number of females lactating, lactating and suckling by calves can continue for some months after calves are no longer reliant on milk as part of their diet.³⁹
- 48 Calves that are orphaned during their transition from suckling to relying on grazing, may survive depending on the stage of their development. However, they survive less well than non-orphaned calves.⁴⁰ Weaned calves still have a degree of social dependence on their mother, for example, in learning grazing behaviour and the quality of habitat that a calf may have access to through the hierarchical status of its mother. Research on Rum showed that the effects of orphaning on red deer within their first two years of life could be measured in the subsequent performance of the deer.⁴¹
- 49 The indications from the dates of calving periods and the duration of nutritional dependence are that, during August, a high and quickly increasing proportion of calves will be weaned and others close to that stage.⁴² Fallow will be behind the other species with its later calving period. There will still be a declining number of nutritionally dependent calves during the weeks of September, and also beyond that with the general distribution of calving dates. However, with the late births, factors other than orphaning can become more important in determining calf survival.⁴³
- 50 There can be some local variation within this overall pattern due to the types of factors discussed above that can affect the timing of calving periods. These include habitat type, population density and geographic location, for example, between the south and north of Scotland. As also described above, it was geographic variation in the timing of the red deer rut that resulted in the compromise date in 1959 for the stag seasons that still dominate the current pattern of close seasons.
- 51 There is limited data on which to base discussions about an end date for the female close seasons and selecting a date also involves balancing a range of factors. SNH has adopted 31st August as the end of the restricted close season on the basis of the information available to it. This avoids the period when there are high levels of vulnerable calves and when shooting might also have a disturbance effect on mothers and young. The Group endorses SNH's position that the close season should not end before 31st August.
- 52 The end of the season draws a line before which it is judged people should not have the discretion to shoot female deer, and before which any shooting would require to satisfy the strict requirements of a Specific Authorisation. There is no requirement on owners and occupiers to start shooting female deer after the date, but the current date allows that discretion in September without the high threshold of a Specific Authorisation.

³⁸ Wild Deer Best Practice guidance.

³⁹ Irvine (2004) *Op cit.*

⁴⁰ Irvine (2004) *Op cit.*

⁴¹ Pemberton, J.M. and Kruuk, L.E.B. (2015). Red deer research on the Isle of Rum NNR: management implications. SNH, Battleby.

⁴² Irvine (2004) *Op cit.*

⁴³ Irvine (2004) *Op cit.*

- 53 In September, only a proportion of female deer have calves due to yeld females and juveniles. In some cases, females may have lost calves due to natural mortality. Amongst the other breeding females, the proportion of calves for which orphaning might prove fatal in the early months of their lives has already reduced substantially and is continuing to fall as the month progresses.
- 54 There will still be a significant number of calves in September for which orphaning would prove fatal sooner or later after they are orphaned. The Group's experience is that some people chose not to shoot females in September for that reason, when there was already discretion prior to 2011 to shoot female deer on enclosed land. However, there can be a need to control female deer in September to protect crops and other interests. In situations where female deer are shot in September, calves may be visible with their mothers and following the WDBP guidance always to shoot the calf before the mother, avoids orphaning.
- 55 While there is clearly a risk of fatal orphaning during September, the risk of this actually happening in practice might be considered significantly lower. The regrettable fate of those orphans has to be weighed against a prohibition on anyone shooting any female deer outwith the strict requirements of a Specific Authorisation.
- 56 The Group's view is that SNH has adopted a reasonable balance setting 31st August as the end of the restricted female close season. The Group is therefore not arguing against that date. However, the Group recognises that a case can be made for setting a later date. While the Group does not consider that imposing the high threshold for Specific Authorisations to 30th September is a warranted restriction, delaying the end of the close season to mid September would significantly reduce welfare concerns.
- 57 In reviewing the dates for the restricted close season for female deer, the Group's view is that the season should not start before the current date of 1st April and should not end before the current date 31st August. The Group also considers that those dates strike reasonable balances for the period of the restricted season. However, the Group also considers there is a case for the delaying the start of the close season to 15th April and a case for delaying the end of the season to 15th September.
- 58 The Group's view is that the case for delaying the start date is stronger than for delaying the end date, even though there are clearly welfare concerns at that time. The Group sees merit in moving both the start and end of the current five month length of the close season two weeks later in the year.
- 59 The wider issue is that the dates for the restricted close season for female deer only operate in the areas covered by the current General Authorisations (i.e. areas of enclosed agricultural land and enclosed woodland). The Group considers that there is no public interest case for requiring the rights of the owners and occupiers of other types of land and those seeking to protect other types of public interests, to comply with the full eight month female close seasons as currently set out in the 2011 Order.
- 60 The Group considers that the same close seasons for female deer should apply to all types of owners and occupiers and all types of land. The Group considers that the close season for each species of female deer should be set in replacement Close Seasons Order, to start on a date in the period 1st to 15th April (inclusive) and end on a date in the period 31st August to 15th September (inclusive). The Group recognises that climate change means that the close season period needs periodic review to allow for biological and temporal changes.

5.4 Male Close Seasons

- 61 The origins of the eight month close season for male red deer as the period between the end of one stag stalking season and the beginning of the next on traditional Highland sporting estates, has been described above. The subsequent influence of that close season on the close seasons for male deer of other species was also mentioned above. This includes having an eight month close season for male sika deer, even though public policy since the 1980s has been to try to limit the spread of sika deer.⁴⁴
- 62 There are no animal welfare or biological reasons to have close seasons for male deer of any species.⁴⁵ It has also been lawful to shoot male deer all year round on enclosed agricultural land and in enclosed woodland throughout the last 60 years. The Group considers there is also no public interest case for restricting the right of the owners and occupiers of other land types from shooting male deer all year.
- 63 There have been proposals from time to time over the years to end close seasons for male deer, and each time they attract a strong reaction from particular interests mainly associated with open hill red deer stalking. When the DCS consulted on close seasons in 2004-05, for example, there were 1,193 responses, of which 1,001 were pre-printed responses organised by the Scottish Gamekeepers Association.⁴⁶ As was observed in the 1990s, it can appear that those who are most against further statutory regulation of deer management, are also those most against removing statutory regulation when it involves the close seasons for male deer.⁴⁷
- 64 The argument is sometimes made that red deer stags require protection after the rut, due to the possible disturbance effect of shooting a stag on the other stags when “*stags are usually well run after their exertions during the rutting season towards the end of October*”.⁴⁸ A possible disturbance effect has been noted as a potential welfare issue in other culling circumstances, most notably culling during the rut but it is the Group’s opinion that the effect is a minor one to be balanced against wider issues.⁴⁹ However, while a hunter might decide not to shoot male deer in poor condition, there is no public interest justification to prevent other owners and occupiers from shooting male deer during that time if they decide to do that.⁵⁰ With the General Authorisations, some owners and occupiers are unrestricted by close seasons and the Group considers that should apply to all owners and occupiers.

⁴⁴ See Section 17.

⁴⁵ For example, Staines (2000) *Op cit*. While close seasons for species can be used for purposes other than welfare, such as restricting access to a scarce resource, these are not applicable in this context.

⁴⁶ DCS Annual Report, 2004-05.

⁴⁷ Callander and MacKenzie (1991) *Op cit*.

⁴⁸ DCS (1997). Guide to the Deer (Scotland) Act 1996, p.4.

⁴⁹ Apollonio, M., Putman, P., Grignolio, S. and Bartos, L. (2011). Hunting seasons in relation to biological breeding seasons and the implications for the control or regulation of ungulate populations. In: Putman, R., Apollonio, M. and Andersen, R. (eds.) *Ungulate Management in Europe: Problems and Practices*. Cambridge University Press, Cambridge.

⁵⁰ If a land owner, for example, does not want stags that may move to other lands over winter shot there because of the potential value to the owner if they return for the next stalking season, then the owner would need to come to an arrangement with the other owner(s) involved. Such matters are a matter between neighbours, rather than measures in legislation. The owner may also have the scope to improve the winter holding capacity of their own land (e.g. by creating more woodland).

- 65 Scottish Forestry, SNH and others have long recognised that there are no welfare or biological reasons for male close seasons, and the change in the 1996 Act so that there is no requirement to set a close season for male deer reflected a move towards that.⁵¹ The Group considers that close seasons for male deer should be removed in an Order to replace the 2011 Order in which no close season is set for male deer of any species.
- 66 Ending male close seasons removes an unwarranted restriction on the scope of owners and occupiers to cull male deer. However, owners and occupiers can also choose if they want to maintain their own seasons for when they shoot stags and bucks.⁵² Whether or not removing the male close seasons would lead to any general increase in the numbers culled, it is likely that the cull of male deer would become more widely spread during the year. This would potentially benefit the supply of wild venison by reducing its seasonality, particularly during the close season for females over the summer months.⁵³
- 67 **The Working Group recommends that The Deer (Close Seasons) (Scotland) Order 2011 should be replaced with a new Order in which the close season for females of each species is set to start on a date in the period 1st to 15th April (inclusive) and end on a date in the period 31st August to 15th September (inclusive), and in which no close seasons are set for males of each species.**

5.5 Interests

- 68 Changing the close seasons for female deer and removing them for male deer does not require any amendment to the 1996 Act, only the replacement of the 2011 Close Seasons Order with a new Order. However, the Group considers that s.5 'Close Seasons' in the 1996 Act should also be amended.
- 69 At present, out of season culling can only be authorised under s.5(6) to protect a restricted range of public interests. While public safety and the natural heritage were added by the 1996 Act, the protection of deer welfare might also have been added, for example, as under other SNH powers in the Act.⁵⁴ However, as discussed previously in this Report, there are significant disadvantages to using an exclusive rather than inclusive approach to the definition of the public interests in the primary legislation that are protected by powers in the Act.⁵⁵ The Group considers that the inclusive phrase "*public interests of a social, economic and environmental nature*" that already applies to some of SNH's powers, should also apply to the interests that can be protected by authorising out of season culling under s.5 of the Act.
- 70 The Group also considers that the scope of owners and occupiers to cull deer out of season should apply in the same terms to all owners and land types. The question in each situation should be whether an authorisation is warranted in the particular circumstances. The Group considers that the current distinction in s.5(6) depending on whether or not land is enclosed "*by a stock-proof fence or other barrier*", is a redundant legacy of previous times and should no longer be a determining factor in whether an owner or occupier needs to apply for an authorisation to shoot deer out of season.⁵⁶

⁵¹ For example, Forestry Commission Scotland and SNH in DCS Annual Report, 2004-05 *Op cit.*

⁵² As with the voluntary seasons on some private estates before the 1959 Act.

⁵³ Male deer shot during the summer months are also likely to be in better condition than some shot over the winter.

⁵⁴ ss.6A and 10 of the 1996 Act.

⁵⁵ See Section 1.

⁵⁶ s.45(1) of the 1996 Act.

- 71 The Group considers that the presence or proximity of a stock fence, which is not a barrier to deer with its limited height, should not be used as the basis for distinguishing owners and occupiers who can protect their interests without authorisation or the types of public interests that can be protected.
- 72 The Group recognises that the introduction by the WANE(S) Act 2011 of the enclosed/unenclosed distinction in s.5(6)(a) and (b) was, with the addition of a new sub-section s.5(8), to create the scope for General Authorisations as the approach taken to ending the ability of owners and occupiers to shoot female deer on enclosed agricultural land and woodland without the need for out of season authorisation. The complexity of the approach appears to have been due to the aim of creating a mechanism that allowed the owners and occupiers of that land, to be able to shoot male deer all year without authorisation.
- 73 While the owners and occupiers of unenclosed agricultural land and unenclosed woodland as well as all other types of land, currently have to apply for authorisation to shoot male deer out of season, they also have to satisfy the requirement at the end of s.5(6) that *“no other means of control which might reasonably be adopted in the circumstances would be adequate”*.
- 74 The Group considers that this extra threshold of *“no other means”* should be regarded as an historic legacy and that it should no longer be applied to applications for authorisation to shoot male deer out of season (even if male close seasons were retained). However, if there were no male close seasons and a more limited close season for females as proposed above, the requirement that *“no other means of control which might reasonably be adopted in the circumstances would be adequate”*, would be an appropriate part of the threshold for authorising shooting females out of season.
- 75 In summary, the Group considers that having no close season set for male deer and the more focused close season for females through a new Close Seasons Order, should be linked to amending s.5(6) to remove the distinction between enclosed and unenclosed land and to have the inclusive approach to public interests represented in the 1996 Act by the phrase *“public interests of a social, economic or environmental nature”*.
- 76 These reforms would remove the need to produce General Authorisations each year, remove the need for Specific Authorisations to shoot male deer out of season and reduce the number of applications each year for Specific Authorisations to shoot females out of season.
- 77 As discussed above, the scope to have General Authorisations under s.5(8)(a) was invented primarily as a device as part of making the out of season shooting of female deer by occupiers of enclosed agricultural land and woodland subject to regulation. The reforms to the seasons proposed here would make General Authorisations redundant in that capacity. It might be considered that the retention of this power in s.5(8) would leave an unnecessary complication in the legislation under the proposed reforms, while the Group recognises there might be a reluctance to repeal the power in case it is ever useful again.

- 78 The Group considers that the unused power in s.5(8)(b) to grant authorisations “*to a category of persons*” should be repealed. The Group considers that its inclusion is a legacy of redundant DCS proposals put to government just prior to the replacement of the DCS by SNH in 2010.⁵⁷ Those proposals are mentioned more fully later in the Report.⁵⁸ The Group considers that authorisations should continue to be tied to land and issued to individual owners and occupiers as the holders of deer hunting rights and the units of regulation under SNH’s powers in the Act.
- 79 **The Working Group recommends, firstly, that section 5(6) of the Deer (Scotland) Act 1996 should be amended to apply to any land and to cover public interests of a social, economic and environment nature; and, secondly, that s.5(8) should be repealed.**

⁵⁷ DCS letter and proposals relating to review of deer management legislation, sent to Minister for Environment, 13 January 2009.

⁵⁸ See Section 8.

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

- 1 As noted in the previous Section, a basic public interest requirement is that there should be adequate statutory provisions in place to ensure that the killing of wild deer is carried out to appropriately high standards of animal welfare and public safety in all circumstances.
- 2 The previous Section reviewed the times of *year* when wild deer in Scotland can be killed lawfully under the current provisions of the Deer (Scotland) Act 1996 and related legislation. This Section reviews the times of *day* when wild deer can be killed lawfully under the legislation.

6.1 Night Shooting Legislation

- 3 In the Deer (Scotland) Act 1959, it was an offence to shoot deer at night under s.23(1) and this remains the case under s.18(1) of the 1996 Act, with 'night' defined as being "*between the expiration of the first hour after sunset and the commencement of the last hour before sunrise*". While an exemption to this offence has always applied for the prevention of suffering by a deer,¹ there have also always been other specific exemptions in the legislation that allowed deer to be shot at night.
- 4 This scope in the 1959 Act was initially through the exemption in s.33(4) which allowed an occupier of agricultural land or enclosed woodland to kill or take wild deer at night on enclosed land. While an occupier could not authorise another person to carry out the night shooting, the exemption covered any species of deer found on the land and was not conditional on the risk of damage by the deer.²
- 5 The Deer (Amendment) (Scotland) Act 1982 then amended the 1959 Act by substituting a replacement s.33(4) that restricted the rights of occupiers of agricultural land or enclosed woodland to killing red and sika deer, and also required that any night shooting was necessary to prevent serious damage to crops, pasture or trees by the deer.
- 6 While s.33(4) still related to the occupier in person, the 1982 Act also added a new s.33(4A) that enabled the Red Deer Commission (RDC) to authorise a person nominated by the occupier to carry out the night shooting subject to three conditions. These were that the shooting was necessary to prevent damage to agriculture or woodlands, that no other method of control would be adequate and that the nominated person was considered "*fit and competent*" to carry out the control.
- 7 When the 1959 Act was replaced by the 1996 Act, occupiers lost the right to carry out night shooting in person without authorisation. Under s.18(2), all night shooting, whether by an occupier or a person nominated by them, required to be authorised by the Deer Commission Scotland (DCS) on the basis of the same three conditions as under the previous s.33(4A). Section 18(2) also covered all species of deer and woodlands rather than just enclosed woodlands.

¹ s.33(1) of the 1959 Act and s.25 of the 1996 Act.

² The rights of occupiers to kill deer under the Agriculture (Scotland) Act 1948 specifically excluded shooting deer at night in s.43(2) of that Act.

8 Since the 1996 Act came into force, there has only been one change to s.18(2) other than the replacement of the DCS by Scottish Natural Heritage (SNH) in 2010. The Wildlife and Natural Environment (Scotland) Act 2011 ('the WANE(S) Act') amended s.18(2) so that night shooting could be authorised "*in the interests of public safety*" in addition to agricultural and forestry interests.

6.2 Extent of Night Shooting

- 9 When authorisations for night shooting were first introduced from 1982/83, the great majority were to protect forestry interests in comparison to out of season authorisations that were predominantly to protect agriculture.³ In the first year, there were 24 authorisations with 363 deer shot under them. The numbers of authorisations and deer killed gradually increased, with a particular increase from 1993/94.⁴ In the RDC's last full year before it was replaced under the 1996 Act, 174 authorisations were issued for night shooting and 1,659 deer shot under them.⁵
- 10 During those first 13 years of night shooting authorisations from 1982/83 to 1995/96, while no fallow were reported as killed, the numbers of the other three species killed all increased. Initially, red deer were the most common species shot, before roe deer became the most common, accounting for c.50% of the cull. The numbers of sika remained at a comparatively low level. In 1995/96, the composition of the 1,659 night shooting cull was 46% roe, 39% red and 15% sika.⁶
- 11 Over the following 20 years, while there continued to be an upward trend in the number of authorisations issued, there was a more marked increase in the cull levels, including fallow for the first time from 1997/98.⁷ The night shooting cull of 15,594 in 2015/16 was 10

Figure 18 Total number of deer of each species reported as killed at night each year under Specific Authorisations

Species	2013/14	2014/15	2015/16
Red	4,242	6,130	5,546
Roe	6,054	7,746	7,543
Sika	2,505	2,547	2,141
Fallow	216	440	364
Total	13,017	16,863	15,594

Source: SNH Information Response 25

³ Callander, R. and MacKenzie, N. (1991), *The Management of Wild Red Deer in Scotland*. Rural Forum, p.20.

⁴ Attributed by the RDC to the growth of forestry and the particularly harsh winter that year increasing the colonisation of woodlands by open range red deer (RDC Annual Report, 1993/94).

⁵ DCS Annual Report, 1996/97.

⁶ DCS Annual Report, 1996/97.

⁷ DCS Annual Report, 1997/98. The average number of deer culled per licence in 1995/96 was 10, while in 2015/16 it was 53.

times that of 20 years earlier in 1995/96, although the composition of the cull remained similar at 48% roe, 36% red, 14% sika and 2% fallow (Figure 18). The totals also reflect the varying significance of night shooting in controlling the different species. In 2015/16, 36% of the total cull of sika was killed by night shooting, 19% of the roe cull, 9% of the red cull and 5% of the fallow cull.

- 12 Throughout the period, authorisations for night shooting have been predominantly to protect forestry interests and have included multiple licences issued to Forestry and Land Scotland's (FLS) predecessor Forest Enterprise Scotland (FES) each year, as it submitted a separate application for each district where it needed to carry out night shooting.⁸ In 2016, SNH's Authorisations Review Panel reviewed the information supplied by FES with its applications and highlighted its high quality and the detailed nature in their report.⁹ The Panel also concluded that FES had a clear need in managing the National Forest Estate to make use of night shooting authorisations as a routine means of preventing damage.¹⁰ This continuing need can be considered to apply to forestry management in Scotland more generally.¹¹
- 13 The Authorisations Panel also considered SNH's night shooting authorisation process and proposed some changes for greater transparency and improved efficiency. The Panel also considered the fact that, while the conditions attached to SNH authorisations for night shooting require those carrying it out to be accompanied by a 'trained dog' to follow up a wounded deer, there are no agreed standards over what is meant by 'trained'.¹²
- 14 SNH has followed up this lack of a standard through discussions with key parties and is revising the Wild Deer Best Practice (WDBP) guidance on the use of dogs.¹³ FLS has also developed a list of eight standards that a FLS wildlife ranger's dog must meet to be 'fit for purpose', with the standards being very similar to points made in SNH's draft WDBP guidance.¹⁴ FLS's aim is that all rangers' dogs will meet these standards by 2022.
- 15 The Group considers that SNH should be actively promoting the standards of dog training set by FLS and explained more fully in the guidance, and starting to require more information from those applying for night shooting authorisations about the standard of 'trained dog' that the applicant will be using.
- 16 However, the Group also agrees with the Authorisations Panel's conclusion that Scotland should be moving towards adopting the more formal dog training standards already used in many other European countries.¹⁵ The Group considers that SNH should be adopting that as an aim for deer management in Scotland.

⁸ The number of FES authorisations in the three years 2013/14 to 2015/16 were 16, 12 and 10 respectively (correspondence between DWG and SNH 28 June 2018).

⁹ Deer Panel – Review of Authorisations (2016). Report to Scottish Natural Heritage, September 2016, p.15.

¹⁰ Deer Panel (2016) *Op cit*, p.13.

¹¹ The Deer Panel also considered that the evidence available suggested that night shooting was a more effective method of control than daytime stalking (p.13). This might be considered to include that night shooting is likely to give more opportunities to shoot more than one deer in a single stalk.

¹² Deer Panel (2016) *Op cit*, Recommendation 9.

¹³ SNH provided DWG with a copy of its current draft revised guidance, 29 August 2018.

¹⁴ FLS correspondence with DWG, 31 May 2019.

¹⁵ Deer Panel (2016) *Op cit*, p.16.

6.3 Current Position

- 17 The Group considers, like the Authorisations Review Panel, that night shooting is a legitimate and helpful method of enabling land owners and occupiers to protect their interests from damage by wild deer where those interests are also in the public interest. The need for night shooting to be authorised ensures that it is an appropriate method in the circumstances, that it will be carried out by a suitably experienced hunter and that the locations of night shooting are known by SNH and Police Scotland.¹⁶
- 18 Night shooting is a significant component of the annual cull of deer in Scotland each year, contributing around 15% of the total cull recorded by cull returns.¹⁷ The Group has recommended earlier in Section 4.4 that there would be benefits in removing the historic prohibition against the use of night sights. The Group also considers that there are four aspects of s.18(2) that should be improved as discussed below.

6.3.1 Owners and Occupiers

- 19 SNH authorises owners and occupiers or persons nominated by them to carry out night shooting under s.18(2) of the 1996 Act and out of season shooting under s.5(6). There is, however, a curious distinction between the wording in the two sub-sections.
- 20 Both paragraphs start in similar terms, stating that the authorisation is notwithstanding anything in an agreement between an occupier of agricultural land or of woodland and the owner of the land, but subject to s.37 (the requirement that the authorised person is fit and competent). However, while s.5(6) then states that “*SNH may authorise the owner or the occupier*”, in s.18(2) it is only stated that “*SNH may authorise such an occupier*”.
- 21 The fact that there is no reference to ‘an owner’ in s.18(2), when SNH and the DCS before them have used s.18(2) to authorise both owners and occupiers, is an illustration of the arcane anomalies that occur in the 1996 Act because of the long legislative history of some of its provisions.
- 22 The origins of the fact that s.18(2) only refers to an occupier can be considered to date back to the deer control rights given to occupiers under the Agriculture (Scotland) Act 1948 and the subsequent evolution of those rights in the 1959 Act.¹⁸ Under that Act, occupiers had the right to carry out night shooting in person and, when the Act was amended in 1982, the RDC was able to authorise a person nominated by the occupier. Subsequently, when the 1996 Act incorporated the requirement that all night shooting should be authorised, “*it appears that in drafting the ‘96 legislation the wording from the 1982 Amendment was used: simply lifted*”.¹⁹ Hence, there is only reference to an occupier.
- 23 While SNH interprets s.18(2) to cover owners as well as occupiers, this would not be clear to a land owner and others looking at the law to see the position over night shooting. This unnecessary lack of clarity in the law has also been compounded by the fact that the wording in the General Authorisations issued by SNH for out of season shooting since 2012 also only refers to occupiers rather than owners and occupiers, because it “*has followed exactly the same pedigree*” in terms of the evolution of the rights of the occupiers of agricultural land and enclosed woodland to shoot deer out of season.²⁰

¹⁶ For example, in case of reports of suspicious activity arising from the use of lamps, SNH informs Police Scotland of night shooting authorisations.

¹⁷ See Figures 8 and 18.

¹⁸ SNH Information Response 35.

¹⁹ SNH Information Response 35.

²⁰ SNH Information Response 35.

24 While General Authorisations have been considered above, the Group considers that the wording in s.18(2) should be amended so that “*SNH may authorise the owner or the occupier*” as in s.5(6), with the consequential amendment to refer to ‘such an owner or occupier’ later in the text. This should be done both for legal correctness in conveying the intent of the provision and for clarity for those affected by the law.

6.3.2 Types of Land

- 25 A second legacy of the legislative history of s.18(2) is that SNH can only authorise night shooting on agricultural land or woodland. In s.5(6) for out of season shooting, authorisation can be issued to the owner or the occupier “*of any land*”.
- 26 The restriction on the types of land in s.18(2) is an historical anomaly and at odds with the concerns that led to public safety being added in 2011 to the interests that can be protected by night shooting. The places where public safety issues can arise that might require night shooting include locations that are neither agricultural land nor woodland.²¹
- 27 The Group therefore considers that the current wording in s.18(2) should be amended so that “*SNH may authorise the owner or the occupier of any land*” as in s.5(6), and the current wording in the sub-section “*on such land or woodland*” should be replaced with ‘on that land’.

6.3.3 Public Interests

- 28 Under s.18(2), night shooting can only be authorised to protect public interests involving agriculture, forestry and public safety. The difficulties that can arise from a restricted list of interests that can be protected by a power in the Act is illustrated by the history of s.18(2).
- 29 The protection of public safety was first introduced into Scotland’s deer legislation by the 1996 Act, which added it to the interests that can be protected under SNH’s control powers (ss.7, 8 and 10) and for which out of season shooting can be authorised in s.5(6). However, it was not added as an interest for which night shooting could be authorised.
- 30 Therefore, prior to the addition of public safety to s.18(2) by the WANE(S) Act in 2011, a convoluted approach needed to be used by the DCS and SNH when public safety issues arose that needed to be addressed by night shooting. The DCS had to use its s.10 ‘*Emergency Measures*’ powers which included the interests of public safety, combined with the provisions in s.14 ‘*Limitation to Criminal Liability*’ under which SNH’s staff and contractors were able to carry out night shooting as part of implementing s.10 measures.²²
- 31 The Group considers that there is no public interest in still having such a restricted list of interests that can be protected by night shooting. The Group considers that there should be scope to protect any public interests by night shooting if the need arises, without the need for convoluted procedures until a legislative opportunity eventually arises to amend s.18(2) to include an additional interest. At present, for example, SNH can authorise an owner or occupier to shoot wild deer out of season to protect natural heritage interests, while night shooting cannot be used to protect the natural heritage.

²¹ See Section 15.

²² SNH Information Response 11.

- 32 While the Group considers that natural heritage interests should be added to s.18(2), there are other interests that should be considered. The protection of deer welfare, for example, is covered under SNH's control powers. However, as discussed earlier in this report, the Group considers that an inclusive rather than exclusive approach should be taken to defining the public interests that can be protected by using the phrase "*public interests of a social, economic or environmental nature*", as currently used in ss.6 and 7 of the 1996 Act.
- 33 The Group considers that an owner or occupier should be able to apply for a night shooting authorisation to protect an interest on their land from damage by deer, and that SNH should have the scope to decide if protecting that interest (e.g. a cultural heritage feature) is in the public interest and whether night shooting is an appropriate means to achieve that.

6.3.4 No Other Means

- 34 While s.18(2)(a) identifies the interests that can be protected by night shooting, s.18(2)(b) then requires that "*no other means of control which might reasonably be adopted in the circumstances would be adequate*".
- 35 This last resort qualification might be considered a legacy of the traditional antipathy to night shooting in some quarters, including amongst peers in the House of Lords during the passage of Scottish deer legislation through Westminster, including the Deer (Firearms etc.) (Scotland) Order 1985 and the Deer (Amendment) (Scotland) Act 1996.
- 36 That antipathy is often linked with a longstanding concern that night shooting can lead to increases in poaching; a view that was expressed to the Authorisations Review Panel and has deep historical roots (e.g. the Night Poaching Act 1828).²³ However, the Panel concluded that the current arrangements in place for authorising night shooting are adequate to address that concern and other concerns that night shooting present increased risk to public safety and deer welfare.
- 37 The Group considers that, rather than the current last resort phrase in s.18(2)(b), the question that SNH should be able to consider is whether night shooting is the most appropriate means of control in the circumstances. The Group therefore considers that the current s.18(2)(b) should be replaced by: 'is the most appropriate means of control in the circumstances'.
- 38 **The Working Group recommends that section 18(2) of the Deer (Scotland) Act 1996 should be amended to refer to both owners and occupiers, to be applicable to any land and to cover public interests of a social, economic and environmental nature.**

²³ Deer Panel (2016) *Op cit*, p.15 and Callander and MacKenzie (1991) *Op cit*, p.53.

Section 7 How and when wild deer can be taken lawfully

7.1 Legislative Background

- 1 Deer hunting rights have always included the right to kill or capture wild deer. This is now represented in the Deer (Scotland) Act 1996 by references to “*to kill or take*” (and different tenses of the phrase). However, there was initially a lack of clarity in Scotland’s deer legislation over the use of ‘take’ and ‘taken’.
- 2 In the Agriculture (Scotland) Act 1948, s.43(1) gave the occupiers of agricultural holdings and enclosed woodland the right “*to kill and take*” deer, with the “*and take*” referring to taking the carcass of the deer killed. In the Deer (Scotland) Act 1959, the occupiers’ right in s.33(3) became “*to take or kill*” deer, with the “*to take*” referring to the live capture of deer.
- 3 The phrase “*to take or kill*” was also included in some other sections of the 1959 Act, including s.23 ‘*Unlawful taking or killing of deer*’ which included in s.23(5) that nothing in that section prohibited a person with the right to take deer on any land “*from taking a deer alive on that land in any manner which does not cause it unnecessary suffering*”.
- 4 However, there was also ambiguity related to the use of ‘take’ in the 1959 Act. In particular s.22 ‘*Prohibition of poaching*’ which, while it referred to “*takes or wilfully kills*” also included the phrase “*taking any deer lawfully killed*”. Subsequently, in a case involving poaching that went to Scotland’s highest criminal court in 1978, the High Court of Justiciary ruled that ‘take’ in relation to deer means ‘take alive’.¹ As a result of this judgment, the Deer (Amendment) (Scotland) Act 1982 amended the existing wording in s.22 and added a new s.22(2) to make clear the distinction between the two offences of taking or killing a deer without authority and removing a deer carcass without authority.
- 5 Other ambiguities over the use of ‘take’ and ‘taking’ remained in the 1959 Act and came to light during the consolidation process to create the Deer (Scotland) Act 1996. This resulted in changes to the Deer (Amendment) (Scotland) Bill 1996 to “*standardise the language across the Act*” to refer to rights to “*take or kill*” and to add ‘take’ to the ‘*Interpretation*’ section.² As a result, s.45(1) of the 1996 Act states “*take*”, *in relation to deer, means take alive*’.
- 6 The 1996 Act also included a provision to succeed s.23(5) of the 1959 Act. In s.41 ‘*Savings for certain rights*’, subsection (2) exempts from the restrictions of ss.18(1), 19(1) and 20(1)(a) the taking of deer “*in any manner which does not cause it unnecessary suffering*”. This means, respectively, that deer can be taken at night, that they can be driven using vehicles for the purpose of taking them, and that a firearm or “*missile*” can be discharged at deer from a moving vehicle subject to no “*unnecessary suffering*”. Live capture is, however, subject to the close seasons for deer.
- 7 An additional provision relating to the taking of deer was also included in the 1996 Act, as a result of public safety being included in the interests that could be protected under the Act. In s.10 ‘*Emergency Measures*’, s.10(5) enables deer to be taken and removed where “*the killing of the deer would itself constitute a danger to public safety*”.

¹ *Miln v Maher*, 1979 Justiciary Cases, p.58 (in ‘Deer (Amendment) (Scotland) Bill - Notes on Clauses’, House of Commons, 1996).

² Hansard, House of Lords, 21 March 1996, Scottish Office Minister, the Earl of Lindsay.

- 8 None of the above provisions relating directly to the ‘taking’ of deer have been amended since the 1996 Act was passed.

7.2 Use of Live Capture

- 9 There was a large increase in the use of live capture in Scotland from the 1970s to obtain red deer breeding stock for deer farms. This appears to have peaked in the 1980s and then declined during the 1990s due to both the contraction in deer farming and the improved availability of farm-bred stock.³ It is not known how many of the 18,500 farmed red deer in Scotland by the start of the 1990s might have derived directly from the wild, but it is thought that over 1,000 a year were being caught during the main period of live catching.⁴
- 10 The lack of statistics available on the extent of live capture before and after the 1996 Act reflects the unregulated nature of live capture under the deer legislation. The returns that can be required from owners and occupiers under s.40 of the 1996 Act cover wild deer that have been both ‘taken or killed’. However, neither the current cull return form nor apparently any previous versions have included a distinction between those killed or taken in the numbers of deer reported on the forms.
- 11 There has long been recognition that both the capturing of wild deer and their management after capture can result in serious welfare concerns and there were a number of issues during the 1980s and 1990s. As a result, the British Deer Society held a conference in 1989 on the ‘Live capture of Wild Hinds in Scotland’ and the Nature Conservancy Council published ‘The capture and handling of deer’ by Rudge in 1995. Issues over the shooting of deer in ‘corrals’ or enclosed areas post-capture also resulted in the Deer Commission for Scotland (DCS) producing ‘Guidelines for Shooting Deer in Enclosures’ in 1999.
- 12 The most common form of live capture appears to have been enticing wild deer into enclosed areas, whether to provide deer for farm stock or as a method of controlling deer numbers. However, other methods have been used, including nets, for example, for research purposes involving both red and roe deer.⁵ The use of dart guns to tranquilise deer is another method of live capture or else used post-capture, though there are limits to the effectiveness of dart guns and there can be significant welfare issues relating to their use.⁶ Animals treated with Immobilon or similar drugs are not allowed to enter the human food chain.
- 13 The use of dart guns in England requires a Home Office licence to establish competency. In Scotland, however, there has been no requirement for this since devolution and the only requirement is to have an appropriate firearms certificate.⁷ A Home Office licence is still required in Scotland, however, for animal research involving wild deer, such as tagging and fitting collars to red deer on Rum.⁸ Scottish Natural Heritage (SNH) estimates that there are less than 10 other cases a year of the use of dart guns on wild deer in Scotland, for example, to capture young stags to send to deer parks.⁹

³ See Section 12.

⁴ J. Fletcher, pers. comm. with DWG.

⁵ Staines, B (2000). Wild Deer: issues concerned with deer welfare and public safety. Deer Commission for Scotland.

⁶ See Staines (2000) *Op cit* and Green, P. (n.d), Can contraception control deer populations in the UK? The Deer Initiative website.

⁷ Staines (2000) *Op cit* and SNH email to DWG, 28 August 2018.

⁸ SNH (2018) *Op cit*.

⁹ SNH email to DWG, 27 August 2018. Dart guns are, however, routinely used on deer farms to de-antler stags.

- 14 The live capture of wild deer for deer farming appears to have been very limited since the beginning of the 2000s and that continues to be the case. Other instances of live capture each year also appear relatively limited. SNH does not monitor the extent of live capture, but does not consider “*the practice to be widespread*”.¹⁰ However, live capture does occur in deer parks and other areas of enclosed land where the deer are still considered to be wild deer, as discussed in Section 12 of this Report. The Group considers that, while the number of deer involved in each case may be relatively few, live capture occurs more than is generally recognised.
- 15 There have also continued to be concerns over the animal welfare issues involved in any form of live capture, as well as the welfare and disease implications of any translocation of deer after capture. In 2013, the DEFRA Farm Animal Welfare Committee reported that SNH was preparing Best Practice guidance for the capture and relocation of wild deer.¹¹ The Committee recommended that all live capture in Scotland should be licensed by SNH and that there should be a moratorium on live capture until the licensing arrangements and guidelines were in place.
- 16 SNH has not, however, produced Best Practice guidance on the capture and relocation of wild deer. SNH also does not have a position paper on the topic. SNH referred the Group instead to guidance produced by the British Deer Farming Association.¹² However, the Association, which was established in the late 1970s, is now the British Deer Farms and Parks Association (BDFPA) and does not have guidelines on live capture.¹³

7.3 Current Arrangements

- 17 The live capture of wild deer is widely recognised as a high risk event for the welfare of the deer involved, yet there is a lack of official guidance from SNH on the topic. Carrying out live capture is also unregulated other than if a person wants to undertake it during a close season.
- 18 The only safeguard in s.41(2) of the 1996 Act in permitting any form of live capture, is that it should not cause the deer “*unnecessary suffering*”. What ‘unnecessary’ means, however, is unclear. Does it mean that any suffering that a person considers necessary as part of carrying out a live capture is acceptable?
- 19 The lack of attention to the welfare of deer during live capture seems at odds with the concern for deer welfare in other provisions in the 1996 Act, for example, those dealing with the firearms and ammunition to be used in killing deer or the sweeping exemptions in s.25 to enable a deer to be killed to end suffering.
- 20 The Group agrees with the recommendation of the Farm Animal Welfare Committee cited above that, while live capture can be a legitimate activity for a number of purposes, all live capture of wild deer in Scotland by any means should require to be authorised by SNH.

¹⁰ SNH Information Response 34.

¹¹ Farm Animal Welfare Committee (2013). Opinion on the Welfare of Farmed and Park Deer.

¹² SNH Information Response 34.

¹³ Based on examination of the website of the BDFPA and direct contact between BDFPA and DWG.

- 21 Live capture involves the transition of the deer from being wild deer under the 1996 Act to being captive deer under the Animal Health and Welfare (Scotland) Act 2006. However, the act of capturing or taking the deer is clearly carried out under the 1996 Act. Requiring this to be authorised by SNH would allow the method of the live capture, the nature of the deer it is intended to catch and the plans for carrying it out to be assessed on welfare and safety grounds. Authorisation would also recognise that past experience shows that live capture can be a sensitive public issue.
- 22 In assessing any live capture application for authorisation, SNH would also need to know the plan for the deer once captured as part of weighing the purpose against the potential welfare costs of taking the deer. For example, are some or all of the deer to be shot once captured, are they going to be retained in the enclosed area used to capture them or are they going to be move to another location? These considerations should also involve SNH consulting the Scottish Government Animal Welfare Branch with its responsibilities for the Animal Health and Welfare (Scotland) Act 2006.
- 23 The Group's view is the requirement for authorisation would bring a necessary transparency and accountability to the live capture of wild deer in Scotland. Authorisation would ensure appropriate welfare standards in how the deer are taken, with the point of capture defining the boundary between the welfare considerations under the 1996 Act and those under the 2006 Act.¹⁴ Live capture without authorisation would become an offence.
- 24 It is unclear how many applications there might be a year for live capture authorisation, but it is anticipated that there could be relatively few.¹⁵ However, the potential frequency of use should not determine whether authorisation should be required or not. The fact that there have not been any applications for many years for authorisation under s.19(2) (driving deer with vehicles with the intention of killing them), does not mean the activity should no longer require authorisation.
- 25 The Group considers that s.41(2) of the 1996 Act should be amended to require authorisation for the taking or live capture of wild deer. The Group considers that the legislation should also require SNH to produce a code of practice for the live capture of wild deer, as it is already required to do in s.37(5) for night shooting under s.18 and for driving deer with vehicles under s.19.
- 26 **The Working Group recommends, firstly, that section 41(2) of the Deer (Scotland) Act 1996 should be amended or replaced so that the taking of wild deer requires to be authorised by Scottish Natural Heritage and secondly, that section 37(5) should be amended at the same time to require Scottish Natural Heritage to produce a code of practice for the taking or live capture of wild deer.**

¹⁴ The boundary between enclosing deer within an area and capturing deer within an enclosed area is discussed in Section 12.

¹⁵ It is anticipated that an expansion in deer farming is unlikely to lead to increased live capture. See Section 11.

Section 8 Occupiers, Authorised and Competent Persons

- 1 The previous three Sections of the Report have reviewed *how* and *when* wild deer can be killed or taken lawfully. This Section considers *who* can kill wild deer lawfully.
- 2 The owner of land in Scotland generally holds the deer hunting rights under Scots property law, as discussed in Section 1 of this Report. Therefore, the starting point in considering who can kill wild deer lawfully is that the owner as the holder of that legal right and anyone acting with their permission can shoot deer on that land.
- 3 Scotland's deer legislation has, however, also given statutory rights to kill wild deer on an owner's land in defined circumstances to both those who count as an occupier of an owner's land and to the public body or 'deer authority' responsible for implementing the deer legislation. The first part of this Section reviews the statutory rights of occupiers.
- 4 The second part of the Section considers the requirement under s.37 of the Deer (Scotland) Act 1996 that anyone authorised by the deer authority to shoot wild deer out of season or at night, or to drive deer with the intention of killing them, needs to be judged as a "*fit and competent*" person for that purpose by the deer authority. This requirement also applies to any person authorised by the deer authority to carry out deer control under its regulatory powers.
- 5 The final part of the Section considers the longstanding concern amongst those involved in deer management about the competence of those who shoot wild deer in terms of standards of public safety and deer welfare. This is examined in the context of s.17A of the 1996 Act, which provides scope to require any person shooting a wild deer to be registered as a "*person competent to shoot deer*".

8.1 Statutory Rights of Occupiers

- 6 A central purpose of the Deer (Scotland) Act 1959 was, following the Agriculture (Scotland) Act 1948, to provide the occupiers of agricultural land and enclosed woodland with statutory rights to protect their crops and related interests from damage by red deer, independent of the views of the owner of the land.
- 7 The inclusive nature of the definition of who constitutes an occupier has remained essentially unchanged since the 1959 Act, and the owner of the land is the occupier of their land if it is not occupied by another person.¹ Owner-occupiers are now much more common than when the 1959 Act was framed. Then, owners were generally seen as estate owners and the occupiers of agricultural land were largely agricultural and crofting tenants, while the main occupier of enclosed woodland was the Forestry Commission operating on land owned by the Secretary of State for Scotland.
- 8 Owners and occupiers are generally mentioned together in the legislation, as both are covered by Scottish Natural Heritage's (SNH) powers under the 1996 Act such as those to require information on culls and to control deer numbers. The main section of the Act dealing with occupiers is s.26 '*Right of occupier in respect of deer causing damage to crops etc. on certain ground*'. Two other sections of the Act have provisions specifically related to occupiers that have also been carried forward from the 1959 Act. They are

¹ See Section 1.

s.41(1) dealing with an occupier's right to claim compensation from the land owner for damage by deer, and s.42 requiring an occupier to provide the land owner with information on deer killed by the occupier.

- 9 The evolution of the rights of occupiers under s.26 to kill deer out of season and at night is described in Sections 5 and 6 of this Report. Occupiers are now in the same position as owners in requiring authorisation from SNH for both of these activities through ss.5(6) and 18(2) respectively. The only remaining difference is that, under s.26(2), occupiers in person and certain persons authorised by the occupier (the owner and the occupier's or owner's employees) can shoot deer out of season without being judged 'fit and competent' by SNH under s.37. The appropriateness of continuing this final exemption is reviewed later in this Section. The right of the occupiers of agricultural land and enclosed woodland to use shotguns to kill deer was considered earlier in Section 4.
- 10 However, the key aspects of the statutory rights of occupiers have remained more or less unchanged since 1959, when the rights were set in the very different context of that period and which they still reflect. The rights still only apply on certain types of agricultural land and in enclosed woodland, and to the protection of correspondingly limited interests.
- 11 The defining limit to occupiers' rights under s.26(1) is that they can only kill or take deer "*where the occupier has reasonable grounds for believing that damage will be caused*" by the deer. However, the Group considers that it is no longer in the public interest that occupiers are restricted to protecting the types of agricultural and forestry interests specified in s.26(1)(a) and (b).² In terms of public policy and contemporary land use practice, an occupier should be able to protect natural heritage interests and other interests that are in the public interest (for example, for public safety on an adjoining public road). The need for an inclusive approach to these interests was discussed in Section 1 of this Report.
- 12 The Group also considers that it is no longer in the public interest that the types of occupied land where occupiers have statutory rights are so restricted. An occupier should be able to protect their interests in an unenclosed woodland on land they occupy, not just in a woodland on land that is considered to be enclosed by a stock proof fence. Similarly, the types of land occupied and purposes of occupation where occupiers might reasonably also expect to be able to protect appropriate interests from damage by deer, are now significantly more diverse than before (for example, golf courses, parks and nature reserves).³
- 13 While agricultural and forestry occupiers are still by far the most extensive types of occupiers, the Group considers that s.26 should be amended to cover all occupiers of land, not just some. Similarly, the types of interests that occupiers can protect from damage by killing or taking wild deer should be covered by an inclusive statement of the types of public interests that can be protected. As discussed in Section 1 of this Report, the statement should be "*public interests of a social, economic or environmental nature*" and shared with the other powers in the Act to prevent damage by deer.

² The paragraphs of s.26(1) of the 1996 Act read: "*(a) arable land, improved permanent pasture (other than moorland) and land which has been regenerated so as to be able to make a significant contribution to the productivity of a holding which forms part of that agricultural land; or (b) on enclosed woodland*".

³ Many private estates are now not directly managed by the owner due to the use of companies and other legal arrangements by owners for a number of reasons, including to limit the risk of legal liabilities. Thus, some estates that are generally described as the owner of a particularly area of land may be occupiers acting through a lease or other arrangement with the actual owner.

- 14 The rights of occupiers under s.26 would remain as only fallback rights in situations “*where the occupier has reasonable grounds for believing that damage will be caused*”. The owner of the land remains liable for controlling wild deer on the occupied land, with occupiers able to claim compensation under s.42(1) for damage caused by deer, subject to s.5 ‘*Close Seasons*’. This last qualification was added by the 1996 Act to the previous provision in the 1959 Act, to recognise that an owner may not be able to control deer during the close seasons due to the requirement to obtain an authorisation.
- 15 The final section dealing specifically with occupiers, s.42, requires the occupiers of “*agricultural land or enclosed or unenclosed woodland*” to provide information on the number, sex and species of deer killed or taken on the land to the owner on request. The reference to unenclosed woodland appears ambiguous, as it is not explicit in s.26 that occupiers have the right to kill deer in unenclosed woodland.⁴ However, an owner should have the right to this cull information over all the occupied land where an occupier has the right to kill deer.
- 16 In considering modernising the provisions specifically related to occupiers in the 1996 Act, as discussed above, it would be helpful to consolidate these provisions in one section for clarity. The current separate position of s.41(1) and s.42 at the end of the Act rather than as sub-sections in s.26, appears to be simply a by-product of the legislative history of the 1959 and 1996 Acts.
- 17 While the legislation is intended to provide a safeguard for occupiers against damage by deer, the nature of the relationships between owners and occupiers over deer control varies with circumstances. In some situations, an owner may rely on an occupier carrying out the control to protect their interests, while in other situations the control by the owner may mean the occupier does not need to carry out any control. However, in all situations there should be clear and constructive relationships between owners and occupiers, and particularly in situations where both owner and occupier may be shooting deer over the same land.
- 18 There has been a long history of issues between agricultural occupiers and their landlords over agricultural damage by deer, and deer remain a significant issue on agricultural holdings in some parts of Scotland. The continuing need for improvements in these relations over deer and other sporting activity is reflected in the recent publication by the Scottish Land Commission of a Code of Practice for ‘The Management of Relationships between Agricultural Tenants and the Holder of Sporting Rights’.⁵
- 19 **The Working Group recommends that the Deer (Scotland) Act 1996 should be amended so that the statutory rights of occupiers to prevent damage by wild deer should apply to the occupiers of any type of land and cover public interests of a social, economic and environmental nature.**

⁴ It is unclear whether the expression in s.26(1)(a) “*land which has been regenerated so as to be able to make a significant contribution to the productivity of a holding*” could be construed to include unenclosed woodland.

⁵ Scottish Land Commission (2018). Code of Practice – The Management of Relationships Between Agricultural Tenants and the Holder of Sporting Rights. Tenant Farming Commissioner, September 2018.

8.2 Authorised Persons

8.2.1 Background

- 20 The requirement for a person to be judged ‘competent’ by the deer authority to carry out an activity authorised by it was first introduced in the 1959 Act. In s.6 ‘*Power of Commission to deal with marauding deer*’, the Red Deer Commission (RDC) could authorise any person “*who in their opinion is competent to do so*” to kill the red deer involved. The RDC’s authorisations under s.6 were very largely for out of season shooting as s.6 was the only power (other than a s.7 ‘control scheme’) that could be used to kill red deer out of season on unenclosed land.
- 21 When the 1959 Act was amended by the Deer (Scotland) (Amendment) Act 1982 to provide for the authorisation of night shooting under s.33(4A)(c), this required “*that the person concerned is a fit and competent person to receive such authorisation*”. While the RDC applied the ‘fit and competent’ requirement in ss.6 and 33, the terms were never defined accurately. As reported in 1991, “*fitness is generally concerned with character (e.g. poaching convictions) and competence with possession of an appropriate firearms licence*”.⁶ However, in its final Annual Report, the RDC stated that it was satisfied that those authorised were “*sufficiently experienced to ensure all welfare and safety aspects are considered*”.⁷
- 22 In the 1996 Act, there continued to be the requirement that a person authorised under s.10 (as the successor to 1959 s.6) should be ‘competent’, while the ‘fit and competent’ requirement was consolidated in s.37 ‘*Restrictions on granting certain authorisations*’. Section 37(1) required the DCS to be satisfied before granting an authorisation under s.5(6) (out of season), s.18(2) (night shooting) or s.19(2) (driving deer), that “*the person concerned is a fit and competent person to receive an authorisation under that provision*”. However, while other changes in the 1996 Act required all night shooting to be authorised, owners and occupiers continued to be able to kill deer at any time of year on enclosed agricultural land and enclosed woodland to prevent damage.
- 23 The Deer Commission for Scotland (DCS), in addition to the standards for authorised shooting and like the RDC before it, also continued to encourage and support the training courses for deer stalkers organised by the British Deer Society (BDS) and several other organisations. In agreement with those other providers, the DCS was “*instrumental*” in setting up Deer Management Qualification (DMQ) Ltd in 1997 as a not-for-profit company to manage and quality assure a single system of stalking training with Deer Stalking Certificates Levels 1 and 2 (‘DSC1’ and ‘DSC2’).⁸ The DCS also sought to clarify the meaning of ‘fit and competent’ by linking assessment of it from its 2002/03 Annual Report, to the Wild Deer Best Practice (WDBP) guides that it had started to develop.

⁶ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland, p.53.

⁷ RDC Annual Report, 1995/96, p.10.

⁸ DCS Annual Report 1998/99, p.17.

- 24 In 2004/05, the DCS adopted a different approach to managing the 'fit and competent' requirement by starting a register of those they assessed as 'fit and competent'. This was to enable them to approve an individual as fit and competent for a period rather than always on a site by site basis, so that any person on the register could be approved to carry out an authorisation.⁹ Applicants needed to provide evidence of their competence to be on the register and two suitable references were also required, one of whom needed to hold at least DSC1. The DCS reported in 2007/08 that there were then 643 deer controllers on the register and by the DCS's final full year, 2009/10, the number had risen to 1,018.

8.2.2 Current Position

- 25 By the time SNH took over, there were two ways in which a person could qualify to be on the fit and competent register. Firstly, a person with a DSC2 would qualify and secondly, a person could apply on the basis of 'following Best Practice Guidance'. This continues to be the current position. Conditional on reforms to the list of authorised activities, the Group considers that SNH should be moving towards a position where only holders of a revised DSC2 should qualify to be on the register.
- 26 The number of people on the register has increased over the years since SNH took over. However, there was a change to the DSC1 qualification in 2006 to add a fifth module on game meat hygiene to equate DSC1 with 'Trained Hunter' status under EU game meat regulations. This resulted in a recalculation of the number of people on the register to remove those not qualified to the new standard. Figure 19 therefore shows lower totals than in the DCS's Annual Reports.

Figure 19 Number of people on the fit and competent register

Season	Fit and competent controllers
2006/07	169
2007/08	203
2008/09	251
2009/10	367
2010/11	594
2011/12	677
2012/13	897
2013/14	1,207
2014/15	1,350
2015/16	1,681
2016/17	1,874

Source: SNH Information Response 5

- 27 The numbers on the register have also been affected by changes over the years in the rules used for deciding how long a person stayed on the register, with that now based on the need for a person to renew their inclusion after five years. The number of stalkers on the register has now increased to nearly 2,000, including suitably qualified

⁹ DCS Annual Report 2004/05, p.28.

individuals registered for their own purposes and others who are available to carry out authorised shooting for others to prevent damage.¹⁰

- 28 The requirement for those killing deer under authorisation to be assessed as ‘fit and competent’ is to ensure that they have sufficient knowledge and experience for the additional safety and welfare concerns that can arise with the activities involved. While this applies to all night shooting and the driving of deer to shoot them, the requirement does not apply to all out of season shooting.
- 29 The occupiers of the agricultural land and enclosed woodland in s.26(1) were able to shoot deer of either sex at any time of year on that land until the Wildlife and Natural Environment (Scotland) Act 2011 (‘the WANE(S) Act’). The use of General Authorisations since then means that the occupiers of those lands need authorisation with the fit and competent requirement to shoot females in the restricted period 1st April - 31st August.
- 30 However, under General Authorisations, occupiers in person and certain categories of people with their permission can still shoot male and female deer during the rest of the close seasons without the need for authorisation.¹¹ In contrast, the owners and occupiers of other enclosed and unenclosed land continue to require authorisation and a fit and competent shooter during those periods.
- 31 The Group considers that this distinction in the standards required is a historical legacy of the evolution of Scotland’s deer legislation and that all owners and occupiers should be treated equally in this respect. The Group considers that the remaining exemption of the occupiers of enclosed agricultural land and enclosed woodland in relation to close seasons should be removed. However, as discussed previously in Section 5 of this Report, the Group recommends that this should result from revising the current close seasons for male and female deer in Scotland.
- 32 The Group has also proposed earlier in Sections 4 and 7 that two other deer management activities should need to be authorised by SNH because of the additional safety and welfare concerns that can be involved - the use of shotguns to kill deer and live capture to take deer. In both these cases, the Group considers that the authorised person carrying them out should have to be judged ‘fit and competent’ by SNH.
- 33 The Group also notes that, at present, a person authorised by SNH under s.10(4) to carry out s.10 ‘*Emergency Measures*’ only requires to be judged a ‘competent’ person by SNH, while any person authorised to carry out other measures needs to be judged ‘fit and competent’ under s.37(1). The Group considers that the person authorised under either section needs to meet the same standards of competence. The Group considers that should be achieved by inserting ‘fit and’ before ‘competent’ in s.10(4), with ‘fit’ referring to the suitability of the person’s character to carry out the operation as it has since the term was first introduced in 1982.
- 34 SNH’s other compulsory power in the 1996 Act to enforce control of deer is s.8 ‘*Control schemes*’ and, if owners and/or occupiers failed to implement the scheme, SNH is empowered under s.8(8) to carry out the scheme itself. The wording in s.8(8) is nearly identical to that in s.10 ‘*Enforcement of control schemes*’ in the 1959 Act. However,

¹⁰ While the register is not a public document, SNH will provide information to owners and occupiers on controllers available in their area.

¹¹ The categories are given in s.26(2) of the 1996 Act: the owner in person, the occupier’s or owner’s employees and anyone normally resident on the land.

there is no clarification on whether any culling to be carried out needs to be done by SNH staff or can also be carried out by others authorised by SNH.¹²

- 35 The Group considers that the position under s.8(8) should be clarified so that SNH can carry out any culling required by authorising either staff or contractors, and that any person authorised should be judged by SNH to be 'fit and competent' for the purpose. The Group's recommendation on this is included in Section 24 of this Report about control schemes.
- 36 **The Working Group recommends, firstly, that section 37(1A) should be repealed so that all out of season shooting authorised by Scottish Natural Heritage requires to be carried out by a person judged fit and competent for that purpose by Scottish Natural Heritage, and secondly, that s.10(4) should be amended so that an authorised person requires to be judged both fit and competent.**
- 37 The Group notes that, if a 'Register of persons competent to shoot deer' is established under s.17A of the 1996 Act as discussed below, then references to 'fit and competent' in the Act should be replaced by appropriate references to the Register.

8.3 Competent Persons

8.3.1 Background

- 38 Those directly involved in deer management and others have long been concerned about the standards to which wild deer are shot in terms of public safety and deer welfare. In the 1950s, concerns about poor standards of deer shooting were raised by the Committee on Cruelty to Wild Animals during the discussions leading to the 1959 Act.¹³
- 39 Those concerns continued and the BDS was already developing a leading role in Scotland in setting standards and organising training events as part of encouraging high standards in the 1980s. However, it was concern over wounding rates, for example, that led the RDC to over-specify the firearms requirements in the Deer (Firearms etc.) (Scotland) Order 1985 to reduce the impact of poor shots on deer welfare.¹⁴
- 40 By the 1990s, there were already proposals for the introduction of a compulsory training requirement for those shooting deer, recognising that Scotland was unusual in a European context in not having such a requirement.¹⁵ There was concern over these proposals from sporting interests because of its potential impact on the scope to have inexperienced paying clients to shoot deer. However, there was also wider recognition that the first requirements were to establish an agreed standard of training and then, before any compulsory requirement could be a practical proposition, to build up a sufficient number of people qualified to that standard.
- 41 During the 1990s, a series of steps were taken in those directions. Firstly, the BDS developed its Woodland Stalking Certificate into a National Stalking Certificate of Competence and then added an advanced level to that qualification.¹⁶ However, given concerns about the nature of the qualification, the BDS and a wide range of other deer interests including the DCS, Forestry Commission and SNH from the public sector,

¹² SNH might not have the in-house capacity to meet the requirements in some situations.

¹³ Report of Committee on Cruelty to Wild Animals (HMSO, 1951), in Callander and MacKenzie (1991) *Op cit*, p.53.

¹⁴ See Section 4.

¹⁵ Callander and MacKenzie (1991) *Op cit*, p.53.

¹⁶ DSC1 Training Manual (Donington Deer Management, 2006).

established DMQ Ltd in 1997.¹⁷ The purpose of this not-for-profit company was to implement, manage and quality assure a new standard of certification at a UK level based on National Vocational Qualifications.

- 42 The new standard consisted of basic and advanced qualifications through DSC1 and DSC2. DSC1 tests knowledge and skills in seven areas: deer biology and ecology; legislation; stalking techniques and taking the shot; deer identification; safety; shooting; and from 2006 as mentioned in paragraph 26 above, large game meat hygiene. DSC2 is then a practice-based qualification designed to test the deer stalking techniques, skills and knowledge acquired at the DSC1 level. These new standards were widely promoted from the late 1990s and have since become the recognised standards for stalker competence in the UK.
- 43 In 2000, a report on issues concerned with deer welfare and public safety for the DCS highlighted that “*many people consider shooting competency and wounding as the major welfare issue concerning deer*”.¹⁸ The review reported wounding rates of 2% or higher from studies in the UK and further afield, noting that even a 2% rate is a relatively large number of deer from annual culls of around 100,000 deer. The report called for more research to improve the information available on wounding rates. Subsequently, a study of over 900 wild red deer carcasses in Scotland by Urquhart and McKendrick was published in 2003, reported that 14.5% of the carcasses had more than one wound tract.^{19, 20}
- 44 The DCS continued to be concerned about shooting competence and proposed to the Government in 2005 that everyone who shoots deer in Scotland should require to be qualified as ‘fit and competent’.²¹ Then, against the background of ongoing increases in the numbers of stalkers holding DSC qualifications, one of the DCS’s main recommendations to Government from its review of deer legislation in 2009 was that it should be made “*a requirement on all who shoot deer to demonstrate adequate skills and knowledge in order to protect deer welfare, public safety and food hygiene*”.²²
- 45 The DCS’s recommendation, shortly before it was replaced by SNH in 2010, was then taken forward through the amendment of the 1996 Act by the WANE(S) Act 2011 to include two new sections: s.17A that provided the option for Scottish Ministers to establish a “*register of persons competent to shoot deer*” by secondary legislation, and s.17B that required SNH to review “*levels of competence among persons who shoot deer in Scotland*” if such a register was not established by 1 April 2014.

8.3.2 Review of Competence

- 46 As no secondary legislation had been brought forward to establish the register of competent persons by the s.17B deadline, SNH initiated a review as required by the section. SNH’s ‘Review of Competence’ was submitted to the Scottish Government at the end of 2016 and the Group was able to review a draft copy. The document is not yet in the public domain.²³

¹⁷ Donington Deer Management (2006). ‘An explanation of the Deer Stalking Certificate. DSC Level 1 Training Manual.

¹⁸ Staines, B (2000). Wild Deer: issues concerned with deer welfare and public safety. Deer Commission for Scotland, p.6.

¹⁹ Urquhart, K.A. and McKendrick, I.J. (2003). Survey of permanent wound tracts in the carcasses of culled wild deer in Scotland. *Veterinary Record*, 152 (16), pp.497-501.

²⁰ A second wound track does not necessarily mean that a deer had previously been wounded, as a second ‘make sure’ shot is sometimes taken immediately after a first shot.

²¹ DCS Chairman letter to the Deputy Minister for Environment and Rural Development, 1 September 2005.

²² DCS Chairman letter and proposals relating to review of deer management legislation, sent to Minister for Environment, 13 January 2009.

²³ The Group received repeated assurances from the Scottish Government’s Head of Wildlife Management during its term, that SNH’s

- 47 The Review reported on two further studies of wounding rates. One by Cockram *et al* (2011) that studied different culling methods used to shoot red deer found that between 7-19% of the deer had been shot in the leg or abdomen, and that overall 13% of the deer culled were shot more than once with a median time between shots of seven minutes.²⁴ The other study by Aebischer *et al* (2014) studied data from 102 anonymous stalkers and the circumstances of over 2,000 shots at deer.²⁵ This showed that, while 5% of the shots were misses, 93% of the first shots that hit the target animal resulted in an outright kill, while 82% of the wounded animals were killed with a subsequent shot.
- 48 SNH's Review noted the limited number of studies into wounding rates in the UK and abroad, with only one study solely in Scotland.²⁶ However, SNH concluded that wounding rates in Scotland might be between 6%-17%. While this was seen as comparable to the one European country for which data was available (Denmark), the wounding rate represents a minimum of around 6,000-17,000 deer in Scotland each year with the recorded annual culls of over 100,000 deer.
- 49 SNH also highlighted from Aebischer *et al* that those with no qualification or DSC1 had higher wounding rates than those with DSC2, while practising shooting at least once a year also reduced the wounding rates. The earlier Urquhart and McKendrick study had also reported that carcasses with more than one wound tract were "*more frequent in males and during the rut*", which is a traditional period when more inexperienced shooters are likely to be involved.²⁷
- 50 The Group was surprised by the relative lack of studies on wounding rates in Scotland, as it has been such a longstanding issue of concern. However, there are many variables affecting such studies including, for example, whether they involve red deer on the open hill or smaller deer species in denser cover, or whether they involve more or less experienced stalkers. While there appears to be no estimate of the number of people who might shoot deer in Scotland in any year, the Group considers that there has probably been a significant increase in the number over recent decades due to a number of factors, including the expansion of deer ranges and numbers in more lowland areas.²⁸
- 51 In its Competence Review, SNH described the continued promotion of the DSC qualifications and the wide provision of training in Scotland. The DSC qualifications are managed on a UK basis by DMQ Ltd and the increase in the numbers of DSC1 holders between 2009 and 2015 are shown in Figure 20.

Review of Competence was due to be published. However, the document had still not been published by the time the Group was finalising its Report.

²⁴ Cockram, M.S., Shaw, D.J., Milne, E., Bryce, R., McClean, C. and Daniels, M. (2011). Comparison of effects of different methods of culling red deer (*Cervus elaphus*) by shooting on behaviour and post mortem measurements of blood chemistry, muscle glycogen and carcass characteristics. *Animal Welfare*, 20(2), pp.211-224.

²⁵ Aebischer, N.J., Wheatley, C.J. and Rose, H.R. (2014). Factors associated with shooting accuracy and wounding rate of four managed wild deer species in the UK, based on anonymous field records from deer stalkers. *PLoS ONE*, 9(10).

²⁶ Urquhart and McKendrick (2003) *Op cit*.

²⁷ SNH (2016). Draft Review of Competence, pp.8-9.

²⁸ To try to get an indication of the 'deer shooting capacity' in Scotland, the Group asked Police Scotland if it was possible to know from their records how many people held firearms certificates for rifles of a legal calibre to shoot deer and had identified deer shooting as a reason for their rifle. The police explained through a Freedom of Information Request response that too much work would be involved because part of the work would require going through the record of over 4,500 individuals holding a firearms only certification (Police Scotland IM-FOI-2018-1404, 3 July 2018).

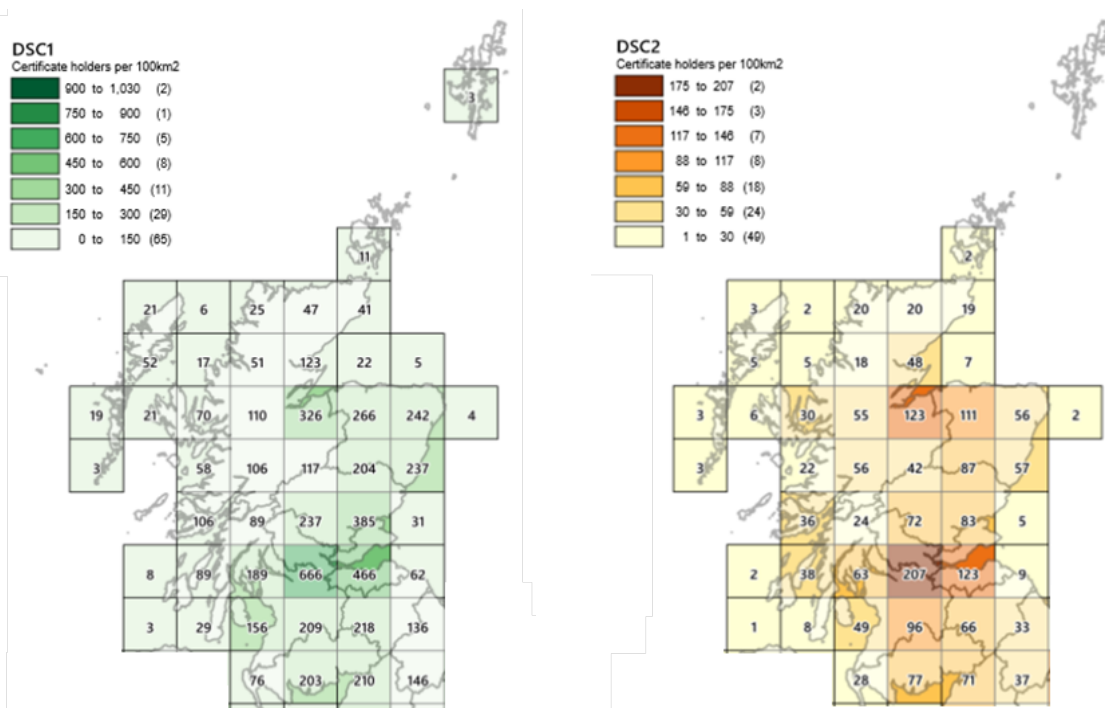
Figure 20 Number of DSC1 holders between 2009 and 2015

Year	Annual awards	Total cumulative awards in the UK	Estimated annual DSC1 awards for those domiciled in Scotland *	Estimated cumulative DSC1 awards for those domiciled in Scotland*	% annual increase
Pre-2008		12,909			
2009	1,316	14,225	263	2,845	10.2%
2010	1,217	15,442	243	3,088	8.6%
2011	1,238	16,680	248	3,336	8.0%
2012	1,526	18,206	305	3,641	9.1%
2013	1,453	19,659	291	3,932	8.0%
2014	1,466	21,125	293	4,225	7.5%
2015	1,174	22,353	235	4,471	5.6%

* It was estimated by DMQ Ltd that approximately 20% of award recipients are domiciled in Scotland at the time of registration.

Source: SNH Draft Review of Competence

Figure 21 Numbers and distribution of DSC1 and DSC2 holders in Scotland per 100km² (2018)



Source: Deer Management Qualifications Ltd.

- 52 In 2018, DMQ Ltd produced maps showing the numbers and distribution of DSC1 and DSC2 holders respectively in the UK per 100 km². The portion of each map covering Scotland are shown in Figure 21. The maps recorded 5,429 DCS1 holders and 1,832 DSC2 holders as domiciled in Scotland in the squares wholly in Scotland. There are 346 DSC1 holders and 104 DSC2 holders in the squares straddling the boundary with England.
- 53 The numbers of DSC holders are cumulative, so it is not known how many of the current total of DSC1 and DSC2 holders have died or retired from shooting deer. SNH concluded in its Review, recognising that people from the rest of the UK shoot deer in Scotland and the limited other information available, that it is “*difficult to confidently assess what percentage of deer shot in Scotland are shot by stalkers holding DSC1*”.²⁹
- 54 SNH also reported that increases in the number of people progressing from DSC1 to obtain DSC2 has been slow. While SNH does not explain why that might be, the Group recognises that many factors might be involved.³⁰ SNH concludes in the Review that one of the principle areas for development should be to “*increase progression rates from DSC1 to DSC2*”.³¹ The Group has commented earlier in this Section that SNH should be moving faster towards the requirement for all those who carry out activities authorised by it under the 1996 Act, to have the DSC2 qualification.
- 55 SNH does not cover public safety in its Review of Competence and was not required to under the legislation. The Group considers, however, that the scope of the review required in s.17B(1) should not have been limited to only the effects of levels of competence on deer welfare in paragraph (b). The Group considers that such a review should also have covered the effects of competence on public safety.
- 56 The use of high-powered rifles to shoot deer has clear implications for public safety. While the Group is not aware of any firearms accidents involving deer hunting and the deer sector appears to have an impressive record in that respect, the indications are that more people are becoming involved in shooting deer. The shooting of deer is also increasing in more complex environments than traditionally, particularly with deer becoming established in peri-urban and urban areas.
- 57 Public health is also a factor, given the significance of the carcase handling by a hunter for food safety. An important aspect of DSC1 is that it covers meat hygiene, including carcase health in terms of abnormalities or other signs of disease. Holding a DSC1 provides a person with Trained Hunter status under the game meat regulations, with this status required to supply carcasses to Approved Game Handling Establishments (AGHEs) and recommended when hunters are supplying venison to other licensed venison dealers and other outlets under the ‘trained hunter’ exemption in the regulations.
- 58 SNH considers that enforcement of this requirement would act as a driver for hunters to undertake the DSC1 qualification.³² The Group has discussed earlier the large numbers of deer carcasses that appear not to go through AGHEs or other venison dealers before entering the human food chain and the need for appropriate standards of carcase handling by these direct suppliers.³³

²⁹ SNH (2016) *Op cit*, p.6.

³⁰ For example, the cost and the difficulty of finding opportunities to conduct three stalks with an accredited witness present.

³¹ SNH (2016) *Op cit*, p.13.

³² SNH (2016) *Op cit*.

³³ See Section 11.

- 59 The conclusions in the SNH Review of Competence are limited to summarising its findings and include no recommendations to the Government as a result of the review. Seven areas for development are noted. The four actions that relate directly to the competence of shooters are: increase progression rates from DSC1 to DSC2; increase uptake of training within farming and crofting sectors; promote regular shooting practice; enforce requirement to demonstrate 'Trained Hunter' status when supplying venison.
- 60 The other three areas for development related to wider welfare topics and Continuing Professional Development (CPD). There are a range of types of practical deer management training events organised by the BDS, the British Association for Shooting and Conservation, WDBP and others, as well as taught courses such as the 'Sustainable Deer Management' postgraduate CPD module at the University of the Highlands and Islands.
- 61 The provision of practical skills training will continue to be important to standards of deer management and these should be promoted. The Group considers that there is also a particular need to review and develop the training available to deer hunters and land managers on the wider land use context and public interests that can be adversely affected by deer, if there is not adequate management.

8.3.3 Current Position

- 62 Significant progress has been made over the years in increasing the number of people qualified at DSC1 level. This has been due to the effort of a range of organisations and many individuals. The Group considers that, at this stage, the Scottish Government should be making clear that it is still government policy to work towards all those who shoot deer in Scotland being required to be qualified at DSC1 level.
- 63 While the case for this continuing direction has traditionally related to deer welfare and wounding rates, the Group considers that the role of DSC1 in giving Trained Hunter status should be seen as a much more significant factor than previously.
- 64 The Group considers that members of the public who comes across a person out in the countryside to shoot a deer with a high velocity rifle, might reasonably expect that the person will have had at least some basic training to be able to be allowed to do that. At present in Scotland, anyone who can borrow an appropriate rifle and ammunition and get permission to shoot on a piece of ground, can go and start firing at deer there.³⁴
- 65 The Group considers that a clear statement of direction from the Government would, together with enforcement of the Trained Hunter requirement, provide a fresh momentum to the number of people obtaining DSC1 qualification. Also, while public bodies already require stalkers on their land to have DSC qualifications, such a statement would also reinforce the growing trend in the private sector for owners, agents and employers to require those who will shoot deer under leases and other types of shooting contracts and work, to have at least DSC1 as assurance of competence.³⁵

³⁴ Subject to the wider firearms regime that applies in Britain, in particular the rules in the Firearms Act 1968, section 11A.

³⁵ SNH (2016) *Op cit*, p.7.

- 66 SNH commented in its Review on the decline in the rate of new DSC1 awards shown in Figure 20 earlier, noting that “*to some extent this would be expected as the pool of stalkers possessing DSC1 increases*”.³⁶ They also give the results of a limited survey of some membership organisations involved in deer management, which showed that between 71%-96% of the respondents who shoot deer unsupervised in Scotland possessed DSC1.
- 67 However, while there has been a positive uptake in the traditional deer management sector, the Group recognises that there is a need to increase the numbers becoming qualified in other sectors. The Group considers that it is in the interests of deer management and of the sector and its reputation, that momentum is maintained to ensure that the uptake of DSC1 continues to spread.
- 68 The Group considers that the addition of s.17A to the 1996 Act by the WANE(S) Act 2011 reflected the intent to move towards a requirement that all those who shoot deer should have had at least a basic level of training. The Government and deer sector also agreed in 2012 that that level should be DSC1.³⁷
- 69 Now, eight years after s.17A was enacted, no such scheme could be brought into effect for some years yet. The Government would need to consult on proposals, then draw up the secondary legislation and if that was passed, there might potentially be a period of grace of several years before the measure came into effect. This would help avoid any undue constraint on active deer management during the transition to the register being fully operational.
- 70 At the time of the 1996 Act, progress towards a requirement for basic training was seen in terms of establishing an agreed standard and building up the number of people holding it. Those aims have been progressed successfully and there is now scope to introduce the training requirement. Given the timescale before any ‘Register of persons competent to shoot deer’ could become operational, the Group considers that it would provide a realistic period to ensure appropriately high levels of qualified stalkers by then, given clear direction.
- 71 While the DSC qualification has the merit of being a UK-wide qualification for people who come to Scotland to shoot deer from the rest of the UK, the introduction of a DSC1 training requirement should also be met by equivalent qualifications from other European countries and further afield.
- 72 The absence of a requirement in Scotland for some basic training has long been very unusual in a European context, as “*the vast majority of European countries*” have some formal training requirement to be able to shoot deer.³⁸ The Group considers that Scotland should be moving decisively towards removing that distinction.
- 73 The Group also notes that the prompt of s.17B in the Act if s.17A was not taken forward in three years, might be considered to reflect that ambition. That could also appear to be reflected in the fact that there is no requirement in s.17B for another review after another time period, if s.17A has still not been implemented.

³⁶ SNH (2016) *Op cit*, p.5.

³⁷ SNH (2016) *Op cit*, p.3.

³⁸ Putman, R. (2011). A review of the various legal and administrative systems governing management of large herbivores in Europe. In: Putman, R., Apollonio, M. and Andersen, R. (Eds.), *Ungulate Management in Europe: Problems and Practices*. Cambridge University Press, Cambridge, pp.54-79.

74 The Group considers that the Scottish Government should follow up a clear statement of direction towards requiring that everyone shooting deer in Scotland must have at least the basic training of DSC1, by starting to consider the nature of the Order to be taken forward under s.17A.

8.3.4 Section 17A Order

- 75 The Group considers that s.17A, as it stands, is inappropriately framed for the type of 'Register of persons competent to shoot deer' that should be considered for Scotland.
- 76 The provisions in s.17A are based on the proposals that the DCS started to develop over 15 years ago and which were predicated on a number of interlocking proposals that the Group considers out of date. As reflected by paragraphs (b) and (c) of subsection 1, the register envisaged by DCS would be restricted to those who had achieved DSC2 and counted as 'fit and competent', with everyone else needing to be supervised by a DSC2 holder or have an equivalent foreign qualification.
- 77 DCS's decision to base the register on DSC2 was then linked with the DCS's wider agenda that included, for example, doing away with authorisations for night shooting and driving deer, reducing out of season authorisations and, as reflected in s.17A(1)(d), attaching the requirement to provide cull returns to the hunters rather than land owners and occupiers.
- 78 The nature of the DCS's proposals related to the register is reflected in the relative long length and complexity of s.17A. The Group considers, however, that the purpose of the register should be clear and straightforward.
- 79 In particular, the Group considers that it would be a very unhelpful and complicating mistake to transfer the responsibility for cull returns to hunters. This responsibility should continue to be a requirement on owners and occupiers for their land, as the people who hold the deer hunting rights over that land and who are, as a result, the basic unit of regulation under the 1996 Act and related legislation.
- 80 The Group considers that the purpose of the register should be to ensure that everyone who shoots deer in Scotland has passed a basic level of training (DSC1), with the register also recording if a person has an advanced level of training (DSC2). This approach would be straightforward to operate. There could be easy links between achieving the qualifications and registration or re-registration to shoot deer in Scotland.
- 81 While a DSC1 is not a qualification that currently needs to be renewed, re-registration could be required after a period (for example, 10 years) to remove those from the register who no longer shoot deer in Scotland (e.g. having died, retired, moved away, etc.). As DSC2 certificates require to be renewed every five years, a registration at that advanced level would end with the renewal date of the certificate and require to be renewed if the holder wanted. As a DSC2 holder has to have passed DSC1, they could stay on the register at that basic level.

- 82 The Group considers that the first step towards introducing the “*register of persons competent to shoot deer in Scotland*” in s.17A(1)(a), is to amend s.17A so that appropriate secondary legislation can be taken forward under that section. The Group therefore outlines below the amendments that it considers should be made in s.17A:
- Paragraph (b) of sub-section (1) should be amended so that it makes provisions intended to:
 - ‘prohibit any person from shooting deer unless the person is:*
 - (i) registered as a person qualified at a basic level of training; or*
 - (ii) registered as a person qualified at an advanced level of training.’*
 - Paragraph (c) of sub-section 1 should be amended to insert ‘*as a person qualified at an advanced level of training*’ after ‘registered person’ (recognising that when a register came into effect, references in the Act to ‘fit and competent’ could be replaced by appropriate references to the register).
 - Paragraph (d) of sub-section 1 should be repealed.
 - In paragraph (a) of sub-section 2, sub-paragraphs (i)-(viii) are straightforward administrative provisions that are required to operate a register, as are the scope for consequential amendments under (xiv) and the flexibility provided by paragraph (b). However, sub-paragraphs (ix)-(xiii) should be repealed as legacies of the DCS’s original proposals that are no longer considered appropriate.
 - Sub-sections (3), (4) and (5) are straightforward, dealing respectively with consultations prior to secondary legislation, the creation of an offence for contravention of the regulations to be set out in that legislation and an exemption for the prevention of suffering by a deer under s.25. However, sub-sections (6) and (7) should be repealed as legacies of the DCS’s original proposals that are no longer considered appropriate.
- 83 Progress over recent decades has achieved agreed standards of shooter competence and a positive level of uptake of those standards. The Group considers that the key requirement now is to take the next steps towards establishing the register so that everyone who is shooting deer lawfully in Scotland has passed some basic training.
- 84 **The Working Group recommends that the Scottish Government should make a clear statement of its commitment to establishing a register of persons competent to shoot deer in Scotland under s.17A of the Deer (Scotland) Act 1996, and develop proposals for a register as set out in this Report.**
- 85 **The Working Group also recommends that s.17A of the Deer (Scotland) Act 1996 should be amended at an early stage as set out in this Report, to enable appropriate secondary legislation to bring the recommended register into effect.**

Section 9 Prevention of Suffering and Wildlife Crime

- 1 The previous five Sections of this Report have reviewed how, when and by whom wild deer can be killed or taken lawfully in Scotland under the existing deer legislation. This Section considers two related topics. The first is s.25 in the Deer (Scotland) Act 1996 that exempts a person from the other provisions of the Act if they are ending the suffering of a wild deer.
- 2 The second topic is the extent of criminal offences involving wild deer that are committed in Scotland. This ‘wildlife crime’ can involve a person killing, wounding or injuring a wild deer on an owner’s land without permission or legal right. However, wildlife crime can also involve offences committed by owners and occupiers in breach of the terms of the 1996 Deer Act.

9.1 The Prevention of Suffering by Wild Deer

- 3 The 1996 Act, like the Deer (Scotland) Act 1959 before it, includes one section that provides an exception to the standards of how, when and by whom a wild deer can be killed that are set out in the other sections of the Act.¹ The exception is s.25 ‘*Action intended to prevent suffering*’.
- 4 Section 25 provides that “*A person shall not be guilty of an offence against this Act or any order made under this Act in respect of any act done for the purpose of preventing suffering by*” a deer which is either starving, injured or diseased or a young deer that will not survive the death of its mother. In such situations, the deer can be killed with any firearm or the most appropriate method possible in the circumstances.
- 5 The provision in s.25(za) concerning a starving deer was added by the Wildlife and Natural Environment (Scotland) Act 2011 (‘the WANE(S) Act’). This might be considered a surprisingly recent addition given the long history discussed in Section 18, of winter mortality reported in most years amongst open hill red deer populations, when that mortality is due to hunger and exposure with the suffering that involves.²
- 6 The wide scope provided by s.25 to override other statutory provisions in the 1996 Act and its secondary legislation, requires that the types of suffering covered are specified in an exclusive list. Those other provisions include the factors discussed earlier in this Part of the Report such as firearm requirements and close seasons. However, the use of s.25 in appropriate circumstances also means that a person can kill a wild deer on land without the permission of the person who has a legal right to kill deer on that land. That would normally be an offence under s.17(1) of the 1996 Act concerning ‘*Unlawful killing, taking and injuring of deer*’.
- 7 While s.25 of the 1996 Act provides an exception to s.17 of the Act, a person still has to conform to the requirements of the firearms legislation. Thus, a person can follow a wounded deer on to somebody else’s land and kill the deer without their consent under s.25, but could still be committing an offence of aggravated trespass under s.20(2) of the Firearms Act 1968. This states that “*A person commits an offence if, while he has a firearm or imitation firearm with him, he enters or is on any land as a trespasser and without reasonable excuse (the proof whereof lies on him)*”.

¹ Section 33 in the Deer (Scotland) Act 1959.

² See Section 18.

- 8 The use of s.25 of the 1996 Act in appropriate circumstances would count as an “excuse” in law against aggravated trespass. However, a “*reasonable excuse*” is considered to require evidence of both a deer that was suffering in terms of s.25 and that the person had made reasonable attempts to contact the owner for consent, but without success.³ As s.20(2) of the 1968 Act makes clear, the proof of those attempts rests with the person operating under s.25 of the 1996 Act if they are challenged under the law.
- 9 There appears limited guidance on this topic in the Wild Deer Best Practice (WDBP) guidance. In the guidance under the heading ‘Follow-Up across Property Boundaries’, it is stated that: “*Section 25 of the Deer (Scotland) Act 1996, provides a reasonable defence in law if there is a need to follow a wounded deer onto adjacent property and dispatch it in order to prevent suffering. In such circumstances the landowner should be notified of the action as soon as possible, whether before or after the event.*”⁴
- 10 There appear to have been no court cases in Scotland involving this topic. However, the Group is aware that Scottish Natural Heritage (SNH) has been concerned over whether appropriate effort has been made to try to contact the owner in some recent instances of following-up wounded deer. The Group considers that SNH should provide clearer guidance on the legal position through the WDBP, including on what might be considered a reasonable effort. The Group suggests that one approach to this would be for SNH to seek advice from the Crown Office and Procurator Fiscal Service (COPFS).
- 11 The Group’s view is that fuller advice through the WDBP on the legal position would be helpful to those involved in shooting wild deer. The Group considers that following-up and dispatching a wounded deer is an important aspect of culling deer to adequate welfare standards. The expansion of deer range and deer culling into more lowland areas where the size of land holdings tends to be smaller, may also increase the number of occasions when property boundaries need to be crossed as part of that.
- 12 The Group is concerned that, while s.25 provides wide exemptions to enable the prevention of suffering by a wild deer, there is no equivalent provision in the Act to enable action to be taken straightaway against a deer posing an immediate threat of serious injury to a person or persons.
- 13 SNH’s powers under s.10 ‘*Emergency Measures*’ of the 1996 Act can be used where deer “*constitute a danger or potential danger to public safety*”, but not to address a situation where deer pose an immediate threat to public safety. Exercising the s.10 powers requires due process and meeting all the other statutory requirements governing the killing of a deer lawfully.⁵ These include the use of an appropriate firearm and ammunition by someone with a legal right to shoot deer on the land involved.
- 14 The Group’s view is that the risk of situations where deer may pose an immediate threat to human safety could increase as red deer spread into more peri-urban and urban areas. If the circumstances in such an environment cause a stag in antler to panic, serious injuries to a person can result, as illustrated by an example cited later in this Report.⁶ The same could be the case with male fallow deer in antler, although their palmate antlers might be considered less dangerous.

³ SNH Information Response 40.

⁴ Wild Deer Best Practice guidance on ‘Culling’, section on ‘Reaction and follow-up’.

⁵ See Section 23.

⁶ See Section 19.

- 15 The Group considers that there is a disparity between the exemptions in s.25 to end the suffering of a deer, and the lack of any equivalent measure to allow action to be taken straightaway to address a situation where deer pose an imminent or immediate threat to human safety.
- 16 **The Working Group recommends that consideration should be given to having a provision in the Deer (Scotland) Act 1996 which provides exemptions to protect human safety where a deer poses an immediate threat, with those exemptions being similar to the exemptions in s.25 of the Act to end the suffering of a deer.**
- 17 The Group considers that exemptions for action to prevent immediate danger to public safety could be achieved by amending s.25. The Group considers that s.25 might then be appropriately re-titled as ‘Emergency Measures’ as a more accurate use of the title than its current use for s.10. As discussed later in this Report, it can be considered misleading to regard the s.10 powers as an ‘emergency’ measure as such.⁷

9.2 Wildlife Crime involving Deer

- 18 Wild deer belong to no-one when they are alive and therefore cannot be stolen. However, the killing or taking of wild deer without the land owner’s permission or ‘poaching’ is the crime most commonly associated with deer management. The topic has deep historical roots and the concern of land owners about poaching was an important factor in the run up to the 1959 Act.⁸ That concern also continued subsequently to influence aspects of Scotland’s deer legislation.⁹
- 19 In the 1959 Act, poaching was an offence under s.22, which was labelled in the side note in the Act as ‘*Prohibition of Poaching*’.¹⁰ The term ‘poaching’ was not, however, considered a clear enough term for carrying forward into the 1996 Act, so that the offence is covered in s.17 of the 1996 Act under the section title of ‘*Unlawful killing, taking and injury of deer*’.
- 20 In s.17(1) of the 1996 Act, the wilful killing, injuring or taking of wild deer on land without legal right or permission from a person having such a right is an offence, subject to the exemption in s.25 discussed above for ending the suffering of a deer. Similarly, under s.17(2), it is an offence to remove a deer carcass from land without legal right or permission.
- 21 Crimes involving wild deer do not, however, only consist of offences under s.17 or ‘poaching’. They can also involve firearms offences and offences against other provisions in the 1996 Act and other legislation.¹¹ The scope of the crimes that can be committed involving wild deer therefore means that they can be committed by land owners and occupiers as well as others.

⁷ See Section 23.

⁸ For example, Callander, R. and MacKenzie, MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland, p.21.

⁹ For example, in relation to night-shooting. See Section 6.

¹⁰ Side notes were used to label sections in legislation, before the change to giving sections titles.

¹¹ For example, the Protection of Wild Mammals (Scotland) Act 2002.

- 22 All offences involving deer tend now to count as 'wildlife crimes' in official statistics. However, a distinction might be made between offences that directly involve deer (for example, shooting a deer out of season without authorisation) and offences that might be considered a breach of administrative law (for example, failing to submit a statutory cull return within the legally prescribed time limit).
- 23 Since the WANE(S) Act 2011, the Scottish Government has been required to publish annual reports on wildlife crime in Scotland.¹² These reports provide an analysis of the recorded crimes involving wild deer and other species. The nature of the reports means that there is a relatively long delay after the end a year before the report on it is published, with the report covering 2016/17 published in December 2018.¹³
- 24 A larger number of incidents that involve deer or might involve deer are reported to the police than are included in the published statistics, as the nature of the reports is very variable. The incidents with sufficient information are recorded in the Police Scotland Intelligence Logs and in 2016/17, 117 of 699 (17%) wildlife incidents logged involved deer.
- 25 Many incidents may go no further than being logged, either because it is established that no crime was committed or there is insufficient evidence to investigate it further. However, in 2016/17, when it was established that a wildlife crime had been committed in 231 incidents, 14 (6%) involved deer. The average number of cases per year involving deer over the five years 2012/13-2016/17 was 21.
- 26 The cases involving deer tend to be spread relatively thinly across the 13 police divisions covering Scotland. In 2016/17, the cases occurred in six divisions and in the previous two years eight and seven divisions respectively. While half the cases in 2016/17 were in Police Scotland's extensive Highlands and Islands Division, the pattern varies year to year.
- 27 Establishing that a crime has been committed does not necessarily mean that there is a suspect or sufficient evidence to go to court. In 2016/17, 99 wildlife crime cases were passed by Police Scotland to COPFS, with fewer than five cases involving deer.¹⁴ COPFS then brings proceedings against people in court where it considers there is sufficient evidence and it is in the public interest to do so.
- 28 There were no court cases involving deer in 2015/16 and one case in 2016/17. However, over the five year 2012/13-2016/17, 11 cases involving deer went to court.¹⁵ The charges were proved in seven of the 11 cases; a 64% conviction rate. Three of the proved cases were for offences against s.17(1) of the Deer (Scotland) Act 1996 and thus involved the killing or taking deer on land without appropriate authority. The other four proved cases each involved an offence against different provisions in the 1996 Act.¹⁶ The seven convictions resulted in one community sentence and six fines averaging £517.

¹² Section 20 of the WANE(S) Act 2011 established this requirement by creating a new section 26B in the Wildlife and Countryside Act 1981.

¹³ Scottish Government (2018). Wildlife Crime in Scotland 2017. Annual Report.

¹⁴ The reports do not now include the actual totals for certain categories of information where there are less than five cases, due to data protection considerations. The number of cases in 2012/13-2015/16 were eight, four, five and four respectively.

¹⁵ It might be noted that someone is likely to be charged under the most serious offence potentially committed and therefore, for example, might be recorded as a firearms offence rather than wildlife offence.

¹⁶ These were: s.5(1) and (5) (out of season); s.17(3) (killing a deer other than shooting with appropriate firearm and ammunition); s.22 (two or more persons involved in offence); s.23(1) (illegal possession of a deer carcase).

- 29 The statistics quoted above reflect that deer are involved in relatively few wildlife crimes that reach the stage of being considered for prosecution by the COPFS and even fewer result in convictions. While SNH has no responsibility for wildlife offences under the 1996 Act and reports any incidents of which it is aware to the police, SNH staff may accompany police in some situations, for example, on a visit to a venison dealer to locate female deer shot out of season without authorisation.¹⁷
- 30 Overall, poaching remains the most common wildlife crime involving deer. While the number of established cases each year is small, SNH reports that there is anecdotal evidence that it is still an issue in some areas and, similarly, there are also indications that incidents may have become more common south of the Highland Boundary Fault towards the Central Belt.¹⁸ It might be considered that the spread of wild deer into more lowland areas and the generally high numbers of roe deer, have created more opportunities for poaching in those areas while traditionally it was seen as largely a Highland issue.¹⁹
- 31 Poaching remains a sensitive issue for those affected by it and there is a past history of its extent being overestimated.²⁰ The difficulty of obtaining sufficient evidence that a poaching crime has occurred and that is also sufficient to go to prosecution, means that it can still seem to be “*an issue dominated by anecdote and rumour*” as there is no information to indicate its full extent.²¹
- 32 Poaching is an important issue to tackle with other offences against the terms of the Deer (Scotland) Act 1996 and related legislation. However, poaching can be considered of limited significance as a factor in the scale of deer management in Scotland, with over 100,000 wild deer reported as shot lawfully every year.

¹⁷ SNH reported visiting some dealers with the police in 2017 (DWG meeting with SNH, 13 March 2018, and follow-up response, 26 April 2018).

¹⁸ SNH *Op cit* and Police Wildlife Officer communication with DWG (24 May 2018).

¹⁹ Poaching can take various forms including shooting, hunting with dogs, the use of crossbows and snaring.

²⁰ Callander and MacKenzie (1991) *Op cit*, p.21.

²¹ Callander and MacKenzie (1991) *Op cit*, p.21.

Section 10 Wild Deer and Diseases

- 1 Wild deer in Scotland and the rest of the UK are susceptible to a range of animal diseases. These diseases are classed as either endemic or exotic to the UK. Some are also classified as zoonotic, meaning that the disease can be transmitted from the animals to humans. Wild deer are also host to a number of internal and external parasites, some of which can transfer to humans and can affect human health either directly or indirectly by transmitting a disease.
- 2 Wild deer in Scotland have generally been considered to have a relatively low level of disease.¹ However, there has long been attention given to the occurrence of diseases in wild deer. This is because of the possible impacts of the diseases on the deer themselves and the risks of the transmission of diseases to and from farm livestock (including farmed deer) or other wildlife sources and, in some cases, to humans. As a result, there are statutory provisions and government procedures covering some diseases, as well as practical guidance available to help those involved in managing deer and handling deer carcasses to recognise the symptoms of diseases.²

10.1 Notifiable and Non-Notifiable Diseases

10.1.1 Notifiable Diseases

- 3 The principal legislation covering animal diseases is the Animal Health Act 1981, with the Act and secondary legislation under the Act listing Notifiable Diseases where there is a legal requirement to report the disease. The occurrence or suspected occurrence of one of the Notifiable Diseases has to be reported to the government body responsible, the Animal and Plant Health Agency (APHA).
- 4 APHA is part of the UK Department for Environment, Food and Rural Affairs (DEFRA) and acts for the devolved Scottish and Welsh administrations for their devolved powers over these matters. More detail about some Notifiable Diseases that can affect wild deer are listed in Annex 7, including Bovine Tuberculosis, Foot and Mouth, Chronic Wasting Disease (CWD), Warble Fly, Bluetongue Virus (BTV) and Epizootic haemorrhagic disease. There are others, for example Anthrax, which is highly lethal to mammals but not currently present in the UK.
- 5 Several factors make diseases in deer an increasingly important topic for the management of wild deer in Scotland. A key reason is that the expansions in deer species ranges and numbers in Scotland mean that there is generally more proximity between wild deer and livestock (including farmed deer) in many parts of the country, increasing both the scope for transmissions between them and the potential for deer populations of one or more species acting as disease reservoirs.³

¹ The Wild Deer Best Practice (WDBP) guidance on 'Deer Health' states that "*Wild deer tend to be remarkably free of disease.*"

² For example, WDBP guides on 'Deer Health' and 'Notifiable Diseases'.

³ Böhm, M., White, P.C.L., Chambers, J., Smith, L and Hutchings, M.R. (2007). Wild deer as a source of infection for livestock and humans in the UK. *The Veterinary Journal*, 174, pp.260-276.

- 6 Climate change can also be a factor in increasing the risks of disease by improving the conditions for disease vectors. With BTV, for example, while its occurrence in Scotland in 2017 was the result of cattle imported from France via England, the spread of BTV in continental Europe has been associated with a northwards expansion due to climate warming of the midge species that transmits it.⁴
- 7 The prominent new disease threat to wild deer is CWD. It affects the nervous system of deer, is highly infectious and has no known treatment or vaccine. While CWD only appears to affect deer species (Cervids), it has been causing severe losses to many farm and wild deer populations in North America. A major concern was the discovery in 2016 of the first cases of CWD in Europe in reindeer and moose in Norway.⁵
- 8 The CWD infected reindeer in Norway were in the Nordfjella mountains where the Norwegian Government has culled the entire local reindeer population of nearly 1,500 animals, confirming 18 cases of CWD.⁶ While the CWD in the reindeer was similar to the type prevalent in North America, the CWD in three moose in Norway were a different type. The same has been the case with a moose with CWD recorded in 2018 in Finland.⁷ All four moose were older animals and it seems that this type of CWD may occur sporadically and spontaneously.⁸ Since then, no further cases of CWD have been reported from Norway.
- 9 Surveys are now underway in many European countries to monitor for CWD. In Scotland, the Scottish Deer Health Survey 2017-19 is being carried out to determine the prevalence of three diseases in Scotland's wild deer populations: CWD, *E.coli* 0157 and *Cryptosporidium*.⁹ The survey is funded by the Scottish Government and the government agency Food Standards Scotland (FSS), and is being undertaken by the Moredun Research Institute and University of Edinburgh.
- 10 No results have been published at the time of writing for the screening of deer for CWD by the Deer Health Survey. However, if the North American type of CWD was to start to become established in Scotland, it could have a severe impact on wild deer populations through both the disease and control schemes designed to contain it. There could also be a major impact on the venison market due to customer concern.¹⁰

10.1.2 Non-Notifiable Diseases

- 11 The other two diseases in the current Deer Health Survey are not notifiable diseases, but each represents a significant risk to human health. *E.coli* 0157 is a bacterium, while *Cryptosporidium* is a parasite. Both occur in deer faeces and can be transmitted to humans mainly through contaminated meat and water respectively. Each can cause serious human illness through gut infections.

⁴ Falconi, C., Lopez-Olvera, J.R. and Gortazar, C. (2011). BTV infection in wild ruminants, with emphasis on red deer: a review. *Veterinary Microbiology*, 151, pp. 209-219.

⁵ British Deer Society website, 'CWD in Norway', 16 November 2017.

⁶ Ministry of Agriculture and Food website (Norway), 'Chronic Wasting Diseases: All known animals in Nordfjella dispatched', 27 February 2018.

⁷ Norwegian Veterinary Institute website, 'CWD in Finland is different from the Nordfjella CWD type', 8 March 2018.

⁸ Norwegian Veterinary Institute website, *Op cit*.

⁹ ADMG website, 'Scottish Deer Health Survey 2017-19', 1 September 2017.

¹⁰ For example, as with 'mad cow disease'.

- 12 While it has been suggested in the past that the prevalence of harmful *E.coli* in wild deer may be low, there has been increased attention paid to it following an outbreak in Scotland in processed wild venison products in 2015.¹¹ In that year, there was also a study published that showed a very high incidence of *Cryptosporidium* in wild deer in part of the Cairngorms National Park, which concluded that this posed a significant risk for public safety.¹²
- 13 The initial results from the Deer Health Survey have confirmed a very low prevalence of harmful *E.coli* 0157, with only 0.3% of the faecal samples testing positive.¹³ However, the levels in the positive samples were very high and the results have emphasised the need for strict hygiene precautions when processing deer carcasses to avoid faecal contamination.¹⁴ No results have been published yet for the incidence of *Cryptosporidium*.
- 14 There are also a number of other disease organisms that can present a significant risk to someone improperly handling deer carcasses (for example, liverfluke, tapeworm). The importance of the market for wild venison to deer management in Scotland and the importance of food safety to that market, are discussed in the next Section of the Report.

10.2 Lyme Disease

- 15 Amongst the disease vectors hosted by wild deer in Scotland, ticks are particularly significant. Ticks may be infected with *Borrelia burgdorferi* bacteria and transmit that to humans, resulting in Lyme disease (Lyme borreliosis). While *Borrelia burgdorferi* is the species responsible for Lyme disease, it consists of different strains and genospecies.¹⁵ The species is therefore often described as the *B.burgdorferi* complex or *B.burgdorferi* sensu lato (in the broad sense).
- 16 Lyme disease is the most common zoonotic disease transmitted by ticks in Europe and North America.¹⁶ In Europe, Lyme disease is mainly carried by the sheep or deer tick (*Ixodes ricinus*). In the UK, in addition to *Ixodes ricinus*, Lyme disease is carried by the hedgehog tick (*I.hexagonus*), the seabird tick (*I. uriae*) and the fox or dog tick (*I.canisuga*), although these tick species are more host-specific and pose little threat to humans.
- 17 Lyme disease is of growing importance in Scotland as the number of people in Scotland affected by Lyme disease is continuing to increase. This is reflected in the results from Scotland's National Lyme borreliosis testing laboratory in Inverness in Figure 22. Similar statistics are also produced by Health Protection Scotland, the national surveillance centre for communicable diseases and health problems associated with environmental hazards.¹⁷

¹¹ ADMG website, *Op cit*.

¹² Wells, B., Shaw, H., Hotchkiss, E., Gilray, J., Ayton, R., Green, J., Katzer, F., Wells, A. and Innes, E. (2015). Prevalence, species identification and genotyping *Cryptosporidium* from livestock and deer in a catchment in the Cairngorms with a history of a contaminated public water supply. *Parasites & Vectors*, 8, p.66.

¹³ Scottish Deer Health Survey 2017-19: STEC 0157 Results (Moredun Research Institute, December 2018).

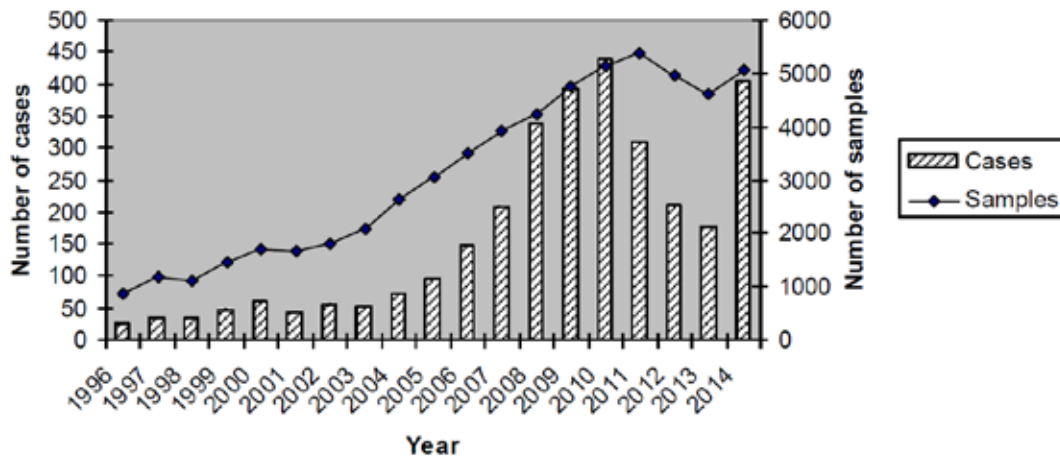
¹⁴ Scottish Deer Health Survey, *Op cit*.

¹⁵ Dr Lucy Gilbert correspondence with DWG, 14 June 2019.

¹⁶ Strnad, M., Hönig, V., Růžek, D., Grubhoffer, L. and Rom, R. (2017). Europe-Wide Meta-Analysis of *Borrelia burgdorferi* Sensu Lato Prevalence in Questing *Ixodes ricinus* Ticks. *Applied and Environmental Microbiology*, 83(15).

¹⁷ Dr Lucy Gilbert, *Op cit*.

Figure 22 Samples and cases of Lyme Disease in Scotland 1996-2014



Source: Dr Roger Evans, 'The Scottish View on Lyme Disease', NHS Highland (2015)

- 18 Official statistics for confirmed new cases of Lyme disease in Scotland are recognised to underestimate considerably the full extent of cases, with the true extent considered to be several times greater.¹⁸ This is a result of under-diagnosis due to the difficulty of diagnosis as the symptoms are non-specific, and under-reporting as Lyme disease is no longer a Notifiable Disease.¹⁹
- 19 If Lyme disease is treated early, there is more chance of a person recovering to full health. However, if left untreated it can become a chronic, debilitating and disabling condition. As full recovery may not take place in some cases, the total number of people affected is accumulating. The increasing number of cases is leading to growing awareness of the disease in Scotland and to more media coverage.²⁰
- 20 The prevalence of the disease in different parts of the country varies. This is illustrated by the results of a study of blood samples from 1,440 blood donors in 2010/11, in which 4.2% of the samples tested positive for antibodies for the *Borrelia* bacteria that causes Lyme disease.²¹ The distribution of the positive test results were then mapped by the donors' postcodes as shown in Figure 23.
- 21 Wild deer in Scotland are a major host for ticks. This is due to the relative abundance of deer and their large size, with deer carrying heavy tick loads in some circumstances. However, while deer can increase the size of local tick populations, deer themselves do not carry or transmit the *Borrelia* bacteria that cause Lyme disease. Thus, a tick feeding on a deer cannot become infected and subsequently transmit that infection to a human or other host. As deer are not a transmission host, they are referred to as a non-competent host for *Borrelia*.

¹⁸ Dr Lucy Gilbert, *Op cit*.

¹⁹ It was removed from the list of Notifiable Diseases in Scotland in 2010, when the criteria for Notifiable Diseases were tightened to diseases that require urgent action.

²⁰ BBC Scotland, 'Disclosure: Under the Skin', first broadcast 17 June 2019.

²¹ Munro, H., Mavin, S., Duffy, K., Evans, R. and Jarvis, L.M. (2015). Seroprevalence of lyme borreliosis in Scottish blood donors. *Transfusion Medicine*, 25(4), pp.284-286.

22 Research has shown that there is a clear correlation between increasing deer densities and increasing tick populations, as the deer provide an important feeding and reproduction host.²² However, this increase in ticks does not lead directly to an increase in ticks infected with *Borrelia* as deer are not a transmission host. This has led to suggestions that there can in theory be a ‘dilution effect’, due to the number of ticks that are not infected with *Borrelia* increasing faster than a minority of the tick population that are infected.²³

Figure 23 Percentage of donors tested seropositive for *B.burgdorferi* antibodies by postcode area of residence (2010/11)



Source: Munro et al. (2015)

²² Dr Lucy Gilbert, ‘Do deer increase Lyme disease risk?’, presentation shared with DWG, March 2018.

²³ Dr Lucy Gilbert, *Op cit*.

- 23 The suggested ‘dilution effect’ might also be produced in some situations by other wildlife species that are not competent transmission hosts.²⁴ However, this effect does not reduce the absolute densities of *Borrelia* infected ticks, it only reduces them as a proportion of the tick population. A critical variable in any situation is the extent to which there are competent transmission hosts present. If there are transmission hosts in an area for the increased number of ticks to feed on, the overall number of infected ticks will increase.
- 24 Competent transmission hosts in Scotland include birds and rodents, with the latter including voles, mice, rats, squirrels and beavers. Sheep can also transmit Lyme disease through their skin between co-feeding (close-together) ticks.²⁵ While the extent to which dogs might be competent transmission hosts is not known, they become ill with Lyme disease and researchers in the USA have been testing dogs as a proxy for humans in trying to understand the spread of Lyme disease.²⁶ More generally, however, there appears to be a lack of information on the full extent of competent host species in Scotland including, for example, whether rabbits and hares can be transmission hosts.
- 25 The evidence described above shows clearly that more deer means a greater density of ticks, while the prevalence of *Borrelia* amongst the ticks will be influenced by the availability of other transmission hosts. However, there are no studies that show that more deer results in a lower risk of Lyme disease to people.²⁷
- 26 Wild deer and ticks both occur in a wide range of environments in Scotland and the level of Lyme disease risk to people can vary in different circumstances. A tick population with a certain level of infected ticks may pose a lower risk in a rural area with relatively low potential for human contact with ticks, than a tick population with the same prevalence in urban green spaces with much greater potential for human contact with ticks.²⁸
- 27 The colonisation of Scotland’s peri-urban and urban environments by deer is thus an important factor in the spread of Lyme disease. The times of greatest tick activity are spring and summer and these can also be periods of higher human activity in urban green spaces such as parks. A study in an English city found an 18% level of infected ticks in the green spaces sampled, in comparison to the studies they examined of rural habitats in the UK where the prevalence ranged from 3-8%.²⁹ The city study suggested that there could be a need in some urban parks to have warning notices about ticks and the risk of Lyme disease.
- 28 Deer can, like other host species, spread ticks between green spaces so that ticks tend to occur in all green spaces where there is suitable vegetation and sufficient host species.³⁰ This can include domestic gardens where ticks drop off after a reproduction feed and become established, posing a risk to pets as well as to people with the level of risk of Lyme disease determined by the density of infected ticks.

²⁴ Entomology Today website, ‘Why the variety of ticks in your back yard might be a good thing’, 12 January 2018.

²⁵ Dr Lucy Gilbert correspondence with DWG, 17 June 2019.

²⁶ Liu, Y., Nordone, S.K., Yabsley, M.J., Lund, R.B., McMahan, C.S. and Gettings, J.R. (2019). ‘Quantifying the relationship between human Lyme disease and *Borrelia burgdorferi* exposure in domestic dogs. *Geospatial Health*, 14(1), p.750.

²⁷ Dr Lucy Gilbert correspondence with DWG, 16 March 2018.

²⁸ Hansford, K.M., Fonville, M., Gillingham, E.L., Coipan, E.C., Pietzsch, M.E., Krawczyk, A.I., Cull, B., Spring, H. and Medlock, J. (2017). ‘Ticks and *Borrelia* in urban and peri-urban green space habitats in a city in southern England. *Ticks and Tick-borne Diseases*, 8(3), pp.353-361.

²⁹ Hansford et al. (2017) *Op cit.*

³⁰ Hansford et al. (2017) *Op cit.*

- 29 The average prevalence of infected ticks in Scotland is considered to be 2-6% as a result of two major studies.³¹ This average figure is lower than the prevalence rates reported in mainland Europe.³² However, prevalence rates of up to 20% have been found in a small number of localised areas in Scotland and prevalence rates can vary both seasonally and year to year in any one location.³³ The important factor for the risk of Lyme disease is the density of infected ticks in an area, rather than simply the prevalence of infected ticks in the tick population.
- 30 There is ongoing research into the relationship between deer and Lyme disease, so that the position can be understood more fully.³⁴ While it is clear that increasing deer density means a greater density of ticks, the relationship between deer densities and the risk of Lyme disease is not linear. This is due to other variables, such as the influence of the abundance of other transmission hosts on the density of infected ticks in any situation and the likelihood of human-tick contact in that situation.
- 31 Scottish Natural Heritage (SNH) briefly described Lyme disease in its 2016 Report on Deer Management and referred to some previous attempts to attribute costs to the number of cases of the disease.³⁵ While there appear to be no recent or reliable estimates for the financial costs of Lyme disease in Scotland each year, these will continue to rise with the increasing number of cases.
- 32 SNH has not done any direct work on the relationship between deer, ticks and Lyme disease, and the role that deer can play in the risk of the disease.³⁶ The Group considers, however, that the expanded ranges and increased numbers of wild deer in Scotland are likely to be a major factor in contributing to ongoing rises in the cases of Lyme disease. The Group considers that the risk of Lyme disease should be seen as a more important factor than currently in the need to reduce deer densities in locations, particular in those areas where there is likely to be greater chance of human-tick contact.
- 33 **The Working Group recommends that the Scottish Government should ensure that the role of wild deer in increasing the risk of Lyme disease is given greater prominence in its policies for deer management in Scotland, and that greater priority is given to that risk in considering the need to reduce deer densities in locations across Scotland.**

³¹ Dr Lucy Gilbert correspondence with DWG, 14 June 2019.

³² Strnad et al. (2017), *Op cit.*

³³ Dr Lucy Gilbert, *Op cit.*

³⁴ For example, involving the James Hutton Institute and the University of Glasgow.

³⁵ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

³⁶ DWG meeting with SNH, 19 June 2019.

10.3 Monitoring Deer Health

- 34 There are now estimated to be well over 750,000 wild deer spread throughout mainland Scotland and some islands. The greater numbers of deer and the greater proximity between deer and both livestock and people compared to earlier decades, add to the risk of existing or new diseases being transmitted. The Group therefore considers that it is important to monitor deer health at a national level for diseases, due to their potential impacts on people, livestock and the deer themselves.³⁷
- 35 In the past, there has been a history of monitoring different aspects of the health of wild deer to examine the risks to the deer, livestock and people. The results of these studies were included in the Deer Commission for Scotland's Annual Reports, and before that the Red Deer Commission's Reports.³⁸ The current Scottish Deer Health Survey described above continues that history of monitoring by examining three risk factors. The Group considers that monitoring for different components of the disease risk should continue on a planned basis.
- 36 The Working Group recommends the Scottish Government and its agencies should, following the current Scottish Deer Health Survey, develop and maintain an ongoing national programme to monitor wild deer in Scotland for existing and potential diseases.**
- 37 The Group considers that the risk or occurrence of diseases is likely to become a more significant factor in the management of wild deer in Scotland. While monitoring deer health is important, there also needs to be adequate information available to deal with a disease outbreak.
- 38 Researchers have highlighted the need in this context for adequate information on deer culls and the use of venison.³⁹ The Group considers that Scotland is ill-prepared on both those requirements. Reference has been made previously to the limited deer cull information available for many parts of Scotland.⁴⁰ The limited information available on what happens to the carcasses of the deer culled each year is discussed in the following Section of the Report.
- 39 Important components of any strategy to monitor for diseases and also to protect food safety, are adequate awareness, education and training amongst practitioners to aid early identification of disease symptoms and ensure appropriate hygiene standards. There is Wild Deer Best Practice guidance available on these and they are covered by the Deer Stalking Certificate Level 1 (DSC1) qualification. However, as discussed earlier, there is no requirement to have any level of training to be able to shoot deer in Scotland and no information on the proportion of the cull each year that might be shot by someone with the DSC1 qualification.⁴¹

³⁷ As recommended, for example, by Böhm et al. (2007), *Op cit.*

³⁸ For example, the DCS reported in 2002/03 on a review of 'Diseases of Deer relevant in Scotland', while in 2003/04 the DCS reported on 'An Analysis of Key Endoparasites and Recommendations for Monitoring Disease'.

³⁹ For example, see Holland, J., Mc Morran, R., Morgan-Davies, C., Bryce, R., Glass, J., Pollock, M., McCracken, D., Glass, R., Woolvin, A. and Thomson, S. (2017). Meeting the challenge of wild deer research to support delivery of sustainable deer management in Scotland. SNH Commissioned Report No.963.

⁴⁰ See Section 2.

⁴¹ See Section 8.

Section 11 Wild Venison and Food Safety

- 1 The cull of over 100,000 wild deer in Scotland each year produces a substantial annual harvest of wild venison. There are no statistics on the actual amount, but it is generally quoted to be around 3,500 tonnes a year. This approximate estimate is based on multiplying the recorded annual cull total for each species by an average 'larder' weight for each species.¹ As red deer make up around half the recorded annual cull and are significantly larger than the other species, red deer account for over 75% of the wild venison produced each year.²
- 2 Venison is the main income each year from the overall management of wild deer in Scotland, whether that value is through direct use of the carcasses by those involved in killing the deer or through selling the venison. As has been long recognised, the availability of commercial outlets for wild venison and the prices paid are key factors in the economics of deer management. Any significant reductions in them (for example, due to food safety concerns) could have important consequences for deer management.³

11.1 Background

- 3 Commercial markets for wild venison were slow to develop in Scotland during the 20th century. The management of red deer on open hill range in the Highlands produced significant quantities of venison, for example, an estimated 800 tonnes a year in the 1930s.⁴ However, many estates did not regard the carcasses as a potential commercial asset, but simply as a by-product of managing the deer for sport and paid little attention to the quality of any carcasses they might sell to a venison dealer.
- 4 In the 1950s and 1960s, there were significant improvements in the prices paid for venison due to the start of exports. The Red Deer Commission (RDC), established in 1959, hoped that the price increases would result in improvements in the management of red deer based on an approach that was more focused on the production of venison.⁵
- 5 The main consequence of the price increases, however, was to stimulate the beginning of the pioneering Scottish research into red deer in the 1960s that led to the start of deer farming in Scotland.⁶ Venison from farmed red deer is now a major component of the retail market for venison in the UK and elsewhere. However, much of the farmed venison consumed in the UK is imported, mainly from New Zealand.⁷
- 6 The amount of farmed venison currently produced in Scotland is relatively small. Farmed deer are managed as agricultural livestock and agricultural census statistics show that the number of deer kept on farms in Scotland increased between 2008-18 from around 6,000 to around 9,500.⁸ The total annual production of farmed venison in Scotland was estimated to be around 70 tonnes in 2018 compared to the estimated 3,500 tonnes of wild venison.⁹

¹ Ashwood Management Services (2010). *Scottish Venison: An Industry Review*. The review, for example, used the average mean weights for each species used by Forest Enterprise Scotland at the time: red 47 kg; roe 12 kg; sika 24 kg; fallow 22kg.

² Applying the above weights to the 2017/18 SNH cull statistics totals: red 2,850 tonnes; roe 500 tonnes; sika 150 tonnes; fallow 50 tonnes. A total of 3,550 tonnes.

³ The food safety issue from the use of lead ammunition is considered in Section 4.

⁴ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland.

⁵ Callander and MacKenzie (1991), *Op cit*.

⁶ Callander and MacKenzie (1991), *Op cit*.

⁷ Scottish Government (2018). Briefing for the Government's Venison Summit, 6 March.

⁸ See Section 12.

⁹ Scottish Government (2018) *Op cit*.

- 7 While deer farming developed in the 1970s and 1980s, there continued to be an export market from Scotland to Europe for wild venison. That market accounted for around 80% of Scotland's wild venison supply at the end of the 1980s and, at that time, getting a better price for their venison was seen as one of the main reasons for estate owners deciding to form a Deer Management Group together.¹⁰ There also started to be an increasing number of initiatives from that time, aimed at improving the condition of carcasses for sale and developing home markets in Scotland to reduce the vagaries of relying so heavily on the export market.
- 8 Progress since has resulted in the development of the Scottish Quality Wild Venison (SQWV) quality assurance scheme.¹¹ Forestry and Land Scotland (FLS) and Scottish Natural Heritage (SNH) are both members of the scheme for their venison production, along with an increasing number of private estates and others producing significant quantities of venison from red deer each year. FLS is generally credited with setting the benchmark for standards of traceability and carcass handling.
- 9 Both FLS and SNH have provided financial support to the SQWV scheme, which is now considered to cover approximately half of the weight of wild venison produced in Scotland each year.¹² FLS and SNH have also provided financial support to help develop the Scottish Venison Association (SVA), which plays a significant role in developing the marketing for both wild and farmed Scottish venison.¹³
- 10 The Scottish Government has a clear interest in promoting the market for Scottish venison, both as Scotland's largest producer of wild venison through FLS and to support the scale of the wider annual harvest required each year as an essential part of managing Scotland's wild deer. Venison is also a Scottish product with many positive dietary attributes.¹⁴
- 11 Currently, about two thirds of the estimated 3,500 tonnes of Scottish wild and farmed venison is used in the UK and one third exported to EU countries (mainly Germany, Belgium and Holland), with around 1,200 tonnes of farmed venison imported to the UK each year (mainly from New Zealand, Poland and Ireland).¹⁵
- 12 With venison seen as a growing market, the Scottish Government and venison processors and producers are keen to see that Scottish venison benefits from the potential opportunities. In 2018, as part of its support for the venison market, the Scottish Government took forward proposals to register the name "Scottish Wild Venison" as a 'Protected Geographical Indicator' under EU quality schemes for agricultural products and foodstuffs.¹⁶

¹⁰ Callander and MacKenzie (1991) *Op cit.*

¹¹ SQWV is run by an independent company overseeing the standards required by the quality assurance scheme.

¹² Stated in a promotional video on the SQWV website.

¹³ The Scottish Venison Partnership became the Scottish Venison Association in April 2019.

¹⁴ For example, Food and Health Innovation Service (2015), 'What's hot in health – let's talk venison'.

¹⁵ Scottish Government (2018) *Op cit.*

¹⁶ SG consultation paper (March 2018).

- 13 The Scottish Government also held a ‘Venison Summit’ in March 2018 to focus attention on promoting markets for Scottish venison and to integrate venison into the Government’s strategic goals for Scotland’s food and drink sector, ‘Ambition 2030’.¹⁷ This resulted in the establishment of a Scottish Venison Strategy Working Group with membership from public and private sectors.
- 14 In September 2018, the Strategy Working Group published its report ‘Beyond the Glen, A strategy for the Scottish Venison Sector to 2030’.¹⁸ The aim is to increase the deer farming sector in Scotland significantly, with annual production increasing from 100 tonnes to 850 tonnes by 2030, as a result of increasing the annual harvest from 1,700 to 15,000 animals.¹⁹ While no increase is anticipated in the production of wild venison, the aim is to improve the market return by increasing the amount of wild venison sold in value added products.
- 15 At the same time as these developments, however, there have continued to be serious concerns over wild venison and food safety standards following the *E.coli* outbreak in processed wild venison in 2015.²⁰ Food Standards Scotland (FSS) has established through its inspection programmes that there are serious non-compliances and concerns around food safety and traceability systems in the venison and game meat sector.²¹ FSS has therefore drawn attention to a number of steps that it could take if there are not improvements made to the poor working practice currently evident.
- 16 The SVA and SQWV fully recognise the need for zero tolerance for poor practice as “*another food scare associated with venison would have highly serious consequences*”.²² One of their responses to the situation has been, for example, to produce three new videos with SNH for the Wild Deer Best Practice guidance on handling carcasses to appropriate standards after they have been shot. The competence of those shooting deer in that and other respects, was considered earlier in Section 8 of this Report.

11.2 Venison Dealers’ Records

- 17 There has been a relationship between Scotland’s deer legislation and the licensing of venison dealers since the Sale of Venison (Scotland) Act 1968. That short, four section Act introduced two measures:
- Firstly, in s.1, the requirement for each Local Authority (counties and large burghs) to establish a register of the persons in their area authorised to deal in venison (i.e. selling or offering for sale the carcass or any edible part of the carcass of a deer lawfully killed or taken). Section 1 also required each Local Authority to send the RDC every year on the 1st January, a list of those in their area registered as venison dealers.
 - Secondly, in s.2, the requirement for venison dealers to keep ‘a book’ in which they recorded all their purchases and receipts of venison in a prescribed form including the sex and species of deer. Section 2 also required venison dealers to keep their records for at least three years and to make available their records for inspection by any person acting under the authority of the Secretary of State or the RDC.

¹⁷ Scotland Food and Drink (2018a). Ambition 2030: A growth strategy for farming, fishing, food and drink.

¹⁸ Scotland Food and Drink (2018b). Beyond the Glen: A strategy for the Scottish Venison Sector to 2030.

¹⁹ Scotland Food and Drink (2018b) *Op cit.*

²⁰ Scottish Venison Partnership, ‘Scottish Venison Report’, in ADMG Newsletter, Winter 2017/18.

²¹ SNH Strategic Deer Group, ‘Venison Production and Food Safety Concerns’, 8 May 2018.

²² Scottish Venison Partnership, *Op cit.*

- 18 The 1968 Act was repealed by the Deer (Amendment) (Scotland) Act 1982, when s.11 of that Act amended the Deer (Scotland) Act 1959 to incorporate a new Part IIIA with the cross-heading '*Licensing of dealing in venison*'. In the new Part, ss.25A-25F elaborated on the requirements in the 1968 Act, while retaining the requirement for Local Authorities to send the RDC a list of dealers each 1st January and the authority of the RDC to inspect venison dealers' records.²³
- 19 The 1982 Act was then followed by The Licensing of Venison Dealers (Prescribed Forms etc.) (Scotland) Order 1984 under s.25B of the 1959 Act. This provided for the first time a prescribed template for the information to be recorded by dealers, as the power to do this by Order in the 1968 Act had not been used.
- 20 The 1984 Order remains in force and the Group considers that aspects of the information required in the prescribed form are no longer adequate for contemporary circumstances. In particular, given concerns over standards of food safety and traceability, there is a need for significantly improved information on the form about the source of the venison recorded on it. The Group considers that FSS should have a lead role in re-designing the form for contemporary circumstances.²⁴
- 21 The Working Group recommends that The Licensing of Venison Dealers (Prescribed Forms etc.) (Scotland) Order 1984 should be replaced by a new Order that requires clearer and more robust information on the prescribed form about the source of any purchases or receipts of wild venison.**
- 22 When the Deer (Scotland) Act 1996 came into force, ss.33-36 under the cross-heading '*Licensing of dealing in venison*' carried forward the provisions in the 1959 Act with little change other than their formatting in the Act. The requirement to send a list of dealers each year continued with the Deer Commission for Scotland (DCS), as did the authority for the DCS to inspect dealers' records, and this has remained the case since SNH took over from the DCS in 2010.
- 23 SNH has continued occasionally, like the RDC and DCS, to accompany the police to particular dealers to check for evidence of deer that have been unlawfully killed (for example, females out of season without authorisation).²⁵ However, unlike its predecessors, SNH has not continued to collate all the venison dealers' records each year to compare those totals with the cull totals from cull returns as part of understanding the market in venison.

11.3 Cull Returns and Dealers' Records

- 24 The RDC started collating dealers' records in 1970 following the 1968 Act, and from 1973 published both cull return and venison dealer totals for red deer. The results available from then until SNH took over in 2010 cover the two periods 1973-1990 and 1997-2009, as shown in Figure 24 (a table showing the underlying data can be found in Annex 8).²⁶ The figures over the two periods reflect a very significant change in the use made of the carcasses from the annual culls.

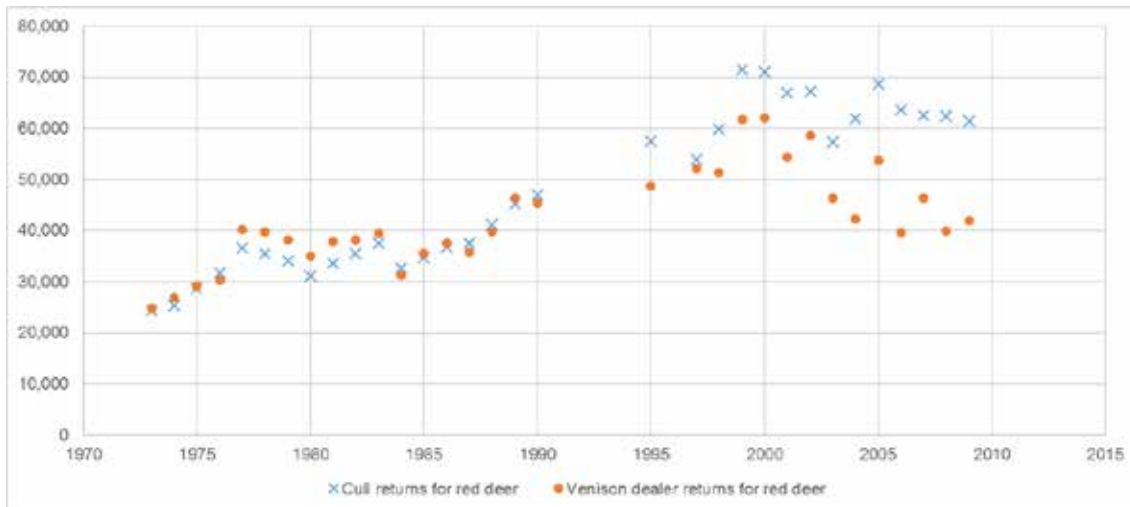
²³ In ss.25A and B respectively.

²⁴ The information might include, for example: the property on which it was shot; the identity of the owner or occupier of the property; the identity of the supplier, if not the owner or occupier; and whether they have Trained Hunter status.

²⁵ For example, SNH reported visiting some dealers with the police in 2017 (DWG meeting with SNH, 13 March 2018).

²⁶ While some information is available for the blank years, the totals were not sufficiently clear for inclusion.

Figure 24 Cull returns and venison dealer returns for red deer (1973-2009)



Sources: RDC Annual Reports, 1973-89, in Callander & MacKenzie (1991); RDC Annual Reports 1990 and 1995; 1997-2009 in M. Daniels 'Estimate of number of deer shot that do not go through game dealers' (DCS, 2007) and 'Scottish Venison: An Industry Review' (Ashwood Management Consultants, 2010).

- 25 During the 1973-90 period, the venison dealers' totals for red deer were usually higher than those recorded from cull returns (13 out of 18 years). During that period, the RDC estimated that properties were retaining about eight per cent of their red deer carcasses for their own use (c.2,000-3,750 deer). The RDC considered that the venison dealers' totals still tended to be higher despite that allowance due to carcasses sold to dealers by owners and occupiers not making cull returns.²⁷
- 26 However, by the end of the 1973-90 period, a trend was already starting to emerge where the red deer cull return totals were higher than those from the venison dealers. By the end of the subsequent 1997-2009 period, the red deer cull return totals tended to be over 30% greater than the totals from venison dealers. The difference was around 20,000 red deer carcasses a year.
- 27 During the 1997-2009 period, the trend was the same for roe deer, with the cull return totals of c.30,000-32,000 being up to 30% greater than the venison dealer totals in the later years, a difference of around 8,000-10,000 carcasses a year.²⁸ It is also reported that, while this trend was not apparent for sika and fallow, both species showed a fairly consistent pattern during 1997-2009 with the cull return totals around 38% greater than the venison dealers' records. This indicated that, based on the average recorded annual culls of c.5,000 for sika and c.1,374 for fallow, another 1,900 and 500 carcasses respectively per year were not going to venison dealers.²⁹
- 28 A number of factors could have resulted in some under-recording of the number of carcasses going to dealers.³⁰ The actual total culls will also have been higher because a significant number of the deer shot in Scotland each year are not recorded in the cull

²⁷ Callander and MacKenzie (1991) *Op cit.*

²⁸ Ashwood Management Services (2010), *Op cit.*

²⁹ Ashwood Management Services (2010), *Op cit.*

³⁰ Daniels, M. (2007). Estimate of number of deer shot that do not go through game dealers. Deer Commission for Scotland.

return system.³¹ However, the totals in the paragraphs above give a clear indication that, by 2009, over 30,000 deer carcasses a year were potentially being retained by producers for their own or local use rather than supplied to venison dealers.

- 29 While some carcasses have always been retained by owners, occupiers and hunters for their own and local consumption, the scale of increase shown in Figure 24 appears to reflect a significant change in the venison market towards more sales to local outlets (including hotels and restaurants).
- 30 Key factors in this change are considered to have been the relatively low venison prices available from dealers, the improved availability of local outlets for venison and the derogation under EU game meat regulations from 2004 allowing direct sales of venison in-fur (i.e. in-skin) locally.³² This exempted from the requirements of the meat regulations *“hunters who supply small quantities of wild game or wild game meat directly to the final consumer or to local retail establishments directly supplying the final consumer”*.³³
- 31 In this definition, ‘small quantities’ is *“regarded as self-defining because demand for in-fur or in-feather carcasses from final consumers and local retailers is limited”*.³⁴ The use of ‘local’ refers to the premises or game larder where a hunter prepares the venison for supply to local retailers rather than where a deer was shot.
- 32 The meaning of ‘local’ is regarded as *“within the supplying establishment’s own county plus the greater of either the neighbouring county or counties or 50km/30miles from the boundary of the supplying establishment’s county”*.³⁵ In Scotland, the very large size of many of its rural Local Authority areas compared to most European countries, means the interpretation of ‘local’ can potentially cover very large distances.
- 33 The increase in retained carcasses recorded up to 2009 suggest the development of a significant market for the local consumption of wild venison in Scotland. At the time, an industry review of Scottish venison in 2010 reported that venison dealers recognised the increasing trend of greater carcass retention and that *“This was viewed by the game dealers as an area where hygiene or quality failure could easily occur with the consequence that it could damage the industry in the eyes of the consumer – a bad outbreak of food poisoning for instance”*.^{36,37}
- 34 The development of local markets for wild venison for local consumption appears to have been on a very significant scale during the last 20-30 years. There seems to be no account of that development, but it occurred during a period when the amount of Scottish venison being exported was declining. As noted previously in this Section, around 80% of all Scottish venison was exported in 1990, while this had declined to around 60% by 2001 and appears to have continued on a downward trend since then towards the current one third of Scottish venison.

³¹ See Section 2.

³² Regulation (EC) No. 853/2004.

³³ Food Standards Agency (FSA) and Food Standards Scotland (FSS) (2015). The Wild Game Guide, Revision November 2015, p.11.

³⁴ FSA and FSS (2015), *Op cit*, p.12.

³⁵ FSA and FSS (2015), *Op cit*, p.12.

³⁶ Ashwood Management Services (2010) *Op cit*, p.30.

³⁷ However, the only E.coli issue to date has been at an Approved Game Handling Establishment, rather than in the local retention sector.

11.4 Current Position

- 35 As described above, SNH has not collated the total numbers of deer carcasses going to venison dealers in any year since it took over in 2010. The Group also learnt from SNH that it was not receiving the annual lists of dealers from all Local Authorities, and that Local Authorities are required to supply these to SNH under s.33(6) of the 1996 Deer Act. SNH was also not following this up with Local Authorities until the information was requested by the Group.
- 36 The Group recognises that SNH is already supporting the wild venison market as described above, because of its significance for deer management. However, the Group considers that SNH should also be using its powers in relation to venison dealers' records as part of developing a clearer understanding of the market.
- 37 Figure 25 shows the distribution of the 178 licensed venison dealers in Scotland in early 2018, and Figure 26 shows the number in each Local Authority area. This total compares, for example, with the total of c.120 in 1990 at an early stage in the change described above to a reduced proportion of the annual culls going to venison dealers.³⁸
- 38 In 1990, the great majority of 120 dealers were relatively small scale with three main dealers accounting for 75-80% of the carcasses supplied to dealers.³⁹ The current pattern might be considered similar. In 2018, 12 of the 178 licensed venison dealers were Approved Game Handling Establishments (AGHEs), while over half the overall total consisted of private estates (78), FLS (15) and SNH (2) properties. The remaining dealers were retail butchers (23), farm shop and food retailers (18) and individuals (30).⁴⁰
- 39 There is, however, no information available on the number of wild deer carcasses processed each year by venison dealers and, as discussed further below, SNH experienced difficulty in trying to obtain this throughput data from some of the main dealers. The most recent information on throughput is therefore from 2009. The total recorded annual cull remains still broadly similar to then at 100,000+ and, at this stage, there also appears no particular reason to suppose that the respective proportions of the annual cull retained for local use or sold to venison dealers have changed significantly in the last 10 years.
- 40 While the Group recognises the limited quality of the information available to it, the implication is that a substantial proportion of the annual cull continues to be retained for home or local consumption. This might be estimated to be 25,000 or more carcasses each year from the previous records and indicates that around a quarter or more of the total cull is being used for local consumption under the EU derogation and thus outwith the EU game meat regulations and requirements.
- 41 That rate of local consumption appears low compared to some other European countries.⁴¹ However, the Group considers that the increased level of local consumption in Scotland has many attributes that are in the public interest if the food is safe (for example: potentially a better price for suppliers; added value retained locally in rural areas; healthy type of meat; local produce for residents and visitors; potentially lower carbon footprint than livestock meat; fewer travel miles, etc.).

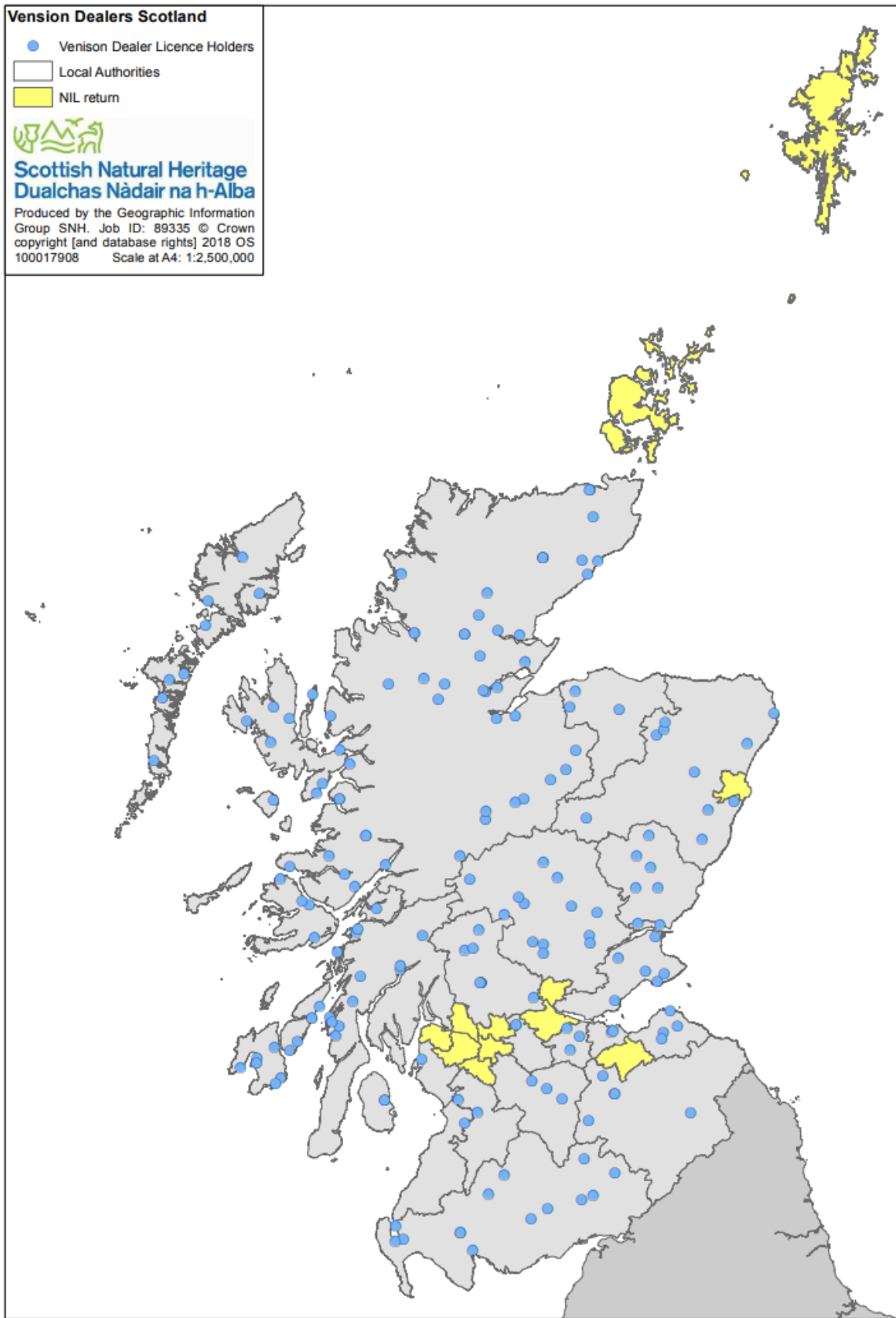
³⁸ Callander and MacKenzie (1991) *Op cit.*

³⁹ Callander and MacKenzie (1991) *Op cit.*

⁴⁰ SNH Information Response 54.

⁴¹ Ashwood Management Services (2010) *Op cit.* In Scandinavia, 80% of carcasses are considered to be used directly by hunters and 20% sold commercially.

Figure 25 Distribution of venison dealers in Scotland (2018)



Source: SNH (2018)

Figure 26 Estimated number of venison dealers in Scotland by Local Authority area (2018)

Local Authority	Licensed dealers
Aberdeen City	0
Aberdeenshire	10
Angus	6
Argyll & Bute	28
Clackmannanshire	0
Dumfries & Galloway	14
Dundee City	1
East Ayrshire	2
East Dunbartonshire	0
East Lothian	5
East Renfrewshire	0
Edinburgh City	1
Falkirk	0
Fife	6
Glasgow City	0
Highland	57
Inverclyde	0
Midlothian	0
Moray	3
North Ayrshire	3
North Lanarkshire	2
Orkney Islands	0
Perth & Kinross	13
Renfrewshire	0
Scottish Borders	5
Shetland Islands	0
South Ayrshire	1
South Lanarkshire	3
Stirling	7
West Dunbartonshire	0
West Lothian	3
Western Isles	8
Total	178

Source: SNH

- 42 The Group recognises that there may be some additional information available on aspects of the venison market. However, the Group considers that there appears to be an overall lack of clarity about the use of the carcasses of the 100,000+ wild deer shot in Scotland each year and the extent of local consumption as part of that. A key concern is the issue of food safety whether the venison goes to dealers or is used for local consumption. The increases in the ranges and numbers of wild deer are potentially a factor in this by increasing the number and distribution of deer hunters.
- 43 SNH does not have any statutory responsibilities for food safety or the regulation of venison dealers. However, as discussed further below, the Group considers that SNH should have for its responsibilities in the deer-venison equation under the deer legislation, a much clearer picture than at present of the use of the carcasses of wild deer.
- 44 Markets for venison are key to underpinning the annual cull of deer required in Scotland each year. The Group considers that SNH should therefore ensure that Local Authorities fulfil the requirement under s.33(6) in the 1996 Act to supply it annually with a list of current licensed venison dealers. The Local Authority area-based list of dealers could be made publicly available for use by deer hunters and others.
- 45 The Group considers that SNH should monitor the distribution and capacity of dealers in relation to the information that it has on the distribution of annual culls. This could indicate areas where there may be difficulty in disposing of carcasses for those carrying out culls, due to the lack of dealers or adequate carcass chilling or larding facilities. This may particularly be the case in areas where the need for deer control is relatively new and expanding.
- 46 A lack of adequate chilling or larding facilities for deer hunters to use is considered to be the case in parts of the Central Belt.⁴² As a result, SNH has been given a lead role in helping to develop cooperatively owned chilling or larding facilities in appropriate areas as part of implementing the public/private strategy for venison mentioned above.⁴³
- 47 The Group considers that SNH should also be making more use of its authority under s.34(2) of the Act to inspect venison dealers' records. The Group consider that SNH should be in a position to collate the overall total of carcasses going to dealers either annually or on a regular basis. This would give information on the capacity of current dealers, while enabling SNH to identify the proportion of the annual reported cull that does not go to venison dealers as part of understanding the scale of local consumption.
- 48 The collation of venison dealers' records should be substantially easier than in past decades, as it is anticipated that all or nearly all dealers will keep computerised records. It might be noted that, while s.34(1) of the 1996 Act still requires dealers to keep a 'book' in which records should be entered as in the 1968 Act, s.36 refers to "*book or document*" and a document is interpreted in legislation as meaning "*anything in which information is recorded in any form*".⁴⁴

⁴² Lowland Deer Panel Report to Scottish Natural Heritage, February 2019.

⁴³ Scotland Food and Drink (2018b) *Op cit*.

⁴⁴ Interpretation and Legislative Reform (Scotland) Act 2010.

- 49 SNH did not find it easy, however, when it approached seven main venison dealers in 2018 to obtain summary carcass throughput data for 2016/17 and 2017/18.⁴⁵ Not all the dealers responded, perhaps recognising that it is not a requirement in the deer legislation to do so. With those that responded, *“The format in which the information was provided and the level of detail within it, varied between each respondent. Two of the respondents provided information in the form required of The Licensing of Venison Dealers (Prescribed Forms, etc.) (Scotland) Order 1984, but even here the recording format varied between the two.”*⁴⁶
- 50 The nature of the responses SNH received meant that summarising the carcass data was *“extremely labour intensive”* and restricted the value of combining the different data sets.⁴⁷ The Group considers that, while SNH can inspect a dealer’s record and, under s.34(4), take copies of *“any book or document”*, SNH should also be able to require a ‘summary carcass return’ from venison dealers that summarises the dealer’s throughput of wild deer carcasses for a particular year.
- 51 The Group considers that an amendment to s.34 to provide the authority to require a summary carcass return, could use an approach similar to that used for SNH’s existing power to require a cull return. SNH or other persons with the authority in s.34(2) would serve a notice on a venison dealer requiring a ‘carcass return’ recording the species, numbers and sexes of the deer carcasses in their records in a specified period of up to three years.
- 52 At present, under s.34(5) of the 1996 Act dealers are required to keep their records available for inspection for three years after the last entry in a previous ‘book’, while three years is also the current period for which venison dealers licences can be valid under s.33(4). The format in which a return is to be submitted should also be set out clearly in amending s.34. This might be achieved through secondary legislation, as the current prescribed form Order discussed above does for individual carcasses. This should also make a clear distinction between carcasses that were first recorded by a dealer, and any carcasses they might purchase from another dealer that have already been recorded.
- 53 The availability of annual totals from venison dealers would clarify the scale of the local consumption that does not go through dealers. The Group considers that both SNH and FSS have an interest in understanding that pattern of direct use and sale more clearly.
- 54 For SNH, improved understanding of local consumption would enable it to improve its support for that sector of the overall venison market. SNH already makes a significant contribution to promoting the venison market because of its importance to deer management. However, for understandable reasons, it might be considered that SNH’s support has been largely focused on larger scale producers and wider markets.
- 55 The Working Group recommends that section 34 of the Deer (Scotland) Act 1996 should be amended to empower those with the authority under that section, to require a licensed venison dealer to submit a return summarising their throughput of wild deer carcasses during a period not exceeding three years and in a form to be prescribed.**

⁴⁵ SNH Information Response 54.

⁴⁶ SNH Information Response 54.

⁴⁷ SNH Information Response 54.

- 56 The Group considers that maintaining the requirement for venison dealers to be licensed is an important component ensuring appropriate standards of food safety and traceability for venison. However, ss.33-36 in the 1996 Act that cover the “*licensing of dealing in venison*” are little different from the provisions in the original Sale of Venison (Scotland) Act 1968.
- 57 At the time of the 1968 Act, the reason behind the introduction of licensing was to help control poaching and other unlawful killing of wild deer, including killing them out of season following the introduction of close seasons for red deer in 1963 and other deer species in 1966. The priority now is food safety.
- 58 Those in s.34(2) that have the authority to inspect venison dealers’ records are the Secretary of State (i.e. Scottish Ministers), SNH or a person acting with their authority. While SNH is included as the RDC’s successor from the 1968 Act, now the key agency to include would be FSS. Similarly, while licensing dealers in the deer legislation because of its origins, it might now be expected to be in food safety legislation.
- 59 FSS has taken an active interest in wild venison and food safety as described earlier, and the Group considers that FSS should be empowered by amending the existing legislation to have a national role overseeing the separate licensing of dealers by each Local Authority. More generally, the Group considers that the Scottish Government should ask FSS to lead a review of the current provisions in ss.33-36 of the 1996 Act and recommend changes to ensure the arrangements are fit for purpose in contemporary circumstances.
- 60 **The Working Group recommends that the Scottish Government should review sections 33-36 of the Deer (Scotland) Act 1996 that cover the licensing of dealing in venison, with a view to making changes in addition to the related recommendations in this Report, so that the arrangements are fit for purpose in contemporary circumstances.**
- 61 As described earlier here, a significant proportion of the annual harvest of wild venison does not go through venison dealers and the Group regards the apparent growth of the this ‘local consumption’ sector over recent decades as potentially a very positive development in the venison market because of the local benefits it brings. The Group therefore considers the ‘local’ derogation from EU game meat regulations very important for the scope it provides. However, there is also a need for better information to improve traceability and accountability in the use of carcasses in the local consumption sector.
- 62 The Group considers that a valuable step in that direction would be to include a question on the use of carcasses in the existing cull returns that SNH can require under s.40 of the 1996 Act, of the species, numbers and sexes of deer culled on properties. The columns for each species and sex could, for example, be extended to give three or four options for the use or uses made of the carcasses of the deer shot.⁴⁸

⁴⁸ For example: (a) carcase not used in human food chain (e.g. not extracted or for some reason not fit for human consumption); (b) own consumption; (c) direct sale in the local area; and (d) sale to a venison dealer.

- 63 The Group considers that including the use of carcasses in cull returns would be an important improvement in the information available. The collated information could be compared with the venison dealer totals nationally, as well as regionally and more locally, while providing an improved chain for traceability and accountability in the interests of food safety.⁴⁹
- 64 SNH could currently start to include the question on the use of carcasses on its cull return forms. While s.40 only requires owners and occupiers to state the species, numbers and sexes of deer killed, SNH already includes other questions where answers would be considered voluntary. However, the Group considers that this question should be put on a statutory basis by amending s.40. The need for SNH to increase the geographic coverage of its use of cull returns for a range of significant reasons is discussed later in Section 21 of this Report.
- 65 **The Working Group recommends that section of 40 of the Deer (Scotland) Act 1996 dealing with cull returns should be amended by inserting ‘and the use of the carcasses’ at the end of sub-section 40(1).**
- 66 An important additional aspect of ensuring high standards of food safety with wild venison, is the Trained Hunter status introduced by the EU game meat regulations and required under them for supplying venison to AGHEs. Enforcement of this requirement was one of the priority actions identified by SNH in its review under s.17B of the 1996 Act, of the competence of persons killing deer in Scotland.⁵⁰ Enforcement of the requirement is not SNH’s responsibility.
- 67 **The Working Group recommends that the Scottish Government should ensure that the requirement for those supplying venison to Approved Game Handling Establishments to be able to demonstrate Trained Hunter status under EU regulations is enforced.**
- 68 As discussed in Section 8 of this Report, attaining Deer Stalking Certificate Level 1 (DSC1) provides Trained Hunter status. The Group’s recommendation that everyone shooting wild deer in Scotland should be required to attain DSC1 would ensure that those shooting deer for local consumption would also have Trained Hunter status.

⁴⁹ In the past, discussions about improving the traceability of carcasses have include the suggestion of introducing a universal carcass tagging scheme. The Group considered that possibility, but considered that such a scheme would neither be a realistic or proportionate proposal as things stand with deer management in Scotland.

⁵⁰ SNH (2016). Draft Review of Competence.

Section 12 Wild Deer and Other Deer

- 1 The primary legislation governing the management of wild deer in Scotland is the Deer (Scotland) Act 1996. While the provisions in the Act refer to ‘deer’ rather than particular species, the species of deer that occur in the wild in Scotland are identified in s.45 ‘*Interpretation*’, where s.45(1) defines ‘deer’ as red deer (*Cervus elaphus*), roe deer (*Capreolus capreolus*), sika deer (*Cervus nippon*), fallow deer (*Dama dama*) and any hybrid of those species.
- 2 While the species of deer that occur in the wild in Scotland are clearly recognised, there is less clarity in some situations over the deer of these species that should be regarded as ‘wild deer’ or considered subject to one of the other main three regulatory frameworks that apply to deer in Scotland. These other categories of deer involve deer managed as farm livestock, zoo animals and other deer kept as private property.
- 3 This Section considers each of these other categories of deer and then examines the boundaries between wild deer and these categories, because of the potential implications for standards of deer welfare, food safety and the risk of animal diseases.

12.1 Farmed Deer

12.1.1 Development

- 4 The pioneering research into domesticating wild red deer and their management as farm livestock, conducted at the Rowett Institute and associate Glensaugh Farm in the 1960s and 1970s, resulted in the first commercial deer farm starting in Scotland in 1973.¹ The sector then grew fairly rapidly during the 1970s and 1980s, using the live capture of wild red deer hinds to build up stock on the farms.
- 5 By 1990, there were around 70 deer farms in Scotland with a total stock of 18,500 farmed red deer.² However, by then, the growth of the sector had stalled due to outbreaks of Tuberculosis (TB) in farmed deer, the lack of an established venison market and the lack of agricultural livestock subsidies for farmed deer. During the 1990s, the sector declined substantially and, with it, the need for wild stock due to breeding from the farmed stock and the development of pedigree lines. By the beginning of this century, the number of deer on farms was down to around 6,000.
- 6 The number of farmed deer in Scotland continued to be fairly stable at around 6,000 until the start of an increase in 2014, so that there were just over 8,000 deer on farms recorded in the 2017 agricultural census (Figure 27). The deer were on 97 holdings spread across the eight agricultural census regions (Figure 28). Current farmed venison production is around 70 tonnes a year.³
- 7 The increase in farmed deer in Scotland over recent years is expected to grow significantly over the next decade. This is due to the positive market for farmed venison, the current eligibility of farmed deer for farm support payments, and farmers’ concerns about the prospects for some other livestock sectors. The aim of the Scottish Government and the deer farming sector is to increase the production of farmed venison

¹ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland.

² Callander and MacKenzie (1991) *Op cit*.

³ Scottish Government (2018). Briefing for the Government’s Venison Summit, 6 March.

from less than 100 tonnes currently to 850 tonnes by 2030, based on increasing the annual harvest from 1,700 to 15,000 animals.⁴

- 8 The general view appears to be that the expected growth in deer farming will not lead to a significant increase in the live capture of wild red deer, due to the preference for and availability of bred stock.⁵ While deer farming in Scotland declined from its early peak and survived at a lower level, deer farming with red deer based on the pioneering Scottish research developed into an international industry.⁶ This includes a trade in stock between European countries, including Scotland.
- 9 Despite the improved performance of deer from bred stock, the Group considers there could still be an increase in the live capture of open hill red deer hinds in the Highlands to start deer farming. The Group is aware of this taking place on some properties where there was the scope to capture deer in enclosures. The Group suspects that the future

Figure 27 Number of farmed deer recorded in the June Agricultural Census (2007-2018)

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Farmed deer	6,213	5,885	6,117	5,977	6,126	6,274	7,007	7,236	7,005	8,039	9,660

Source: Scottish Government (2018)

Figure 28 Distribution of holdings with farmed deer by agricultural region (2017)

Agricultural region	Farmed deer	
	Holdings	Head
Argyll & Bute, Clyde Valley	9	523
Ayrshire	5	116
Dumfries & Galloway	10	869
East Central	5	447
Fife, Lothian and Scottish Borders	9	1,467
Highland & Islands	29	1,646
NE Scotland	14	1,877
Tayside	16	1,094
All	97	8,039

Source: Scottish Government RESAS Statistics (Agriculture)

⁴ Scotland Food and Drink (2018b). Beyond the Glen: A strategy for the Scottish Venison Sector to 2030.

⁵ Farmed deer in Scotland are very largely all red deer, though there are a number of farms with fallow deer. The Group is also aware of a case where sika are farmed.

⁶ In which New Zealand is the largest player with, in 2010, c.1m farmed deer or c.40% of farmed deer and exporting c.15,000+ tonnes of farmed venison (Ashwood Management Consultants, 2010, Scottish Venison: An Industry Review).

extent of live capture will depend on increasing competition and prices for bred stock if the sector develops fairly rapidly, and if other livestock sectors are doing poorly. The live capture of wild deer was discussed earlier in Section 7 of this Report.

12.1.2 Regulatory Framework

- 10 At the time of the Deer (Scotland) Act 1959, there were no farmed deer. The Act was therefore amended by the Deer (Amendment) (Scotland) Act 1982 to include a new s.5A with a definition of ‘farmed deer’ to distinguish them from the ‘deer’ in the 1959 Act. A similar definition was then included in the 1996 Deer Act in s.43 ‘*Application of Act to farmed deer*’.
- 11 In the 1996 Act, s.43(1)-(3) cover the limited number of provisions in the Act that also apply to farmed deer.⁷ The final sub-section then defines ‘farmed deer’:

s.43(4) “*In this section, ‘farmed deer’ means deer of any species which are on agricultural land enclosed by a deer-proof barrier and kept on that land by any person as livestock.*”
- 12 In the 1996 Act, s.45 ‘*Interpretation*’ states that ‘livestock’ has the meaning given by the Agriculture (Miscellaneous Provisions) Act 1968. Section 8 of that Act provides:

(1) *In this Part of this Act—*

“*livestock*” means any creature kept for the production of food, wool, skin or fur or for use in the farming of land or for such purpose as the Minister may by order specify.
- 13 While farmed deer are livestock, they are different from other livestock in that they can be killed either on the farm or at an abattoir.⁸ However, as livestock, farmed deer are managed under the same animal health and welfare regulations as other livestock and the same food safety regulations apply to meat production. The deer can only be killed by licensed slaughterer and the killing is also subject to other regulations.⁹ The carcasses must be processed through red meat Approved Game Handling Establishments (AGHEs) that are licensed and inspected by the UK Food Standards Agency (FSA) through Food Standards Scotland (FSS).¹⁰
- 14 Farmed deer are thus subject to a very different regulatory regime than wild deer. They should also be separated behind deer-proof barriers from wild deer. However, there is a continuing history of red deer escapes from deer farms.¹¹ These deer may not always be re-captured or killed following an escape, and become what can be regarded as ‘feral red deer’ with their mixed genetic breeding.¹²
- 15 There are longstanding concerns that the escapes can increase the risk of spreading diseases such as TB into wild populations, while also introducing further mixed origin genetic material.¹³ The possible transmissions of diseases either way between wild

⁷ Section 17(3)-(4) (Unlawful killing, taking or injuring of deer); s.21 (Firearms and Ammunition); ss.33-36 (Licensing of dealing in venison); s.45 (Interpretation); and s.24 and ss.27-32 (offences and enforcement).

⁸ Venison Advisory Services (2016), *Op cit*.

⁹ For example, The Welfare of Animals at the Time of Killing (Scotland) Regulations 2012 and The Welfare of Animals (Transport) (Scotland) Regulations 2006.

¹⁰ For more information, see Venison Advisory Services (2016), *Op cit*.

¹¹ Callander and MacKenzie (1991) *Op cit* and recently, for example, SNH confirmation that more than 10 tagged deer were shot as part of controlling marauding red deer in the Howe of Alford in 2017.

¹² They are selectively bred and can include, for example: sika genes from deer that were obtained by live-capture; genes from English park deer with their mixed origins; and genes from the continuing use of European stock (e.g. sires from Eastern Europe).

¹³ Callander and MacKenzie (1991) *Op cit*.

deer and livestock, including farmed deer, was discussed in Section 10 of this Report. There has also been a particular concern over escapes from deer farms in those parts of Scotland designated as refuges for native stock of wild red deer, as discussed later in Section 17.

- 16 At present, under current regulations, farmed deer only have to be tagged if they are to be tested for TB or if they are to be transported live from their farm of origin, for example, between deer farms or to an abattoir.¹⁴ The Group considers that this is an anomaly. If farmed deer were required to be tagged, this would enable any escaped deer to be identified and either captured or killed to reduce the risk of disease and genetic introgression.¹⁵
- 17 These were the reasons that farmed deer originally had to be tagged. The definition of farmed deer in s.5A of the 1959 Act from 1982 ended “*provided that the deer are conspicuously marked to demonstrate that they are so kept*”. This requirement was not, however, then included at the end of the definition of farmed deer in s.43 of the 1996 Act when that Act was passed at Westminster. The Group’s understanding is that this omission resulted from influence in England.
- 18 The Group considers that all farmed deer should require to be tagged for the reasons explained above. This is already regarded as good practice from the time of weaning within the deer farming sector as part of appropriate stock management.¹⁶ However, the sector includes both ‘deer farms’ where the business is fully focused on managing farmed deer, and ‘deer on farms’ where some farmed deer are kept as part of a wider livestock mix or farming business.
- 19 A growth in the number of farmed deer will include increases in both ‘deer farms’ and farms that have some deer as part of their livestock. Growth is also likely to be widely distributed in Scotland, as reflected in the current distribution shown in Figure 28 above. The growth is also likely to include an increase in farmers managing farmed deer for the first time. The Group considers that the current history of farmed deer escapes is likely to continue and could possibly increase if the sector expands as expected.
- 20 The Group considers that farmed deer should already require to be clearly marked as such because of the risk of escapes. Increases in the numbers of farmed deer and the locations where deer are farmed strengthen the case for this. The Group considers this could be done straightforwardly by amending the end of the definition of farmed deer in s.43(4) in the 1996 Act, to include wording to the effect of ‘and be clearly marked to show they are kept as such’.
- 21 **The Working Group recommends that section 43 of the Deer (Scotland) Act 1996 should be amended at the end of the definition of farmed deer in s.43(4) to include ‘and be clearly marked to show they are kept as such’.**
- 22 When farmed deer escape, they come under the terms of the Animals (Scotland) Act 1987 that deals with stray livestock. Deer are listed in the Act with other types of livestock, including sheep and cattle, which can cause material damage to property by foraging

¹⁴ ‘Deer Keepers: tagging deer and reporting their movements’, DEFRA guidance, UK Government, 2015.

¹⁵ Genetic introgression in terms of the genetics of bred farm stock into the wild population.

¹⁶ This includes the use in some cases of relatively inconspicuous electronic tagging.

when stray.¹⁷ The occupier of the land affected can then ‘detain’ or impound the animal or animals involved to prevent further damage.¹⁸ The person responsible for the animals is liable for any damage caused by the animals and if that person does not reclaim them, the stray livestock are treated as lost or abandoned property under the Civic Government (Scotland) Act 1982. This allows the affected occupier of land to report the lost or abandoned property (in this case, the deer) to the police and may (in the event that the property has not been reclaimed within two months) be offered to the occupier or sold.¹⁹

- 23 These arrangements for stray livestock are, for example, well-established for dealing with stray sheep.²⁰ However, in comparison with the other types of livestock covered by the 1987 Act, detaining escaped farmed red deer is likely to be a fairly unrealistic proposition in most circumstances.²¹ This is especially the case when the escaped deer have joined up with wild red deer.²²
- 24 In most situations, the only way to ‘detain’ escaped farmed red deer will be to shoot them. While this would prevent further damage, the Group considers that shooting the escaped deer is also generally in the public interest due to the risks of disease transmission and genetic mixing as outlined above. However, there is currently a lack of legal clarity over the scope to shoot escaped farmed deer.
- 25 The Group suspects that, at present, people take a pragmatic approach to dealing with escaped farm deer. These deer no longer conform to the definition of a farmed deer as they are not enclosed behind a deer-proof barrier.²³ A hunter encountering a free-living deer of a species that occurs in the wild in Scotland will shoot the deer and only then happen to notice the tag that identifies the deer as a farmed deer.²⁴
- 26 The Group considers that there should be greater legal clarity through the 1987 Act that an owner or occupier of land can shoot a stray farmed deer on that land to prevent damage, where that deer cannot be readily captured. The Group recognises that some farmed deer can be valuable, but it is the owner of farmed deer who is responsible for ensuring they are kept enclosed by deer-proof barriers.
- 27 The Group considers that Scottish Natural Heritage (SNH) already has the power through s.10 ‘*Emergency measures*’ to pursue and kill escaped farmed deer on an owner or occupier’s land where warranted, whether SNH carries this out itself or authorises another person to do it.
- 28 **The Working Group recommends that the Animals (Scotland) Act 1987 should be amended to establish clearly that an owner or occupier of land can shoot a stray farmed deer on that land to prevent damage by the deer, where that is the only reasonable practical means in the circumstances to detain the stray deer under the Act.**

¹⁷ Animals (Scotland) Act 1987 s.1(3)(b).

¹⁸ Animals (Scotland) Act 1987 s.3(1).

¹⁹ Animals (Scotland) Act 1987 s.3(2).

²⁰ For example, ‘Foresters call time on stray sheep’, *Scottish Farmer*, 19 January 2017.

²¹ For example, they are very mobile, can clear stock fences and cannot generally be herded with sheep dogs.

²² As in the case confirmed by SNH of more than 10 tagged deer shot as part of controlling marauding red deer in the Howe of Alford in 2017.

²³ Deer (Scotland) Act 1996 s.43(4).

²⁴ The Group’s view is that the hunter should not dispose of the carcase for human consumption due to the uncertainty over any medication the deer may have previously been given in captivity, although the types of medication used with farmed deer do not generally preclude the use of the deer in the human food chain.

12.2 Deer in Zoos

- 29 A zoo in Scotland is defined under the Zoo Licensing Act 1981 as “*an establishment where wild animals... are kept for exhibition*” and “*to which members of the public have access, with or without charge for admission, seven or more days in any period of twelve consecutive months*”. ‘Wild animals’ means animals not normally domesticated in Great Britain. Establishments that conform to the definition of zoo are subject to licensing and inspection under the 1981 Act and the Zoo Licensing Act 1981 (Amendment) (Scotland) Regulations 2003.
- 30 The wide definition of zoos means that they range in Scotland from traditional urban zoos to safari parks and other wildlife parks that are usually in rural areas. Many of these zoos keep deer. These may be species that occur in the wild in Scotland, while some will also have other exotic deer species.²⁵ Red deer are the most common Scottish wild deer species kept in zoos, followed by fallow. In safari parks and wildlife parks, these deer may be kept in relatively large enclosed areas (for example, the red deer herd at the Highland Wildlife Park and the fallow deer at the Blair Drummond Safari Park).
- 31 Responsibility for zoos in Scotland is devolved to the Scottish Government. Its animal welfare staff have responsibility for policy on zoo animal welfare, while Local Authorities are responsible for licensing and inspecting zoos. All zoos have to conform to the animal health and welfare standards in the 1981 Act and associated secondary legislation. Deer in zoos therefore have to be tagged, may receive medication, and if they are intentionally killed or die of other causes, no meat can enter the human food chain.
- 32 While these zoo deer are subject to a different statutory regime from farmed deer, the five principles in the ‘Standards of Modern Zoo Practice’ that provides government guidance across the UK, are based on the ‘Five Freedoms’ drawn up for farm livestock by the Farm Animal Welfare Committee.²⁶
- 33 While deer in zoos are kept physically separate from wild deer behind deer-proof barriers, the concern is that escapes do sometimes occur.²⁷ The deer then becomes a stray animal under the Animals (Scotland) Act 1987 and the issues discussed above apply. If an escape involves a species that does not occur in the wild in Scotland, it is likely to be clear to the owner or occupier that the deer probably comes from the nearest registered zoo. The zoo can therefore be contacted over re-capturing or killing the deer. The zoo may also, depending on the species, be required to notify SNH under the Wildlife and Countryside Act 1981. If the deer is a species that occurs in the wild in Scotland and is shot, the person should be able to recognise that it is an escaped zoo deer as it will be tagged. The carcass should therefore not enter the human food chain.²⁸

²⁵ Based on the latest content of zoo websites, the zoo with the most species of deer appears to be the Scottish Deer Centre with over a dozen.

²⁶ ‘Secretary of State’s Standards of Modern Zoo Practice’, DEFRA, 2012.

²⁷ See Section 17 for examples.

²⁸ For example, due to the risk that the deer has previously been given medication that could affect its suitability for the human food chain (e.g. antibiotics).

- 34 A particular concern is the escape of muntjac deer as a species that legislation and public policy is trying to prevent becoming established in Scotland. The most recent confirmed case of a free-ranging muntjac being shot in Scotland was one that escaped from a zoo in 2017.²⁹ At least three zoos in Scotland currently keep muntjac.³⁰
- 35 Since 2011, it has been an offence in Scotland to keep any species of muntjac without a licence from SNH. Initially, this was done through secondary legislation under the Destructive Imported Animals Act 1932.³¹ However, those measures were soon replaced as part of secondary legislation under the Wildlife and Countryside Act 1981.³² The position with muntjac and the steps being taken to prevent them becoming established in Scotland are discussed in more detail later in Section 17 of this Report.

12.3 Other Kept Deer

- 36 There are deer in Scotland which are owned as private property, like farmed and zoo deer, but which do not conform to either of those categories of deer and which are therefore not covered by those regulatory regimes.³³ These other deer are kept in a wide variety of circumstances and include species that occur in the wild in Scotland and other non-native deer species that have been legally acquired.
- 37 Muntjac is the only deer species that cannot be kept in Scotland without a license from SNH.³⁴ There is no official record of the other deer kept as private property and little is known about them more generally. However, by virtue of the degree of responsibility for an animal that comes with the ownership of an animal, the owners of all these kept deer have to manage them in keeping with the requirements set by the Animal Health and Welfare (Scotland) Act 2006 and related animal health and welfare legislation.
- 38 These kept deer include what are often referred to as ‘private collections’, where a person keeps some deer of one or more species for their personal interest and enjoyment. These collections may include exotic deer species or wild deer that have been ‘rendered into possession’ by live capture. However, the kept deer may also be used as part of a business, for example, by being kept at a visitor attraction as added interest. This might most commonly be red or fallow deer, but reindeer are now often used at events during the festive season before and after Christmas. Reindeer, as a long-domesticated species, are also now the only type of deer that could be used in a circus in Scotland following the Wild Animals in Travelling Circuses (Scotland) Act 2018.

²⁹ SNH Information Response 4

³⁰ British Deer Society, Enclosed and Captive Deer Survey, 2017.

³¹ The Muntjac Keeping (Scotland) Order 2011 and The Muntjac Keeping (Scotland) Regulations 2011.

³² The Wildlife and Countryside Act 1981 (Keeping and Release and Notification Requirements) (Scotland) Order 2012.

³³ The descriptions ‘private property’ and ‘privately owned’ are used in contrast to the legal status of wild deer. The owners might therefore include private or public sector owners.

³⁴ See Section 17.

- 39 The reindeer in the Cairngorms National Park area owned by the Cairngorms Reindeer Company might be considered the most conspicuous example of privately kept deer in Scotland.³⁵ The herd was first established in the area in the 1950s and now consists of around 150 reindeer managed at three locations in the Cairngorm area: the Company's visitor centre; an area of high ground in the Cairngorms; and a farm with hill grazing in the Glenlivet area. On the farm, the livestock includes farmed red deer. The reindeer are able to free range over the high ground and hill grazing for parts of the year and share these areas with wild red and roe deer.
- 40 The Reindeer Company's reindeer are all tagged and recorded in its stock register and the Group's understanding is that no reindeer are sold to other owners. Contraceptive chemical agents are used with females as part of managing the herd.³⁶ The reindeer also receive medications when ill. No meat is produced from the reindeer nor is any other part of them used, with the Company importing the reindeer products such as hides that it has for sale. When a reindeer dies, the carcass is collected for disposal as with other livestock that have died on farms. Over each winter, reindeer are transported around the country by the Company for use at events.
- 41 There appears to be no information available on the extent to which there are other reindeer in Scotland that are used for events or kept for some other reason. However, particular attention has been focused on reindeer in recent years since the outbreak of Chronic Wasting Disease (CWD) in Norway in 2016, with UK-wide restrictions now in place over importing or exporting reindeer and reindeer products.³⁷
- 42 The need for more information about privately owned deer that are neither farm deer nor zoo deer led the British Deer Society (BDS) to carry out its 'Enclosed and Captive Deer Survey 2017'. In addition to being able to advise the public where they can view deer and to record endangered species, the other main purpose of the survey was to enable quicker responses to outbreaks of diseases affecting deer by recording where there are deer.³⁸ However, the BDS only publishes information about sites which are open to the public. Given the variable nature of the circumstances in which deer are kept as privately owned deer, the extent of coverage by their survey is unclear.
- 43 The Group considers that there should be further work to identify privately owned deer in Scotland which are neither farmed deer nor deer in zoos. These other kept deer should be being kept under the terms of the Animal Health and Welfare (Scotland) Act 2006 and related legislation. However, improved information is needed to ensure more accountability over the standards of the health and welfare under which these other privately owned deer are being kept.
- 44 Deer are relatively large, sentient animals and the Group considers that, while attention is paid in the public interest to the welfare of farmed deer and deer in zoos, and to the welfare of wild deer in the Deer (Scotland) Act 1996, it is an anomaly that other deer can be kept as private property without more transparency and accountability.

³⁵ The Group is grateful to Dr Louise de Raad of the University of the Highlands and Islands, for help with information about the reindeer in the Cairngorms.

³⁶ For a review of the research into the use of contraceptive agents in deer and their very limited relevance for application to wild deer, see P. Green 'Can contraception control deer populations in the UK - A review article for the Deer Initiative', Deer Initiative website, June 2018.

³⁷ See Section 10.

³⁸ Information on the BDS website about the Enclosed and Captive Deer Survey 2017.

- 45 Improved identification and monitoring of these other privately owned deer would also assist in the management of diseases that affect deer. There would also be benefits if these kept deer required to be tagged. An important aspect of that requirement is that their venison should not be used in the human food chain, as kept deer may have been given medication such as antibiotics. The requirement for tagging would also assist the control of any of these deer that escape or are released from captivity into the wild.
- 46 **The Working Group recommends that there should be a legal requirement for all deer that are owned as private property and not farmed deer or deer in zoos, to be tagged to identify them as private property.**
- 47 The keeping of muntjac deer in Scotland already requires a licence under the Wildlife and Countryside Act 1981, because of the threat it poses as an invasive non-native species. The Group considers that serious consideration should now be given to introducing regulations that would require any person who wants to own other species of deer in Scotland that are not farmed deer nor kept in a zoo, to have a licence.³⁹ These regulations should cover all cervid species except muntjac.
- 48 The proposed regulations could be introduced on welfare grounds by secondary legislation under s.27 of the Animal Health and Welfare (Scotland) Act 2006. The Group considers that, while Government animal welfare officials might have overall responsibility for the proposed licensing scheme, the licensing and inspection might be carried out by local authorities (as with zoos). SNH could, for its responsibilities under the Deer (Scotland) Act 1996, be a statutory consultee on applications for a licence and also be able to inspect the records of licences granted.
- 49 An application for a licence would allow assessment of the circumstances in which the deer would be kept. Granting a licence would identify the owner's responsibility for their health and welfare under the existing legislation and establish the scope to inspect those standards during the period of a licence. The licences would provide the locations of these privately owned deer in the event of an outbreak of a disease affecting deer. Such a system would also help to ensure that venison from these kept deer does not enter the human food chain and that carcasses are disposed of appropriately.
- 50 In addition, the proposed system could be used to monitor compliance by these private owners with the regulations requiring records to be kept of any live transport or movement of deer.⁴⁰ In Scotland, in comparison to England, these records only need to be kept and do not require to be submitted. If the Government needed to find out about deer movement due to a disease outbreak or other cause, it is already clear who is responsible for deer on farms and deer in zoos. A licence system for other kept deer would provide that information for these deer and licence renewals after possibly five years, would provide an opportunity to monitor the movements taking place.
- 51 **The Working Group recommends that the Scottish Government should give serious consideration to the introduction through the Animal Health and Welfare (Scotland) Act 2006, of a scheme to require an owner of deer to have a licence for the keeping of deer as private property that are not farmed deer, deer in zoos nor muntjac deer.**

³⁹ There may be a limited number of circumstances where privately owned deer that are not farmed nor zoo deer are covered by other regulations, for example, deer kept for research purposes, where a Home Office licence would be required.

⁴⁰ The Movement of Animals (Records) (Amendment) Order 1989, which extended the Movement of Animals (Records) Order 1960 to extend it to deer.

12.4 Wild Deer

- 52 Deer in Scotland are either wild deer managed under the Deer (Scotland) Act 1996 and associated legislation, or captive deer managed under the statutory regimes governing farm deer, deer in zoos and other privately kept deer as described above. While the distinctions between these four types of deer might be considered clear in law, there also needs to be clarity in practice.
- 53 The Group has recommended in the previous parts of this Section that all captive deer should be tagged and that is part of distinguishing wild and captive deer in practice. However, the Group considers that there are a number of other issues that need to be clarified in practice to ensure that wild deer are managed appropriately as wild deer and that their meat can be legitimately used as wild venison.
- 54 The conversion of wild deer into captive deer by live capture was described earlier, with the Group recommending that the live capture of wild deer should require authorisation by SNH because of the concerns over the significant implications of the operations involved for deer welfare.⁴¹ While SNH's responsibility for the deer ends at the point of capture, the authorisation process would also allow the planned use of the captive deer to be established.
- 55 The conversion of captive deer into wild deer by intentionally releasing captive deer into the wild can involve any of the four species that occur in the wild in Scotland. There is, however, a prohibition on releasing any species of deer in the Outer Hebrides and the islands of Arran, Islay, Jura and Rum, with releasing or allowing any deer to escape in these areas an offence through secondary legislation under s.14 of the Wildlife and Countryside Act.⁴² This is to protect the red deer refugia in these areas, as mentioned in this Section in the context of escapes from deer farms and also discussed further later in Section 17 of this Report.
- 56 The Wildlife and Natural Environment (Scotland) Act 2011 changed s.14(1)-(4) of the Wildlife and Countryside Act 1981 as it applies to Scotland. This changed the terms from referring to releases and escapes into the wild, to releases and escapes from captivity. In Scotland under s.14(1)(a)(i), it is an offence to release or allow to escape any animal "*to a place outwith its native range*".
- 57 That provision means that the release of a captive sika/sika hybrid deer or captive fallow deer would, as non-native species, require a licence from SNH. The Group considers this requirement is not enforced rigorously enough by SNH with fallow deer. This is discussed further later in the Section 17 of this Report, which deals with non-native deer species more generally.
- 58 The 'outwith its native range' restriction quoted above would also apply to some extent to the release of captive red or roe deer into the wild in Scotland, most clearly in the Orkney and Shetland Islands and some other islands without any wild deer. Elsewhere in Scotland, roe are considered to have re-colonised their former native range by their own means, so that mainland Scotland can essentially be regarded as within their native range.⁴³

⁴¹ See Section 7.

⁴² The Wildlife and Countryside Act 1981 (Keeping and Release and Notification Requirements) (Scotland) Order 2012.

⁴³ SNH (2014). Guidance Notice: Native Range. Ecosystems and Biodiversity Unity.

- 59 The position with red deer is different from that with roe, even without considering the extent of hybridisation between red and sika deer. For red deer, north of the Central Belt is native range for the purposes of the 1981 Act as wild red deer are considered to have re-colonised the area by their own means. However, no wild red deer are considered to have survived historically in southern Scotland and the population that subsequently developed there has resulted from the escape or release of captive red deer. Therefore, the area is not considered native range under the 1981 Act and any release of captive red deer south of the Central Belt could be considered to require a licence from SNH.⁴⁴
- 60 At present, there are several circumstances where captive red deer are being released into the wild in Scotland (as discussed below) and the Group considers that all releases of native deer species to become wild deer should be in a transparent and accountable way, as provided for with the requirement for releases of non-native species to be licensed by SNH.
- 61 The same requirement for the release from captivity of native deer species would allow the purpose of the release to be assessed, with the implications for the welfare of the deer to be released in a new environment and of any existing wild deer in the area, including disease and genetic risks. The prospect of released deer entering the food chain as wild venison should also be considered, given, for example, the possibility that a captive deer might have been given medication.
- 62 **The Working Group recommends that either the Deer (Scotland) Act 1996 or the Wildlife and Countryside Act 1981 should be amended so that any release of captive red deer and captive roe deer into the wild requires to be authorised by Scottish Natural Heritage.**
- 63 One of the situations is where captive red deer are released from captivity to provide red deer stags for sporting clients to shoot, that are larger than a typical open hill stag in the Highlands. In these situations, a stag that has grown a larger body and antler size in an enclosed lowland environment is live-captured and transported to a site in the Highlands where it is released into a large enclosed area. The stag can then be shot by a client for a higher fee than a typical Highland stag.
- 64 This practice is colloquially known as ‘canned hunting’ and generally associated with trophy hunting. While it appears to be widely recognised in the deer sector that canned hunting takes place, it is not considered widespread.⁴⁵ In 2018, one case involving trophy hunting red deer and other species received unfavourable comment in the media and resulted in shooting organisations intending with Scottish Government encouragement, to produce guidance on trophy hunting in Scotland.⁴⁶
- 65 A red deer used for ‘canned hunting’ might have been considered a wild deer in an enclosed lowland park and a wild deer on an enclosed Highland hillside. However, a deer that has been put into an animal transporter to be moved to another location is clearly a captive deer. As such, its health and welfare have become the responsibility of the owner of the deer under the Animal Health and Welfare (Scotland) Act 2006.

⁴⁴ SNH (2014) *Op cit.*

⁴⁵ SNH Deer Management Round Table Meeting, 21 May 2019.

⁴⁶ SNH Deer Management Round Table Meeting, 21 May 2019.

- 66 The Group considers that there are significant deer welfare issues (including ‘stress’) involved in the live capture of a wild deer, its transportation in a vehicle and release into a new environment to fend for itself. As the deer are being transported from their place of origin they also require to be tagged and their movement recorded as a result of The Movement of Animals (Records) (Amendment) Order 1989.
- 67 The degree of responsibility for the deer assumed by its owner can be considered to mean that the person would continue to be responsible for the deer’s health and welfare under the 2006 Act. As that Act states in s.18(3) “...a person who owns an animal is always to be regarded as a person who is responsible for it” and in s.18(5) “...a person does not relinquish responsibility for an animal by reason only of abandoning it.”⁴⁷
- 68 There are other approaches to increasing the size of red deer stags to be shot for sport on open hill ground in the Highlands that do not require the deer to be transported between locations. There is a tradition from Victorian times of estates raising stags in enclosures on sheltered low ground where they can be fed, before being released on to the hill to be shot for sport.⁴⁸ The Group’s understanding is that this still occurs to a very limited extent. The practice of providing supplementary feed to red deer stags living on open range in the Highlands is considered in Section 18.
- 69 These types of practices are also linked to wider issues about when deer that are enclosed within deer-proof barriers are considered to be captive or wild deer. Whether deer are to be considered wild deer is not necessarily defined by whether or not they are living enclosed within deer-proof barriers. For example, if one or more land owners with sufficient land and money deer fenced an area of thousands of hectares, the wild deer already living within the extensive area would still be considered to be wild deer.
- 70 There are, however, other situations where deer enclosed in relatively restricted areas are still managed as wild deer. The Group considers that there is a need for greater clarity over the distinction between deer in a deer fenced area that should be regarded as wild deer and those that should be regarded captive. The distinction has implications both for the welfare of the deer and the venison that should legitimately count as wild venison.
- 71 This distinction between wild and captive deer is not clear-cut and whether deer are to be considered wild deer depends on a judgment in the situation being considered. Two key parameters are the extent to which the deer have a similar degree of freedom to wild deer and the extent to which the actions of the owner of the enclosed land amount to taking responsibility for the welfare of the deer.
- 72 With the first parameter, sufficient freedom is required to conform to the EU Regulation that allows for the venison from enclosed deer to be treated as wild venison. Regulation (EC) No. 853/2004 Annex 1 defines wild game as:
*“Wild ungulates and lagomorphs, as well as other land mammals that are hunted for human consumption and are considered to be wild under the applicable law in the Member State concerned, including mammals living in enclosed territory under conditions of freedom similar to those of wild game...”*⁴⁹

⁴⁷ For example, abandonment in the sense of its release from captivity on to a Highland hillside to survive as a wild deer.

⁴⁸ Callander and MacKenzie (1991) *Op cit*, p.54.

⁴⁹ Quoted in FSA and FSS (2015), *The Wild Game Guide*, Revision November 2015, p.6.

- 73 These conditions of freedom not only refer to the scope of deer to move around, but also to factors such as whether the land that they are living on provides sufficient food for the deer to survive in a good condition of welfare by themselves. As the FSS 'Wild Game Guide' states in this context: "*Game animals with sufficient grazing to enable them to live throughout the year without supplementary feeding are (also) considered to be wild*".⁵⁰
- 74 The reference to supplementary feeding links to the second parameter - the degree to which the owner has assumed responsibility for the deer's welfare. While assessing this involves considering the extent and nature of any supplementary feeding if this takes place, the assessment should also include other potential interventions affecting how the deer live. As important aspect is the degree to which there is human contact with deer, the proximity of that contact and the behaviour of the deer towards humans and more generally, as considered against attributes considered to reflect the behaviour of wild deer.⁵¹
- 75 The need for greater clarity between wild deer living in an enclosed area and deer within an enclosed area that are considered captive and therefore owned deer, is often associated with deer that are referred to as 'park deer' and currently regarded as wild deer. The fact that there are 'grey areas' between wild and park deer was, for example, noted in particular in a presentation linked to the BDS's 2017 survey of Enclosed and Captive Deer.⁵² It has also been reported that the FSA in England considers that there are situations where park deer should be re-classified as farmed deer.⁵³
- 76 Deer kept as what are regarded as 'park deer' are much more common in England than Scotland. There have been deer kept in enclosed parks in Scotland since medieval times with, for example, deer in the parks at Scotland's royal palaces from the 12th century.⁵⁴ However, there are very few 'parks' with deer in Scotland that have had deer since before the 19th century.⁵⁵
- 77 There are, however, situations in Scotland where enclosed deer are described as being managed as 'park deer' rather than farmed deer, with 'park deer' being viewed as wild deer and therefore requiring less onerous management.⁵⁶ The levels of management applied to 'park deer' can vary and may, for example, involve transporting stags between parks to avoid inbreeding.
- 78 The terms 'park deer' or 'deer park' have no legal meaning in relation to the management of deer in Scotland. Therefore, while the label 'park deer' suggests they are kept in a particular type of landscape environment, they are simply deer kept on enclosed land that are not managed as farmed deer.

⁵⁰ FSA/FSS (2015), *Op cit*, p.6.

⁵¹ Green, P. (2016). Practical Indicators to assess the welfare of wild deer in Scotland. SNH Commissioned Report No.944.

⁵² Presentation by P. Green referred to on the BDS website in the Background to 2017 Survey.

⁵³ Venison Advisory Services (2010) *Op cit*, p.7.

⁵⁴ For example, the King's Park at Stirling.

⁵⁵ For example, as at Hopetoun House since the 1700s.

⁵⁶ Venison Advisory Services (2010) *Op cit*.

- 79 The Group considers that the judgment to manage enclosed deer as wild deer rather than farmed deer, for example, to avoid the more the onerous health and welfare regime with the latter, is not one that should just be left to the land owner's discretion as at present. The Group considers that there are enclosed deer in Scotland which are managed as wild deer under the 1996 Deer Act in terms of when and how they are killed and the eligibility of their meat to enter the human food chain as wild venison, and yet which would fail an assessment to be considered 'wild deer' under the parameters identified above.
- 80 In these situations where the deer do not conform to the criteria for wild deer and are therefore captive deer, the owner has two options if they want to continue to have deer on the enclosed land. They could opt to register the enclosed land as agricultural land (if it is not already) and manage the deer as farmed deer under the requirements identified in Section 12.1 above. Alternatively, they could opt to manage the deer as privately owned deer under the standards required by the Animal Health and Welfare (Scotland) Act 2006. In that case, meat from any of the deer would not be eligible to enter the food chain other than through personal consumption by the owner.⁵⁷
- 81 The Group considers that fairly straightforward and practical criteria could be devised to assess the appropriate status for cases of enclosed deer that are currently managed as wild deer. The Group considers that the application of such criteria would end situations where conspicuously captive deer are being managed as if they were wild deer. The Group considers that SNH, FSS and the Scottish Government's Animal Welfare Branch should be co-operating to develop and implement this approach.
- 82 The Group considers that ensuring clarity over the distinction between enclosed deer that are appropriately judged to be wild deer and those that should be considered rendered into possession and therefore owned, is a significant issue for animal welfare and managing the risk of disease, as well as for food safety and maintaining the integrity of the 'wild venison' market.
- 83 **The Working Group recommends that the Scottish Government and its agencies should agree and apply practical criteria to identify and correct situations where deer are enclosed by deer-proof barriers are being managed as if they are wild deer, when it is clear from the assessment that they should be managed as captive deer.**
- 84 In this Section, the Group has identified a range of measures to clarify the distinction between wild deer and captive deer, and to manage the boundary between wild and captive deer. The reasons for these measures include appropriate standards of animal welfare, the management of disease and genetic risks, and ensuring food standards. The Group also considers that, at a wider level, the measures would help safeguard the integrity of the wild deer sector and wild venison market.

⁵⁷ For example, as is the case with a sheep killed by a farmer on their own farm.

PART THREE - DAMAGE TO PUBLIC INTERESTS

Introduction

- 1 Part Two of this Report considered the basic standards of public safety and deer welfare that should apply through Scotland's deer legislation, to safeguard these public interests as part of the management of wild deer *in all circumstances*. Those considerations included, for example, the provisions governing how and when wild deer can be killed lawfully.
- 2 The role of the deer legislation is also to safeguard interests that are considered to be in the public interest, from physical damage by wild deer *in particular circumstances*. The Deer (Scotland) Act 1996 therefore, like the Deer (Scotland) Act 1959 before it, includes a number of regulatory powers that can be used by Scottish Natural Heritage (SNH) where appropriate to prevent damage or further damage by deer to the interests covered by the legislation.¹ These regulatory powers and the history of their use are considered in Part Four of the Report.
- 3 This Part of the Report considers the meaning of 'damage' in the context of the interests covered by the regulatory powers in the 1996 Act, before commenting on the nature and extent of damage by deer to each of the main interests covered by the powers. The final Section in this Part of the Report then considers the overall economic cost/benefit equation for management of wild deer in Scotland at present.
- 4 The main role of Scotland's deer legislation has always been to prevent damage or further damage to public interests, whether through provisions for basic standards of public safety and deer welfare in all circumstances or through regulatory powers to protect those and other public interests in particular circumstances. Damage might therefore be seen as a central concept in legislation.

Section 13 Damage by Wild Deer

- 5 Since the Deer (Scotland) Act 1959, Scotland's deer legislation has always been concerned with the physical damage that wild deer can cause to the public interests covered by the legislation. This type of damage is discussed in the first part of this Section.
- 6 Over 50 years after the 1959 Act, a new type of damage was introduced into the current Deer (Scotland) Act 1996. The Wildlife and Natural Environment (Scotland) Act 2011 ('the WANE(S) Act') amended s.7 of the 1996 Act to include the concept of damage caused to public interests by "*steps taken or not taken for the purposes of deer management*". That is discussed in the second part of this Section.

13.1 Physical Damage by Wild Deer

- 7 Deer have physical impacts on the environments in which they occur, for example, by browsing or grazing and trampling. Under the 1959 Act, the question of whether these impacts might amount to damage only involved the protection of agricultural and forestry interests. Under the 1996 Act, the circumstances in which the impacts of deer might be considered to constitute damage increased with the greater range of interests covered by the regulatory powers in the Act and the evolving values placed on those different interests in public policy.

¹ These powers include the scope to authorise out of season and night shooting under s.5(6) and s.18(2), the short term emergency control powers under ss.10 and 11, and the use of s.6A Deer Management Plans and s.7 Control Agreements leading to a s.8 Control Scheme where necessary.

- 8 The meaning to be attributed to ‘damage’ by deer in the 1996 Act is not included in s.45 ‘*Interpretation*’ of the Act or in other Acts dealing with the interpretation of legislation.² This is because the definition of damage is determined by the context in which it is being considered. However, damage by deer in the 1996 Act refers to physical damage from the impacts of deer and can therefore be considered to fit standard dictionary definitions such as “*physical harm that impairs the value, usefulness or normal functioning of something*”.³
- 9 The physical impacts of deer can be measured, with the type of measurement depending on the nature of the interest and impacts involved in any situation.⁴ The level of impacts can then be assessed by SNH as the regulator, to determine whether the impacts are judged to amount to damage in considering the use of the powers in the Act. Whether a decision is made to use the powers in any situation will then depend on further factors, including government policies, the local circumstances and the significance of the damage for the type of interest involved. General thresholds for damage cannot be prescriptive as they are context dependent.
- 10 The 1959 Act, like the Agriculture (Scotland) Act 1948 before it, was intended to protect agriculture and forestry from damage by deer. The regulatory powers in the Act were therefore to protect the interests of the owners and occupiers of agricultural and forestry land, and thus to protect the private interests of those owners and occupiers because safeguarding agriculture and forestry was judged in the public interest. The 1996 Act, when passed, added damage to public safety and natural heritage to the interests covered. Damage to deer welfare and “*damage to public interests of a social, economic or environmental nature*” were then added by the WANE(S) Act in 2011.
- 11 The regulatory powers are therefore intended to protect the private interests of owners and occupiers involved in the interests covered, because those uses are considered in the public interest, and also to protect interests that might be considered more directly in the public interest.
- 12 The Deer Commission for Scotland (DCS) started to describe these two types of interests as ‘legitimate public objectives’ and ‘legitimate private objectives’ in 2003/04, when it also decided to interpret ‘damage’ as “*a change in state that is regarded as detrimental to legitimate objectives*”.⁵ This followed the DCS adopting the policy of focusing its limited resources on ‘priority sites’ the year before.⁶ The intention of that policy was that action by the DCS “*should be concentrated where deer are...causing serious detrimental impact to woodlands, agriculture, natural heritage or public safety*”.⁷ As described in Section 1 of this Report, public interests now define the carrying capacity of land for wild deer.
- 13 When the DCS adopted its priority sites policy in 2002/03, it also instigated the production of the Wild Deer Best Practice (WDBP) guides. The current guide on damage still dates from that time and is a much abbreviated version of the section on damage in the DCS’s 2002/03 Annual Report. The guide also includes a number of misleading statements and the Group considers that it should be replaced by an updated version. An example is that the guide states without reference that “‘*Damage*’, as

² Interpretation Act 1978; Interpretation and Legislative Reform (Scotland) Act 2010.

³ Oxford Dictionary definition.

⁴ For example, using methods of assessing impacts in the Wild Deer Best Practice guides.

⁵ DCS Annual Report, 2003/04, p.32.

⁶ DCS Annual Report, 2002/03.

⁷ DCS Annual Report, 2002/03, p.7.

used throughout the Deer Act is then defined as ‘a change in state that is regarded as detrimental to legitimate objectives’⁸. This statement could be taken to imply that this is legal definition, when it was just the DCS’s interpretation of the term.

- 14 The WDBP guide also only describes ‘legitimate public objectives’ in terms of legally protected sites, habitats and species without regard, for example, to wider environmental concerns, public safety and deer welfare. The ‘legitimate private objectives’ are also just listed as agriculture, woodland and natural heritage. The statement in the guide on legitimate objectives is also followed by the isolated and potentially misleading statement that *“In determining damage SNH respects the right of owner/occupiers to determine when damage is occurring and how serious that damage is”*.
- 15 That statement was, however, only the case if the powers in the deer legislation were not involved and the statement was aimed by the DCS at owners and occupiers with the right to shoot deer out of season.⁹ As the DCS also made clear, if an owner or occupier applied for authorisation to shoot deer out of season under s.5(6) of the 1996 Act, then the DCS would assess the situation to see if an authorisation was warranted.¹⁰ The statement is now redundant given the changes since then to the control of out of season shooting described earlier in Section 5.
- 16 The Group also considers that the notion of legitimate public and private objectives is a redundant concept. The term ‘legitimate’ was used to refer to interests in the restricted list of land use interests that could be protected from damage by deer under the legislation at the time. Now, any public interest can be protected because the 1996 Act covers public interests of an economic, social or environmental nature. Similarly, any private land use activity can be protected if that activity is judged by SNH to contribute to public interests.
- 17 While the Code of Practice for Deer Management (which came into effect on 1 January 2012) still refers to legitimate objectives in the context of damage by deer, there do not seem to be any references to legitimate objectives in more recent documents such as ‘Scotland’s Wild Deer: A National Approach’ (WDNA) and SNH’s 2016 report on deer management to the Scottish Government. However, the Group considers the paragraphs in those documents describing public and private interests still lack clarity, in terms of the scope of the interests that can be protected from damage by deer under the 1996 Act.
- 18 **The Working Group recommends that Scottish Natural Heritage should develop fuller statements of the public and private land use interests that can be protected under the Deer (Scotland) Act 1996, and that Scottish Natural Heritage should also ensure that the Wild Deer Best Practice guidance on damage is replaced.**
- 19 Another concern is the legacy of the ‘priority sites’ policy adopted by the DCS from 2002/03. While prioritising the most pressing cases of damage by deer clearly makes sense, the policy rapidly became narrowed to the protection of designated natural heritage sites where there is a legal obligation to safeguard them. While such sites need to be protected from damage, the continued high degree of focus on this approach by SNH is major factor in the relative lack of adequate information available on damage to other interests by deer outside designated sites in the rest of Scotland, as described in the following Sections in this Part of the Report.

⁸ Wild Deer Best Practice guide, ‘Damage definition’.

⁹ DCS Annual Report, 2003/04.

¹⁰ DCS Annual Report, 2003/04

- 20 The high degree of focus on designated natural heritage sites can also create the impression that the deer legislation is all about asserting a public interest over private land. However, a central role of the legislation is to protect the land uses of owners and occupiers that contribute to the public interest, from physical damage by deer coming on to their land.
- 21 While there is an expectation implicit in the deer legislation that owners and occupiers will take reasonable steps to control the number of deer on their land, the legislation is intended to provide further protection through the use of authorisations or regulatory powers where reasonable steps by owners and occupiers are not enough to protect their land use activities from damage by deer.
- 22 The 1996 Act used to contain the distinction that, while 'damage' was required for an owner/occupier to be granted an authorisation to control deer numbers on their land, 'serious damage' was required for SNH to be able to use its other regulatory powers (ss.8 and 10) to intervene on the land of an owner to control deer numbers. This distinction, which had not been in the 1959 Act, has since been removed from the 1996 Act by the WANE(S) Act. This change in 2011 was to give consistency in the Act and to remove the ambiguity of what might constitute serious damage as opposed to damage.
- 23 Complaints of damage might be raised by owners or occupiers, by SNH or by a third party, such as a private individual.¹¹ The Red Deer Commission used to encourage complaints as part of fulfilling its responsibilities, for example, with its 1986 booklet 'Help for those suffering damage by deer'. While the DCS clarified that complaints could come from third parties, its subsequent focus on designated natural heritage sites meant the DCS had limited interest in complaints of damage elsewhere. SNH has continued this approach and at least some owners and occupiers are discouraged from complaining about damage by deer, because they have limited expectation that SNH will take action.¹²
- 24 For owners and occupiers who are taking reasonable steps to control deer on their land and yet still experiencing damage, this typically arises due to deer movement from neighbouring lands. The source of those deer can be considered in very large measure to be an owner who has, in the words of s.44 of the 1948 Agriculture (Scotland) Act, "*failed to take reasonable steps to control the number of deer on his land*".
- 25 This deer movement might result from the displacement or dispersal of deer. Displacement might follow a particular event, where an owner has failed to take 'reasonable steps'. Examples might include an owner enclosing a significant area of open hill with deer fencing to establish woodland or protect a grouse moor, without first carrying out a reduction cull of the deer that had been using the land. The same can apply where an owner clear fells an area of forestry without reducing the deer first. Displacement can also happen if an owner carries out a culling programme in an area at an intensity that causes deer movement out of the area.
- 26 The Group considers, however, that the main cause of deer movement on to the land of owners and occupiers is under-culling on other land in their area. Deer are mobile animals that move around their local range, for example, for better feeding or shelter. However, under-culling tends to result in the density of deer increasing and a net dispersal of deer to surrounding areas.

¹¹ DCS Annual Report, 2003/04.

¹² See Section 16.

- 27 An illustration of the widespread nature of under-culling and dispersal is the scale of deer movement on to National Forest Estate (NFE) covering 9% of Scotland's land area, where "*long term monitoring has shown that in some places well over 50% of the annual cull comes from deer which have moved into the NFE from adjacent land*".¹³ Another example discussed in Section 24, is the difficulty for SNH in achieving reductions in red deer numbers in open hill areas covered by s.7 Control Agreements, due to red deer moving into the area as a result of the relatively high densities in surrounding areas.
- 28 The Group considers that there is a general pattern in a wide range of local areas in Scotland, where under-culling on some properties results in neighbouring owners and occupiers having to contend on a regular basis with deer from those properties. This situation might be considered to have similarities with the ecological theory of 'source and sink' populations, with deer dispersing from the source area to the sink areas.¹⁴
- 29 The expectation implicit in the deer legislation and made explicitly in public policy is, firstly, that all owners and occupiers of land where wild deer occur will take reasonable steps to control the number of deer on their land, if it is safe and practical to do so. The expectation is, secondly, that SNH as the regulator will consider the use of the regulatory powers in the 1996 Act where a lack of control is leading to damage to interests covered by those powers.
- 30 In situations where an owner is not carrying out adequate culls, the use of persuasion by SNH rather than compulsory powers might be seen a preferable outcome. However, as discussed later in Section 26, the scope for persuasion as part of an effective system of regulation relies on a credible expectation that SNH will use its powers to prevent damage or further damage when necessary. The Group is not convinced that SNH passes that test, despite Scottish Government instructions to SNH to ensure that it uses "*the full range of enforcement powers at its disposal*" where necessary.¹⁵
- 31 Even in an effective system of deer management that safeguards public interests, there will still always be examples where the impacts of wild deer in a particular area are considered to have an unacceptable level of damage. However, at present, the Group considers that, while the apparent levels of damage by wild deer in Scotland might not be described as out of control, the levels cannot be described as under control.
- 32 SNH might cite the limited resources that it can commit to deer management, given its budget and the wide-ranging nature of its remit. However, the Group considers that there is an inherent responsibility on the public authority implementing Scotland's deer legislation, to have the capacity to respond to complaints of damage by deer and to take effective action where appropriate.
- 33 The Working Group recommends that the Scottish Government should ensure that Scottish Natural Heritage has the capacity to encourage complaints of unacceptable levels of damage by wild deer and to respond by taking effective action where warranted to reduce the damage.**

¹³ Campbell D., Marchbank, M., Watson, M. and Quin, S. (2017). Trends in woodland deer abundance across Scotland: 2001-2016. SNH Commissioned Report No. 948.

¹⁴ For example, Wäber, K.J., Spencer, J. and Dolman, P.M. (2013). Achieving landscape-scale deer management for biodiversity conservation: The need to consider sources and sinks. *Journal of Wildlife Management*, 77(4), pp.726-736.

¹⁵ Scottish Government, 'Strengthening deer management' press statement, 29 June 2017.

13.2 Damage by Deer Management

- 34 Over 50 years after the 1959 Act, a new type of damage was introduced into the current Deer (Scotland) Act 1996. In 2011, the WANE(S) Act amended s.7(1) of the 1996 Act to include damage caused to public interests by “*steps taken or not taken for the purposes of deer management*”. The inclusion of this type of damage in s.7 means that it can form the basis of a compulsory s.8 Control Scheme, while the Land Reform (Scotland) Act 2016 included the same phrase in the new s.6A on deer management plans.
- 35 Damage by deer can be considered generally to result from steps taken or not taken for the purposes of deer management. However, the “*or*” in s.7(1)(a) contrasts damage by deer with damage caused by “*steps taken or not taken for the purposes of deer management*”. The relevant part of s.7(1) is shown in Figure 29.
- 36 Despite the significance of adding a new type of damage to the 1996 Act, the Group searched in vain for any record of the origin and intention of introducing it into the Act. The phrase was already included in the WANE(S) Bill at Stage 1 of the Scottish Parliament’s legislative process, but it had not been mentioned in the Scottish Government’s consultation paper prior to the Bill nor apparently in any of the responses received.¹⁶

Figure 29 Extract from section 7(1) of the Deer (Scotland) Act 1996

7 Control agreements

“(1) Subject to the following provisions of this section, where SNH, having had regard to the code of practice on deer management, is satisfied that, on any land, ... —

(a) deer or steps taken or not taken for the purposes of deer management have caused, are causing, or are likely to cause—

(i) damage to woodland, to agricultural production, including any crops or foodstuffs, to the welfare of deer or, whether directly or indirectly, to the natural heritage generally;...

(ia) damage to public interests of a social, economic or environmental nature; or

(ii) injury to livestock, whether by serious overgrazing of pastures, competing with any such livestock for supplementary feeding, or otherwise; or

(b) deer have become a danger or a potential danger to public safety,

and that for the prevention of further such damage, injury or, as the case may be, danger or potential danger, or for the remedying of such damage...”

Source: legislation.gov.uk

- 37 There also appears to have been no mention at all of the phrase during the entire Parliamentary process from Stage 1 to the passing of the WANE(S) Act. There were also no statements by people that Courts might consider ‘relevant persons’ to assist in the interpretation of the phrase if a disputed s.8 Control Scheme was contested in the Scottish Land Court.

¹⁶ While the consultation paper did not include the phrase, Question 7 in the consultation asked about the proposals being made to extend SNH’s powers to intervene. However, there is no reference to the phrase in the Scottish Government analysis of the responses received.

- 38 SNH also confirmed to the Group that it is not aware of any official record of why the phrase was included in the WANE(S) Act and thus in the 1996 Act.¹⁷ SNH also confirmed the Group's understanding that there is no relationship between the phrase and "*the Seven Steps*" in the Code of Practice on Deer Management that are to be taken by owners and occupiers to follow the voluntary code.¹⁸
- 39 The interpretation and application of damage caused directly by "*steps taken or not taken...*" in s.7(1) is not immediately clear. The actions or inaction of one land owner might mean deer cause or are likely to cause damage to another owner or occupier's interests under s.7(1)(a)(i) and (ii). However, if it is the owner's actions rather than deer that are directly causing damage to those interests, it would be other laws that the owner or occupier suffering the damage would turn to rather than the Deer Act.
- 40 The Group's investigations and inquiries eventually allowed the Group to develop an informal understanding of the origin and intention of adding "*steps taken or not...*" to s.7. Apparently, during the period before the WANE(S) Bill was published, the Scottish Government's increased focus on trying to improve deer management resulted in concerns amongst some Highland estate owners that significantly increased culls in some areas might cause damage to their red deer stalking business interests.
- 41 The Group's understanding is that the Scottish Government then included the "*steps taken or not taken...*" provision as reassurance, with the wording provided by solicitors to meet the intent of being able to limit the number of deer being culled in some situations to protect economic or social interests. The provision would therefore be implemented through s.7(1)(a)(ia) "*damage to public interests of an economic, social or environmental nature*".
- 42 The implication is that, for example, if one or more estate owners in an area decided to significantly reduce the density of red deer on their land and this impacted on the deer hunting opportunities on one or more neighbouring estates, such that it jeopardised the jobs of the estate deer stalkers, the provision might be used to protect the public interest in jobs in remote rural areas.
- 43 SNH appears to have interpreted the provision in this way and the Group's informal understanding is that at least one estate in the northern Highlands has approached SNH about the information required to consider the use of the provision.¹⁹ SNH has, after some initial work for SNH by the James Hutton Institute on how such a situation might be assessed for the possible use of the provision in such a situation, produced draft internal guidance on 'Assessing the Economic Impacts of Deer Management'.
- 44 The Group considers that the implementation of the provision in the type of situation mentioned above is fraught with difficulty. The relatively lengthy questionnaire in SNH's draft guidance illustrates some of the challenges in trying to weigh the interests of two different estate owners in how they decide respectively to manage the wild deer that occur on their land. This is particularly the case if the use of the provision in s.7 did not produce results and the next stage was a compulsory s.8 Control Scheme that could be challenged in Court.

¹⁷ SNH Information Response 55.

¹⁸ SNH (2011). Code of Practice on Deer Management, p.3.

¹⁹ SNH correspondence with DWG, 14 August 2019.

- 45 There is no entitlement to be able to shoot a certain number of wild deer on a particular property. Land owners may have adapted how they manage deer populations in many circumstances due to changes on the land of a neighbouring property and, as deer often move across property boundaries, land uses changes happen all the time that alter the number of deer that might be shot on a property. Examples might include a neighbouring owner either deer fencing their land or substantially reducing the density of deer on their land for forestry purposes.
- 46 There are also questions over how SNH might enforce the use of the “*steps taken or not taken...*” provision in practice, if there was not a voluntary agreement in place under s.7 and a compulsory s.8 Control Scheme was required. Without a national licence system where owners need permission from SNH for the number of deer they shoot and a maximum number could be set, would SNH seek to impose an annual quota on a land owner for the number of deer they can shoot?
- 47 The Group’s view is that the addition of “*steps taken or not taken...*” in s.7 was a poorly considered amendment and should be repealed, along with the use of the phrase in s.6A. However, the Group notes that the provision did for the first time give SNH the power in theory at least to reduce deer culls rather than just increase them. The Group considers that an effective system of deer management should have such a power in the legislation, but not through the current provision in s.7.
- 48 The Group’s view is that if SNH is to have the power to reduce deer control on a property, it should be through a separate section in the Deer Act and be based on careful consideration of the terms of the measure and its potential enforcement. However, examples of where such a power might be used at present in Scotland are not easy to suggest. The public authorities responsible for deer management in many European countries have the power to limit culls through a deer hunting licence system.²⁰
- 49 **The Working Group recommends that the phrase “or steps taken or not taken for the purposes of deer management” should be repealed from sections 6A(2) and 7(1) of the Deer (Scotland) Act 1996, and that consideration might be given to whether an appropriately termed and practical power for Scottish Natural Heritage to reduce deer control on a property might be introduced through a new section in that Act.**

²⁰ Putman, R. (2011). A review of the various legal and administrative systems governing management of large herbivores in Europe. In: Putman, R., Apollonio, M. and Andersen, R. (eds.) *Ungulate Management in Europe: Problems and Practices*. Cambridge University Press, pp. 54-79.

Section 14 Agriculture and Forestry

- 1 This Section and Sections 15-19 consider the information available on the nature and extent of damage by deer to the interests covered by the regulatory powers to reduce damage by deer in the Deer (Scotland) Act 1996. The Group considers that the relatively limited information available on most of the interests other than designated natural sites, reflects the degree of focus on those sites by Scottish Natural Heritage (SNH), and its predecessor the Deer Commission for Scotland (DCS), as the public authority responsible for implementing the deer legislation.
- 2 The positions with agriculture and forestry are considered first, as the interests that have been covered since the Deer (Scotland) Act 1959. The interests added under the 1996 Act are then considered in the following Sections: public safety, the natural heritage, deer welfare and, lastly, the other interests that might be taken to be covered by the inclusive phrase “*public interests of a social, economic or environmental nature*”.¹

14.1 Agriculture

- 3 The long history of conflict between agriculture and deer management in the Highlands due to the damage on crofts and hill farms caused by marauding red deer, was the principal factor leading to the 1959 Act. While the Act also included the protection of enclosed woodlands, the use that the Red Deer Commission (RDC) made of its regulatory powers continued to be mainly focused on trying to reduce the damage to agriculture by marauding red deer.²
- 4 Damage by deer to agriculture remained a key issue when the DCS took over under the 1996 Act and was a main objective in most of the s.7 Control Agreements that it established during its early years. However, by then, the expansion of both woodlands and deer populations meant that damage to agriculture by deer was a risk experienced much more widely in Scotland. This has continued to be the case.
- 5 There has never been a systematic approach to collecting and collating statistics on the extent of agricultural damage.³ However, a number of authors have summarised the impacts of deer on agriculture that give rise to damage.⁴ Red deer continue to be the most important species causing agricultural damage, together with fallow in some areas. As herding species, they can have a serious impact in a short time depending on their number. Roe deer can also be a particular issue on lowland agricultural land and are the main species causing damage to horticulture with its predominantly lowland distribution. However, red and fallow are also becoming increasingly important, with the risk of serious damage to the high value crops involved in horticulture (for example, orchards, soft fruits and market gardens).

¹ This phrase was added to s.7 of the Deer (Scotland) Act 1996 by the Wildlife and Natural Environment (Scotland) Act 2011.

² See Section 22 for discussion of the RDC's use of s.6 of the 1959 Act.

³ SNH (1994) Red deer and the natural heritage; Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland.

⁴ For example: Putman, R. (2012), Scoping the economic benefits and costs of wild deer and their management in Scotland, SNH Commissioned Report No. 526; and the material reviewed in Holland, J. et al. (2016), Meeting the challenge of wild deer research to support delivery of sustainable deer management in Scotland, SNH Commissioned Report No. 963.

- 6 The most common types of damage by deer to agricultural crops are to early season grass and cereals.⁵ With cereals, the timing can be important in the significance of damage with grazing in the early stages of growth having a relatively small impact on field productivity, while a herd of red or fallow deer flattening the later stages of growth can result in major losses. Wild deer can also act as a constraint on options, for example, not growing root crops in some areas due to the high risk of damage or being unable to use feeding blocks in hill farming situations as they will be used by deer.
- 7 There is not a direct relationship between agricultural damage by deer and local densities of deer.⁶ A range of other factors can be significant, including the proximity of crops to woodlands or other cover and the other feeding opportunities available to deer locally. In addition to direct physical damage by deer, there are also concerns over the health of livestock due to contact with deer and the risk of the transmission of diseases such as Tuberculosis, as well as increases in the number of ticks.⁷
- 8 The right of agricultural occupiers under the deer legislation to shoot deer on their land to prevent damage, has meant that deer can also be an economic resource for farmers and crofters. The RDC recognised in the late 1980s that the reduction in complaints that they were receiving from agricultural occupiers was not due to a reduction in damage being caused by deer, but a result of improved venison prices.⁸
- 9 With open hill red deer in the Highlands, stags are more likely to maraud onto agricultural land and the shooting of stags by tenant farmers and crofters continues to give rise to tensions with landlords in some areas.⁹ More generally, there continues to be a lack of attention by some landlords to the concerns of agricultural tenants or crofters over damage by deer. This issue was covered in part in the Tenant Farming Commissioner's recent Code of Practice.¹⁰ However, the Code mainly focuses on game bird shooting and the Group considers that the position with deer should be given greater attention.
- 9 SNH, in considering agricultural damage by deer in its 2016 review, relies on Putman's 2016 report to conclude that "*Any impacts that do occur tend to be highly localised (e.g. a specific field in a specific area because it is close to a woodland strip)*" and that "*the effects of deer on agriculture are not of economic significance at a regional or national scale*".¹¹
- 10 More generally, while SNH continues to deal with some particular cases of damage to agriculture by deer, it does not consider that there is a wider issue between agriculture and deer. SNH, in commenting on its regular contact with the National Farmers Union Scotland (NFU Scotland) and the Scottish Crofting Federation (SCF), has reported that "*rarely does deer emerge as a priority issue and it is usually ourselves who raise it, particularly in trying to assess the extent of damage to agriculture*".¹²
- 11 The Group considers, however, that SNH is not adequately recognising the extent of the issues between agriculture and wild deer in much of Scotland. When the Group contacted NFU Scotland and SCF, the organisations consulted internally and the

⁵ Putman (2012) *Op cit.*

⁶ Putman (2012) *Op cit.*

⁷ See Section 10 on Wild Deer and Diseases.

⁸ Callander and MacKenzie (1991) *Op cit.*

⁹ SCF correspondence with DWG, April 2018.

¹⁰ Scottish Land Commission (2017). Code of Practice - The Management of Relationships between Agricultural Tenants and the Holder of Sporting Rights.

¹¹ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, p. 48.

¹² DWG meeting with SNH, 13 March 2018.

feedback described widespread problems with deer.¹³ The SCF reported issues with red deer across the Highlands, and NFU Scotland, while commenting that the biggest issue with deer was in their Highland region, reported that the impacts of deer and particularly red deer “is becoming an increasing problem right across Scotland”.¹⁴

- 12 The Group considers that NFU Scotland and SCF responses indicate that there is a lack of clarity about complaining to SNH and a degree of scepticism about whether SNH will take any action in response. There also appears to be an element of the organisations not raising deer issues with SNH, because of the perceived lack of progress over so many years. The longstanding nature of the problem means that the organisations tend to have more immediate topics to discuss with SNH in liaison meetings.
- 13 The Group recognises that Priority 4 in ‘Wild Deer: A National Approach’ (WDNA) includes the aim of understanding more about the impacts of wild deer on agriculture. However, the Group considers that SNH should be placing greater emphasis on following this up than appears to be the case so far. The Group considers that SNH should have a clear perspective on the current extent of damage to agriculture in different parts of the country through contact with owners and occupiers in those areas.
- 14 The Group also considers that SNH should reassess its practice, as in its 2016 report quoted above, of describing damage by deer to agriculture as not significant regionally or nationally because it is localised. All damage by deer is ‘local’ and it appears clear that damage to agriculture is significantly more widespread across Scotland than SNH apparently recognises. The costs of damage to agriculture may be more difficult to estimate at a national level compared, for example, to forestry. However, the Group considers that damage by deer to agriculture is a national issue and should be recognised as that by SNH.
- 15 Recently, there has been a recommendation that the potential for including a question about deer impacts in the Scottish Government’s annual June Agricultural Census should be assessed as a way of gathering more information on the impacts of deer on agriculture.¹⁵ The Census is sent to all agricultural holdings that complete a Single Application Form and a sample of smaller holdings. There is also an annual December Agricultural Survey based on data from larger holdings, which might be used for such a question.
- 16 In the early 2000s, the DCS arranged for a question about deer damage to be included in the June Census. The question was added, however, with no explanatory text and appeared to be largely ignored by those completing the form.¹⁶ If a more successful approach was taken, the information provided would be subjective and not available at the level of individual holdings. However, the aggregated results from the question could be presented at civil parish and Local Authority scales to give an indication of the level of reports of damage in different parts of Scotland. If such a question was used on a regular basis, the results would show any trends in the reports of damage. There has been a question in the June Census since 2012 that asks ‘Any wild deer killed at this location within the last twelve months? (Y/N)’.

¹³ DWG correspondence with NFU Scotland (17 September 2018) and SCF (17 April 2018).

¹⁴ DWG correspondence with NFU Scotland, *Op cit*.

¹⁵ McMorran R., Gibson-Poole, S. and Hamilton, A. (2019). Lowland deer management: assessing the delivery of public interests. SNH Research Report No. 1069.

¹⁶ Information known directly by the Group.

- 17 **The Working Group recommends that Scottish Natural Heritage should take a far more focused approach to identifying the current extent of damage to agriculture by wild deer in different parts of Scotland and taking action to tackle the local issues involved.**

14.2 Forestry

- 18 At the beginning of the 20th century, when deer forests in the Highlands for red deer stalking were at their greatest extent, the amount of woodland in Scotland was at its lowest recorded extent of less than 5% of the land area.¹⁷ The Forestry Commission (FC) was then created as a government department in 1919, to increase Britain’s strategic timber reserves. The FC’s two main initial roles were, firstly, acquiring and planting land to establish government owned plantations and secondly, encouraging private sector planting.
- 19 The increase in Scotland’s tree cover since 1919 is illustrated in Figure 30 and also shown as a sequence of maps in Figure 3 in Section 2. The expansion of woodland over the last 100 years and particularly the last 50 years, has been a dominant factor in the spread and increase of wild deer in Scotland by providing them with additional habitat to colonise. Woodland is the natural or preferred habitat for each of Scotland’s four species of wild deer and the majority of wild deer in Scotland now live in woodland habitat.
- 20 Scottish Government policy is for continued woodland expansion, with the target of increasing Scotland’s woodland cover from the current 18.5% to 21% by 2032.¹⁸ That target has been given added impetus because of the value of woodland creation as part of climate mitigation measures. However, the target of 21% is still low compared to the current average amongst European Union countries of 38% woodland cover with, for example, France, Germany, Italy and Spain all having over 30% woodland cover.¹⁹
- 21 The serious damage that wild deer can cause to young trees by browsing means that deer control through fencing and culling has been an important factor throughout the history of woodland expansion in Scotland and will continue to be in the creation of further new woodlands. The need for deer control within woodlands is similarly important to enable existing woodlands to be re-stocked or regenerated, as well as to avoid other forms of damage such as bark stripping on established trees. Deer control is also needed to minimise woodland deer causing damage on neighbouring lands, for example, through damage to agricultural crops or causing deer vehicle collisions on public roads.

Figure 30 Tree cover as a percentage of Scotland’s land area (1895-2011)

Year	1895	1947	1965	1995	2011
Percentage Tree Cover	4.5%	6.6%	8.2%	16.1%	18%

Source: Forestry Commission Scotland correspondence

¹⁷ See Figure 30.
¹⁸ Scottish Government (2019). Scotland’s Forestry Strategy 2019-2029.
¹⁹ Scottish Government (2019) *Op cit.*

22 The current relationship between forestry and deer management is considered below, after a brief background account of forest expansion and deer management in Scotland during the 20th century.

14.2.1 Background: 1919-1999

- 23 The expansion of FC plantations in the Highlands from 1919 marked the beginning of half a century of direct competition for land between plantation forestry and open hill red deer sporting interests.²⁰ As there was very little private sector planting during those decades, the issues that arose were between the FC and private estates. The area of new FC plantations had a disproportionate effect on red deer range because they were concentrated on red deer wintering grounds. The situation was also compounded by the sale by some estates of some of their own wintering grounds and a failure to adjust open hill red deer populations adequately for the loss of range.
- 24 By the time that the Red Deer Commission (RDC) was established by the Deer (Scotland) Act 1959, the relationship between plantation forestry and open hill red deer “*was characterised by red deer dying in winter against plantation fences or mass breaking-ins of hundreds of deer*”, and while the FC did attempt to drive deer out, “*there were also large shoot-outs*”.²¹ In its first year, the RDC opened discussions with the FC “*because of the ‘drastic effect’ of the FC’s planting programme and the large backlog of situations that required to be resolved*”.²²
- 25 In the 1970s, the RDC was involved in encouraging reductions in the size of forestry enclosures, improved fence lines, better fence specifications and more attention to compensatory culls where red deer range was to be replaced by plantations. The FC also agreed from 1973 to consult the RDC on all forestry planting applications over 50 hectares in size in red deer range.²³ The early 1970s was the beginning of the expansion of investment driven plantation forestry in Scotland, which was very largely responsible for the substantial increase in woodland area by 1995 shown in Figure 30.
- 26 The RDC only started to take more interest in the management of the red deer populations that had become resident in plantations in the mid-1970s and, at that stage, began to collect cull return statistics from the FC and other forest managers for the first time.²⁴ Discussions involving the FC, RDC and others also resulted by the 1980s in guidance being produced on the internal design principles for plantations to facilitate deer control and reduce damage to trees by deer. The principles were not always then adopted in new plantations, while the new plantations from the 1970s were not due to be re-structured for many years.
- 27 The continuing expansion of red deer range during the 1970s and 1980s meant that deer fencing needed to be used in increasingly more parts of Scotland. In addition to the damage to plantations by red deer, the expansion in the distribution of sika deer gave rise to further issues of browsing and bark stripping. The need to control roe deer in plantations to reduce damage also started to receive greater attention. From the 1970s to the 1990s, there were a range of research projects on the ecology, population dynamics and impacts of woodland deer.²⁵

²⁰ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland.

²¹ Callander and MacKenzie (1991) *Op cit*, p.29.

²² Callander and MacKenzie (1991) *Op cit*, p.29.

²³ Callander and MacKenzie (1991) *Op cit*. This continued into the early 2000s.

²⁴ Callander and MacKenzie (1991) *Op cit*.

²⁵ For example, see Scott, D., Bacon P. and Irvine, J. (2002), *Management of Deer in Woodlands: Literature reviews of woodland design, and techniques for assessing populations and damage*. Centre for Ecology and Hydrology report for the Deer Commission for Scotland.

- 28 The change of government forest policy away from a strategic timber reserve to multi-purpose forestry by the 1990s, also broadened the situations where deer control was needed. Policy developments included, for example, the introduction of the FC's broadleaves policy to help diversify planting away from the heavy concentration on spruce forests, and the FC's approach in Scotland from the start of the 1990s of encouraging the restoration and regeneration of existing native woodlands and the planting of new native woodlands.
- 29 The rate of woodland expansion slowed in the 1990s, after the UK Government reformed the tax system for forestry in 1988.²⁶ However, the expansion over previous decades meant that there was a need for deer management in and around woodlands across much of Scotland by the 1990s. The RDC's responsibilities had been changed to cover all four species of wild deer in Scotland through the Deer (Amendment) (Scotland) Act 1982 and in 1994/95, the RDC with its headquarters in Inverness opened an office in Stirling with a team of staff covering the south of Scotland.²⁷
- 30 While the RDC was replaced by the DCS under the Deer (Scotland) Act 1996, there were also changes affecting the FC in the 1990s. In the early 1990s, the FC's two main functions under the Forestry Act 1967 were separated into the Forestry Authority, covering the FC's regulatory and grant giving roles, and Forest Enterprise, as an FC agency responsible for managing the FC's woodlands.
- 31 Then, under the Scotland Act 1998, forestry in Scotland was devolved to the new Scottish Parliament and Scottish Government in 1999. While the FC's responsibilities under the Forestry Act 1967 were not devolved, agreement between the UK and Scottish Governments resulted in the Forestry Authority and Forest Enterprise operating in Scotland to implement Scottish Government policies. As a result, they were re-named Forestry Commission Scotland (FCS) and Forest Enterprise Scotland (FES) in 2003.
- 32 Another consequence of devolution in 1999 was that the ownership of the land managed by the FC in Scotland, which had always been owned in the name of the Secretary of State for Scotland transferred to Scottish Ministers. This land managed by FES became identified as Scotland's National Forest Estate (NFE).
- 33 The Group also notes at this point that the FC's responsibilities in Scotland were eventually devolved under the Forestry and Land (Scotland) Act 2018, which repealed the Forestry Act 1967 in Scotland. When the Forestry and Land (Scotland) Act came into force on 1 April 2019, FCS and FES were converted into Scottish Forestry (SF) and Forestry and Land Scotland (FLS) respectively as executive agencies of the Scottish Government. These identities, SF and FLS, are used below when describing forestry and deer management since devolution, starting with deer management on the NFE.

²⁶ Scottish Forestry briefing to DWG, July 2019.

²⁷ Red Deer Commission Annual Report, 1994.

14.2.2 National Forest Estate

- 34 Scotland's NFE covers approximately 640,000 hectares of woodland and open ground, which is equivalent to around 9% of Scotland's land area.²⁸ The NFE includes 470,000 hectares of woodlands or 32% of the 1.5 million hectares of woodland in Scotland.²⁹ While Scotland's woodland area consists of 74% conifers and 26% broadleaves, the NFE woodland area is approximately 90% conifers and 10% broadleaves.³⁰ The NFE includes approximately 40% of the coniferous woodland in Scotland and 10% of the broadleaved woodland.
- 35 Losses of revenue caused by damage to trees by deer and expenditure on deer control through culling and fencing, have been major costs throughout the development of the NFE and remain so. The main problem is damage by deer browsing young trees, which can prevent or delay sapling growth, Browsing can also deform trees, reducing their potential to produce commercial timber. Past studies have estimated, for example, that browsing of Sitka spruce can result in revenue losses of 3-4% and browsing of leading shoots in losses of 1-8% of revenue.³¹ Recent evidence also indicates that repeated browsing of Sitka spruce can result in a revenue loss of 3-4%.³²
- 36 Surveys on the NFE in 2013 showed that 15-20% of young trees on the NFE had been damaged by deer.³³ It was also reported that on the NFE between 2011 and 2013, around 11-12% of leading shoots suffered deer damage each year.³⁴ That damage impacts on timber production and other objectives. While timber production is still a major objective for FLS, the NFE is also managed by FLS for a wide range of other environmental, social and economic objectives aligned with Scottish Government policies.³⁵ FLS aims on NFE land for damage by deer to be less than 10% of leading shoots each year.³⁶
- 37 FLS is involved in many different planting and regeneration schemes each year as part of meeting its objectives. In the five years 2014/15 to 2018/19, FLS planted or regenerated an average of over 7,000 hectares of woodland a year. This consisted of an average of 800 hectares of new woodland and 6,500 hectares of re-stocking existing woodland.³⁷ While FLS accounted for 11% of the new planting in Scotland during that period, FLS was responsible for over 66% of the re-stocking carried out.
- 38 The Group considers that FLS's management of deer on the NFE to achieve its objectives, exemplifies a professional, evidence-based approach to deer management in a Scottish context. FLS has described the many different aspects to its approach in some detail in the 2014 publication 'Deer Management on the National Forest Estate'.³⁸ The totals shown in Figure 31 for FLS's annual net expenditure on deer management over the last five years, should be viewed in the context of the size of the NFE and the scale of FLS's overall expenditure and income each year.³⁹

²⁸ Forestry and Land Scotland Corporate Plan, 2019-22.

²⁹ Forest Research Forestry Statistics, 2019.

³⁰ Forest Research Forestry Statistics, 2019.

³¹ Gill, R. (2000). The Impact of Deer on Woodland Biodiversity. Forest Research Information Note 036.

³² Scottish Forestry briefing to DWG, July 2019.

³³ Scottish Parliament Daily Written Answers, S4W17137, 25 September 2013.

³⁴ Forestry Commission Scotland (2014). Deer Management on the National Forest Estate. Current Practice and Future Directions, 1 April 2014 to 31 March 2017.

³⁵ Forestry and Land Scotland Corporate Plan, 2019-22.

³⁶ Forestry Commission Scotland (2014) *Op cit*.

³⁷ Forestry Commission Scotland (2014) *Op cit*.

³⁸ Forestry Commission Scotland (2014) *Op cit*.

³⁹ Forest Enterprise Scotland Annual Report and Accounts 2017-18

Figure 31 Forestry and Land Scotland deer management costs (2014/15-2018/19)

	2014/15	2015/16	2016/17	2017/18	2018/19
	£	£	£	£	£
Salaries	2,386,000	2,382,000	2,373,000	2,477,000	2,256,000
Vehicles, machinery and equipment	656,000	664,000	490,000	525,000	570,000
Admin*	791,000	631,000	931,000	727,000	1,035,000
Cash: deer other	3,047,000	2,954,000	3,274,000	3,463,000	3,422,000
Cash: deer fencing	121,000	391,000	112,000	453,000	239,000
Cash: deer shooting rates**				960,000	1,075,000
Depreciation	97,000	93,000	92,000	92,000	113,000
Total expenditure	£7,098,000	£7,115,000	£7,272,000	£8,697,000	£8,710,000
Deer management income	(1,778,000)	(1,711,000)	(1,679,000)	(1,998,000)	(1,746,000)
Deer management net (income)/expenditure	£5,320,000	£5,404,000	£5,593,000	£6,699,000	£6,964,000

* Increase in Admin costs due to new accounting arrangements

** Sporting rates costs following the introduction of the Land Reform (Scotland) Act 2016. FLS are looking to recoup these costs via the Empty Property Relief route.

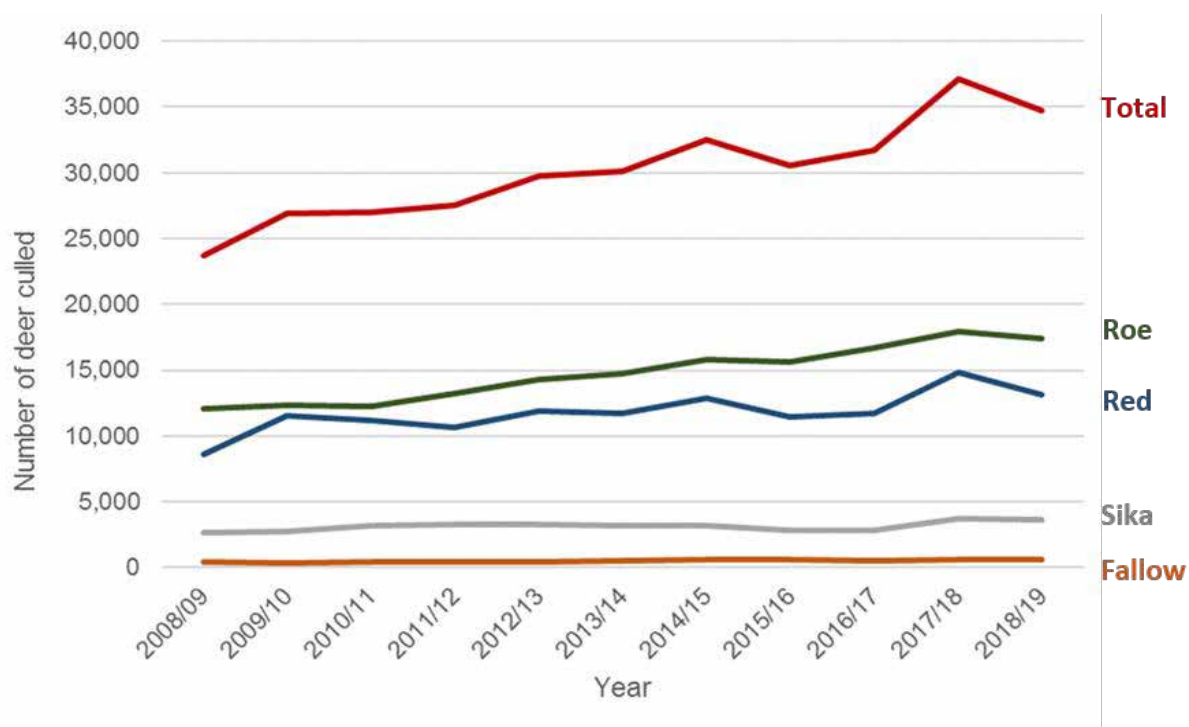
Source: FLS correspondence with DWG, 16 August 2019

- 39 FLS aims to maintain sustainable, resident populations of deer on NFE land and minimise the use of fencing. To determine appropriate deer densities to meet its objectives in different situations and set cull targets each year to achieve those densities, FLS operates an iterative process that involves systematically monitoring a range of factors. These include tree damage assessments, habitat impact assessments and determining effective deer utilisation of land using dung count analysis, as well as other forms of information gathering. FLS generally aims to limit deer densities on NFE land to two to seven deer per 100 hectares.⁴⁰
- 40 FLS carries out a substantial cull on NFE land each year, with the average cull density in 2012/13 being 4.6 deer per 100 hectares. FLS annual cull totals from 2008/09 to 2018/19 are shown in Figure 32, with FLS's annual culls generally consisting of around 37-40% red deer, 48-51% roe deer, 10% sika deer and 2% fallow deer. FLS's cull target for 2019/20 is 37,000 deer.⁴¹

⁴⁰ Forestry Commission Scotland (2014) *Op cit.*

⁴¹ FLS correspondence with DWG, 8 July 2019.

Figure 32 Forestry and Land Scotland deer cull by species (2008/09-2018/19)



Year	Red	Roe	Sika	Fallow	Total
2008/09	8,579	12,063	2,639	419	23,700
2009/10	11,523	12,315	2,775	332	26,945
2010/11	11,157	12,255	3,196	424	27,032
2011/12	10,633	13,254	3,247	408	27,542
2012/13	11,854	14,259	3,241	432	29,786
2013/14	11,695	14,705	3,183	528	30,111
2014/15	12,853	15,845	3,222	591	32,511
2015/16	11,429	15,651	2,830	614	30,524
2016/17	11,698	16,702	2,790	484	31,674
2017/18	14,793	17,973	3,698	643	37,107
2018/19	13,151	17,409	3,633	572	34,765

Source: FLS correspondence with DWG, 8 July 2019

- 41 FLS's culls make a major contribution to deer control in Scotland, with its annual culls representing around 28-30% of the total deer cull recorded in Scotland each year. FLS annual culls generally account for around 15-20% of the total recorded red deer cull, 40% of the total roe deer cull, 45-50% of the total sika deer cull and 20-25% of the total fallow deer cull.
- 42 Research indicates that FLS managed to reduce the number of deer on NFE land by over 20% between 2001 and 2016.⁴² However, damage by deer is still a problem on NFE land and FLS plans to review and refresh its deer management strategy to further reduce the impacts of browsing damage by deer.⁴³
- 43 FLS has, as mentioned above, a systematic, evidenced-based approach to deer control on the NFE. However, a widespread challenge that FLS has to contend with in setting culls to achieve specified deer density targets, is the rate of influx of deer from neighbouring lands. The scale of this problem at a national level for FLS is not known, but long term monitoring at local levels shows *"that in some places well over 50% of the annual cull comes from deer which have moved into the NFE from adjacent land"*.⁴⁴
- 44 The Group considers this dispersal of deer from other land into the NFE is indicative of a lack of adequate cull levels on those other lands, and that SNH should be investigating the most prominent cases with its responsibilities under the Deer (Scotland) Act 1996. The Group also considers that this is a widespread problem in Scotland which can affect other land owners trying to carry out adequate deer control. The Group considers, as discussed in later Parts of the Report, this situation reflects that Scotland does not have an effective system of deer management that adequately protects the interests of public and private land owners from damage by deer due to a lack of culling on other lands.
- 45 There are some deer shooting lets for recreational stalkers on NFE land, but they only account for a few percent of FLS's annual culls. The great majority of FLS's culls are carried out by FLS rangers and contract deer controllers, all of whom have Deer Stalking Certificate (DSC) Level 2 and other training. Over the years, FLS played a valuable role in increasing the pool of professional deer controllers in Scotland and in the development of both the DSC system and the guidance available through the Wild Deer Best Practice project.⁴⁵
- 46 FLS's culls also involve high standards of carcase handling and venison production. Over 90% of all deer culled on NFE land provide high quality venison for the food industry, with most of the remaining being deer carcasses retained by recreational hunters.⁴⁶ FLS has helped improve standards of carcase handling more generally in Scotland, and has played a very important role in the development of both the Scottish Venison Partnership and the Scottish Wild Venison Quality Assurance Scheme.
- 47 The Group has not been in a position to review FLS's deer management in detail, and the Group recognises that there can be occasions when FLS needs to respond to deer from NFE land causing damage on neighbouring land. However, the Group strongly supports FLS's high standards of professional, evidence-based deer management to ensure the

⁴² Campbell, D., Marchbank, M., Watson, M. and Quin, S. (2017). Trends in woodland deer abundance across Scotland: 2001-2016. Scottish Natural Heritage Commissioned Report No. 948

⁴³ Forestry and Land Scotland Corporate Plan, 2019-22.

⁴⁴ Campbell et al. (2017) *Op cit*, p.35.

⁴⁵ The Wild Deer Best Practice project is discussed in Section 25.

⁴⁶ Scottish Forestry briefing to DWG, July 2019.

delivery of public policy objectives on the NFE. While FLS's system will continue to be refined and developed, the Group considers that the value of FLS's deer management on the NFE and FLS's wider contribution to deer management more generally in Scotland, should both be adequately recognised by the Scottish Government.

14.2.3 Forestry Policy and Deer Management

- 48 Government forestry policy in Scotland has evolved over time. For many decades after 1919, the policy was driven by economic objectives until environmental objectives were added in the 1980s and then social objectives in the 1990s. Also in the 1990s, the UK and other European governments adopted the definition of sustainable forest management footnoted below that has been central to the Scottish Government's forestry policy since devolution.⁴⁷ That policy is currently represented by the Scottish Forestry Strategy (SFS) 2019-2029, with the Scottish Government agency Scottish Forestry responsible for overseeing the implementation of the Strategy.
- 49 There appear to be just two references to deer management in the text of the SFS. The first is in the section on 'Strategic Drivers' under the heading 'Adaptation and Resilience' and includes that "*While wild deer and other herbivores are a valuable part of forest and woodland ecosystems, high numbers of animals can damage trees. This can be a challenge to successful woodland establishment, as can the presence of invasive species such as *Rhododendron ponticum**".⁴⁸ The text concludes that "*The sustainable management of wild deer populations, the protection of trees from herbivore browsing and the control of invasive species are therefore important aspects of resilience and sustainable forest management*".⁴⁹
- 50 The second mention of deer management in the text of the SFS is under 'Priorities for Action', where it is stated that "*Maintaining and enhancing biodiversity, in particular by using the recruitment of natural regeneration and improving mitigation of the risks posed by invasive non-native species, deer and other herbivores*".⁵⁰
- 51 The Group recognises that other herbivores and invasive plants such as *Rhododendron* can be important issues in places. However, the Group considers the scale of the challenge that deer pose across Scotland to achieving the SFS objectives for the sustainable management of woodlands and the creation of new woodlands, is of a different order of magnitude. Indeed, the consultative draft for the SFS identified wild deer as one of the major risks to achieving the SFS's economic, environmental and social objectives.
- 52 The management of wild deer by FLS on NFE land as part of delivering the public policy objectives of the SFS has been described above. However, around 988,000 hectares or 68% of Scotland's 1.5 million hectare woodland area is privately owned.⁵¹ These woodlands consist of 56% conifer woodland and 35% broadleaved woodland. The private sector is also responsible for the majority of new woodland established, accounting for 31,250 hectares or nearly 90% of the 35,320 hectares of new planting in Scotland in the five years 2014/15 to 2018/19. The private sector also carries out a third of the re-stocking or regeneration of existing woodlands, with the proportion steadily increasing.

⁴⁷ "*The stewardship and use of forests lands that maintains biodiversity, productivity, regeneration capacity, vitality and potential to fulfil now and in the future relevant ecological, economic and social functions at local, national and global levels and that does not cause damage to other ecosystems*"

⁴⁸ Scottish Government (2019). Scotland's Forestry Strategy 2019-2029, p.23.

⁴⁹ Scottish Government (2019) *Op cit*.

⁵⁰ Scottish Government (2019) *Op cit*, p.33.

⁵¹ Forest Research Forestry Statistics, 2019.

- 53 Private sector woodlands belong to a wide range of different types of owners, but there is a lack of information on woodland ownership in Scotland. One study indicated that a very high proportion of private woodlands belong to private estates and forestry investors, with the average size of forest holdings in Scotland of 259 hectares being several times larger than the average size in 20 other European countries.⁵²
- 54 There appears, as discussed further below, to be little information available on the abundance or densities of deer in private woodlands.⁵³ There also appears to be a lack of published information on the impacts of deer in these woodlands, other than those covered by the Scottish Forestry's landmark Native Woodland Survey of Scotland (NWSS).⁵⁴
- 55 The NWSS, which was published in 2014, assessed 311,153 hectares of native woodland or around 20% of Scotland's woodland area, and is discussed further in Section 16. The survey found that deer were a significant presence in 73% of the native woodland areas and that 33% of the woodland area had high or very high browsing impacts that are considered too high for the woods to be able to survive by natural regeneration.⁵⁵
- 56 Scottish Forestry also has herbivore impact survey data from the National Forest Inventory, which is assessed on a five year cycle. This uses the same methodology as the NWSS, but involves a network of sample plots rather than a walkthrough of an entire woodland area. The National Forest Inventory work therefore provides a sample based assessment of deer impacts across all types of woodland.⁵⁶ However, the Group is not aware of any published analysis of that information.
- 57 Scottish Forestry, as the regulator of the forestry sector, uses the UK Forest Standard (UKFS) to inform forest planning and forestry application decisions relating to all forests and woodlands. The UKFS has, however, little mention of standards of deer management. The one reference to deer management in UKFS is the general forestry practice guideline (21) that states: "*in areas where deer are a threat, develop and monitor deer management plans - ideally in cooperation with neighbours and local deer management groups*".⁵⁷
- 58 The position is similar for standards of deer management with forest certification under the UK Woodland Assurance Scheme (UKWAS). The management of all NFE woodlands and, in 2018, 363,000 hectares or 37% of private woodland is independently audited under UKWAS.⁵⁸ The limited reference to deer management in the current UKWAS standard is that "*Management of wild deer shall be based on a strategy that identifies the management objectives, and aims to regulate the impact of deer*", with the additional provisions that "*This requirement may involve the setting of cull targets and should involve the membership of a Deer Management Group where appropriate*".⁵⁹
- 59 Scottish Forestry does, however, require 20 year Forest Plans as part of forestry applications for larger managed woods and these Plans generally need to include a Deer Management Plan (DMP). As a result, most privately owned forest properties in Scotland larger than 100 hectares are covered by a DMP approved by Scottish Forestry. This involves approximately 1,200 woodlands covering over 500,000 hectares.⁶⁰

⁵² Forest Policy Group (2011). Forest Ownership in Scotland: A Scoping Study.

⁵³ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

⁵⁴ Forestry Commission Scotland (2014). Scotland's Native Woodlands: Results from the Native Woodland Survey of Scotland.

⁵⁵ Forestry Commission Scotland (2014) *Op cit*.

⁵⁶ Scottish Forestry briefing to DWG, July 2019.

⁵⁷ Scottish Forestry briefing to DWG, July 2019.

⁵⁸ Scottish Forestry briefing to DWG, July 2019.

⁵⁹ UKWAS Standard, 4th Edition, 2018.

⁶⁰ Scottish Forestry briefing to DWG, March 2019.

- 60 Scottish Forestry monitors deer management in all cases where Forest Plans have involved forestry grants, including for the preparation of a DMP. Monitoring is carried out by assessing annual returns on culls and impact monitoring. Each year, a sample of cases are physically inspected on the ground and deer management will be considered at the five year reviews involved in Forest Plans, if deer impacts are affecting the delivery of a Forest Plan. Scottish Forestry is not only concerned with the impacts of deer on trees, but also their impacts on ground vegetation and the development of a healthy environment.
- 61 The Forest Plan system has been operating for over 10 years and it might be expected, given the large area of woodlands covered the Plans, that Scottish Forestry would have built up a substantial amount of information on deer impacts and deer management in woodlands in Scotland over 100 hectares. However, no information or analysis of such information appears to have been published by Scottish Forestry.
- 62 The Group's view is that Scottish Forestry has not paid enough attention over the years to the standards of Forest Plan DMPs and the impacts of deer in and around the woodlands involved, unless those impacts were limiting the delivery of an aspect of the Plan supported by grant aid. However, the Group notes that Scottish Forestry has started in recent years "*to look for higher quality and better evidenced DMPs that are consistent with the delivery of other management objectives and proposals*".⁶¹
- 63 The Group considers that there is a need for improved information on the standards of deer management in the larger private sector commercial conifer plantations in Scotland, including the deer impacts in and around these woodlands. The indications from the Group's investigations are that the deer densities in these plantations are generally higher than on NFE land and that the cull densities are lower. The densities of roe deer can be very high in some plantations, particularly in lowland agricultural areas.
- 64 Limited culling in plantations can be particularly the case once plantations are established and there is no re-stocking due for some years. High densities of deer in woodlands can result in the deer causing damage of neighbouring agricultural land and woodlands, deer vehicle collisions on public roads, and deer dispersing on to other lands. In the previous Section, the Group mentioned patterns of 'source and sink' populations, with deer dispersing from the source area to the sink areas⁶²
- 65 The need to re-stock plantations after some or all of a plantation has been felled, poses the question for owners and managers of whether to reduce deer densities adequately or incur a significant cost from deer fencing the felled area.⁶³ Increased culling to lower the density of deer for re-stocking also usually has to deal with a reproductive response from the deer.⁶⁴ The evidence from the NFE shows that, as the density of deer is reduced, calving and recruitment rates amongst the deer increase.⁶⁵ The level of deer control can also need to be greater where continuous cover forestry is used, rather than the traditional clearfell approach of forestry in upland Scotland.

⁶¹ Scottish Forestry briefing to DWG, March 2019.

⁶² For example, Wäber, K.J., Spencer, J. and Dolman, P.M. (2013). Achieving landscape-scale deer management for biodiversity conservation: The need to consider sources and sinks. *Journal of Wildlife Management*, 77(4), pp.726-736.

⁶³ A range of variables affect the cost of erecting a deer fence, including the size of the area to be enclosed, the specification for the fence, the nature of the terrain, the accessibility of the site and the availability of grants. Previous studies have suggest that deer fencing can cost 10-30% of total revenue (Gill et al. 2000 *Op cit*).

⁶⁴ Putman, R., Nelli, L. and Matthiopoulos, J. (2019). Changes in bodyweight and productivity in resource-restricted populations of red deer (*Cervus elaphus*) in response to deliberate reductions in density. *European Journal of Wildlife Research*, 65 (13).

⁶⁵ SNH (2016) *Op cit*.

- 66 Another factor in these situations is tree species choice. As Scottish Forestry has commented, “*anecdotal evidence strongly suggests tree species choices are influenced by the potential impact deer could cause: less palatable species are planted in preference to palatable species where the potential for high losses or damage from deer impact is anticipated*”.⁶⁶ The most resilient species against deer browsing is Sitka spruce, which already accounts for just under 60% of all coniferous woodland in Scotland.
- 67 Sitka spruce and Norway spruce also currently account for 55% of softwood production in Scotland and this is expected to increase to nearly 70% by 2030.⁶⁷ These species are an important economic resource, but an over-reliance on them creates vulnerability to the arrival of new tree pests and diseases, as well as to the effects of climate change. This is at odds with the SFS aim of increasing the resilience and adaptability of Scotland’s forests.
- 68 Deer and the damage they can cause by browsing young trees is a particular challenge for creating new woodlands, with the Scottish Government’s current target of 10,000 hectares of new woodland per year increasing to 12,000 hectares per year from 2020/21, 14,000 hectares per year from 2022/23 and 15,000 hectares per year from 2024/25.⁶⁸ The widespread risk of damage by deer means that most new woodlands need to be protected by deer fencing.
- 69 The Scottish Government’s new woodland targets include the aim of creating 3,000-5,000 hectares of new native woodland per year. In 2018/19, when the Scottish Rural Development Programme budget for creating new woodland was £37 million and 11,200 hectares of new woodland were created, 40% of the area consisted of native species.⁶⁹ These species are particularly vulnerable to deer damage compared to non-native conifers and new native woodlands generally need to be protected by deer fencing, although there is a gradually increasing list of examples where native woodlands have been regenerated and expanded by deer control rather than fencing.⁷⁰
- 70 Until 2003, forestry grants in Scotland were the same as those in England and Wales. However, since then, the devolution of forestry has enabled the Scottish Government and Scottish Forestry to design forestry grant schemes bespoke to the circumstances in Scotland. This had included greater recognition of the importance of deer control.
- 71 In the four financial years 2015-19, Scottish Forestry spent £18.7 million on grants to reduce deer impacts on forestry.⁷¹ The grants available cover a range of deer management activities including, for example, the preparation of DMPs. However, just over £13 million or 70% of the grant expenditure in the last five years has gone on erecting, modifying or enhancing deer fences.

⁶⁶ Scottish Forestry briefing to DWG, March 2019.

⁶⁷ Mason, W.L., MacDonald, F., Parratt, M. and McLean, J.P. (2018). What alternative tree species can we grow in western Britain? 85 years of evidence from the Kilmun forest garden. *Scottish Forestry* 72 (1), pp.24 -33.

⁶⁸ Scottish Government (2019) *Op cit.*

⁶⁹ Scottish Forestry briefing to DWG, July 2019.

⁷⁰ See Section 16.

⁷¹ Scottish Forestry briefing to DWG, July 2019.

- 72 Scottish Forestry's current average grant expenditure on reducing the impacts of deer on forestry is £4.7 million a year. That annual amount is over three times the total of around £1.5 million that SNH spends on deer management each year as the deer authority under the Deer (Scotland) Act 1996, with responsibilities for implementing the Act and reducing the damage by deer to public interests.
- 73 Deer management is a part of forestry. However, the current levels of deer densities across much of Scotland add extra costs in existing woodlands and creating new woodlands through damage to trees, deer fencing and net culling costs. There are no overall estimates for the annual costs of deer damage and deer control to forestry in Scotland.⁷² However, as SNH has commented, 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 reduced.⁷³
- 74 Scottish Forestry aims to see a significant increase in the intensity of deer management in forestry across Scotland in order to reduce populations and high levels of impacts.⁷⁴ However, Scottish Forestry only has limited means by which it can try to achieve that, such as Forest Plan DMPs and grants for certain purposes. As Scottish Forestry recognises, deer impacts and the effectiveness of wider approaches to deer management are amongst the most important factors that threaten the successful delivery of the SFS.⁷⁵
- 75 The Scottish Government's SFS is intended to deliver a wide range of economic, environmental and social public benefits, and has added significance because of its role as part of the Scottish Government's climate change mitigation measures. The Group considers, however, that the difficulties in implementing the SFS due to the numbers and damaging impacts of wild deer, exemplify the shortcomings in the current statutory and non-statutory arrangements for the management of wild deer in Scotland that are discussed in this Report.
- 76 The Group's remit from the Scottish Government is to "*make recommendations for changes to ensure effective deer management in Scotland that safeguards public interests and promotes the sustainable management of wild deer*".⁷⁶ Later in the Report, the Group discusses the refocused non-statutory approach and improved deer legislation that the Group considers are needed to fulfil its remit. The Group considers that the Scottish Government needs to recognise the importance of such changes to the implementation of its own Scottish Forestry Strategy over the next 10 years.
- 77 The Working Group recommends that the Scottish Government should recognise much more fully than at present, the need for changes to the current statutory and non-statutory system for the management of wild deer in Scotland if the Scottish Forestry Strategy 2019-29 is to be implemented successfully.**

⁷² Scottish Forestry briefing to DWG, July 2019.

⁷³ SNH (2016) *Op cit.*

⁷⁴ Scottish Forestry briefing to DWG, July 2019.

⁷⁵ Scottish Forestry briefing to DWG, July 2019.

⁷⁶ DWG Terms of Reference (September 2017).

Section 15 Public Safety

- 1 The standards of public safety that should apply to deer management in all circumstances, including those related to shooter competence and food safety, were considered in Part Two of the Report. This Section considers the damage or risk of damage to public safety that can arise in particular circumstances.
- 2 The major issue is road traffic accidents involving deer. These ‘deer vehicle collisions’ (DVCs) are continuing to increase and are the subject of the rest of the Section.¹ The Group recognises that there can be other incidences involving public safety, such as the need to control deer on or near airport runways.² However, those cases are relatively isolated and not considered further here.

15.1 Frequency and Distribution of DVCs

- 3 Road traffic accidents (RTAs) involving wild deer have become increasingly recognised as a major public safety concern over the last 25 years. These accidents are generally referred to as DVCs and include both cases where there is a collision with a deer and cases where a vehicle swerves to avoid a deer and collides with something else.³
- 4 Following the inclusion of public safety in the Deer (Scotland) Act 1996 and the appointment of the first Deer Commission for Scotland (DCS) Board under the Act at the end of 1998, the DCS commissioned its first research considering DVCs in 1999.⁴ The subsequent report in 2000 led to the DCS commissioning from 2003 the ‘DVCs in Scotland: Monitoring Project’ to collect and analyse information on the frequency and distribution of DVCs.⁵ This project, which has been continued by Scottish Natural Heritage (SNH) since 2010, provides a systematic sample of DVCs in Scotland from 2003 to the present, with the data since 2008 more directly comparable year to year in terms of coverage and consistency of approach to data collection.
- 5 The monitoring project analyses data on DVCs from four main sources: the Trunk Road Operating Companies (TROCs) that manage the trunk road and motorway network for Transport Scotland; the police, for DVCs involving human injury; the Scottish Society for the Prevention of Cruelty to Animals (SSPCA), who are often called out when there are wounded deer; and Forestry and Land Scotland (FLS) rangers, who may be called out for injured deer near National Forest Estate land. Figure 33 shows the numbers of DVCs reported by these and other sources from 2008-18.⁶ Figure 34 also illustrates the distribution of the recorded DVCs from the four main sources.

¹ There are also deer-train collisions but they are not considered a risk to public safety. Network Rail has records of around 500 deer-train collisions in Scotland between 2008-14, but these records are unmapped and there is no data on the costs involved in deer-train collisions (Langbein Wildlife Associates, Phase I Preliminary desktop review to assess the scale and distribution of past deer-vehicle collisions and identify priority areas for field survey, A9 Dualling Programme, Central Section Glen Garry to Dalraddy, December 2015).

² For example, the use of s.10 powers at Machrihanish, as mentioned later in Section 23 Emergency Control Measures.

³ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH.

⁴ Staines, B. (2000). Wild Deer issues concerned with deer welfare and public safety. Deer Commission for Scotland.

⁵ Langbein, J. (2017). Deer-vehicle collisions in Scotland: data collection and collation to end of 2015. SNH Commissioned Report No. 950.

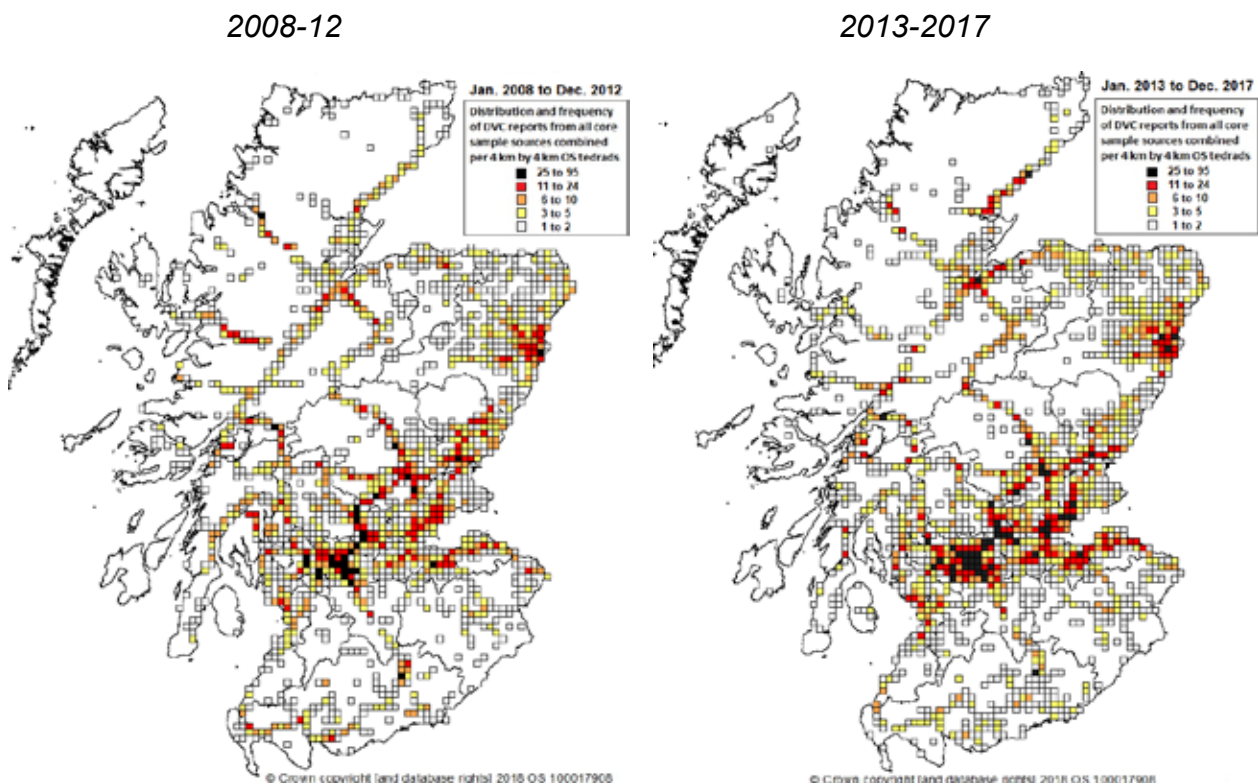
⁶ Langbein, J. (2019). Deer-Vehicle Collision (DVC) Data Collection and Analysis to end 2018. Scottish Natural Heritage Research Report.

Figure 33 Number of DVCs recorded in the core data sources (2008-2018)

Year	TROCs	Police	FLS	SSPCA	Others	Total
2008	480	88	62	319	186	1,135
2009	652	75	101	291	425	1,544
2010	717	64	68	349	317	1,515
2011	593	72	104	419	23	1,211
2012	745	74	84	666	25	1,594
<i>Mean 2008-2012</i>	<i>637</i>	<i>75</i>	<i>84</i>	<i>409</i>	<i>195</i>	<i>1,400</i>
2013	638	81	73	698	94	1,584
2014	674	47	76	475	65	1,337
2015	660	30	62	883	63	1,698
2016	672	24	36	1,001	64	1,797
2017	620	30	48	1,255	53	2,006
<i>Mean 2013-2017</i>	<i>653</i>	<i>42</i>	<i>59</i>	<i>862</i>	<i>68</i>	<i>1,684</i>
2018	530	TBC	56	1,102	68	1,756
Total	6,981	585	770	7,458	1,383	17,177

Source: Langbein (2019)

Figure 34 Distribution and frequency of DVCs per 4km by 4km square from all core data sources



Source: Langbein (2019)

- 6 These records are only a sample of the DVCs in Scotland. However, consistency in data collection means the records can provide indicators of changes in frequency and distribution. This helps identify areas with high frequencies of DVCs or where incidences are increasing. The monitoring focuses on the main strategic roads in Scotland, where traffic is concentrated. Trunk roads (motorways and major strategic A-roads), for example, account for 6% of the road network and yet carry 39% of all traffic and 63% of HGVs.⁷ These trunk roads, combined with non-trunk A-roads, account for around 75% of the DVC records, while representing around 20% of the road network.⁸
- 7 The patterns of DVCs recorded across the road network were similar in the periods 2008-12 and 2013-17, but with a 20% increase in the number of reported DVCs in the second period. There are not many species-specific records. Those that do exist show that red deer are regularly involved in a significant proportion of reported DVCs in five Local Authority areas, particularly Highland and Argyll and Bute. Sika are reported in a small proportion of DVCs in those Local Authority areas, while records of fallow mostly relate to Dumfries and Galloway and Perth and Kinross. For the majority of other Local Authority areas, roe deer are the only species recorded as involved in DVCs.
- 8 The approach that has been used by the project to monitor DVCs was not intended to provide estimates for the total number of DVCs in Scotland each year, and there are many variables to consider when trying to extrapolate from the current data to make national estimates. These include, for example, the lack of clear information on the proportion of all DVCs on the lengths covered by TROCs that are recorded by the companies.⁹ As a result of such factors, a national estimate for DVCs in Scotland in 2017 was given as being between the broad margins of 4,000-12,000 per year.¹⁰
- 9 Estimates at a UK level have suggested that there are more than 450 DVCs a year involving human injury, with 10-20 fatalities.¹¹ While 70 of those DVCs were estimated to be in Scotland, it is considered that the actual number of DVCs in Scotland involving human injury may exceed 120 per year.¹² This equates to 1% or more of the estimated number of DVCs. A review of the available police Personal Injury Accident (PIA) records in Scotland in which deer have been implicated, suggests that nearly 60% of the cases involved a driver swerving and hitting another car or other object, rather than a direct collision with a deer.¹³
- 10 In the past, there appear to have been difficulties obtaining PIA records from all the police forces across Scotland and it is anticipated that this situation might improve now there is a single force, Police Scotland. However, a limitation to the value of the PIA records in this context, is that the Department of Transport form used by Police Scotland (the ST19 form) does not have a separate category for deer. Attempts to change this since the time of the DCS have been unsuccessful.¹⁴ The Group considers that Transport Scotland and SNH should be continuing to push for this change on ST19 forms used in Scotland, and that the Scottish Government should directly support that.

⁷ Transport Scotland, Scottish Transport Statistics.

⁸ Langbein, J. and Putman, R. (2006). National Deer-Vehicle Collisions Project: Scotland 2003-2005. Final report to Scottish Executive. The Deer Initiative, Wrexham.

⁹ Langbein (2017) *Op cit.*

¹⁰ Langbein (2017) *Op cit.*

¹¹ Langbein (2017) *Op cit.*

¹² Langbein (2017) *Op cit.*

¹³ Langbein (2017) *Op cit.*

¹⁴ For example, see DCS Annual Report, 2000/01.

- 11 **The Working Group recommends that the Scottish Government should be working to ensure that the UK Department of Transport form used by Police Scotland to record Personal Injury Accidents (ST19), is modified for use in Scotland to include a separate category for deer.**
- 12 A DVC where nobody is injured can also be a fairly traumatic experience for those involved. There have been indications previously that the risk of being involved in a DVC could be twice as high per driven mile in Scotland than in England and Wales.¹⁵ The position may become clearer as SNH has recently commissioned research using the existing DVC records to assess the risk of a DVC per road length.¹⁶
- 13 SNH is also continuing the DVC monitoring project, with data from the 2016-18 phase indicating that the number of DVCs in Scotland is continuing to increase.¹⁷ This has led to a revised national estimate of “8,000 up to 14,000” per year in Scotland.¹⁸ The Group supports the monitoring project continuing to develop through further phases. The project is jointly funded by SNH and Transport Scotland. The Group did not examine whether the balance between SNH and Transport Scotland in funding this project and some other research related to DVCs is appropriate, given Transport Scotland’s more direct responsibilities for road safety.
- 14 The Group considers that there is a clear logic in the DVC monitoring project being focused on the motorway and trunk road network, as it carries a disproportionate amount of Scotland’s traffic. However, that means 75% of the DVC records come from 20% of the road network and there is a lack of systematic data on the frequency and distribution of DVCs over the rest of the road network under Local Authority management.
- 15 The Group recognises that SNH is engaging Local Authorities on this topic, as part of assisting Local Authorities to produce Deer Management Plans for their areas. However, the Group considers that more progress is needed on identifying DVC ‘hotspots’ on roads managed by Local Authorities and then considering the most appropriate mitigating measures for those road lengths.
- 16 The broad range quoted in paragraph 13 for the possible total number of DVCs in Scotland each year reflects, as discussed above, that the DVC monitoring project was never intended to be able to give national estimates and is unsuited to doing so. The Group recognises that trying to obtain an overall total of the number of actual DVCs is unrealistic. However, the Group considers that having a clearer estimate would be helpful in ensuring there is an appropriate allocation of resources to reduce the frequency of DVCs.
- 17 A proposal has been made that a clearer national estimate could potentially be obtained through a one-off independent public questionnaire, with the results combined with the existing DVC data to produce a better estimate of the true total.¹⁹ The Group is not qualified to judge the merits of this proposal and how it might be carried out, but the Group considers that it should be actively considered.

¹⁵ Langbein, J. (2008). DVCs in peri-urban areas: a risky life for deer. Presentation at the British Deer Society conference, London.

¹⁶ SNH Information Response 10.

¹⁷ Langbein (2017) *Op cit.*

¹⁸ Langbein, J. (2018). Deer-vehicle collisions in Scotland: National data overview, regional hotspots, trends, mitigation. Presentation to Lowland Deer Network, June 2018.

¹⁹ Langbein (2017) *Op cit.*

15.2 Costs of DVCs

- 18 Thousands of people in Scotland are involved in DVCs in each year. This represents the most direct and common adverse impact of wild deer on people. DVCs also appear to be the largest economic cost of wild deer compared to other forms of damage. A study in 2012 estimated that DVCs in Scotland cost £9.4 million and, in 2016, SNH revised that estimate to £13.8 million.²⁰ The Group considers that improved information would be likely to show that the actual costs are even higher.
- 19 There are a range of direct and indirect costs involved in DVCs. The direct costs include the human injuries and any fatalities. The costs of these are conventionally calculated using the Department of Transport's figures for the value of preventing accidents.²¹ In 2012, these figures gave average values for all types of roads of £1.92 million per fatality, £219,043 per serious injury and £23,336 per minor injury.
- 20 The figures for the number of accidents involving fatalities or injuries each year that are central to calculating these values, are based on the information in the ST19 forms completed by the police. The Department recognises the number of cases involving injuries is an underestimate as the police are not always involved in such incidences.²² However, the particular significance of the values is that they can form the basis for Transport Scotland justifying expenditure on mitigating measures along stretches of road to reduce DVCs.
- 21 Another direct cost of DVCs is damage to vehicles. The AA estimated in 2009 that insurance claims in the UK for DVCs could amount to between £59 million and £103 million a year.²³ While no separate figures are available for Scotland, around 20% of DVCs are estimated to be in Scotland and the insurance costs will run to millions of pounds. In addition, not all the DVCs involving vehicle damage will result in an insurance claim.²⁴ Other direct costs of DVCs include the time of those involved in dealing with DVCs including: injured deer; the costs of collecting and disposing of carcasses; DVC research and monitoring; and carrying out mitigation measures.
- 22 DVCs can also include indirect costs for people as a consequence of being directly involved in one, as well as for other people if a DVC results in a temporary road closure. There are well established methods for quantifying the value of the factors such as time lost and increased vehicle operating costs because of road delays. These were used in a case study in 2009 based on a scenario where a DVC caused a four hour road closure on a main Scottish route. The study concluded that the DVC would have resulted in quantifiable indirect costs of at least £75,000.²⁵
- 23 The annual cost of DVCs in Scotland of £13.8 million estimated by SNH is a substantial sum and the Group considers that the actual costs are most likely to be even higher. The Group also considers that, while there has been increasing attention paid to DVCs over recent years, it is an issue which has yet to receive the level of attention that it warrants.

²⁰ Putman, R. (2012). Scoping the economic benefits and costs of wild deer and their management in Scotland, SNH Commissioned Report No. 526; and SNH (2016) *Op cit*.

²¹ Department of Transport (2012). A valuation of road accidents and casualties in Great Britain in 2012.

²² Department of Transport (2012) *Op cit*.

²³ The AA (2009). 'Deer Collision Claims: Autumn rut costs drivers deer', AA website, 30 September.

²⁴ Langbein (2017) *Op cit*.

²⁵ JMP Consultants Ltd (2009). The Indirect Costs of Deer Vehicle Collisions. Report to SNH, 31 March.

- 24 **The Working Group recommends that the Scottish Government should ensure that a more appropriate level of attention and resources is applied to addressing the continuing rise in road traffic accidents in Scotland involving wild deer.**

15.3 DVC Mitigation Measures

- 25 The main statutory responsibilities for trying to reduce DVCs to improve public safety are held by SNH, with its responsibilities for the management of deer, and by Transport Scotland and Local Authorities, with their responsibilities for the management of roads. SNH's involvement includes its scope to carry out research and provide advice under s.3 of the Deer (Scotland) Act 1996, as well as to use its regulatory powers in the Act to control deer numbers.
- 26 SNH, like the DCS before it, has played an active part in raising awareness of DVCs as an issue. This includes advice to TROCs on the annual Deer Management Plans (DMPs) that they are now required to produce under their operating contracts.²⁶ This process is still in its early stages, but it is hoped that these will result in improved data collection by the companies and lead to a greater focus on identifying 'hotspots' and applying appropriate mitigating measures.
- 27 SNH also engages Local Authorities over DVCs, both in advising on the DMPs that the Authorities are now committed to producing and through local Community Planning Partnerships. SNH also raises the issue with land managers, for example through the DMPs that are part of the current DMG assessment process.²⁷ More generally, the Code of Practice on Deer Management encourages land managers to recognise road safety as a public interest when planning deer management and to "*contribute to co-ordinated action to reduce road safety risks*".²⁸
- 28 As part of raising the awareness of drivers to the risk of DVCs, SNH and Transport Scotland also run two campaigns a year using the Variable Message Signs on the trunk road network.²⁹ A campaign in the autumn starting on 30th October targets upland red deer areas to warn of an increased risk of red deer on roads as a result of seasonal movements associated with the rut. A spring campaign in late May/early June targets lowland roe deer areas to warn of an increased risk of deer on the road as a result of the dispersal of juvenile roe deer.
- 29 There has long been a general and understandable acceptance that the direct application of mitigation measures should be focused on the 'hotspots' where DVCs are most frequent.³⁰ Prior to SNH becoming responsible for the deer legislation, the DCS had used its s.10 powers to assist reductions in deer numbers in a couple of priority locations for road safety.

²⁶ In accordance with Schedule 7 (Part 4) of the annual landscape management report required as part of the fourth Generation Team Contract for the management and maintenance of the Scottish Trunk Road Network.

²⁷ See Section 26.

²⁸ SNH (2001). Code of Practice on Deer Management, p.14.

²⁹ SNH Information Response 10.

³⁰ White, P.C.L., Smart, J.C.R., Böhm, M., Langbein, J. and Ward, A.I. (2004). Economic impacts of wild deer in the East of England. Report for the Forestry Commission and English Nature.

- 30 The DCS also initiated a project in 2009/10 with Transport Scotland to investigate the effectiveness of mitigating measures at priority sites along three roads (A835 Garve, A87 Lochshiel, A82 Glencoe).³¹ For each site, the DCS appointed a Panel under s.4 of the 1996 Act to advise on the measures to be undertaken. These included the use of vehicle activated warning signs, some vegetation clearance along the roadside and some culling. The results included a significant reduction in the number of carcasses on the A82 and A87, but not the A835. There was, however, a general reduction in drivers' speeds and the number of DVCs.
- 31 The DCS project illustrated some of the range of factors that can influence the frequency of DVCs on particular stretches of road, including local deer densities, verge management, the adjoining vegetation, lines of sight, driver awareness and vehicle speed. The main measures to apply in any situation will depend on the particular context.
- 32 On motorways and high-speed trunk roads, deer fencing along the highway remains the most effective measure against DVCs. In upland red deer areas in particular there may also still be a need to allow lengths where the deer can cross as part of their seasonal movement. The involvement of SNH in providing advice as part of large-scale road schemes, such as the M80 upgrade and dualling of the A9, allows such factors to be considered at the planning stage, including the use of underpasses for deer movement and other wildlife.
- 33 There is extensive experience in Europe in using under- and over-passes and other measures to reduce the risks of collisions with deer and wild boar, as well as bears in some areas and elk in Scandinavia. The need for research in this country "*to test different mitigation options in order to keep abreast of technological advances and successful mitigation systems being used in Europe*" is recognised by SNH and Transport Scotland.³²
- 34 Research has previously indicated that some types of measures are not effective at reducing DVCs, such as roadside reflectors to reflect headlights along the verge at night and high frequency whistles attached to vehicles. Drivers also get used to static deer warning signs and ignore them, while clearing woodland or scrub back from the verge to improve lines of sight needs to avoid creating a grass strip that attracts deer to feed.
- 35 A current research proposal being considered by Transport Scotland and SNH involves testing two types of mitigation measures for the trunk road network in Scotland.³³ One test involves roadside devices which emit strobe light and variable acoustic signals into the verge when triggered by approaching vehicles. The other test involves vehicle activated signs that display vehicle speed and a deer warning, with existing evidence indicating that reducing vehicle speed can be an important factor. Both tests were to be carried out at a number of sites with high frequencies of DVCs.

³¹ Transport Scotland/Scotland Transerv (2010). North West Area A82, A87, A835 Vehicle Activated Deer Warning Signs, Report 07/NW/0805/046.

³² SNH Information Response 10.

³³ SNH Information Response 10.

- 36 The Group considers that research on different types of mitigation measures is an important contribution to trying to reduce DVCs. The Group also considers that, as part of that, more attention should be paid to local deer densities in the areas around 'hotspots'. It has long been recognised that there is a relationship between the frequency of DVCs and deer densities, and that reducing densities could reduce DVCs.³⁴
- 37 There appear to have been surprisingly few studies of the influence of reducing deer densities. Those that exist indicate that, as would be expected, there is not a linear relationship between reduced deer densities and reducing DVCs due to the types of other variables mentioned above relating to the nature of the particular stretch of road involved. However, DVCs are positively correlated with deer densities and the Group considers that local deer densities are a very important factor to be taken into account.³⁵
- 38 There is no evidence that the presence of more deer in an area is likely to reduce DVCs and, even if reducing densities in some areas might not result in a demonstrably direct reduction in DVCs, controlling adjacent deer densities should be a basic component of mitigating measures to reduce DVCs in recognised 'hotspots'.
- 39 In most parts of Scotland, roe deer are either the only deer species causing DVCs or the main species. The Group considers that particular attention should be focused on the densities of roe deer in wooded areas along roads with frequent DVCs in more lowland environments, including peri-urban areas.
- 40 The clear indications are that woodlands often have high densities of roe deer due to under-culling and that one of the consequences of those densities is higher levels of dispersal, leading to increased risk of DVCs in places. The Group considers that land managers are often not aware of the cull levels required to contain the size of a roe deer population in lowland environments, where a roe doe population may have an average 100% calving rate.
- 41 The Group considers that SNH should be more active in using s.40 cull returns to establish the current culling patterns in a corridor down either side of lengths of road that have been identified as 'hotspots' for DVCs involving roe deer. SNH can also assess the relative densities of the roe deer from their impacts on the vegetation in the woodland, while monitoring DVCs with the TROC or Local Authority responsible for the road. SNH can then promote cull levels that ensure the densities of deer are both within the capacity of the habitats and produce a reduction in DVCs.
- 42 The Group considers that the fact that there tends not to be linear relationship between deer densities and DVCs due to the other factors, can result in not enough attention being paid to local deer densities. The Group's understanding is that there are no roads in Scotland where SNH is taking a systematic approach to the control of deer densities along lengths that have frequent DVCs.³⁶

³⁴ For example, DCS Annual Report, 2003/04.

³⁵ SNH (2016) *Op cit*.

³⁶ DWG meeting with SNH, 19 June 2019.

- 43 The Group considers that, while a more focused approach to local deer densities should be used along some lengths of trunk roads,³⁷ the management of local deer densities is likely to be a key approach along more minor roads. As things stand, there is unlikely to be much coverage of these roads by Variable Message Signs or other relatively expensive devices, while installing and maintaining deer fences is also expensive. Managing local deer densities therefore becomes relatively more important as a potential mitigating measure that can be carried out locally to try to limit the frequency of DVCs.
- 44 **The Working Group recommends that Scottish Natural Heritage should be paying much more attention to the control of local deer densities alongside lengths of public roads with frequent road traffic accidents involving wild deer.**
- 45 More generally, the Group considers that improved information about DVCs and the need to try to reduce DVCs for public safety and wider economic reasons, should become an increasingly important influence on local deer management in many areas.

³⁷ For example, along parts of the A9 in northern Perth and Kinross where high frequencies of DVCs occur.

Section 16 Natural Heritage

- 1 This Section considers the damage that wild deer can cause to Scotland's natural heritage. Wild red and roe deer are, as native species, a natural part of that natural heritage. Sika and fallow deer are non-native species that have become naturalised as wild deer in Scotland. The particular issues relating to non-native deer species are considered in the next Section of the Report.
- 2 Prior to Scottish Natural Heritage (SNH) being established in 1991, references were generally to Scotland's natural environment rather than its natural heritage. The two terms can be regarded as essentially synonymous. However, human influence on Scotland's land during history means that there is little left now that might actually be considered a 'natural' environment, while the use of natural heritage conveys that the focus is on the environment that current generations have inherited from the past.
- 3 In the Act that established SNH and in Scotland's current deer legislation, the definition of natural heritage is that "natural heritage' includes flora and fauna, geological and physiographical features, and the natural beauty and amenity of the countryside".¹ This list of components can seem a limited definition. However, as the work of SNH reflects, the interpretation of the definition includes the physical and biological processes associated with the relationships between these components in functioning ecosystems.

16.1 1959-1996

- 4 The Nature Conservancy (NC) was SNH's original predecessor as the government body responsible for nature conservation in Scotland. The NC was set up in 1949 with Britain-wide responsibility for implementing parts of the National Parks and Access to the Countryside Act 1949.² This included establishing the new statutory system of sites designated for their nature conservation interest, Sites of Special Scientific Interest (SSSIs), as well as the power to establish National Nature Reserves (NNRs).
- 5 The NC was concerned from the beginning of its work in Scotland, with the need to reduce the damage being caused by open hill red deer to the natural environment in the Highlands. The key to this was seen as having improved information, so that the management of the deer populations could be based on scientific knowledge. As was commented 50 years ago, the sporting estates in the Highlands had since Victorian times developed a strong hunting code "but failed to develop a system of management based on the ecology (population dynamics, habitat relationships) of the quarry".³
- 6 In the early 1950s, the NC commissioned the pioneering ecologist Fraser Darling to carry out a census of the open hill red deer to provide basic information on the numbers of deer and sex ratios of populations. The approach of open hill counting used then was subsequently adopted by the Red Deer Commission (RDC) when it was established in 1959, and SNH continues to undertake an annual open hill counting programme.

¹ Deer (Scotland) Act 1996 s.45(1).

² The Nature Conservancy was established by Royal Charter to act as a government department.

³ McVean, D. and Lockie, J. (1969). *Ecology and Land Use in Upland Scotland*. Edinburgh University Press, p.67.

- 7 In 1957, the NC bought the island of Rum to manage it as a NNR for longer term ecological studies. By 1958, scientific research had started on the population of red deer on the island and that research is still ongoing at the current time. As a result, the research into the red deer on Rum “*has become one of the longest and most complete scientific studies of a wild population of vertebrates in the world*”.⁴ The research on Rum, together with the associated research that was done in Glen Feshie in the Eastern Highlands in the early decades, has been the foundation of current understanding of the biology, population dynamics and ecology of open hill red deer in the Highlands.
- 8 When the Deer (Scotland) Act 1959 established the RDC with the 12 Commissioners appointed from the nominees of different sectoral interests, the NC and Natural Environmental Research Council (NERC) were each responsible for nominating one Commissioner. This continued until the Deer (Scotland) Act 1996, during which time the legislation contained no powers to protect the natural environment from damage by deer. The role of the NC and NERC nominees was, however, to help make sure that the RDC’s work was based on a scientific approach.
- 9 The NC had both advisory and research staff. However, these functions were split in 1973, when the advisory side became the Nature Conservancy Council (NCC) and the research side became part of the Institute of Terrestrial Ecology (ITE).⁵ At that juncture, and drawing on the NC’s research into red deer over the previous 20 years, a major review was published of research relevant to the management of red deer in Scotland.⁶
- 10 By the mid 1970s, concern over the damage being caused to the environment in the Highlands by red deer was an increasingly prominent issue. There was particular concern over high densities of red deer preventing the natural regeneration of Scotland’s surviving native Caledonia Pinewoods and other remnant native woods.⁷ By the 1990s, after over three decades in which the population of red deer in the Highlands had continued to increase, the concerns over their impact on the environment had increased further.
- 11 SNH replaced the NCC in Scotland as the government’s nature conservation body in 1991.⁸ In 1994, SNH published a major report on ‘Red Deer and the Natural Heritage’. The report reviewed the scientific knowledge and other information available on red deer in Scotland and concluded that “*There is an urgent need for a fresh appraisal of the way in which we manage our red deer to ensure that both deer and those elements of the natural heritage on which they depend are sustained in a balanced and healthy state*”.⁹ The report highlighted, amongst other points, the need for the restoration of native woodlands through lower deer densities.

⁴ Isle of Rum Red Deer Project website, 2019. A summary of the Isle of Rum research can be found in: Pemberton, J.M. and Kruuk, L.E.B. (2015), Red deer research on the Isle of Rum NNR: management implications. SNH/University of Edinburgh.

⁵ Nature Conservancy Council Act 1973.

⁶ Mitchell, B., Staines, B. and Welch, D. (1997). *Ecology of Red Deer - A research review relevant to their management in Scotland*. Institute of Terrestrial Ecology, Cambridge.

⁷ For example, Bunce, R. and Jeffers, J. (1977), *Native Pinewoods of Scotland*. Institute of Terrestrial Ecology, Cambridge.

⁸ Natural Heritage (Scotland) Act 1991. SNH was formed from the merger of NCC Scotland and the Countryside Commission for Scotland.

⁹ SNH (1994). Red deer and the natural heritage, p.1.

- 12 The wider environmental concerns by the 1990s were also reflected by the European Council's Habitats Directive in 1992. This included the designation of sites as Special Areas of Conservation (SACs) because of their importance for nature conservation under the Directive's criteria.¹⁰ The European Council's Birds Directive had previously introduced Special Protection Areas (SPAs).¹¹ Following the Habitat Directive, SACs and SPAs were identified as Natura 2000 sites.
- 13 Natura sites were given strict protection under European Union law, and those requirements were transposed into Scots law by the Conservation (Natural Habitats Etc.) Regulations 1994. This included the requirement to maintain the sites in a favourable condition. While SACs and SPAs were additional to the existing system of SSSIs, most are co-designated as SSSIs.¹² The size of areas covered by these designations tend to be more extensive in the Highlands and Islands than in the rest of Scotland.
- 14 The requirement to be able to protect designated nature conservation sites from damage by deer and the lack of progress since 1959 in reducing the damage by red deer to the natural heritage more generally, provided impetus to amend the Deer (Scotland) Act 1959 to include powers to be able to protect the natural heritage from damage by deer.

16.2 1996-Present

16.2.1 Deer (Scotland) Act 1996

- 15 One of the basic tenets of wildlife and game management which had been recognised throughout the period of the 1959 Act, is that the species involved should be managed within the capacity of its range to sustain its population without damage to that habitat.¹³
- 16 The fact that powers to protect the natural heritage from damage by deer were only added to Scotland's deer legislation less than 25 years ago, can be considered a reflection of the influences constraining the regulation of deer management in Scotland. These constraints included the difficulty of securing time at Westminster for Scottish deer legislation and the influence of the House of Lords on any legislation brought forward.
- 17 During the passage through Westminster of the Deer (Amendment) (Scotland) Bill that led to the Deer (Scotland) Act 1996, the House of Lords had a particular influence on amending the powers to be introduced to protect the natural heritage. The Government had to bring forward amendments to its original proposals to satisfy the concerns of members of the House of Lords with deer stalking interests in Scotland.¹⁴
- 18 The result of the amendments in the Lords was that the powers in the 1996 Act to protect the natural heritage were particularly constrained compared to other interests. This remains the case and is considered in detail later in Sections 23 and 24 of this Report, dealing with ss.10 and 11 (Emergency Measures) and ss.7 and 8 (Control Agreements and Control Schemes) of the 1996 Act. The Group has also recommended in Section 6 that the scope to protect natural heritage interests by night shooting should be added to s.18(2) and also added to the rights of occupiers under s.26.

¹⁰ Habitats Directive (92/43/EEC).

¹¹ Birds Directive (79/409/EEC)

¹² 'Natura Sites'. SNH website.

¹³ For example, McVean and Lockie (1969) *Op cit*.

¹⁴ See Section 1.

19 The Group considers that revising the powers in the 1996 Act to protect the natural heritage is an essential requirement to enable the effective protection of natural heritage interests in Scotland from damage by deer. While the debate has traditionally been dominated by concern about the impacts of open hill red deer in the Highlands, all four species of wild deer have the ability to cause damage to the natural heritage across Scotland.

16.2.2 Designated Sites

- 20 The 1996 Act replaced the RDC with the Deer Commission for Scotland (DCS). In 2002/03, the DCS adopted a priority site policy to focus its limited resources on tackling the most pressing cases of damage caused by deer.¹⁵ As described earlier in Section 13, that policy soon became focused on designated sites where deer were causing damage.
- 21 SNH started monitoring the condition of these designated sites in 1999 using its system of Site Condition Monitoring. The DCS's focus on these sites reflected the legal requirement on the Scottish Government and its agencies to protect them and ensure their special features are managed in a favourable condition.
- 22 The shift in the DCS's focus to designated sites was reflected in its use of voluntary control agreements under s.7 of the 1996 Act. As described later in Section 24, while the DCS's use of these agreements had initially involved the protection of agricultural and forestry interests, this changed so that the use of the agreements was very largely to try to protect natural heritage interests. Since 2010, when SNH replaced the DCS in the 1996 Act, SNH has continued the focus on designated sites.
- 23 Under its natural heritage responsibilities, SNH has continued its Site Condition Monitoring of designated sites from 1999 to the present, although SNH is currently considering whether the monitoring could be carried out by a more economic method.¹⁶ SNH provided an analysis of the results of its Site Condition Monitoring and the influence of deer in its 2016 report to the Scottish Government on deer management.¹⁷
- 24 The designated sites, or protected areas as they are also known, include SSSIs, SACs, SPAs and sites designated under the Ramsar Convention on Wetlands.¹⁸ On 1,866 protected areas in Scotland, SNH has monitored 5,355 natural features of which 1,606 are potentially affected by herbivores.¹⁹ The nature of these 1,606 features is mainly upland (46%) and woodland (30%), with the proportion of them in favourable condition or unfavourable recovering condition is, at 75%, lower than for the full number of features at 81%.²⁰ SNH concluded that "*Herbivores (deer, sheep, rabbits and hares) continue to be a major driver of unfavourable condition of natural features*".²¹

¹⁵ DCS Annual Report, 2002/03.

¹⁶ SNH correspondence with DWG, 25 April 2019.

¹⁷ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

¹⁸ According to the SNH website, there are: 1,423 SSSIs, 241 SACs, 153 SPAs and 51 Ramsar sites.

¹⁹ SNH (2016) *Op cit*.

²⁰ SNH (2016) *Op cit*, pp. 32-33.

²¹ SNH (2016) *Op cit*, p.31.

- 25 SNH's analysis also showed that the proportion of the 1,606 features in unfavourable condition was higher in areas covered by the Deer Management Groups in the Highlands and by Lowland Deer Groups, with the proportion in favourable condition 10-12% lower than the rest of Scotland. The analysis also shows that the proportion of features in favourable condition in protected areas covered by s.7 Control Agreements under the 1996 Act, was 7% lower than areas not covered by s.7 Agreements.
- 26 SNH's explanation of the worse position in areas covered by s.7 Control Agreements, was that it "*is likely, at least in part, to reflect that Section 7 Agreements are entered into in areas where there is a higher level of concern over features in unfavourable condition*".²² However, the Group notes that at the time of SNH's report, SNH had not established any new s.7 Agreement areas since it took over from the DCS six years before. The relatively limited success of s.7 Agreements in achieving the intended results and their limitations as an effective measure are discussed in Section 24 of this Report.
- 27 Over 20 years after powers to protect the natural heritage were added to Scotland's deer legislation and over 15 years since the DCS adopted its priority site policy, deer are still causing significant levels of damage to protected areas designated for their natural heritage value, despite the degree of focus on these areas by the DCS and then SNH.
- 28 In considering the damage caused by deer to Scotland's natural heritage, these protected areas are sites where the natural heritage features are of national and international importance and where there is a legal requirement on SNH and the Scottish Government to ensure they are in favourable condition. The responses of SNH and the Scottish Government to the current situation are discussed in Part 5 of this Report.

16.2.3 National Parks

- 29 Scotland's two National Parks were established because of the special environmental qualities of the areas they cover. The legislation to enable national parks in Scotland, the National Parks (Scotland) Act 2000, was amongst the first Acts of the Scottish Parliament. The Loch Lomond and the Trossachs National Park (LLTNP) was then established in 2002 and the Cairngorms National Park (CNP) in 2003. Each Park has a Park Authority (the LLTNPA and CNPA respectively) managed by a Park Board.
- 30 The LLTNP covers 1,865 square kilometres, while the CNP is more than twice that size at 4,528 square kilometres and covers around 6% of Scotland's land area. Both Parks include designated nature conservation sites, particularly the CNP which has extensive designated areas covering a range of different types of interests. There is a clear expectation that standards of land management should be higher in National Parks than in the wider countryside because of their special status.²³
- 31 Both Park Authorities recognise that adequate deer control is integral to achieving the outcomes in their current National Park Partnership Plans.²⁴ In the Park areas, SNH continues to be the public body responsible for deer management and the Park Authorities have no direct responsibilities or role in deer management. However, the Authorities aim to improve deer management by providing extra support to the voluntary Deer Management Groups (DMGs) of land owners and occupiers within the National Parks.²⁵

²² SNH (2016) *Op cit*, p.37.

²³ DWG meeting with CNPA 6 June 2019.

²⁴ LLTNP Partnership Plan 2018-23; CNP Partnership Plan 2017-22.

²⁵ DMGs are considered in Section 26.

- 32 The Park Authorities' support to DMGs is part of the wider support services to land managers provided by the Authorities and which, under European state aid regulations, can include education, training and consultancy to provide technical support to land managers to deliver the statutory aims of the National Parks.²⁶ The Authorities' support for deer management may include, for example, advice on habitat impact assessments and the production of Deer Management Plans.
- 33 In 2018, the CNPA published a Forest Strategy for the CNP to cover the next two decades, while the LLTNPA has recently consulted on a Trees and Woodland Strategy for the LLTNP.²⁷ Both documents set out the need to improve the environmental condition of existing woodlands and expand the extent of woodland in the Parks.²⁸ Both documents also highlight the need for reduced deer densities to achieve the Park's woodland aims and, as part of that, a reduction in the need for deer fencing because of its environmental and financial costs.
- 34 The Cairngorms area covered by the CNP has long been a prominent part of the history of native woodlands and deer in Scotland. The Cairngorms were, for example, the core surviving area for both native woodlands and red and roe deer by the beginning of the 1700s. The area was subsequently influential during the 1800s in the development of 'deer forests' by Highland sporting estates with, for example, Prince Albert's purchase of Balmoral Estate for Queen Victoria in 1852 and the painting at that time of Sir Edwin Landseer's *Monarch of the Glen* with its association with Glen Feshie.
- 35 By the 1970s, the lack of natural regeneration since the 19th century in many of the surviving Caledonia Pinewoods in the Cairngorms due to high numbers of red deer, had become a prominent nature conservation issue.²⁹ The lack of progress in reducing deer numbers and regenerating the pinewoods was reflected in the purchase of estates by environmental charities, with the RSPB buying Abernethy Estate in 1988 and the National Trust for Scotland buying Mar Lodge Estate in 1995.
- 36 By the 1990s, the scale and significance of the wider extent of the native woodlands on Deeside and in Strathspey over and above the Caledonian Pinewoods, had been recognised.³⁰ The extensive, predominantly native forests in those areas were then an important factor in the work of the Government appointed Cairngorms Working Group and Cairngorms Partnership that preceded the establishment of the CNP and CNPA. This included the Cairngorms Forest and Woodland Framework published by the Cairngorms Partnership in 1999 and a precursor of the CNPA's current Forest Strategy.
- 37 The CNP area currently has 16.4% woodland cover, compared to 18% for Scotland as a whole.³¹ However, the area has the highest proportion of native woodlands of any equivalent sized area in Scotland, with over 75% of the tree cover consisting of Scots pine and birch.³² The percentages of woodland cover and proportions of native species are also both significantly higher in the main Deeside and Strathspey forest areas.³³

²⁶ European Commission Regulation 702/2014.

²⁷ Cairngorms National Park Forest Strategy, 2018; LLTNP Trees and Woodland Strategy consultation 2019.

²⁸ The CNPA aims for 5,000 ha of new woodland by 2023, while the LLTNPA aims for 2,000 ha of new woodland by 2023.

²⁹ Bunce and Jeffers (1997) *Op cit.*

³⁰ For example, Callander, R. and MacKenzie, N. (1994), *The Native Woodlands of Highland Deeside*, SNH; and Dunlop, B. (1994), *The Native Woodlands of Strathspey*, SNH.

³¹ Cairngorms National Park Forest Strategy, 2018.

³² Cairngorms National Park Forest Strategy, 2018.

³³ Bunce and Jeffers (1997) *Op cit.*

- 38 The CNP area also includes a major demonstration of the native woodland regeneration that can be achieved by reducing the densities of red and roe deer to five or less deer per square kilometre. This approach is being followed by a cluster of properties in Strathspey, involving a mix of private, public and charitable ownership and covering 90,000 hectares or one fifth of the CNP area.³⁴ Four of the land owners, Forestry and Land Scotland, SNH, RSPB and Wildland Ltd, have also formed a Cairngorms Connect project, the aims of which include establishing a native woodland connection with the National Trust for Scotland's native woodland regeneration on its 29,000 hectare Mar Lodge Estate on Deeside.³⁵
- 39 However, elsewhere in the CNP, there are still the highest densities of open hill red deer in Scotland.³⁶ In large parts of the Park, there are densities of 15-20 or more red deer per square kilometre.³⁷ The CNPA states in its Park Plan that "*Where habitat enhancement is restricted by management objectives which seek to maintain higher red deer densities above 10 per km², our aim is for the density to be reduced*".³⁸
- 40 These densities tend to be calculated over large areas, such as a DMG area or SNH open hill counting block, which cover thousands and often tens of thousands of hectares. The deer are not spread evenly over these areas and tend to be concentrated in different parts of their range in summer and winter. Within those parts, the deer are then further concentrated in the more favourable areas, for example, for feeding and shelter. The impact of the deer on the vegetation therefore depends on the numbers of deer occupying a particular place and the amount of time they spend on that ground.
- 41 The current high densities of open hill red deer over large parts of the Park result in damaging impacts on the vegetation in many places, including designated sites and elsewhere.³⁹ The Group considers that the CNPA identifying a 10 red deer per square kilometre threshold is a welcome step. The threshold is qualified by "*where habitat enhancement is restricted*". However, as the CNPA guidance paper that was part of deciding that threshold illustrates, most types of habitats will be restricted by densities of 10 deer per square kilometre or above.⁴⁰
- 42 The Group considers that the CNPA should be setting the 10 red deer per square kilometre threshold across all the open hill red deer range in the National Park, when measured at the scale of DMG areas. The Group considers that the CNPA should also have SNH's support in this aim, recognising the special environmental status of the Park.
- 43 Given that threshold, the Group considers the CNPA should then be prioritising the areas where the deer densities should be lower to improve habitats and their biodiversity. For example, ensuring that "*deer densities are compatible with the need to allow woodland regeneration is a conservation priority*" in the current CNP Forest Strategy.⁴¹ That is generally recognised to require densities of five or less deer per square kilometre.⁴²

³⁴ Hetherington, D. (2018). Conservation of Mountain Woodland in the Cairngorms National Park. *British Wildlife*, 29 (6), pp. 393-400.

³⁵ Hetherington (2018) *Op cit*.

³⁶ DWG correspondence with SNH 29 May 2019.

³⁷ See, for example: CNP Partnership Plan 2017-22, Issue 2 'Guidance on Deer Densities'; Albon, S.D. *et al.* (2017), Estimating national trends and regional differences in red deer density on open-hill ground in Scotland, SNH Commissioned Report No. 981; and Hetherington (2018) *Op cit*.

³⁸ CNP Partnership Plan 2017-22, p.31.

³⁹ A prominent example is the Caenlochan SAC – see Section 24.

⁴⁰ CNP Partnership Plan Issue 2 Guidance on Deer Densities, 2016.

⁴¹ CNP Forest Strategy 2018, p.25.

⁴² For example: SNH (1994) *Op cit*; CNP Partnership Plan 2017-22, Issue 2 'Guidance on Deer Densities'.

- 44 Woodland regeneration requires attention to the densities of roe deer, as well as red. Roe deer numbers generally have increased markedly over recent decades and the CNPA acknowledges in its Park Plan that more attention needs to be paid to their management.⁴³ This is expressed in terms of more cooperation, for example, using dung counting techniques to calculate densities across estate boundaries. However, roe deer can have a particular impact on limiting the natural regeneration of native broadleaved trees. The Group considers that many properties could be taking higher roe deer culls in woodlands to limit both high densities and dispersal to other properties.
- 45 In the Park Plan, after mentioning roe deer, the CNPA states that “*all deer species including red, roe, fallow, sika and reindeer continue to be monitored*”. While the reindeer in the Cairngorms are not wild deer, the mention of fallow and sika deer populations is surprising. The CNP is very unusual in Scotland for an area of its size in still having no established populations of either of these two non-native deer species.⁴⁴
- 46 The Group considers the fact that the wild deer in the CNP are all native red and roe deer to be an important aspect of the area’s natural heritage. The Group notes that the CNPA’s documents do not contain a policy against the establishment of non-native deer populations in the CNP area, although the Group’s understanding from the CNPA is that that is the Authority’s policy.⁴⁵ The Group considers that the CNPA should make this policy explicit in relevant documents, communicate this policy to land managers in the CNP and secure SNH’s support in implementing the policy if the need arises.
- 47 **The Working Group recommends that the Cairngorms National Park Authority and Scottish Natural Heritage should adopt and enforce a clear policy against the establishment of any populations of Scotland’s two non-native deer species, fallow and sika deer, in the Cairngorms National Park.**
- 48 While the CNPA documents neglect non-native deer species, they do set out the public interest benefits that flow from the restoration of native woodlands and other habitats, when the densities of red and roe deer are reduced to appropriate densities. To that extent, the Group endorses the CNPA’s aim “*to continue the current direction of travel in which deer numbers and consequent impacts are reduced, where deer welfare is improved and sport stalking in a high quality environment continues to make a valuable economic contribution to the National Park*”.⁴⁶

⁴³ CNP Partnership Plan 2017-22, p.31.

⁴⁴ DWG meeting with CNPA, 6 June 2019. In addition, a study of red deer in part of the Park that could be affected by sika deer, has also shown no genetic introgression by sika – Smith, S., Senn, H., Pérez-Espona, S., Wyman, M., Heap, E. and Pemberton, J. (2018). Introgression of exotic *Cervus (nippon and canadensis)* into red deer (*Cervus elaphus*) populations in Scotland and the English Lake District. *Ecology and Evolution*, 8(4), pp.2122-2134.

⁴⁵ DWG meeting with CNPA, 6 June 2019.

⁴⁶ CNP Partnership Plan 2017-22, p.30.

- 49 However, the Group is not convinced that the CNPA has been having much effect on improving deer management in the National Park. The cluster of properties on Strathspey and other examples that are reducing deer densities are doing so because of the owners' objectives, while elsewhere red deer densities continue at high levels and there is a lack of attention to roe deer densities. This is despite the fact that, as the CNPA states, "*There has been a longstanding policy ambition in the Cairngorms to manage deer at levels that protect and enhance habitats, from the Cairngorms Working Group (1992) through to current National Park policy*".⁴⁷
- 50 The Group acknowledges that the CNPA's land use advisers are engaged with the DMGs in the Park and that the CNPA has also taken a number of initiatives in relation to deer management, including the former Cairngorms Deer Advisory Group and the Deer Framework for the CNP that it produced.⁴⁸ The Group also recognises that the CNPA has no powers in relation to deer management, has limited resources and needs to maintain a pragmatic relationship with land owners in the Park area.
- 51 However, the Group considers that the CNPA has been giving relatively little attention to deer management, given the key importance of reducing deer densities to many of the CNPA's environmental aims for the Park. The Group considers that the CNPA should have a clearer focus and deliver clearer messages on the topic. The Group also considers that the current climate change context, as discussed later in this Section, adds a further imperative for the CNPA to adopt a more direct approach over deer management and to increase its woodland and montane scrub expansion targets.
- 52 **The Working Group recommends that the Cairngorms National Park Authority and Scottish Natural Heritage should have a much greater focus on the need to improve the management of wild deer in the Cairngorms National Park, to reduce deer densities in many parts of the Park to protect and enhance the Park's biodiversity.**

16.2.4 Wider Environment

- 53 Around 80% of Scotland's land area is neither part of a site designated for natural conservation nor within a National Park. One or more species of wild deer occur throughout most of that environment in mainland Scotland and many of the islands. These deer naturally have an impact on their environment through grazing, browsing, fraying and trampling. At appropriately low densities, deer can make a positive contribution to the natural ecology of the habitat where they occur. However, at higher densities, they can cause damage to the natural heritage of which they are a part.⁴⁹

⁴⁷ CNP Partnership Plan 2017-22, p.30.

⁴⁸ CNPA/Cairngorms Deer Advisory Group (2011). Deer Framework for the Cairngorms National Park.

⁴⁹ See, for example, the collection of articles in the Special Issue of *Forestry*, Volume 74, Issue 3 (2001).

- 54 There has been a wide range of research studies in Scotland over the years that have documented the damage that deer can cause to different types of habitats and species. Many of these are included in a recent review of the studies that there have been done into the impacts of deer on the natural heritage.⁵⁰ These demonstrate how damaging impacts by deer on the ground vegetation can affect the overall ecosystem, for example, by damage to the plant species resulting in a reduction in the insects that use them with a consequential effect on birds.⁵¹
- 55 Many studies have examined the damaging impacts of deer on native woodlands in Scotland, showing how this can result in woods being in poor ecological condition and unable to regenerate naturally. A major insight into the current adverse effects of deer on native woodlands at a national level was provided by the Native Woodland Survey of Scotland (NWSS).⁵² This was carried out between 2006 and 2013 and covered 319,000 hectares of native woodland across Scotland, representing 23% of Scotland's total woodland area and 4% of its land area.
- 56 The results of the NWSS showed that deer were a significant presence in 73% of the native woodland areas, while they may also have occurred in others. This is in comparison to sheep in 15% and rabbits/hares in 3.5% of native woodlands.⁵³ More than a third of native woodlands were in unsatisfactory condition due to high or very high herbivore impacts, with around half of these in the areas covered by upland DMGs and around half in the rest of Scotland.⁵⁴ In addition, "*few native woodlands had sufficient established regeneration to sustain them in the long term*".⁵⁵
- 57 While the damage that deer are causing to native woodlands across Scotland threatens the future of many of them, it is also having a more immediate impact on their biodiversity and habitat value. The clear indication from the densities of deer in other woodlands, is that deer are also having a major impact on the natural heritage in woodlands more generally.
- 58 Grazing by wild deer also has impacts on peatland habitats, where overgrazing and trampling occur at much lower densities of livestock and deer than for other habitats. While low levels of grazing can provide biodiversity benefits by preventing scrub invasion on some shallower peats, high levels of grazing are likely to affect bog species negatively. This is because the associated trampling causes damage by breaking up the moss layer and exposing bare peat.⁵⁶ Scotland's National Peatland Plan recognises the importance of "*achieving appropriate grazing levels by livestock and deer*" to avoid trampling and overgrazing.⁵⁷

⁵⁰ Holland, J., McMorran, R., Morgan-Davies, C., Bryce, R., Glass, J., Pollock, M., McCracken, D., Glass, R., Woolvin, A. and Thomson, S. (2017). Meeting the challenge of wild deer research to support delivery of sustainable deer management in Scotland. Scottish Natural Heritage Commissioned Report No. 963.

⁵¹ Holland *et al.* (2017) *Op cit.*

⁵² Forestry Commission Scotland (2014). Scotland's Native Woodlands: Results from the Native Woodland Survey of Scotland.

⁵³ FCS Information Response to DWG, March 2019.

⁵⁴ SNH (2016) *Op cit.*

⁵⁵ SNH (2016) *Op cit.*, p.41.

⁵⁶ Marsden, K. and Ebmeier, S. (2012). Peatlands and Climate Change. SPICe Briefing 12/28.

⁵⁷ SNH (2015). Scotland's National Peatland Plan: Working for our Future, p. 19.

- 59 Taking account of the points above and the other information available, the Group agrees with SNH's conclusion that the "*evidence demonstrates that deer do have a major impact on the natural heritage of Scotland*" and illustrates that "*there is a need for more action to address the negative impact deer are having within protected areas and the wider environment*".⁵⁸
- 60 This situation is at odds with the Scottish Government's environmental policies, such as the Scottish Biodiversity Strategy.⁵⁹ The position is also at odds with the core principle of healthy ecosystems in the Scottish Government's deer management strategy, Wild Deer: A National Approach (WDNA).⁶⁰ SNH has stated that the high densities of red deer in many parts of the uplands are a barrier to healthy ecosystems. The evidence from the NWWS illustrates how deer densities more generally are a barrier to achieving that aim.
- 61 Ecosystem health is now central to the Scottish Government's land use policies and seen as key to delivering the Government's long term goals.⁶¹ This includes the ecosystem services that functioning ecosystems provide to human well-being. While there can be some variation in how these services are named, they are generally recognised as consisting of four types: regulating services (e.g. carbon capture), supporting services (e.g. genetic biodiversity), provisioning services (e.g. raw materials) and cultural services (e.g. recreation opportunities).⁶²
- 62 Healthy ecosystems with their regulating and supporting services are a key part of the Scottish Government's response to climate change. Functioning native woodland ecosystems exemplify the range of benefits those types of services can provide and the Scottish Government highlights in the WDNA that the damage by deer to native woodlands is impacting on its climate change measures. These woodlands and woodlands more generally capture and store carbon through the trees, other vegetation and the wildlife they support, while they can also provide other environmental benefits such as helping to protect against extreme weather (e.g. reduced flooding risk).
- 63 Improving the condition of existing woodlands and expanding the area of woodlands are both important climate change mitigation measures because of the regulatory and supporting services they provide. The need to reduce deer densities as a requirement of those measures, is not necessarily in competition with the other two types of ecosystem services, provisioning and cultural services.
- 64 In 2016, after reviewing the social and economic benefits of deer, SNH concluded that "*Available information suggests that if deer densities were lower across much of Scotland the benefits from deer could be largely maintained, and many of the costs (such as deer collisions and impacts on forestry productivity) reduced leading to overall enhanced delivery of public benefits*".⁶³

⁵⁸ Written submission from SNH to the Rural Affairs, Climate Change and Environment (RACCE) Committee, 34th Meeting, Session 4, 20 November 2013, p.9.

⁵⁹ The Scottish Biodiversity Strategy includes the original strategy ('Scotland's Biodiversity: It's in Your Hands, 2004) and the '2020 Challenge for Scotland's Biodiversity'.

⁶⁰ SNH (2014). Scotland's Wild Deer: A National Approach (WDNA), Including 2015-2020 Priorities.

⁶¹ SNH (2014) *Op cit*.

⁶² Bonn, A., Allott, T., Hubacek, K. and Stewart, J. (2009). Introduction: Drivers of change in upland environments: concepts, threats and opportunities. In: Bonn, A., Allott, T., Hubacek, K. and Stewart, J. (eds.), *Drivers of Environmental Change in Uplands*. Routledge, London, pp. 1-10.

⁶³ SNH (2016) *Op cit*, p.96.

- 65 Those costs also include the damage currently caused by deer to the natural environment through grazing and browsing. While there was already a need to reduce the levels of damage by deer as part of the Scottish Government's climate change mitigation measures, that need has been given important extra impetus by the First Minister's declaration in April 2019 that there is a climate emergency and by the Scottish Government's subsequent statement on the topic to the Scottish Parliament.⁶⁴ The implications for the management of wild deer of the increasing importance of climate change mitigation measures are discussed further in Part Six.
- 66 In addition to the deer damage by grazing and browsing, another indirect cause of damage to the natural environment is the use of muirburn as part of deer management. Muirburn in Scotland is regulated by the Hill Farming Act 1946 and for some decades there has been a Muirburn Code providing non-statutory guidance on the standards of muirburn expected by the Government in Scotland. The recently revised version of the Code includes for the first time, in contrast to previous versions, references to muirburn for deer with the clear implication that it is a legitimate activity under the Code.⁶⁵
- 67 The Code identifies the possible benefits of burning heather or grass for deer as being to provide "*greater short-term grazing capacity*" and to "*attract deer to specific areas*".⁶⁶ This practice of burning off the existing vegetation to produce a fresh flush of growth is used for open hill red deer in some situations. The fires typically involve significantly larger areas in comparison to muirburn for grouse, where a mosaic of small areas is recommended to support higher densities of grouse. Where the purpose is deer grazing, small areas are liable to be subject to heavy grazing that can damage the re-growth.
- 68 There is no information available on the extent of muirburn for red deer, which tends to occur to the north and west of the main grouse moor management areas in the Eastern and Central Highlands. As muirburn is done for sheep as well as deer, the purpose in some situations may be unclear to an observer. However, the removal of sheep from many of the areas in the Highlands where muirburn for red deer has traditionally occurred, now makes muirburn for deer conspicuous in those areas. The larger fires used for deer management burn hotter than smaller fires for grouse. They also tend to burn longer and with greater severity as they are typically less closely managed than muirburn for grouse.

⁶⁴ First Minister's Climate Emergency Statement 28 April 2019; 'The Global Climate Emergency - Scotland's Response' Statement by Climate Change Secretary Roseanna Cunningham to the Scottish Parliament on 14 May 2019

⁶⁵ SNH (2017). The Muirburn Code: Management of moorland by burning and cutting. SNH/Scottish Government, produced by Scotland's Moorland Forum.

⁶⁶ SNH (2017) *Op cit*, p.18.

- 69 The wide ranging environmental impacts of muirburn have been the subject of many research studies and will likely be considered in the report of the Grouse Moor Management Group.⁶⁷ However, in the context of deer management, the research is clear that the larger the size, severity and duration of the fire, the greater its impact on the soil structure and above ground biodiversity.⁶⁸ This is also reflected in the Muirburn Code, which warns against large fires as they “*burn indiscriminately, including areas that are suitable for burning and those that are not*”.⁶⁹ In addition, there are the wider environmental effects of muirburn (e.g. particle emissions, increased water run-off).⁷⁰
- 70 The Group does not consider that muirburn for deer is still particularly widespread. However, the Group considers there is no public interest justification for continuing to allow a general right of land owners and occupiers to carry out muirburn for deer. The environmental costs of these fires in upland environments is at odds with the Scottish Government’s healthy ecosystem approach and its measures to mitigate climate change.
- 71 The Scottish Parliament amended the Hill Farm Act 1946 to make climate change one of the reasons for which the permitted seasons for muirburn could be varied. The Group considers that the Scottish Government should now, firstly, remove references to deer from the Muirburn Code and, secondly, make it an offence under the 1946 Act to carry out muirburn for the purpose of deer management without a licence from SNH.⁷¹ SNH is already responsible for licensing any out of season muirburn and the scope to licence muirburn for deer would retain that option if needed for a wider environmental purpose in some instance.
- 72 The Group also considers that the current use of public funds to support muirburn for deer should be ended. ‘Muirburn and Heather Cutting’ is included in the Rural Payments and Services Agri-Environment Climate Scheme, under ‘Management options and capital payments’.⁷² On moorland, this item must be combined with the Moorland Management option if deer or livestock are present. The muirburn under the scheme needs to be carefully managed to receive the rate of payment per hectare. However, the Group considers, as argued above, that there is not a public interest case for muirburn for deer.
- 73 The Working Group recommends that the Scottish Government should remove the current references to deer from the Muirburn Code and end financial support for muirburn for wild deer through its Rural Payments and Services Agri-Environment Climate Scheme.**
- 74 The Working Group recommends that the Hill Farm Act 1946 should be amended to make it an offence to carry out muirburn for wild deer without a licence from Scottish Natural Heritage.**

⁶⁷ The Grouse Moor Management Group was established by Scottish Government in November 2017 to examine the environmental impact of grouse moor management practices. The Group is due to report in late 2019.

⁶⁸ Brooker, R., Hester, A., Newey, A. and Pakeman, R. (2018). Socio-economic and biodiversity impacts of driven grouse moors in Scotland: Part 2 Biodiversity impacts of driven grouse moors in Scotland. Report to Scottish Government.

⁶⁹ SNH (2017) *Op cit*, p.17.

⁷⁰ Brown, L.E., Holden, J. and Palmer, S.M. (2014). Effects of moorland burning on the ecohydrology of river basins. Key findings from the EMBER project. University of Leeds.

⁷¹ The Group recognises that it may not be possible to distinguish muirburn for deer in some situations where sheep use the same area. However, implementation of the measure could, for example, use satellite images and agricultural information on the distribution of hill sheep to identify potential instances of muirburn for deer.

⁷² Scottish Government Rural Payments and Services, ‘Muirburn and Heather Cutting’, last published 15 December 2017.

- 75 Another factor that needs to be considered in the relationship between wild deer and climate change mitigation measures is their role as ruminants. Deer and other ruminants emit methane, which has a significantly higher global warming potential than carbon dioxide.⁷³ However, methane is relatively short lived in the atmosphere compared to carbon dioxide which lasts for centuries. As a result, with methane from ruminants, change over time in the numbers of ruminants is the key variable. More ruminants produce more warming, while reducing the number of ruminants has a cooling effect over a given period of time.⁷⁴
- 76 There has been a very substantial increase in the numbers of wild deer in Scotland in Scotland over the last 50 years and the overall population appears to be approaching one million.⁷⁵ That compares with the 1.8 million cattle and 6.6 million sheep in Scotland in 2018.⁷⁶ While attention has focused on methane production by livestock, the numbers of deer also make them a component to consider. Achieving the reduced deer densities in Scotland needed to protect public interests and respond to climate change would itself be a direct climate mitigation measure by reducing the methane produced by deer to a lower level.
- 77 The Group considers that the need to respond to climate change should give an important new impetus to reduce the damage to Scotland's natural environment by deer. While the Scottish Government's 2016 Climate Change Plan did not include reference to deer, the Plan is currently due to be revised following the Government's declaration of a climate emergency. The Group considers, as discussed in the later Parts of this Report, that reducing the current high densities of deer in Scotland should be an important part of climate change mitigation measures.
- 78 SNH concluded in its 2016 report on deer management to the Scottish Government, that "*The scale of action needed to address deer impacts on the natural environment across Scotland, and thereby ensure its enhancement, is large*".⁷⁷ The Group considers that challenge is not as large as the important challenge of trying to mitigate climate change.
- 79 SNH has legislative responsibilities both for protecting that natural environment from damage under the natural heritage legislation and for regulating the management of wild deer to prevent damage to the natural heritage. At the end of its 2016 report as the deer authority, SNH raises significant issues over current funding and the existing statutory framework for deer management, concluding that "*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 ...which underpins the Government's ambitions for the natural heritage*".⁷⁸
- 80 The adequacy of Scotland's current arrangements for the management of wild deer and the implications of a climate emergency for that management, are discussed further in Parts Five and Six of this Report.

⁷³ Pérez-Barbería, F.J. (2017). Scaling methane emissions in ruminants and global estimates in wild populations. *Science of the Total Environment*, 579, pp. 1572-1580.

⁷⁴ Allen, M.R., Shine, K.P., Fuglestedt, J.S., Millar, R.J., Cain, M., Frame, D.J. and Macey, A.H. (2018). A solution to the misrepresentations of CO₂-equivalent emissions of short-lived climate pollutants under ambitious mitigation. *Climate and Atmospheric Science*, 1, Article 16.

⁷⁵ See Section 2.

⁷⁶ Scottish Government Agricultural Statistics, June Agricultural Census 2018.

⁷⁷ SNH (2016) *Op cit*, p.97.

⁷⁸ SNH (2016) *Op cit*, p.97.

Section 17 Non-Native Deer Species

- 1 Public policy in Scotland has long been against expansion of the ranges of Scotland's two species of non-native wild deer, sika and fallow deer. An illustration of this position described in Section 3 of this Report, was the change in 2011 to s.1 of the Deer (Scotland) Act 1996 to clarify that the conservation of deer only refers to species native to Scotland.
- 2 Current public policy for deer management in Scotland, as represented by 'Wild Deer: A National Approach' (WDNA), includes the objective to "*minimise further spread of non-native species in Scotland*". This Section reviews the implementation of that objective for fallow and sika deer respectively. In addition, the commitment in the WDNA as part of that objective to prevent the establishment of muntjac deer in Scotland, is examined.
- 3 The distributions and estimated population sizes of fallow and sika deer in Scotland were described earlier in Section 2 of the Report, together with the annual cull totals for these species and the distributions of the culls in Scotland.

17.1 Fallow Deer

- 4 Fallow deer (*Dama dama*) are native to mainland Europe and have been in Scotland for centuries. They appear to have been first introduced to Scotland as park deer in the 13th century and then became established in the wild from releases or escapes.¹ By the early 20th century, the locations where wild fallow deer populations had become established included Dumfriesshire, Argyll, along the Tay Valley, at Dornoch in Sutherland and on Mull.²
- 5 The distribution map of fallow deer in Scotland at the end of the 1980s in Figure 35 indicates that there had been limited expansion in their distribution by then. That position tends still to be reflected in the continuing statements by Scottish Natural Heritage (SNH) and others that "*Fallow deer occur in isolated populations around areas in which they were originally kept in captivity*".³ SNH also considers that the range of fallow in these areas "*is not currently expanding significantly*".⁴
- 6 Fallow deer are recognised as having a relatively limited tendency to expand their range compared to Scotland's other species of deer, even where the fallow occur at high densities. However, the distribution map for fallow deer in 2016 in Figure 35 indicates that there has been expansion of fallow range around its traditional areas in Scotland with some now merged together. The map also shows that fallow deer now occur in additional areas due to releases or escapes.
- 7 The expansion in the range of existing fallow deer populations and the occurrence of fallow deer in new areas, does not match the long-term vision for wild deer in Scotland adopted by the Deer Commission for Scotland (DCS) in 2000. The vision stated that in 15-20 years (i.e. the current period) "*There will have been little, if any, expansion in the range of the localised populations of fallow deer and in some cases, a reduction*".⁵

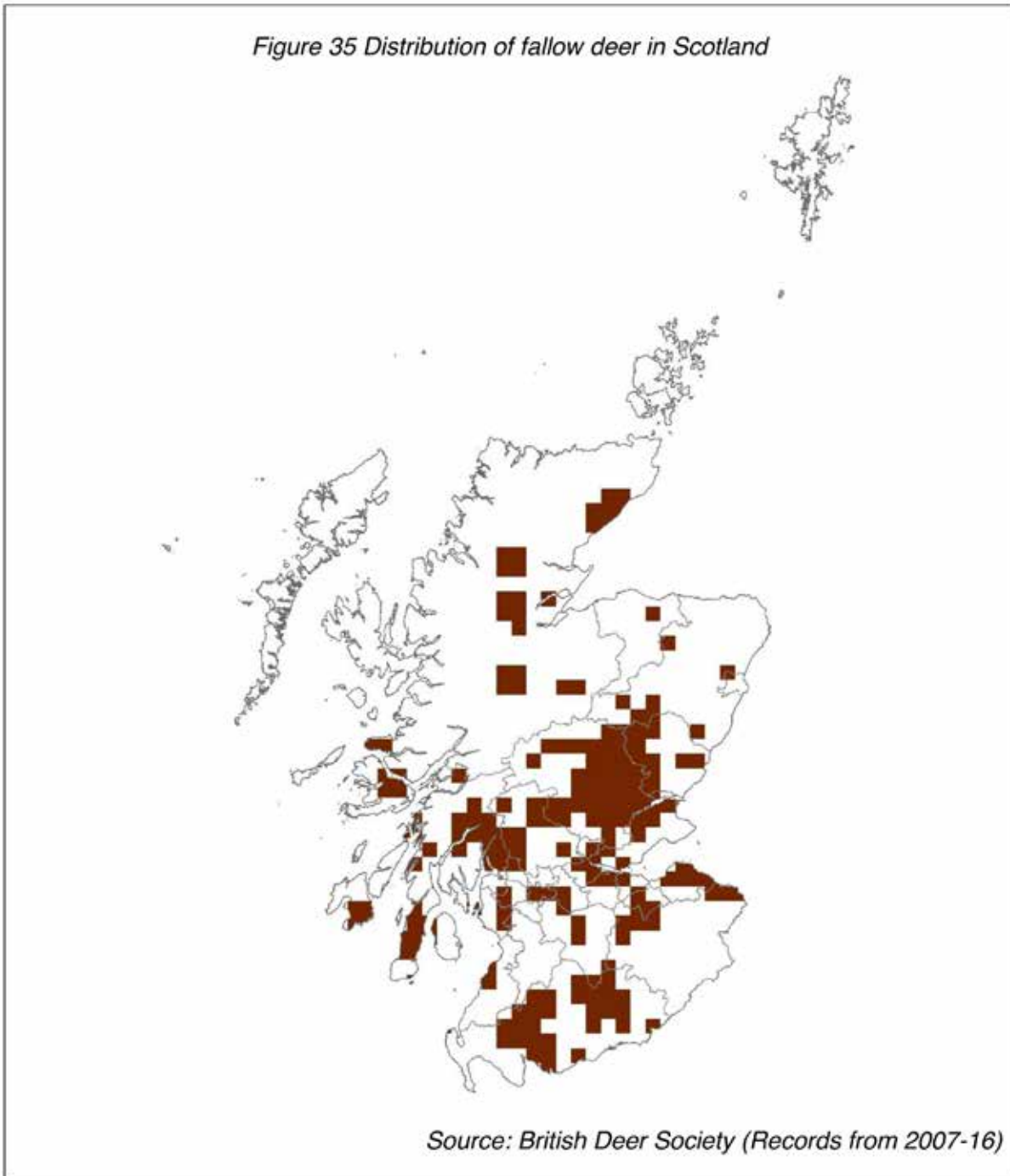
¹ Ritchie, J. (1920). *The Influence of Man on Animal Life in Scotland*. Cambridge University Press, Cambridge.

² Ritchie, J. (1920) *Op cit*.

³ SNH (2016). *Deer Management in Scotland: Report to the Scottish Government from SNH*, October 2016, p.17; Edwards, T. and Kenyon, W. (2013). SPICe Briefing: Wild Deer in Scotland.

⁴ SNH Information Response 17.

⁵ DCS (2000). *Wild Deer in Scotland: A long-term vision*, p.11.



- 8 The Group considers that SNH should be giving the spread of fallow in Scotland more attention than is apparent at present. While the WDNA has the objective to “*minimise further spread of non-native deer species in Scotland*”, the document only refers to sika deer with no mention of fallow deer.⁶ Also, while SNH informed the Group that “*it is important to monitor the range and condition of populations of fallow deer*”, there seems to be no apparent evidence that SNH is doing this.⁷ In addition, SNH continues to quote a national population estimate for the number of fallow deer in Scotland that has become a conspicuous under-estimate based on SNH’s own data from cull returns.⁸
- 9 Fallow deer can build up to relatively high densities, as demonstrated in both their main concentrations in Scotland: in the Tay valley around Dunkeld and in Dumfriesshire

⁶ SNH (2014). *Scotland’s Wild Deer: A National Approach*. Including 2015-2020 priorities, p.16.

⁷ SNH Information Response 17.

⁸ See Section 2.

around Annandale. As a herding species, they can cause serious damage to agriculture and woodlands.⁹ High densities can also contribute significantly to deer vehicle collisions (DVCs) as, for example, in the Dunkeld area.¹⁰

- 10 That area also illustrates that fallow deer are comparatively tolerant of people, coming in to the town as well as causing damage in local gardens. Fallow deer are also occurring in other settlements. The emergence of a new population on the northern side of Aberdeen, for example, means that fallow deer now occur in the Seaton Park area of the city.¹¹ In England, where fallow deer are much more widespread, significant issues have arisen from fallow deer colonising peri-urban and urban areas.¹²
- 11 The Group considers that there is a clear, continuing public interest in restricting the distribution of fallow deer in Scotland, so that they and the damage that they can cause do not expand beyond their current range. The Group therefore considers that SNH should have a specific strategy to implement the WDNA public policy objective of minimising the further spread of fallow deer. The relative limited tendency of fallow to expand their range makes this a realistic target.
- 12 The Group considers that SNH should develop its own distribution maps for fallow deer in each of the localities where fallow deer are known to occur, using cull returns and other local information. SNH should then actively promote in these localities the public policy of minimising further spread and also ensure that fallow deer are being managed at densities that minimise the chance of dispersal outwith the existing locations.
- 13 The fact that some land owners may like the expansion of fallow on to their land, for example, as an additional species for hunting, should not be allowed to override or damage the public interest represented by the public policy of minimising the spread of fallow as a non-native species. The Group recognises that SNH encourages Deer Management Groups to agree local management to reduce the spread of fallow deer.¹³ However, the Group considers that SNH should be prepared to use its regulatory powers under the Deer (Scotland) Act 1996, to limit the density or spread of fallow deer where this is not happening on a voluntary basis.
- 14 The main fallow populations in Dumfriesshire and Perthshire should each be a particular focus for this approach. However, the Group considers it is important that SNH also pays attention to the other localities where fallow occur to prevent their further development. Some of these fallow populations appear to have become established relatively recently and an early priority for containing these populations should be those areas where the fallow could give rise to issues in peri-urban areas.
- 15 **The Working Group recommends that Scottish Natural Heritage should develop its own maps of the existing distribution of fallow deer in Scotland and implement a clear strategy to prevent the further spread of these fallow deer populations, including the use of Scottish Natural Heritage's regulatory powers under the Deer (Scotland) Act 1996 if necessary.**

⁹ See, for example, the British Deer Society website.

¹⁰ See Section 15 and Section 23.

¹¹ As observed by a Member of the Working Group.

¹² Putman, R.J., Watson, P., Green, P. and Langbein, J. (2009). Methods for control of wild deer appropriate for use in the urban environment in England. The Deer Initiative, Report to Defra.

¹³ As part of the assessments of Deer Management Group carried out by SNH in recent years, as described in Section 26.

- 16 There is also a need for SNH to avoid new fallow deer populations becoming established. The occurrence of fallow deer in new areas seems to have been happening despite the fact that, as fallow deer are a non-native species, any person who releases a fallow deer from captivity or allows a fallow deer to escape from captivity in Scotland is guilty of an offence under s.14(1) of the Wildlife and Countryside Act 1981.
- 17 An example of how captive fallow can lead to fallow becoming established in the wild seems to be illustrated by a recent report from the Cairngorms National Park area. The Mammal Atlas of North-East Scotland recorded for fallow deer “*the presence of individuals observed with young in Strath Avon, close to a site known to hold captive animals,*” and concluded from this that fallow may now breed at large in the area.¹⁴ SNH was aware of captive fallow in Strath Avon, but not of any free-living fallow deer there.¹⁵ The Group recommended in Section 16 of this Report that SNH and the Cairngorms National Park Authority should be working together to ensure no fallow deer populations become established in the Park.
- 18 There is limited information on the extent of captive fallow deer in Scotland. While fallow deer are sometimes kept as farmed deer, they were the most common species in Scotland after red deer in the British Deer Society’s 2017 survey of other enclosed and captive deer.¹⁶ The need to address the issue of fallow deer being kept in enclosed areas as so-called park deer and managed as if they were wild deer was discussed in Section 12.
- 19 **The Working Group recommends that Scottish Natural Heritage should be more actively raising awareness that releasing or allowing fallow deer to escape from captivity is an offence, and that Scottish Natural Heritage should be taking enforcement action in any situation where that appears to have happened.**

17.2 Sika Deer

- 20 Sika deer (*Cervus nippon*) are native to Asia and were introduced into Britain from Japan in the second half of the 19th century. However, by the early 20th century, there had been releases and escapes at a range of locations in Scotland, including in Peebleshire, Fife, Argyllshire, Inverness-shire, Ross-shire, Sutherland and Caithness.¹⁷
- 21 Sika deer are predominantly a woodland species and their spread in Scotland from the 1920s mirrored the expansion of large areas of forestry.¹⁸ They are very successful colonisers with pioneer stags travelling relatively long distances to new habitats and hinds following in future years. Sika deer are also a very resilient species and can achieve higher densities than red deer in comparable habitats. They show no reduction in performance at densities which would result in reduced reproductive performance in red deer.¹⁹
- 22 The spread of sika deer soon resulted in considerable damage to woodlands through browsing and bark stripping, with sika deer also recognised as more difficult to control than red or roe deer due to their use of thick cover and tendency to become more

¹⁴ North East Scotland Biological Records Centre (2017). Mammal Atlas of North-East Scotland and the Cairngorms.

¹⁵ DWG correspondence with SNH, 13 May 2019.

¹⁶ British Deer Society (2017). Enclosed and Captive Deer Survey.

¹⁷ Ratcliffe, P.R. (1987). Distribution and current status of Sika Deer, *Cervus nippon*, in Great Britain. *Mammal Review*, 17(1), pp. 39-58.

¹⁸ DCS (1997). A Policy for Sika Deer in Scotland.

¹⁹ DCS (1997) *Op cit*.

secretive and nocturnal if frequently disturbed.²⁰ There was also increasing evidence by the 1970s of hybridisation between sika and red deer resulting in fertile hybrids.²¹ This led to the Deer (Amendment) (Scotland) Act 1982 which, amongst other measures, amended the Deer (Scotland) Act 1959 to include sika deer and sika/red hybrids.²²

- 23 The establishment of nearly half a million hectares of new woodland in the 1970s and 1980s resulted in the rapid spread of sika deer in many areas. By the 1990s, there was growing concern over the levels of damage by sika deer to woodlands and the spread of hybridisation. The DCS was increasingly concerned that the spread of hybridisation “*will eventually lead to the loss of the genetic integrity and possibly the appearance of Scottish red deer*”.²³ The DCS reported that “*In parts of Scotland it is already impossible to distinguish between ‘pure’ red deer, ‘pure’ sika deer and sika/red hybrids*”.²⁴
- 24 The DCS took a number of steps in response to this situation. In 1997, the DCS published ‘A Policy for Sika Deer in Scotland’ and also established a Sika Working Group that published its report ‘Sika Deer in Scotland’ in 1998. The DCS recognised that the red and sika deer in the north of Scotland were likely to become a fully-hybridised population in time. The DCS considered that there was little that could be done to prevent that, but advocated more generally slowing the spread of sika deer by shooting colonising sika and reducing source populations. The DCS also urged the culling of any sika deer found on the open hill.
- 25 In the South of Scotland, where there had been separate populations of red deer in Galloway and sika deer in the Upper Tweed, these populations had started to have overlapping ranges by the 1990s. The DCS was particularly concerned to protect the integrity of the Galloway red deer and advocated the reduction of the core populations of red and sika deer to minimise dispersal, linked to “*a policy of rigorous control*” for red deer outwith the core Galloway area and sika deer in all areas.²⁵ The DCS followed this up with a series of s.7 Control Agreements in the Borders between 1998/99-2002/03 in order to reduce the sika population.²⁶
- 26 A further initiative in the 1990s was an amendment to the Wildlife and Countryside Act 1981. Under Schedule 9 of that Act, it was already illegal to translocate sika deer to areas where they were not already established in the wild. However, there was concern about establishing island refuges where there had never been sika deer to protect populations of Scottish red deer from hybridisation. As a result, the Wildlife and Countryside Act 1981 (Variance of Schedule 9) Order 1999 made it an offence to release deer of the genus *Cervus* in the Outer Hebrides and islands of Arran, Islay, Jura and Rum without a licence. This is now covered by the Wildlife and Countryside Act 1981 (Keeping and Release and Notifications) (Scotland) Order 2012, Schedule 1, Part 1.
- 27 A limitation to the island refuges for red deer is that the red deer in the Hebrides are amongst those that have been influenced in the past by the introduction of exotic red deer. The refuges should therefore be seen as conserving a Scottish red deer phenotype rather than a pure genotype.²⁷

²⁰ Red Deer Commission Annual Report, 1992; DCS (1997) *Op cit*.

²¹ Ratcliffe (1987) *Op cit*.

²² See Section 3.

²³ DCS (1997) *Op cit*, p.4.

²⁴ DCS (1997) *Op cit*, p.4.

²⁵ DCS (1997) *Op cit*, p.6.

²⁶ See Section 24.

²⁷ Pérez-Espona, S., Pemberton, J.M. and Putman, R.J. (2009). Red and sika deer in the British Isles, current management issues

- 28 Another weakness in the policy is that it does not cover farmed red deer, which can still be imported to deer farms in the Hebrides. In 2009, for example, it was reported that some imported red deer had recently escaped on the Isle of Barra.²⁸ The Group considers that this loophole for captive deer should be closed by requiring a licence for any red deer imported into the areas covered by the 2012 Order, including those to be held in captivity due to the chance that the red deer may include sika deer genes.
- 29 While the DCS had a focused approach in its early years after the 1996 Act on trying to slow the spread of sika, the DCS seemed to give up pursuing its 1997 policy for sika as the 2000s progressed. At the time of that policy, sika deer were estimated to occupy around one third of red deer range.²⁹ Now, sika deer are considered to occupy 40% or more of red deer range as the expansion of sika deer range continues.³⁰
- 30 Hybridisation also continues to spread. While assortative mating is strong (red-type deer mate selectively with red deer and sika-type with sika) and first generation hybridisation relative rare, the assortative mating can break down with intermediate animals creating ‘hybrid swarms’ that can spread into adjoining areas.³¹
- 31 The WDNA, first produced in 2008, continues to have as one of its public interest objectives, to “*minimise further spread of non-native deer species in Scotland*”.³² However, there appears to be very limited intent in the document to pursue this objective for sika deer. The text notes that sika deer are already established across many parts of Scotland and continue to spread.
- 32 The WDNA text also comments that, while some land managers view sika deer as an economic opportunity, others see them as a threat due to the significant damage they can cause to forestry and woodlands. Then, after observing that hybridisation occurs in some areas, the text concludes simply that “*Where there is local agreement, their spread and the damage they cause will be minimised through active management*”.³³ This quote from the WDNA seems a very limited approach to delivering the public policy objective of minimising the further spread of sika deer and reflects a position where SNH appears to be taking no particular action over sika deer.
- 33 The Group recognises that SNH encourages Deer Management Groups to agree local management to reduce the spread of sika deer.³⁴ However, the Group considers that SNH should have a clear national strategy for slowing the spread of sika into new areas as part of implementing the WDNA policy objective, and be required to report on the measures it is taking to support that as part of the ongoing WDNA process. The Group has recommended earlier that the current eight month close season for shooting male sika deer should be removed and the close season for shooting female sika deer shortened.³⁵

and management policies. *Mammalian Biology*, 74(4), pp. 247-262.

²⁸ Pérez-Espona et al. (2009) *Op cit*.

²⁹ DCS (1997) *Op cit*.

³⁰ Smith, S.L., Senn, H.V., Pérez-Espona, S., Wyman, M.T., Heap, E. and Pemberton, J.M. (2018). Introgression of exotic *Cervus (nippon and canadensis)* into red deer (*Cervus elaphus*) populations in Scotland and the Lake District. *Ecology and Evolution*, 8(4), pp. 2122-2134.

³¹ Smith et al. (2018) *Op cit*.

³² SNH (2014) *Op cit*, p.16.

³³ SNH (2014) *Op cit*, p.16.

³⁴ As part of the assessments of Deer Management Group carried out by SNH in recent years, as described in Section 26

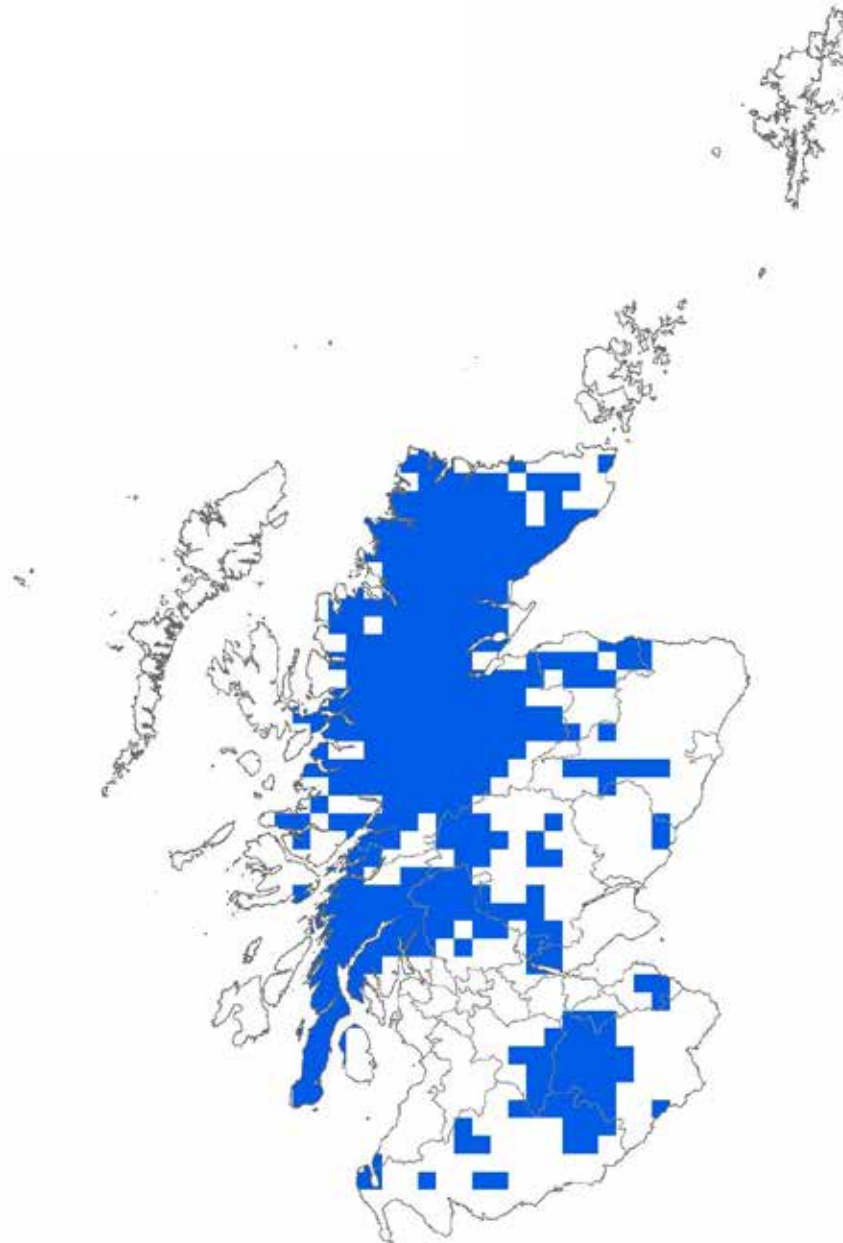
³⁵ See Section 5.

- 34 Releasing sika deer from captivity or allowing them to escape from captivity is already an offence in Scotland under s.14(1) of the Wildlife and Countryside Act 1981. The Group considers that there should also be a clear policy position that the further spread of existing sika deer populations is, as an invasive non-native species, against the public interest and of itself constitutes damage to the natural heritage under the provisions of the deer legislation.
- 35 The Group considers that, against a clear policy background, SNH should have a targeted approach to where it intends to slow the spread of sika deer. As part of that, SNH should end the approach in the WDNA at present where, if one or more land owners in an area view sika deer as an 'economic opportunity', then SNH does not pursue limiting the spread of sika deer. The Group considers, like the DCS in its sika deer policy paper, that the public interest position where an area is at risk from colonisation by sika deer, is that "*their potential damage outweighs any sporting gain*".³⁶
- 36 In considering a targeted approach to limiting the spread of sika, the north and west Highlands might be considered more or less fully colonised by sika, as with the core area of sika deer in the Borders. The further spread of sika over time might also be viewed as fairly inevitable given their ability to colonise new woodland areas. However, as the map of the current distribution of sika deer in Figure 36 shows, sika deer are not yet established in most of eastern Scotland, north of the Firth of Forth, as well as most of the Central Belt and much of southern Scotland. The Group considers that it is in the public interest to slow the spread of sika into these areas.
- 37 The Group considers that SNH should be using its cull return system and other local sources of information to develop more detailed distribution maps for sika deer in Scotland than those produced by the British Deer Society. SNH should then be identifying target areas to slow the spread of sika deer. SNH should seek Forestry and Land Scotland's support by prioritising the control of any sika deer in National Forest Estate woodlands in the area. SNH should also be communicating clear messages to the other land owners and occupiers in the target area on the need to prevent sika colonising by culling pioneer stags at any opportunity and preventing any build up of sika.
- 38 SNH should also identify source populations of sika deer behind the front line of the spread, to control those populations to reduce dispersal. SNH should be prepared to use ss.10 and 11 of the Deer (Scotland) Act 1996 to control sika deer if a land owner or occupier is not doing that adequately, with the scope to use s.11 where there is not the physical damage to warrant the use of s.10. SNH could also use s.7 Control Agreements if a more concerted effort is required across a number of properties.
- 39 A conspicuous area for a targeted approach to limiting the spread of sika deer is the Cairngorms National Park. There are sika deer in the Monadhliaths on the western edge of the Park and sika deer have been spreading eastwards along the northern edge of the Park. Pioneering sika deer have also been culled in a number of locations in the Park over the decades.³⁷

³⁶ DCS (1997) *Op cit*, p.4.

³⁷ North East Scotland Biological Records Centre (2017) *Op cit*.

Figure 36 Distribution of sika deer in Scotland



Source: British Deer Society (Records from 2007-16)

- 40 However, there is no established sika population within the Cairngorms National Park area at present and a study has indicated limited evidence of hybridisation with sika deer amongst red deer in the Park.³⁸ The Group recommended in Section 16 that SNH and the Cairngorms National Park Authority should be working together to prevent sika deer starting to colonise the Park area.
- 41 **The Working Group recommends that Scottish Natural Heritage should be taking a clearer, more robust approach to minimising the spread of sika deer in Scotland, and should be targeting areas where Scottish Natural Heritage intend to prevent or slow colonisation by sika deer.**

³⁸ Cairngorms National Park Authority (2011). Deer Framework for the Cairngorms National Park.

17.3 Muntjac Deer

- 42 The Chinese muntjac deer (*Muntacus reevesi*) was first introduced into the UK at Woburn Abbey in southern England in the late 19th century.³⁹ The first known releases into the wild were at Woburn Abbey in 1901 and muntjac deer soon became widely established in the wild in England as a result of escapes from private collections and further releases at new locations.⁴⁰ Muntjac deer have continued to spread since, expanding their range throughout England and Wales at an estimated compound rate of around 10% a year over the last four decades.⁴¹
- 43 Muntjac deer are a small, non-gregarious and hardy species of deer that have the capacity for rapid population growth and spread. They breed continuously with fawns born at any time of year and both males and females are sexually mature at less than a year old.⁴² They colonise deciduous and conifer woodland and other habitats with sufficient cover, including gardens and amenity lands in peri-urban and urban areas.⁴³ They can reach densities as high as 120 per square km and are recognised as having the capacity to cause “*substantial environmental harm*”.⁴⁴
- 44 Public policy in Scotland has long aimed to prevent the establishment of muntjac in Scotland to avoid the damage they would cause as an invasive non-native species. The inclusion of muntjac deer in Schedule 9 of the Wildlife and Countryside Act 1981 from 1999, made it illegal to release or allow muntjac deer to escape into the wild.
- 45 However, the escape of muntjac deer from the Camperdown Wildlife Centre in Dundee in 2004 led to concerns that there was no record of where muntjac deer were kept in Scotland and no procedures for dealing with escapes.⁴⁵ In 2005, the DCS produced staff guidance on reporting and investigating any escape of muntjac deer.⁴⁶ Then, in 2006, the DCS carried out an audit of known captive muntjac deer in Scotland. This recorded that, while only three of the eight known populations of captive muntjac deer in 2001 remained, four of the eight populations had experienced escapes.⁴⁷
- 46 The results of the DCS audit and recognition that there might be other muntjac being kept in Scotland that the DCS did not know about, led to legislation to make it illegal to keep muntjac in Scotland without a licence. Since 2011, it has been an offence in Scotland to keep any species of muntjac without a licence from SNH. Initially, this was done through two pieces of secondary legislation in 2011 under the Destructive Imported Animals Act 1932.⁴⁸ However, those measures were replaced in 2012 as part of secondary legislation under the Wildlife and Countryside Act 1981.⁴⁹

³⁹ DCS (2005). Recording and investigating reports of free-living muntjac in Scotland. DCS Staff Guidance.

⁴⁰ Ward, A.I. and Lees, K. (2011). Analysis of cost of preventing establishment in Scotland of muntjac deer (*Muntiacus spp.*). Scottish Natural Heritage.

⁴¹ Ward and Lees (2011) *Op cit.*

⁴² DCS (2005) *Op cit.*

⁴³ The particular difficulties of controlling muntjac in peri-urban and urban areas are described in Watson *et al.* (2009) *Op cit.*

⁴⁴ Ward and Lees (2011) *Op cit.*, p.1.

⁴⁵ DCS Annual Report, 2004/05.

⁴⁶ DCS (2005) *Op cit.*

⁴⁷ Explanatory Note produced by Scottish Government to accompany The Muntjac Keeping (Scotland) Order 2011.

⁴⁸ The Keeping of Muntjac (Scotland) Order 2011 and The Keeping of Muntjac (Scotland) Regulations 2011.

⁴⁹ The Wildlife and Countryside Act 1981 (Keeping and Release and Notification Requirements) (Scotland) Order 2012.

- 47 The Wildlife and Countryside Act 1981 (Keeping and Release and Notification Requirements) (Scotland) Order 2012 states that a licence continues to be required to keep muntjac in captivity and that it is also a requirement to report any escapes. Anyone guilty of keeping muntjac without a licence could face a substantial fine, imprisonment or both.⁵⁰ The Order also requires an occupier of land who is, or becomes, aware of the presence of muntjac on their land to notify SNH without delay.⁵¹ However, an occupier who fails to follow this statutory requirement is not guilty of committing an offence.
- 48 Since the 2012 legislation, SNH has issued two licences to keep muntjac.⁵² These have been to the Scottish Deer Centre and Heads of Ayr Farm Park.⁵³ However, the Jedburgh Deer and Forest Park and the Five Sisters Zoo at West Calder were also listed as keeping muntjac in the British Deer Society's 2017 survey of enclosed and captive deer.⁵⁴
- 49 The Jedburgh Deer and Forest Park was reported as having one male and two female muntjac in 2011.⁵⁵ The Park has since closed and SNH has been unable to make contact with the former owners of the Park to find out what happened to the muntjac.⁵⁶ SNH's approach would be to seek the transfer of any unlicensed muntjac to a zoo in England rather than kill them.⁵⁷ The other site, the Five Sisters Zoo, is currently applying for a licence to keep muntjac.⁵⁸ However, in 2017 when the zoo was not licensed to keep muntjac, a muntjac escaped from the zoo and was subsequently shot by the owners.⁵⁹
- 50 That escape, like those recorded by the DCS and the one at Camperdown in 2004 mentioned above, illustrate the capacity of muntjac to escape enclosures. The licences to be issued under the previous 2011 Regulations included detailed specifications for the fences and gates for enclosures for keeping muntjac. However, those specifications are not a requirement under the 2012 Order and the Group's understanding is that SNH does not set specifications for muntjac enclosures.
- 51 The current sites in Scotland with captive muntjac may have both sexes. SNH's position is that it would require the sexes to be kept separately if licensing a site with both sexes. However, SNH is currently unaware of the number and sex of the muntjac at the sites it has licensed.⁶⁰
- 52 The WDNA objective to "*minimise further spread of non-native deer species*" includes that "*action will be taken to prevent the release and subsequent establishment of non-native deer species, in particular muntjac, in Scotland*".⁶¹ The WDNA also refers to preventing escapes of non-native deer species and "*especially muntjac*".⁶² However, the Group considers that SNH has not been taking a rigorous enough approach to enforcing the requirement that the keeping of captive muntjac must be licensed. This is illustrated by the Five Sisters Zoo example, the lack of information on the numbers and sexes being kept at licensed sites and the lack of attention to the adequacy of the enclosures used.

⁵⁰ Wildlife and Countryside Act 1981, s.21.

⁵¹ The Wildlife and Countryside Act 1981 (Keeping and Release and Notification Requirements) (Scotland) Order 2012, paragraph 4.

⁵² SNH Information Response 4.

⁵³ DWG correspondence with SNH 10 December 2018.

⁵⁴ British Deer Society (2017) *Op cit*.

⁵⁵ Ward and Lees (2011) *Op cit*.

⁵⁶ DWG correspondence with SNH 9 May 2019.

⁵⁷ DWG correspondence with SNH 9 May 2019.

⁵⁸ DWG correspondence with SNH 9 May 2019.

⁵⁹ SNH Information Response 4, reported as recaptured in WDNA Annex 'Summary of Progress with 2017/18 Actions'.

⁶⁰ DWG correspondence with SNH 9 May 2019.

⁶¹ SNH (2014) *Op cit*, p.16.

⁶² SNH (2014) *Op cit*, p.26.

- 53 There may also be other captive muntjac in Scotland of which SNH is unaware. In that context, the Group understands that the implementation of an EU Regulation on Invasive Alien Species will result in SNH writing to all zoos and wildlife parks in Scotland in the near future to make them aware of the need to apply for a licence for keeping muntjac and other species of concern.⁶³
- 54 The licensing and reporting requirements for captive muntjac might, if properly implemented, limit escapes and facilitate control measures to capture or kill any that do escape before they become established in the wild. However, the Group considers that the capacity of muntjac to escape from enclosures and the costly consequences of muntjac becoming established in the wild in Scotland, mean that SNH should have a clear policy against issuing any further licences for keeping muntjac except where an exceptional level of public interest could be clearly demonstrated.
- 55 **The Working Group recommends, firstly, that Scottish Natural Heritage should take a more rigorous approach to identifying sites with captive muntjac and knowing the numbers and sexes of muntjac and adequacy of enclosures at the existing sites licensed to keep muntjac, and secondly, that Scottish Natural Heritage should have a clear policy of not issuing any further licences for keeping muntjac in captivity unless exceptional public interest can be demonstrated.**
- 56 In addition to captive muntjac escaping, there are two other risks of muntjac becoming established in Scotland. These are, as discussed below, the spread of muntjac into Scotland from northern England and deliberate releases of muntjac.
- 57 There are small isolated muntjac populations in the north of England, as shown in the British Deer Society's 2016 distribution map for the species shown in Figure 37. This position has led to a presumption that it will only be a matter of time before muntjac start to cross the border into Scotland.⁶⁴
- 58 The areas with woodland cover on both sides of the border are the most likely to be the routes for colonisation by muntjac into Scotland.⁶⁵ The Group considers that SNH should be targeting these areas, actively promoting awareness of muntjac and the requirement on occupiers to report any sighting of muntjac on their land. While SNH states that it raises awareness through press articles and other means, it appears that this tends only to be as a result of a credible reported sighting and not to have happened since 2012.⁶⁶
- 59 The Group also supports a vigorous programme of detection and control if or when muntjac are recorded. The Group recognises that it is likely to prove difficult to prevent muntjac becoming established if significant numbers start to cross the border. However, the Group considers that investment in detection and control will be worthwhile to limit and slow their spread because of the damage they can cause.⁶⁷
- 60 The third potential source of muntjac becoming established in Scotland is deliberate releases, despite this being illegal. Figure 38 shows several apparent records of muntjac in Scotland since 1980 and SNH investigates several reported potential sightings each year. SNH considers nearly all of these are unlikely to be muntjac based on witness statements.

⁶³ DWG correspondence with SNH 9 May 2019; Regulation (EU) No. 1143/2014.

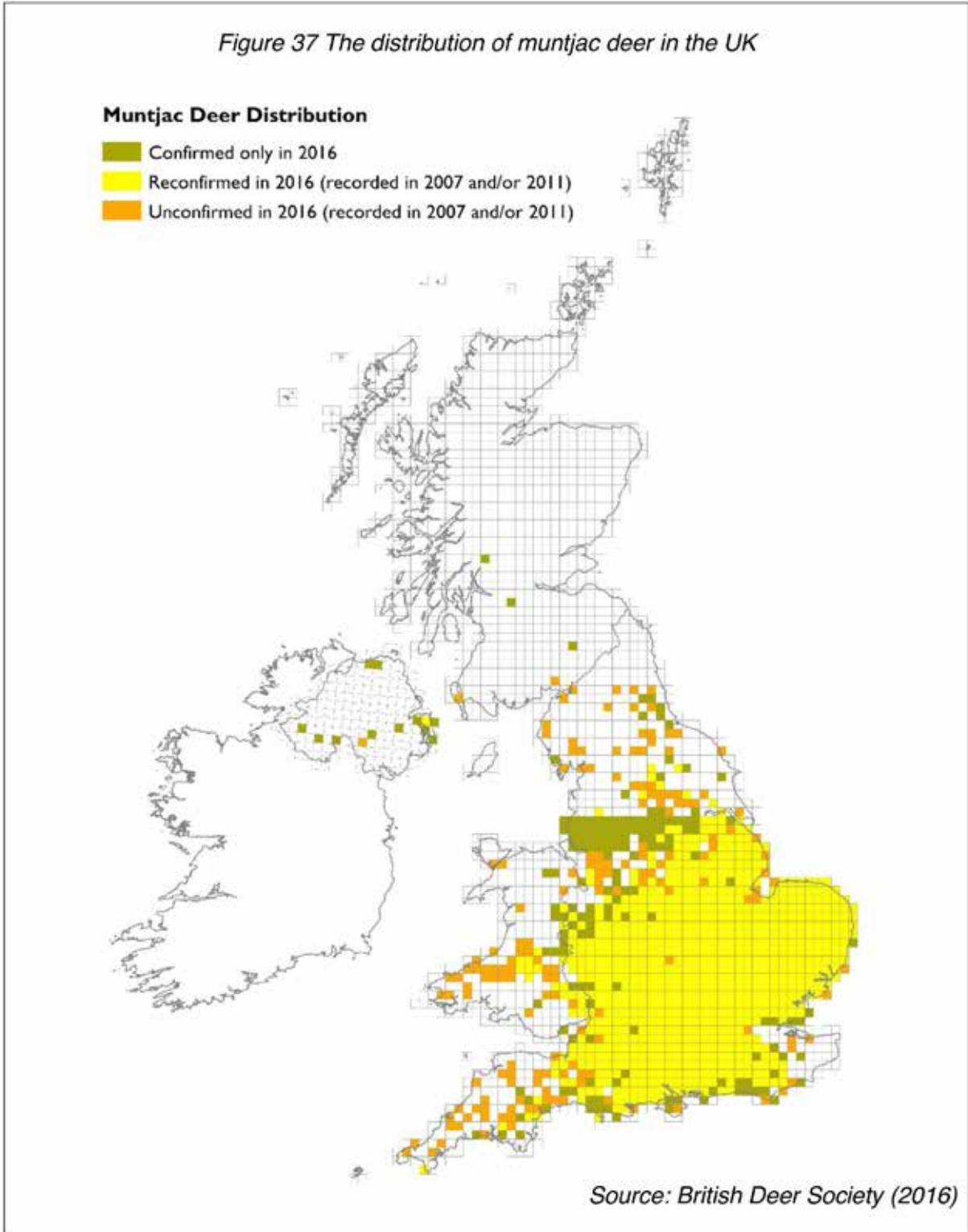
⁶⁴ Ward and Lees (2011) *Op cit.*

⁶⁵ Ward and Lees (2011) *Op cit.*

⁶⁶ SNH Information Response 4 and DWG correspondence with SNH, 9 May 2019.

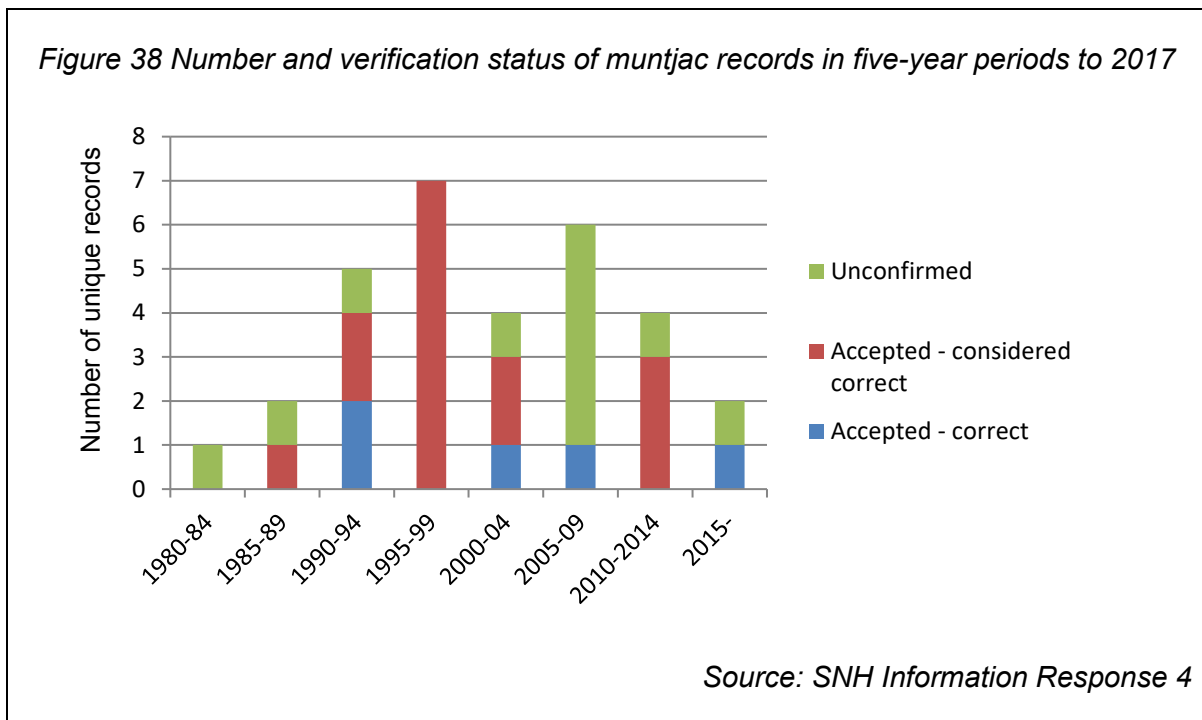
⁶⁷ Ward and Lees (2011) *Op cit.*

61 The majority of records in Figure 38 were unconfirmed or accepted on the basis of the observer’s experience. In five cases there was photographic or physical evidence of muntjac and all of these are considered to have escaped from captivity nearby.⁶⁸ SNH’s view is that the muntjac that have been seen have been captured or killed and that there is no established population of muntjac in the wild in Scotland.⁶⁹



⁶⁸ SNH Information Response 4.

⁶⁹ SNH Information Response 4.



- 62 A particular risk of deliberate releases appears to come from people who like to hunt deer and see muntjac as an additional species to shoot. This translocation of muntjac seems anecdotally to have occurred as part of the expansion of muntjac into northern England, as well as the expanding populations in Ireland and several European countries. Muntjac are relatively easy to capture and move to another location and during the passage of the 2011 muntjac legislation in Scotland, it was noted that muntjac “are becoming increasingly popular as a quarry species in England” and “it is quite possible that someone might transport some animals from England for release in Scotland”.⁷⁰
- 63 The prevention of muntjac becoming established is part of the WDNA⁷¹ and supported by the organisations representing the deer sector in Scotland. However, the Group considers that it is particularly important that SNH continues to actively promote through those bodies and to deer hunters directly, that it is illegal to have captive muntjac without a licence and illegal to release muntjac into the wild. SNH should, as part of that, emphasise that anyone committing either of those offences could face a substantial fine, imprisonment or both.⁷²
- 64 The costs of muntjac becoming established in Scotland would be high and the Group considers that it is important that SNH continues to raise public awareness of the risk of muntjac on its website and through periodic press articles to encourage any reports of any potential sightings. The Group also considers that SNH should be reporting the awareness raising that it has undertaken each year through the WDNA reporting process.
- 65 **The Working Group recommends that Scottish Natural Heritage should be maintaining a more active focus on the likely routes by which muntjac deer may colonise Scotland from the north of England, and that Scottish Natural Heritage should have an annual programme of raising awareness about muntjac deer to reduce the risks of muntjac deer becoming established in Scotland.**

⁷⁰ Explanatory Note produced by Scottish Government to accompany The Muntjac Keeping (Scotland) Order 2011.

⁷¹ SNH (2014) *Op cit*; SNH (2018) WDNA Action Plan for 2018/19.

⁷² Wildlife and Countryside Act 1981, s.21.

Section 18 Deer Welfare

- 1 The standards of deer welfare that should apply to deer management in all circumstances, including those related to factors such as how and when deer can be killed, were considered in Part Two. This Section considers the issues that can arise over deer welfare in particular circumstances.

18.1 Legislative Background

- 2 A concern for the welfare of wild mammals, including deer, has resulted in a number of Acts of Parliament intended to prevent them experiencing unnecessary suffering by making various deliberate or reckless actions illegal. These Acts currently include the Wildlife and Countryside Act 1981,¹ the Wild Mammals (Protection) Act 1996² and the Protection of Wild Mammals (Scotland) Act 2002³.
- 3 Scotland's deer legislation since 1959 has also included measures to prevent unnecessary suffering by wild deer and these measures have developed over the years. As discussed in Part Two, these measures initially included setting basic standards for how and when deer could be killed, for example, requiring the use of a firearm for killing deer and having close seasons for female deer. They also included the provisions now in s.25 of the Deer (Scotland) Act 1996 Act, providing exemptions to various provisions in the Act to enable a person to prevent suffering by a deer in specified circumstances.
- 4 These 'welfare measures' in the Deer (Scotland) Act 1959 only covered red deer until the Deer (Amendment) (Scotland) Act 1982 expanded the scope of the legislation to include sika, fallow and roe deer. The word 'welfare' did not, however, appear in the legislation until the 1996 Act, which included the word in ss.1 and 3 of the Act.
- 5 In the 1996 Act, s.1, which deals with the Deer Commission for Scotland (DCS)/Scottish Natural Heritage's (SNH) functions under the Act, includes "*and keep under review all matters, including their welfare, relating to deer*". Section 3 deals with enabling powers to facilitate the exercising of the DCS/SNH's functions, with s.3(1) listing these powers such as giving advice and conducting research. Section 3(2) then "*for the avoidance of doubt*", makes clear the enabling powers in s.3(1) can be used "*in relation to the general welfare of deer*".
- 6 Deer welfare was subsequently given more prominence in the 1996 Act through amendments by the Wildlife and Natural Environment (Scotland) Act 2011 ('the WANE(S) Act'). These amendments included, firstly, the addition of ss.17A and 17B. These introduced the scope to establish a register of persons competent to shoot deer under s.17A, and the requirement under s.17B for SNH to review the competence of those who shoot deer, if the register had not been established through secondary legislation by 1st April 2014. As part of the review, SNH was specifically required to consider the effects of levels of competence on deer welfare, as discussed earlier in Section 8 of this Report when considering the review produced by SNH.

¹ The Wildlife and Countryside Act 1981, for example, made illegal the use of self-locking snares, bows, explosive or use of live mammals or birds as decoys, for the capture and killing of any wild animal.

² The Wild Mammals (Protection) Act 1996 Act, for example, made it illegal to "*mutilate, kick, beat,....crush, drown or asphyxiate any wild mammal*" with the intend to inflict unnecessary suffering.

³ The Protection of Wild Mammals (Scotland) Act 2002 made it illegal to hunt wild mammals with dogs.

- 7 Secondly, despite the references to deer welfare in the 1996 Act since it was passed, there was no scope for the DCS/SNH to use its regulatory powers to protect deer welfare until 2011. The WANE(S) Act 2011 added deer welfare to the interests covered by those powers. The 2011 Act added damage to deer welfare to the interests covered in s.7 Control Agreements, where “*deer or steps taken or not taken for the purposes of deer management have caused, are causing or are likely to cause*” damage.
- 8 The WANE(S) Act also amended s.10 Emergency Measures of the 1996 Act to include circumstances where deer “*are causing damage to their own welfare or the welfare of other deer*”. Subsequently, when the Land Reform (Scotland) Act 2016 amended the 1996 Act to include the additional regulatory power s.6A Deer Management Plans, damage to deer welfare was included in that new section in the same terms as in s.7.

18.2 Interpretation of Welfare

- 9 The development of the position of deer welfare in Scotland’s deer legislation to become one of the interests covered by the regulatory powers in the 1996 Act, can be considered to reflect the evolution in how deer welfare is perceived more generally. Previously, deer welfare was considered simply in terms of reducing unnecessary suffering by a deer at the time of its death, with attention focused on wounding, injury and the orphaning of dependent juveniles.⁴ Now, deer welfare is seen in more holistic terms as encompassing a deer’s “*physical and mental well-being*”.⁵
- 10 Wider concepts of deer welfare and the welfare of other wildlife species have been based on the long established ‘five freedoms’ developed in the 1960s for farm livestock.⁶ They are: freedom from hunger, thirst or inadequate food; freedom from thermal and physical discomfort; freedom from injuries and diseases; freedom from fear and chronic stress; and the ability to display normal species-specific behaviour patterns.⁷
- 11 These freedoms are reflected in the Animal Health and Welfare (Scotland) Act 2006. The Act places a duty of care on people responsible for ‘protected animals’ to ensure that the welfare needs of their animals are met, with ‘protected animals’ being animals “*under the control of man on a permanent or temporary basis*” and “*not living in a wild state*”.⁸ The four welfare needs of an animal identified in the Act are: its need for a suitable environment; its need for a suitable diet; its need to be able to exhibit normal behaviour patterns; and its need to be protected from suffering, injury and disease.⁹ Suffering is stated to include “*physical or mental suffering*”.¹⁰
- 12 The application of welfare considerations to wild animals, while developed from the ‘five freedoms’ and the animal needs identified in the 2006 Act, places particular emphasis on the scope of wild animals to respond through adaptive behaviour to adverse welfare challenges.¹¹ The welfare of the animals is seen as a spectrum with the animals’ behaviour seeking to improve their own welfare status within the limits of their adaptive capacity.

⁴ SNH (2016). Draft Review of Competence.

⁵ Wild Deer Best Practice Guidance, ‘Welfare definition’.

⁶ Holland, J., McMorran, R., Morgan-Davies, C., Bryce, R., Glass, J., Pollock, M., McCracken, D., Glass, R., Woolvin, A. and Thomson, S. (2017). Meeting the challenge of wild deer research to support delivery of sustainable deer management in Scotland. SNH Commissioned Report No. 963.

⁷ Ohl, F. and Putman, R. (2013). Applying wildlife welfare principles at the population level. SNH Commissioned Report No. 629.

⁸ Section 17 of the Animal Health and Welfare (Scotland) 2006 Act.

⁹ Section 24 of the Animal Health and Welfare (Scotland) 2006 Act.

¹⁰ Section 48 of the Animal Health and Welfare (Scotland) 2006 Act.

¹¹ Holland *et al.* (2017) *Op cit.*

SNH therefore considers the welfare of individual and groups of wild deer in terms of their freedom to react adequately to: “hunger, thirst or incorrect food; thermal and physical discomfort; injuries or disease; fear and chronic stress”.¹²

- 13 In contrast to the legal duties on the owners of animals under the 2006 Act, an owner of land has no legal responsibility for the welfare of the wild deer that may occur on the land. However, adult deer in Scotland have no natural predators and their numbers are regulated by the culls carried out using the hunting rights held by land owners.
- 14 An owner’s land management activities can also have direct impacts on the welfare of deer. This might be an adverse impact, for example, fencing off land which deer use regularly for feeding or shelter; or a positive impact, for example, opening up woodland for open hill red deer to use as shelter. SNH considers that the more that land management activities influence the welfare of deer, the greater the degree of responsibility that the land owner has for the state of the deer’s welfare.¹³
- 15 The distinction is clear-cut in the legislation between captive deer, which are covered by the 2006 Act, and wild deer, where a land owner has no legal responsibility for the welfare of deer on their land. However, the boundary between these situations can be less clear in practice. As the Group has commented in Section 12, there are some situations where ‘wild deer’ kept in deer parks and other enclosed areas might be more appropriately considered to be covered by the 2006 Act due to the level of management intervention and the restricted freedom of the deer. The relative nature of that boundary reinforces the view that there is a spectrum where “with increasing intervention (fencing, culling, feeding, etc) comes increasing responsibility for the welfare of wild deer populations”.¹⁴
- 16 The practice of providing supplementary feed to open hill red deer stags during winter is recognised as an intervention that increases a land owner’s responsibility for the welfare of the deer.¹⁵ The practice has a long history in the Highlands and still continues, although there is no information on how common it is. The regular supplementary feeding of stags is different from other uses that might be made of food, for example, as a short term diversionary tactic to draw deer away from a site where they are causing damage.
- 17 Land owners provide supplementary winter feeding to red deer for a variety of reasons, for example, to improve body condition and antler size and to increase survival over winter. A research review found, however, that there was more or less no evidence to indicate that supplementary feeding was effective in achieving the reasons for which it is carried out.¹⁶
- 18 In contrast to the lack of evidence to justify supplementary feeding for red deer, there is evidence that the practice can lead to a number of deer welfare issues. These include, for example, the development of high parasite burdens and an increased risk of disease transmission, as well as a loss of condition amongst deer attracted to the feeding but excluded from feeding by dominant stags.¹⁷ SNH, like the DCS before it, does not support the practice.¹⁸

¹² Wild Deer Best Practice Guidance, ‘Welfare: Definition and Principles’ (draft), citing Ohl, F. and van der Staay, F.J. (2012). Animal welfare: At the interface between science and society. *The Veterinary Journal*, 192, pp. 13-19.

¹³ Wild Deer Best Practice Guidance, ‘Welfare definition’.

¹⁴ Wild Deer Best Practice Guidance, ‘Welfare definition’.

¹⁵ Wild Deer Best Practice Guidance, ‘Welfare definition’.

¹⁶ Putman R. and Staines, B. (2004). Supplementary winter feeding of wild red deer *Cervus elaphus* in Europe and North America: justifications, feeding practice and effectiveness. *Mammal Review*, 34 (4), pp. 285-306.

¹⁷ Putman and Staines (2004) *Op cit.* Staines, B. (2000). Wild Deer: Issues concerned with deer welfare and public safety. Report for DCS.

¹⁸ SNH correspondence with DWG, 14 August 2019.

- 19 While there is no obligation in the Deer (Scotland) Act 1996 for land owners to have due regard to deer welfare, the welfare of deer is a prominent component of the Act. There appears to be no other type of wild mammal in the UK that has the same level of attention paid to their welfare in statutory provisions. These provisions include the reference to deer welfare in s.1 of the Act and the inclusion of deer welfare in the regulatory powers as described above.
- 20 These provisions in the 1996 Act go beyond SNH simply promoting standards of deer welfare and providing advice and training on them. The Group considers that these provisions place a duty or obligation on SNH to proactively safeguard deer welfare in the exercise of all its powers under the Act and to take action in the event of deer welfare being damaged or potentially damaged.
- 21 The Group considers that concern for the welfare of deer has been focused for too long on simply reducing acute suffering by a deer, and that the incorporation into deer management of the fuller interpretation of deer welfare outlined above is overdue. The Group supports the work to date by SNH of this, but considers that there is a need for clearer progress on the development and application of appropriate contemporary measures of deer welfare. The Group considers that these measures should make deer welfare a far more important factor in determining standards of deer management in Scotland than is currently the case.
- 22 **The Working Group recommends that the Scottish Government should ensure that a fuller contemporary interpretation of the welfare of wild deer becomes a more important factor in determining standards of deer management in Scotland than is currently the case.**

18.3 Assessing Welfare

- 23 A basic requirement for assessing deer welfare in terms of the 1996 Act, is to establish the biological parameters by which the welfare of deer will be judged. These parameters need to cover both the physical condition of the deer and their behaviour, with a positive welfare status considered to be when deer are in a good physical condition and exhibiting patterns of behaviour considered normal for the species. While the concept of 'welfare' is considered to apply at the level of individual deer, reference can also be made to the welfare of a herd or local population when the individual deer involved share the same welfare condition.¹⁹
- 24 In 2016, SNH published a report by Professor Green which reviewed the factors related to the welfare of deer in Scotland and identified nine practical indicators that can be used to assess the status of their welfare.²⁰ These indicators are listed in Figure 39. The last two in the list are based on examining the carcasses of dead deer, while the rest can be assessed in the field. Some of these field indicators may be assessed from a single observation and some may depend on observations over the course of a week or more.
- 25 The first indicator in the list, pelvic body condition score, is based on the system for assessing 'body condition' that has long been used with farmed livestock. In the SNH report, Green reviews its applicability to wild deer in Scotland and concludes that it can be a helpful indicator for visually assessing the welfare of wild deer. He identifies a score of two or less out of five as indicating a negative welfare state, with the deer likely to be conspicuously malnourished.

¹⁹ Wild Deer Best Practice Guidance, 'Welfare: Definition and Principles' (draft).

²⁰ Green, P. (2016). Practical indicators to assess the welfare of wild deer in Scotland. SNH Commissioned Report No. 944.

Figure 39 Indicators of deer welfare in wild deer

- 1 Pelvic body condition score of yearlings
- 2 Normal mobility, freedom from debility, injury, disease
- 3 Mortality rate
- 4 Normal activity, evidence of lethargy, sluggishness
- 5 Toleration of close approach or handling
- 6 Social interaction
- 7 Foraging behaviour and appetite
- 8 Kidney and coronary groove fat deposits of yearlings
- 9 Bullet placement in carcasses

Source: Green (2016)

- 26 Four of the other indicators relate to the behaviour of deer (nos. 4-7) and while these can be difficult to observe in the wild, the types of abnormal behaviour used as indicators are likely to be or become conspicuous. Similarly, a deer suffering chronic debility due to injury or disease (no.2) is likely to be conspicuous. The remaining indicator in the list, mortality rate (no.3), is discussed further in Section 18.4 below.
- 27 The list of indicators is based on identifying signs of adverse welfare in contrast to the perceived normal body condition and behaviour for a species. SNH is currently converting the indicators into Wild Deer Best Practice (WDBP) guidance to assist land managers to avoid or address the adverse welfare conditions covered. SNH considers that the lack of such guidance explains the fact that, while Deer Management Plans (DMPs) produced by Deer Management Groups (DMGs) recognise the need to consider deer welfare, *“there is little prescriptive action identified beyond the limited scope of preventing unacceptable wounding”*.²¹
- 28 The development of biological parameters for deer welfare and providing advice on such parameters is, however, only the first aspect of assessing deer welfare in terms of the 1996 Act. SNH’s responsibilities mean that it also has to monitor deer welfare in Scotland and make judgements on the significance to be attached to the occurrence of deer with a poor state of welfare due one cause or another.
- 29 In assessing the significance of poor welfare and whether to act to remedy a situation, SNH has to take into account current social values or public perceptions in Scotland of the importance to be attached to the welfare of deer. The prominence of welfare in the deer legislation is one indicator of the social importance attached to the welfare of deer. Key organisations involved in deer management, such as the British Deer Society (BDS) and the Association of Deer Management Groups (ADMG), place particular emphasis on deer welfare in the statements they make about their organisations.²² The WDBP guidance also has *“taking full account of deer welfare”* as one of its three central aims (with public safety and food safety).²³

²¹ SNH (2016). Draft Review of Competence, p.12.

²² The BDS is a charity which promotes deer welfare, and the ADMG is *“committed to the welfare of deer and their habitats through sustainable management practices”* (ADMG website).

²³ Wild Deer Best Practice guidance, Introduction.

- 30 More widely, people tend to enjoy seeing deer and to dislike evidence of deer suffering, while red deer were voted one of Scotland's favourite animals in a survey organised by SNH and Visit Scotland in 2013.²⁴ Subsequent surveys have also shown that deer are the wildlife species that the public most associate with Scotland and the species (along with red squirrels) remains that which people in Scotland are most concerned about.²⁵
- 31 The evidence indicates that public views on deer can be considered to place a relatively high value on their welfare. The Group considers that this value should be reflected in SNH's approach to deer welfare, including winter mortality as discussed below. The Group also considers that SNH's approach should be moving further beyond simply identifying indicators of poor welfare, to developing a fuller interpretation of deer welfare or well-being that is based on a wider consideration of their biological performance. This is discussed further in Section 18.5 below.
- 32 **The Working Group recommends that Scottish Natural Heritage should be developing a fuller interpretation of the welfare of wild deer that is based on a wider consideration of their biological performance.**

18.4 Winter Mortality

- 33 There is a long history in the Highlands of significant numbers of open hill red deer dying during the winters from a combination of exposure and starvation. This dates from the increase in the numbers of red deer on the open hill with the expansion of 'deer forests' in the 19th century.²⁶ There has also long been concern about the regular occurrence of this winter mortality. A hundred years ago, when commenting on the high numbers of red deer on the open hill, Professor Ritchie wrote that "*there can be little doubt that in many areas the number exceeds what the ground could naturally bear. ...how else can we account for the great mortality that occurs from natural causes every season?*"²⁷
- 34 The high levels of winter mortality amongst open hill red deer was a continuing concern to the Red Deer Commission (RDC) and DCS, which regarded large scale die-offs as a failure of management. They both monitored levels of winter mortality on an ongoing basis and had a standing item in their Annual Reports on the topic until 1998. The only year for which an overall total appears to have been published was 1993, when a survey of 315 estates by the RDC recorded a minimum winter mortality of 7,545 red deer.²⁸
- 35 The continuation of significant levels of winter mortality amongst open hill red deer resulted in the inclusion of a question on it in the annual cull return form from 2009/10. Figure 40 shows the reported annual winter mortality over the last nine years. The only source these totals are based on are the numbers reported in cull returns in response to the question about winter mortality.²⁹ The totals are therefore only a minimum.

²⁴ Red deer were ranked third, behind golden eagles and red squirrels. BBC News website, 'Golden eagle voted Scotland's favourite wild animal', 1 November 2013.

²⁵ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from Scottish Natural Heritage 2016.

²⁶ The number of deer forests increased from nine in 1790 to 213 in 1912 (Green, 2016, *Op cit*).

²⁷ Ritchie, J. (1920). *The influence of Man on Animal Life in Scotland*. Cambridge University Press.

²⁸ RDC Annual Report, 1993.

²⁹ SNH Information Response 44.

- 36 There are some properties with open hill red deer range that do not make cull returns and, while some properties that do make returns may search for carcasses to assess winter mortality, many do not. The totals in the table are therefore an under-estimate of the actual extent of winter mortality.
- 37 Previously, a breakdown by species of the winter mortality total each year has not been published. However, Figure 41 also provides the species composition for 2012/13-2017/18. The totals show that the large majority of the reported mortality consists of red deer, generally 75-90%. While winter mortality occurs amongst the other species, particularly roe deer, the numbers are at a substantially lower level than for open hill red deer.
- 38 While nearly all the red deer mortality is reported from areas in the Highlands covered by DMGs, the fallow mortality is very largely from outwith those areas. The red deer mortality is widely dispersed amongst the DMG areas and, while some areas have relatively low totals, a significant proportion of the areas have totals running into hundreds.³⁰

Figure 40 Reported winter mortality of deer (2009/10-2017/18)

Year	Reported mortality
2009/10	13,074
2010/11	4,395
2011/12	2,199
2012/13	1,946
2013/14	1,748
2014/15	4,929
2015/16	1,558
2016/17	1,224
2017/18	7,004

Source: SNH Reported Annual Deer Cull Data

³⁰ SNH Information Response 44.

Figure 41 Winter mortality of deer by species (2012/13-2017/18)

Year	Red	Roe	Sika	Fallow	Total
2012/13	1,381	511	36	18	1,946
2013/14	1,346	358	26	18	1,748
2014/15	4,108	640	98	83	4,929
2015/16	1,186	325	34	13	1,558
2016/17	789	368	50	17	1,224
2017/18	6,225	502	251	26	7,004

Source: SNH Reported Annual Deer Cull Data

- 39 While the totals in Figures 40 and 41 are under-estimates, they indicate that there continue to be notable levels of winter die-off. Even excluding the higher total of more than 13,000 deer in 2009/10, the totals show that the average reported total for winter mortality during the last eight years has been just over 3,000 deer a year.
- 40 Red deer, like Scotland's other species of wild deer, are naturally a woodland species and the physiology of red deer predisposes them "to severe metabolic pressures" when the cold, wet and wind of winter on the open hill are combined with reduced bodily reserves and limited availability of forage.³¹
- 41 The level of winter mortality amongst open hill red deer varies year to year and area to area, depending on the pattern of the weather and the numbers of deer relative to the shelter and forage available to the deer. However, each year, a significant number of open hill red deer die from a combination of exposure and starvation. In contrast, the SNH report by Green recorded in 2016 that winter die-off of red deer in woodland or forest populations had not been reported to the BDS during the previous twenty years.^{32, 33}
- 42 The SNH report by Green also placed the scale of the winter die-off of open hill red deer each year at the top of its list of challenges to standards of deer welfare in Scotland, and the Group considers that it is an issue that should receive greater attention to reduce the extent to which occurs.
- 43 SNH advises land owners to cull red deer on the open hill to minimise "*winter starvation other than in exceptional weather conditions*" and encourages them to cull the deer "*most likely to suffer and die*" over the winter.³⁴ The ADMG gives similar advice to its members.³⁵ However, both SNH and ADMG consider some winter mortality is "*inevitable*" amongst Scotland's open hill red population and that the prolonged effects of "*extreme weather can result in higher mortality than normal through starvation and malnutrition*".³⁶

³¹ Green (2016) *Op cit.*

³² Green (2016) *Op cit.*

³³ Winter mortality amongst roe deer is generally on open hill range, but can occur sometimes amongst roe deer at high densities in woodlands in a particularly harsh winter.

³⁴ Wild Deer Best Practice guidance, Welfare definition; SNH Information Response 44.

³⁵ ADMG News Release, 'Higher winter mortality expected in wild deer', 7 March 2018.

³⁶ SNH Information Response 44.

- 44 There has long been a debate between those who regard the red deer winter mortality in Scotland as 'natural' and part of 'natural selection', and those who regard it as a significant welfare issue that should be being addressed because land managers are responsible for the numbers of deer and the nature of the range available to them.³⁷ The Group considers that the issue is not whether some winter mortality is inevitable, but the levels at which it continues to occur amongst adult open hill red deer.
- 45 There has been recognition for a long time that "*management culling undoubtedly reduces natural mortality*" amongst red deer, particularly when it is targeted at deer in poorer condition.³⁸ However, a study for the DCS that reviewed the data available on natural mortality from across Europe, found that the levels of winter mortality amongst red deer due to starvation in Scotland were higher than amongst other managed populations, with the level in Scotland "*within the range reported from unmanaged populations suffering resource limitation*".³⁹ The study concluded that the levels of culling in Scotland were not sufficient to manage the red deer within the carrying capacity of the available range. Ten years later, this appears to be still the case.
- 46 The death of open hill red deer each year from starvation indicates that there is not enough forage, particularly appropriate quality forage in late autumn, available in some areas relative to the number of deer. The relationship between deer densities and winter mortality rates is not, however, direct because of the influence of other range factors, in particular the availability of shelter from the weather during winter.
- 47 Open hill red deer can use topographical shelter and also relatively low vegetation such as long heather, to gain some protection from wind chill and exposure.⁴⁰ However, the most effective type of shelter against the elements is woodland cover and red deer, as a woodland species, will choose this in preference to other types of shelter.⁴¹
- 48 The Group considers that more attention should be paid to the extent that open hill red deer in different local areas have access to woodland shelter during winter. Improved access to woodland cover might reduce winter mortality in some areas at current densities, by improving the carrying capacity of the range due to the benefits from the shelter to the deer.
- 49 However, the Group considers that access to suitable woodland cover during winter should become a basic management standard for the welfare of open hill red deer in Scotland. While the current levels of winter mortality are continuing against the backdrop of the trend towards milder winters and reduced snow cover, the wind and rain during Scottish winters are also more challenging to the welfare of open hill red deer that do not have access to suitable woodland cover.

³⁷ Staines, B. (2000). Wild deer: issues concerned with deer welfare and public safety. Dept of Zoology, University of Aberdeen.

³⁸ ADMG, *Op cit.*

³⁹ Putman, R. (2008). A review of available data on natural mortality in red and roe deer populations. Deer Commission for Scotland.

⁴⁰ Putman (2008) *Op cit.*

⁴¹ Irvine, R.J., Fiorini, S., Yearley, S., McLeod, J.E., Turner, A., Armstrong, H., White, P.C.L. and van der Wal, R. (2009). Can managers inform models? Integrating local knowledge into models of red deer habitat use. *Journal of Applied Ecology*, 46(2), pp. 344-352.

- 50 Statements from SNH and the ADMG about winter mortality tend to incorporate references to ‘exceptional’ or ‘extreme’ weather conditions. The weather is clearly a key factor, but the use of those terms can be taken to imply very unusual and particular severe weather. However, recognising that the totals in Figures 38 and 39 are only the reported winter mortality, there are significant levels of winter die-off each year with higher levels not infrequent. The winter die-off of red deer in Scotland is also not a short term event, but generally the terminal event after prolonged “*nutritional and environmental austerity*”.⁴²
- 51 The Group considers that the evidence shows that the continuing levels of winter mortality amongst adult open hill red deer is very largely a product of how the deer and their range are managed. As discussed above, the owners of the range and hunting rights do not have a legal responsibility for the welfare of the deer, but SNH does through the 1996 Act. In particular, and in comparison to its predecessors the RDC and DCS, SNH now has regulatory powers that enable it to intervene to safeguard deer welfare.⁴³
- 52 SNH has no policy on winter mortality amongst adult open hill red deer. The Group considers that SNH should have a clear policy to reduce the levels of this annual mortality and the frequency of larger die-offs. At present, given the levels of just the reported figures, the Group considers that it is not unreasonable for people to claim that thousands of open hill red deer are regularly dying of starvation and exposure.⁴⁴
- 53 The ongoing levels of winter mortality are not ‘natural’ or inevitable and can be considered at odds with the public voting red deer as one of their favourite animals. The report that SNH published on indicators of deer welfare also contrasts with the image of Landseer’s iconic ‘Monarch of the Glen’, bought for Scotland’s National Gallery in 2017, with the image of thousands of red deer dying in the hills.⁴⁵
- 54 In addition, there seems to be a contrast between the amount of attention given by SNH and the deer sector to the orphaning of calves and wounding rates from shooting as deer welfare issues, and the apparent limited concern over the welfare of the numbers of adult open hill red deer that have a prolonged period of suffering before they die from starvation and exposure.
- 55 The Group recognises that SNH staff, as part of discussing DMPs as part of the DMG assessment process, “*will have discussed mortality in reviewing the factors affecting plan delivery and population modelling*”.^{46,47} However, the Group considers that reducing the levels and frequency of winter mortality should be explicit measures of the implementation of DMPs by DMGs.

⁴² Green (2016) *Op cit*, p.19.

⁴³ In ss.7/8 and 10 of the Deer (Scotland) Act 1996.

⁴⁴ For example, Reforesting Scotland, ‘Why are deer dying in Scotland’s hills?’, May 2018.

⁴⁵ Green (2016) *Op cit*.

⁴⁶ See Part Five.

⁴⁷ SNH Information Response 44.

- 56 The Group also notes that a significant proportion of the winter mortality that occurs is within some of the DMGs covering parts of the Cairngorms National Park area.⁴⁸ The Group considers that there should be an expectation of particular progress in reducing winter mortality in the National Park for the higher land management standards that it is intended to represent.⁴⁹ The Group also considers that, while it has not seen winter mortality figures for the Loch Lomond and the Trossachs National Park area, the same principle should apply there.
- 57 A particular factor to consider is that the information which SNH currently receives on the distribution and levels of red deer winter mortality comes from the culls returns submitted by land owners. The land owners' main motivation for supplying this information appears to be so that the numbers are taken into account in planning future culls.
- 58 The Group recognises there has been a concern, in the past at least, that making more of 'an issue' about winter mortality could result in some of the land owners who currently report it, either no longer doing that or under-reporting it. However, that is a question for the owners and the credibility of their approach to deer management. The Group considers that, if necessary in some locations, SNH could take other approaches to gaining a clear indication of likely levels of winter mortality.
- 59 **The Working Group recommends that the Scottish Government should make clear that the ongoing levels of annual winter mortality amongst red deer on open hill range in the Highlands are unacceptable and need to be reduced.**

18.5 Carcase Weights

- 60 The concept of 'deer welfare' has traditionally been considered in terms of reducing direct suffering to individual deer through wounding and orphaning juveniles. Concern for deer welfare is now expanding to cover other indicators of poor welfare, such those discussed above in terms of pelvic body condition score, mortality rates and abnormal behaviour.
- 61 The Group considers, however, that the absence of conspicuous indicators of poor welfare status should not be the limits to concern for deer welfare. These negative indicators are all about one end of the 'welfare spectrum' and more attention should be given to measures that reflect improving welfare status towards the positive end of the spectrum. The Group considers that these measures should encompass fuller consideration of the biological performance of deer and, in particular, the influence of deer densities on that.

⁴⁸ SNH Information Response 45.

⁴⁹ See Section 16.

- 62 The effects of density on the biological performance of red deer have long been recognised.⁵⁰ With increasing density, for example, body weights decline, the reproductive performance of hinds is depressed and mortality rates increase.⁵¹ Correspondingly, with decreasing density, weights increase, reproductive performance improves and mortality rates reduce. These trends also apply to roe deer.⁵² With both species, the effects from reducing the density of deer can be taken to reflect a reduction in the ‘stress’ experienced by the deer (e.g. less competition for food) and therefore considered to be an improvement in their welfare or well-being at an individual and group or population level.
- 63 The relationship between deer density and weights correlates with the food supply available and thus varies with local circumstances. However, in local circumstances, monitoring the average carcase weights of yearlings in the autumn can be used as an indicator of the welfare of the population. This approach is used, for example, in Norway.⁵³ When weights are considered low for the species and habitat, increased culling should lead to a gradual increase in the carcase weights as the food supply improves relative the number of deer (if the density is not maintained by deer moving into the area from other high density areas). The same links apply to all of Scotland’s deer species.
- 64 Low average carcase weights do not necessarily imply that deer welfare is in a directly negative state, unless the deer have low pelvic body condition scores (BCS) of two or less out of five and will thus appear clearly malnourished.⁵⁴ The deer may appear in good condition and, in terms of the other welfare indicators discussed above, the carcasses of yearlings may have “*renal and cardiac coronary groove fat deposits*”.⁵⁵ However, as the report on indicators states, the presence of these fat deposits just “*indicates that the welfare state of the deer at the time of death was not unacceptably negative*”.⁵⁶
- 65 The Group considers that rather than just the pelvic BCS and the extent of fat deposits, the size or weight of the deer could also be viewed as a welfare indicator. The small size and low average weights of deer in good condition indicate that they have experienced limited resources during their development. Monitoring the average weights in a local area can be seen as moving from the avoidance of harm to a measure of biological performance as part of a fuller assessment of the welfare of the local deer population.
- 66 Recent research that used data for red deer to study the relationship between density, bodyweight and reproductive performance, suggests that this relationship applies to other deer species where bodyweight is a driver of fecundity.⁵⁷ For all deer, while low carcase weights reflect poor biological performance and reduced welfare, low weights can also indicate the likelihood of damage being caused to the environment in which the deer live.

⁵⁰ Putman, R., Nelli, L. and Matthiopoulos, J. (2019). Changes in bodyweight and productivity in resource-restricted populations of red deer (*Cervus elaphus*) in response to deliberate reductions in density. *European Journal of Wildlife Research*, 65 (13).

⁵¹ SNH (1994). Red deer and the natural heritage; Staines (2000) *Op cit*.

⁵² Putman (2008) *Op cit*; Staines (2000) *Op cit*.

⁵³ Solberg, E. J., Strand, O., Veiberg, V., Andersen, R., Heim, M., Rolandsen, C. M., Langvatn, R., Holmstrøm, F., Solem, M. I., Eriksen, R., Astrup, R. and Ueno, M. (2012). Moose, red deer and reindeer – Results from the monitoring program for wild cervids, 1991-2011. NINA Report 885, Norwegian Institute for Nature Research.

⁵⁴ Green (2016) *Op cit*.

⁵⁵ Green (2016) *Op cit*, p.33.

⁵⁶ Green (2016) *Op cit*, p.33.

⁵⁷ Putman et al. (2019) *Op cit*.

- 67 This other damage is likely to include the adverse impact of the deer on the vegetation of their environment due to the competition for food. The consequences may also include a higher level of dispersal of deer from woodlands and this may in turn contribute to DVCs, themselves a deer welfare issue in addition to the human costs. Thus, culling at levels that start to improve the average weights of yearlings, are likely to reduce other adverse impacts that can arise.
- 68 The contrast in size and average weights that can exist between red deer living on the open hill and those living in woodland is well recognised.⁵⁸ Woodland red deer in Scotland at appropriate densities for their habitat, can be twice the carcass weight of open hill red deer. The average weights of woodland deer in many areas are well below that potential due to relatively high local densities of red deer and reduced densities would be likely to lead to higher average carcass weights.
- 69 The biologically stunted size of open hill red deer compared to their genetic potential in their natural habitat of woodland, can be viewed as the deer adapting to the open hill environment.⁵⁹ However, relatively small size of the deer reflects the environment limitations during their development. Reduced competition for food and improved access to woodland shelter would reduce those limitations and be reflected in average body weights starting to increase.⁶⁰
- 70 The Group considers that SNH should be giving greater consideration to developing the use of the average carcass weights of yearlings in the autumn as an indicator of the welfare of the local population of the deer species involved. Improvements from relatively low average weights to lower numbers of heavier deer can be considered to be promoting an increasingly positive welfare state, while also being likely to reduce other adverse impacts associated with high densities of deer.
- 71 **The Working Group recommends that Scottish Natural Heritage should consider developing the use of the average carcass weights of yearlings in the autumn as an indicator of the welfare of the local population of the deer species involved.**

⁵⁸ Mitchell, B., Staines, B. and Welch, D. eds. (1977). *Ecology of Red Deer: a research review relevant to their management in Scotland*. Institute of Terrestrial Ecology, Cambridge.

⁵⁹ Ritchie, J. (1920). *The influence of man on animal life in Scotland*. Cambridge University Press, Cambridge.

⁶⁰ Putman et al. (2019) *Op cit*.

Section 19 Other Public Interests

- 1 Sections 13-16 have described damage by wild deer to the interests covered in the Deer (Scotland) Act 1996 in the order that they were added to Scotland's deer legislation. The Wildlife and Natural Environment (Scotland) Act 2011 ('the WANE(S) Act') also added a further very broad category of damage to the 1996 Act: "*damage to public interests of a social, economic or environmental nature*". This was inserted into s.7 Control Agreements and subsequently also included in the new s.6A Deer Management Plans when that was added by the Land Reform (Scotland) Act 2016.
- 2 This additional broad category of damage appears to have been added for flexibility to deal with public interests that might not be covered by the other types of damage identified in the 1996 Act. The WANE(S) Act also amended s.16 of the Wildlife and Countryside Act 1981 for that reason to include a new similarly worded licensable purpose "*for any other social, economic or environmental purpose*".
- 3 At present, damage to public interests of a social, economic or environmental nature only applies under two of Scottish Natural Heritage's (SNH) regulatory powers under the 1996 Act (ss.6A and 7). The case for including this category of damage in SNH's other regulatory power (s.10) and its powers to grant night shooting and out of season authorisations (ss.5(6) and 18(2)), is argued elsewhere in this Report.¹ However, the phrase illustrates that the deer legislation should be able to protect all types of public interests from damage from deer. An example of this mentioned in the Code of Practice on Deer Management is the protection of cultural heritage interests rather than just natural heritage interests.²
- 4 An important land use that can be affected by deer damage and which has generally not been covered by the deer legislation, is land managed for recreational, amenity and related purposes. This includes golf courses and other sports grounds, parks, gardens and other uses, such as graveyards.
- 5 These types of land uses occur widely in Scotland and the hunting rights that go with the ownership of land mean that wild deer can be shot on them where it is safe to do so. However, recreational and amenity lands are most commonly associated with settlements and are most frequent in urban and peri-urban areas. In these types of environments, particular issues can arise where deer numbers need to be controlled.
- 6 Urban areas are considered in this context to be the centres and suburbs of cities, towns and other conurbations.³ Peri-urban areas are transitional areas around settlements and are characterised by a mosaic of mixed land uses, often including housing, transport infrastructure, industry, farm land, woodlands, and amenity and recreational lands.⁴

¹ See Section 1.

² SNH (2011). Code of Practice on Deer Management, p.12.

³ See, for example, Lowland Deer Panel Report to SNH (February 2019); and Watson, R., Putman, R.J. and Green, P. (2009). Methods of control of wild deer appropriate for use in the urban environment in England. Deer Initiative Report.

⁴ Dandy, N., Ballantyne, S., Moseley, D., Gill, R. and Quine, C. (2009). The management of roe deer in peri-urban Scotland: Final Report. Forest Research.

- 7 While the Central Belt is conspicuously the most extensive area of urban and peri-urban land in Scotland, there has been growing concern over recent decades about increasing wild deer numbers in these types of areas more generally because of the damage they can cause. Roe deer now tend to occur throughout peri-urban areas and many settlements in Scotland, and are increasingly colonising all of Scotland's cities and other main urban areas. Fallow deer also occur in some peri-urban areas, while the expansion of the range of red deer means that they are also starting to occur in some peri-urban areas.
- 8 The concern over this situation resulted in "*the need to manage the deer population in urban and peri-urban areas*" being added by the WANE(S) Act 2011 to the list of factors in s.1(2) of the 1996 Act. These are factors which SNH has to take into account in particular circumstances as appropriate under the legislation. The challenges involved in controlling deer numbers in these types of environments compared to the wider countryside, are discussed below.

19.1 Peri-Urban Areas

- 9 The mosaic of land uses in peri-urban areas means that roe deer can cause damage to a range of different interests in many locations. This can include agriculture and commercial horticulture as well as woodlands managed for economic and environmental purposes. There is also a higher risk of road traffic accidents involving deer due to the concentration of road networks and greater flows of traffic. Damage can also occur to publically important sites such as parks and public gardens, graveyards and golf courses, as well as private gardens.
- 10 A study commissioned by the Deer Commission for Scotland (DCS) in 2007 into the management of roe deer in peri-urban Scotland, which based its case studies in the Central Belt, also identified other concerns.⁵ These included the possible intake of toxins by deer, the spread of diseases including Lyme disease through ticks, and the risk of 'acts of cruelty' to deer through the use of inappropriate firearms or dogs.⁶
- 11 Deer fencing can be used to protect interests from damage in some situations. However, the control of roe deer numbers in peri-urban areas to limit their adverse impacts adequately, relies on culling. This is generally more difficult than in the wider countryside. The greater development in peri-urban areas means that the patterns of land ownership tend to be smaller scale and therefore larger areas where it may be safe to shoot deer with high velocity rifles more limited. An additional safety issue is that the presence of people in woodlands and open areas for walks and other recreational purposes can also be higher and widespread.
- 12 A further factor that is highlighted by the DCS study and other reports, is the need to engage with local residents and communities in peri-urban areas where deer culling is to be carried out.⁷ The greater density of people and less familiarity with deer management in peri-urban areas, means that local engagement tends to be more important than in the wider countryside to minimise issues that can arise out of people's concern that deer are being shot. The local engagement needs to start sufficiently before the culling, to provide scope to discuss concerns that there might be.

⁵ Dandy *et al.* (2009) *Op cit.*

⁶ See Section 10.

⁷ Dandy *et al.* (2009) *Op cit.*; Lowland Deer Panel Report (2019) *Op cit.*

- 13 People tend to enjoy seeing wild deer and may resent seeing them shot by hunters, if they have little awareness of the need to control deer to limit deer vehicle collisions (DVCs) and other damage, including the risk of Lyme disease. The evidence from existing studies and wider experience is that people are more likely to accept culling if they have a better understanding of why the deer control is being carried out.⁸
- 14 The local engagement can be by deer hunters in the areas where they are operating and the need for engagement is identified in the Wild Deer Best Practice (WDBP) guidance on Deer in Towns. Also, following a recommendation from SNH's Authorisations Review Panel in 2016, fuller guidance on interacting with the public is due to be added to the WDBP guides in 2018/19.⁹
- 15 There have also been some positive educational initiatives to promote public awareness and understanding of deer management in peri-urban areas.¹⁰ The need for further such initiatives, whether aimed at the general public or more targeted audiences, has recently been endorsed in the Lowland Deer Panel report.¹¹ However, the Panel also noted some of the challenges involved in designing effective educational initiatives.
- 16 The requirement for further training and education programmes related to deer in and around towns is also identified in Wild Deer: A National Approach (WDNA).¹² Amongst other measures, a need for better knowledge of the influence of improving habitat networks in these types of areas on local deer populations is also identified. The on-going work of the Central Scotland Green Network Trust is a prominent example of this.¹³
- 17 The particular challenges of controlling wild deer numbers in peri-urban areas emphasises that a key strategic requirement for effective deer control in these areas, is to ensure adequate culling in adjoining areas of wider countryside. In some areas, this will involve targeting red deer and fallow deer to restrict any movement of these larger species into peri-urban areas.¹⁴ However, more generally, the need is to manage the densities of roe at levels that limit ongoing dispersal of roe deer into the peri-urban area each year as a result of under-culling in the adjoining areas.
- 18 The Group considers that SNH should be implementing this strategy in an increasing number of locations on a prioritised basis. The Group considers that SNH should take a systematic approach in each location, including identifying likely corridors for deer movement and establishing the pattern of culling in both the cordon of land around a peri-urban area and the area itself using the statutory cull return system.

⁸ Dandy *et al.* (2009) *Op cit*; Lowland Deer Panel (2019) *Op cit*; Brown, G. (2018). An investigation into the environmental damage caused by roe deer (*Capreolus capreolus*) and social perception of high deer density within peri-urban Aberdeen. BSc thesis, SRUC/University of Glasgow.

⁹ SNH Information Response 32

¹⁰ For example, the Lowland Deer Network Scotland project 'Deer on your Doorstep', and Forestry and Land Scotland's video on 'Deer Management on the National Forest Estate'.

¹¹ Lowland Deer Panel (2019) *Op cit*.

¹² SNH (2014). Scotland's Wild Deer: A National Approach, including 2015-2020 priorities.

¹³ The Central Scotland Green Network Trust succeeded the Central Scotland Forest Trust in 2014.

¹⁴ The risk that an antlered red deer stag can pose to human safety in a built-up area was illustrated by the serious injuries to a woman when a stag 'panicked' in 2013. See 'Woman badly injured by panicked stag in the Highlands', BBC website, 31 December 2013.

- 19 With this type of approach, SNH can monitor both the levels of culls relative to habitat types and other indicators of deer densities, while engaging with owners and occupiers to advise on cull levels where necessary using an adaptive management approach in response to the available information.¹⁵ It would also facilitate a proactive rather than reactive approach, which should help to avoid conflicts that are difficult to resolve without significant expense and multi-agency involvement.¹⁶ The area covered by SNH's current Lowland Deer Management Project incorporates peri-urban areas with wider countryside beyond them and that project and the type of locality approach proposed here are discussed further later in the Report.
- 20 There is no specific definition of land that is 'peri-urban', for example, in terms of a particular proportion of built-up land within a location, and areas that might be considered peri-urban can potentially be very varied in their character and circumstances. In some areas, the management of deer levels on National Forest Estate or Local Authority land may play an important role.
- 21 There may or may not be established patterns of local deer hunters operating in a peri-urban area. However, the Group considers that SNH should, as the deer authority, have a sufficiently clear overview of current deer management in each area to be able to respond to issues over adverse impacts by deer. While this might be to limit DVCs or damage by deer to land use interests, an important target should be to manage roe deer densities at levels that limit the dispersal of deer into any adjoining urban areas.

19.2 Urban Areas

- 22 Roe deer have extensively colonised urban areas in Scotland, living in green spaces that provide suitable cover in the built-up environment. The deer can cause significant damage to trees and other vegetation in public parks and gardens, other recreational and amenity grounds, graveyards and other green spaces including household gardens. There is also a high risk of deer being involved in DVCs because of the volumes of traffic in urban areas.
- 23 Another public safety concern with the growing numbers of roe deer in urban areas, is ticks from the deer increasing the risk of Lyme disease, including ticks using pet dogs and cats as hosts. In addition, there can be animal welfare concerns as the physical condition of deer established in urban areas tends to be poor compared to other areas.¹⁷ While roe deer appear to adapt to living in urban areas, these areas might be generally considered a stressful environment for wild deer.
- 24 The difficulties of culling roe deer in the densely built-up environment of urban areas means that effective deer control in these environments requires adequate control in adjoining peri-urban areas to limit ongoing dispersal of deer into the urban areas.¹⁸ This essential requirement needs to be ongoing each year. The approach also needs to be strategic with, for example, the control in a peri-urban area focused where there are any corridors of suitable habitat along which roe deer can move into the urban (such as a water course with wooded banks).

¹⁵ For example, other indicators might include: the number of DVCs recorded locally; complaints of damage by deer; low intensity field surveys of woodlands for evidence of deer impacts; and thermal imaging counts.

¹⁶ Putman, R., Langbein, J., Watson, P., Green, P. and Cahill, S. (2014). The Management of Urban Populations of Ungulates. In: Putman, R. and Apollonio, M. (Eds.) *Behaviour and Management of European Ungulates*. Whittles Publishing, p.158.

¹⁷ Watson, P. *et al.* (2009) *Op cit.*

¹⁸ Watson, P. *et al.* (2009) *Op cit.*

- 25 SNH should, as with the wider countryside around peri-urban areas, be monitoring culls around urban areas to ensure adequate culls are being carried out. The fact that the occurrence of deer in urban areas in continental European countries appears to be significantly less of an issue than in the UK, may be due to longer established culling patterns in the surrounding areas.¹⁹
- 26 **The Working Group recommends that Scottish Natural Heritage should be implementing a strategic approach to limiting ongoing dispersal by deer into both peri-urban areas from the wider countryside and urban areas from peri-urban areas, selecting target areas on a prioritised basis.**
- 27 The challenge of culling deer in urban areas using rifles that can be lethal over hundreds of metres, has led to the investigation of alternative methods of removing deer to limit their numbers and damage. This has particularly been the case in the USA, where urban deer are an issue. The methods have included immuno-contraception, immobilisation and trapping, whether with nets or in an enclosure. While each method may have some application in specific and limited circumstances, they each have very major limitations and the approach in the USA continues to be based on culling with ‘sharpshooters’.²⁰
- 28 The use of enclosures to trap fallow deer may be an option in a few particular situations in the UK, while the use of nets might be effective to catch muntjac in some circumstances where they occur.²¹ However, the essential method of deer control in urban areas in Scotland and the rest of the UK involves culling deer using suitably skilled and experienced marksmen.²² The Group considers that there should be a clear expectation in Scotland that such a marksman would hold a Deer Stalking Certificate Level 2.²³
- 29 The question arises whether there should be a specific qualification for shooting deer in urban areas in Scotland to reflect a certain level of training and competence. However, circumstances are very varied and the Group considers that the onus should be on the land owner or other person responsible for having a cull carried out to satisfy themselves that the marksman they plan to use is suitably skilled and experienced for the local context.
- 30 A core issue in urban areas is the limited availability of sites where deer can be shot safely, given the density of the built environment. Many of the suitable green spaces are likely to be owned and managed by the Local Authority, for example, parks and graveyards.²⁴ However, there may also be areas owned by other public sector bodies. In Scotland’s cities, for example, these areas will include the corridors of land owned by Network Rail as part of the railway network. In addition, there are significant areas of privately owned green space in some cities and other urban settlements. There may also be privately owned ‘brown field’ sites, some of which may be colonised by vegetation and provide cover for roe deer before the sites are re-developed.

¹⁹ Putman *et al.* (2014) *Op cit.*

²⁰ Watson, P. *et al.* (2009) *Op cit.*

²¹ Watson, P. *et al.* (2009) *Op cit.*

²² Watson, P. *et al.* (2009) *Op cit.*

²³ See Section 8.

²⁴ Parks and other sites may be common good land that is not owned, only managed by the Local Authority (e.g. in Edinburgh).

- 31 Local Authorities can be considered well positioned to have a lead role in deer management in Scotland's main urban areas. Their ownership and management of green spaces means they will be aware of deer damage to these sites and potentially have the scope to control deer numbers. Their responsibilities for roads means they are aware of DVCs and their involvements more generally, mean they should be able to develop an overview of the position with deer in an urban area.²⁵ They can also take account of deer management in development planning.
- 32 In addition, while residents and other property owners may use the Local Authority as a first point of contact to raise an issue involving deer, the existing links between Local Authorities and communities in their area mean they should be well-positioned to undertake the local engagement that should occur where culling is to be carried out. An adverse local reaction to culling without adequate consultation is a risk to which Local Authorities are likely to be sensitive, because of the issues that have arisen in some places.²⁶
- 33 SNH also needs to be involved in the management of deer in urban areas for its responsibilities under the Deer (Scotland) Act 1996, including those involving public safety, deer welfare and damage to other interests. However, the use of SNH's regulatory powers in the Act might be expected to be unnecessary on land managed by Local Authorities and other public bodies, as s.3(3) of the 1996 Act requires public bodies to have regard to any guidance or advice issued to them by SNH. This requirement does not apply to all the privately owned sites where deer occur in urban areas.
- 34 The need to control deer in urban areas occurs in a significantly different context than in other areas. In urban areas, the density of properties and limited opportunities to shoot deer make the link in property law between land ownership and deer hunting rights more impractical and less relevant. There is also a need for a co-ordinated overview of deer numbers across a potentially wide variety of sites and there may be a need to be able to make use of all or most sites where deer can be culled safely, as well as other factors such as local engagement in all cases. These types of considerations suggest that, in some circumstances, there might be benefits in having a single body, the Local Authority, responsible for all deer management over all or part of a particular urban area.²⁷
- 35 The notion of that type of 'regulated area' in a particular defined urban area where the Local Authority is given responsibility for carrying out the deer management, might be seen as an alternative, urban-tailored measure to the s.8 'control areas' in the existing legislation. Such a measure would not, for example, remove the hunting rights of property owners in the area. Instead, they could require a licence from the Local Authority to shoot deer to ensure all safety and consultation requirements will be met, while the Local Authority could have the authority to cull deer on properties not covered by a licence, subject to notifying the owner.

²⁵ Surveying with thermal imaging sights at night can be a valuable aid for assessing deer numbers in urban areas.

²⁶ For example, Aberdeen City.

²⁷ This would also include, for example, having a single point of responsibility and contact for SNH, as well as for the Police and SSPCA if they are called to a situation involving deer.

- 36 While the Group can envision the types of provisions that would be required in a section of the deer legislation to set out an appropriate process to establish such a 'regulated area' with the agreement of a Local Authority and appropriate consultation, the Group does not consider creating such a measure to be a realistic or practical proposition as things stand. The role of Local Authorities in deer management more generally is considered in Part Six of the Report.
- 37 The Group does consider, however, that deer management in urban areas should be given increasing attention. The scale of the current issues in these areas might be considered limited compared to issues in the wider countryside, but the more direct social concerns involved add to the importance of the issues.
- 38 SNH has the lead public sector responsibility for ensuring that wild deer in urban areas are managed appropriately to safeguard public interests and they are already involved in a number of areas. However, the Group considers that SNH should have a more focused approach towards achieving this. This should involve both building on SNH's current work with individual Local Authorities to making greater progress with deer control in urban areas more generally. This should include implementing a strategic approach to deer control in adjoining peri-urban areas to limit the movement of more deer into urban areas, as recommended above.
- 39 **The Working Group recommends that the Scottish Government should ensure that increasing attention is focused on implementing effective deer management in peri-urban and urban areas to limit damage to public interests, and that Scottish Natural Heritage adopts a more focused approach towards achieving this.**

Section 20 Economics of Wild Deer

20.1 National Level

- 1 Scotland's populations of wild red and roe deer are one of the country's natural assets. These native species are natural components of Scotland's biodiversity and popular species with the public. The need to control the numbers of both native and non-native deer species in the absence of any natural predators of adult deer also provides hunting opportunities and an annual harvest of venison. However, the previous sections have provided an overview of the types of damage that wild deer can cause when they are not adequately managed.
- 2 Scottish Natural Heritage (SNH) recently reviewed the information available at a national level on the economic costs and benefits of wild deer and their management in Scotland, as part of its 2016 report to the Scottish Government on deer management in Scotland.¹
- 3 SNH's review of the costs and benefits relied heavily, as SNH acknowledged, on two reports. The first was a 2012 report commissioned by SNH from Professor Putman to identify the different types of benefits and costs associated with wild deer and their management in Scotland, and to review published studies for information on the economic values of those costs and benefits.² The second report was one commissioned by the Association of Deer Management Groups (ADMG) from Public and Corporate Economic Consultants (PACEC) on 'The Contribution of Deer Management to the Scottish Economy' and published in 2016.
- 4 SNH's review included tables to summarise the information available, firstly, on the costs of damage by deer and the costs of managing them, and secondly, on the benefits of deer and their management. These tables are reproduced here as Figures 42 and 43. The Group considers the types of damage by deer listed in Figure 42 are relatively limited compared to the list of benefits. This potentially reflects that the brief for SNH's 2012 report included that SNH was interested in "*the widest definition of economic benefit*" without apparently a corresponding instruction for types of damage.^{3,4}
- 5 The information in Figure 42 on the costs of damage illustrates the most conspicuous problem with trying to consider costs and benefits at a national level - there are no national statistics for the economic value of damage by deer to trees and woodlands and agriculture, while damage to the natural heritage is difficult to represent in financial terms.
- 6 The Group considers that the cost of Lyme disease might also have been more appropriately listed as 'uncertain', because of the difficulty of attributing a value to the role of deer in the occurrence of the disease and the age of the source quoted by SNH. While the estimated cost attributed to deer vehicle collisions (DVCs) in 2007 is very likely to have increased since then with the increase in DVCs outlined in Section 15, the value given from 2007

¹ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from Scottish Natural Heritage, October 2016.

² Putman, R. (2012). Scoping the economic benefits and costs of wild deer and their management in Scotland. SNH Commissioned report No. 526.

³ Putman (2012) *Op cit*, p.20.

⁴ The benefits include, for example, a number of intangible values without equivalents in the costs list. For example, while the benefits list includes the 'existence value' of deer, the costs do not include deer welfare (such as winter mortality) or the impact of sika/red hybridisation; the benefits include the 'pleasure from stalking', while the costs do not include the negative experiences of farmers, foresters and others who have experienced serious deer damage or been involved in a deer vehicle collision.

is equivalent to nearly 80% of the total income from venison, sporting income and other income from deer management shown in Figure 43.

- 7 While SNH described the cost of the damage to agriculture by deer as “*not significant*” in the table, the Group considers that SNH underestimates this as discussed earlier. However, the Group considers (as did SNH’s 2012 report) that a particular omission that could be remedied is the lack of information on the likely scale of the costs of damage by deer to commercial plantations and woodlands more generally. There have been a range of previous studies examining aspects of the costs of damage by deer in commercial plantations and the 2012 report had hoped to include a summary headline figure for the estimated total cost for damage to forestry caused by deer in Scotland.⁵ However, the report concluded that “*the paucity of data and the age of the data currently available would make such an estimate meaningless*”.⁶ That remains the case.
- 8 The category of tree damage in Figure 42, while linked by SNH’s comment in the table to commercial forestry, should also cover the wide range of other situations where deer can cause economic damage to trees. These include, for example, non-commercial native woodlands, farm woodlands and other amenity woodlands, including trees and woodlands such as those in parks, golf courses, other recreational lands and gardens.
- 9 One perspective on the costs of deer to forestry is provided by the figures produced by Forestry and Land Scotland (FLS) for deer management on the National Forest Estate, encompassing approximately 32% of Scotland’s woodland area. In 2018/19, for example, FLS’s expenditure on deer management was £7.6m (excluding sporting rates) and its income from venison and stalking lets was £1.7m, giving a net annual expenditure of £5.9m that is justified on basis of the damage prevented to commercial crops and other woodland interests.⁷
- 10 SNH concluded from the information in Figures 42 and 43 that, while the public sector’s estimated annual income from deer management was FES’s £1.8m, the public sector’s estimated annual expenditure on deer management was £12.9m with FES’s expenditure, public sector grants and SNH’s £1.5m expenditure as the deer authority under the Deer (Scotland) Act 1996.
- 11 The Group considers that the amount of government funds spent directly on deer management each year should be clear and transparent. The Group proposes in Part Five that SNH should produce an annual report on the delivery of its functions under the Deer (Scotland) Act 1996. While that should include a breakdown of SNH’s annual expenditure on deer, the Group considers that it should also include a compilation of other government expenditure directly on deer.⁸
- 12 With regard to the private sector, SNH concluded based on the 2016 PACEC report, that the private sector’s estimated annual income from deer management was £15.8m and estimated annual expenditure on deer management more than twice that at £36.8m.⁹

⁵ Putman (2012) *Op cit.*

⁶ Putman (2012) *Op cit.*, p.4.

⁷ Figures provided to DWG by FLS - see Section 14.

⁸ Including, for example, expenditure by Transport Scotland directly on measures to help mitigate DVCs.

⁹ SNH (2016) *Op cit.*

Figure 42 Summary of costs associated with deer and deer management (2016 prices)

Description	Public or private cost	Estimated annual cost	Source(s)
<i>Costs associated with damage by deer</i>			
Tree damage	Private/public	Uncertain but significant	
Agricultural damage	Private/public	Uncertain not significant	
Damage to habitats	Private/public	Uncertain – difficult to monetise	
Deer vehicle collisions	Mainly public	£13.8 million	Langbein (2007)
Lyme disease	Mainly public	£0.5 million	Joss <i>et al.</i> (2003)
<i>Costs associated with managing deer</i>			
Effects on public access	Public	Uncertain	
Operational and capital expenditure on deer management	Mainly private	£42.6 million	PACEC (2016); FES evidence to Deer Authorisations Panel (2016)
Fencing	Public	£4.8 million	Scottish Government (2013)
Other deer management via SRDP	Public	£0.8 million	Scottish Government (undated)
Monitoring, regulation and administration	Public	£1.5 million	Putman (2012)

Source: SNH (2016)

- 13 The PACEC study, which covers the financial year 2013/14 and was carried out in 2014/15, was commissioned by the ADMG to be in time for SNH's 2016 report to the Scottish Government. The ADMG has long recognised the lobbying value of producing national figures to show the scale of the economic contribution of deer management to the Scottish economy. PACEC's 2016 report followed a similar report by them in 2006 that had the same title and was also commissioned by the ADMG.¹⁰ Both reports were based on questionnaires, with the information from respondents "*extrapolated to provide estimates for Scotland as a whole*".¹¹

¹⁰ PACEC (2016). The Contribution of Deer Management to the Scottish Economy.

¹¹ PACEC (2016) *Op cit*, p.10.

Figure 43 Summary of benefits associated with deer and deer management (2016 prices)

Description	Public or private benefit	Estimated annual benefit	Source
Sale of deer carcasses and processed venison	Private/public	£7.5 million	PACEC (2016)
Sporting income	Mainly private	£7.1 million	PACEC (2016)
Stalking rents and other income from deer management	Mainly private	£3 million	PACEC (2016)
Direct employment	Public	77 paid FTE jobs	PACEC (2016)
Secondary employment	Public	Uncertain	PACEC (2016)
Deer watching/tourism	Public	£0.1 million	Putman (2012)
Rural culture	Public	Uncertain	
Land owner benefits	Private	Uncertain	
Public health benefits	Public	Uncertain	
Existence value	Public	Uncertain	

Source: SNH (2016)

- 14 The previous PACEC 2006 report was considered in SNH's 2012 report, which commented that it was very largely about Highland estates with little information on the rest of Scotland. The 2016 PACEC report aimed to reduce this imbalance by achieving a wider reach with its questionnaires. However, as the report acknowledges and statistics in the report reflect, the results are still largely about Highland estates.¹² The report notes that "*Lowland deer activities are potentially more diverse and more dispersed... in contrast to the larger-scale activities of the larger Highland estates which are principally organised as fee-bearing sporting activities*".¹³
- 15 The substantially greater expenditure than income recorded by the PACEC report may partially be a product of the purpose of the survey, as expenditure by estates on deer management increases the contribution that it is considered to make to the Scottish

¹² The 186 respondents to PACEC's questionnaire managed 1.8m ha or just under 25% of Scotland's land area, with the average size of landholding given as 6,800 ha. Statistics that reflect the open hill red deer focus of responses include that 86% of landholdings "count their deer" and the main primary purpose for shooting red deer amongst respondents was sport. 66% of respondents were members of Deer Management Groups that had formal Deer Management Plans and 66% were also involved in some commercial stalking.

¹³ PACEC (2016) *Op cit*, p.3.

economy. However, SNH commented in 2016 that “*It is clear that deer management employment is not necessarily contingent on income, and that many estates run their activities at an economic loss*”.¹⁴

- 16 With the responses to the PACEC survey mainly from Highland estates, SNH’s statement might be considered to reflect in part the importance, long-recognised in other surveys and reports, of non-economic factors in the reasons for owning and managing Highland deer stalking estates.¹⁵
- 17 Another factor that is also taken to reflect the non-economic factors influencing the ownership of Highland deer stalking estates, is the high level of capital value attributed to shootable stags in the sale of estates. Figure 44 shows that the values rose rapidly after the practice was introduced by property selling agents in the 1970s, but that the annual values since then have tended to remain in a broad band of between £10,000 and £40,000. Lesser values have also been attributed to hinds.
- 18 An attempt was made in the past to use such values to calculate a theoretical overall capital value for shootable open hill red deer.¹⁶ While SNH refer to these capital values in considering the benefits of deer, the Group considers that SNH was correct not to include them in its list for the reasons given by SNH. Many factors affect the price paid for Highland estates, including the objectives of a new owner, and the traditional method of assessing the capital value of stags can end up attributing the amenity and other attributes of an estate to the stalking.¹⁷
- 19 SNH’s account of the current economic costs and benefits of deer management, while identifying the types of components involved, mainly illustrates the very limited economic information that can be estimated at a national scale. Improved information about the national costs of damage to particular land use interests by deer, might stimulate greater attention to reducing damage.
- 20 The Group considers, however, that the existing evidence is already sufficient to demonstrate the clear need to reduce the costs of damage by wild deer in Scotland. As SNH concluded in 2016 “*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*”.¹⁸
- 21 The Group considers that the need to reduce the levels of damage currently caused by deer to a wide range of public and private interests is a conspicuous priority, if Scotland is to make significant progress towards the aim of sustainable deer management, where that is defined as “*the best combination of benefits for the economy, environment, people and communities for now and for future generations*”.¹⁹

¹⁴ SNH (2016) *Op cit*, p.54.

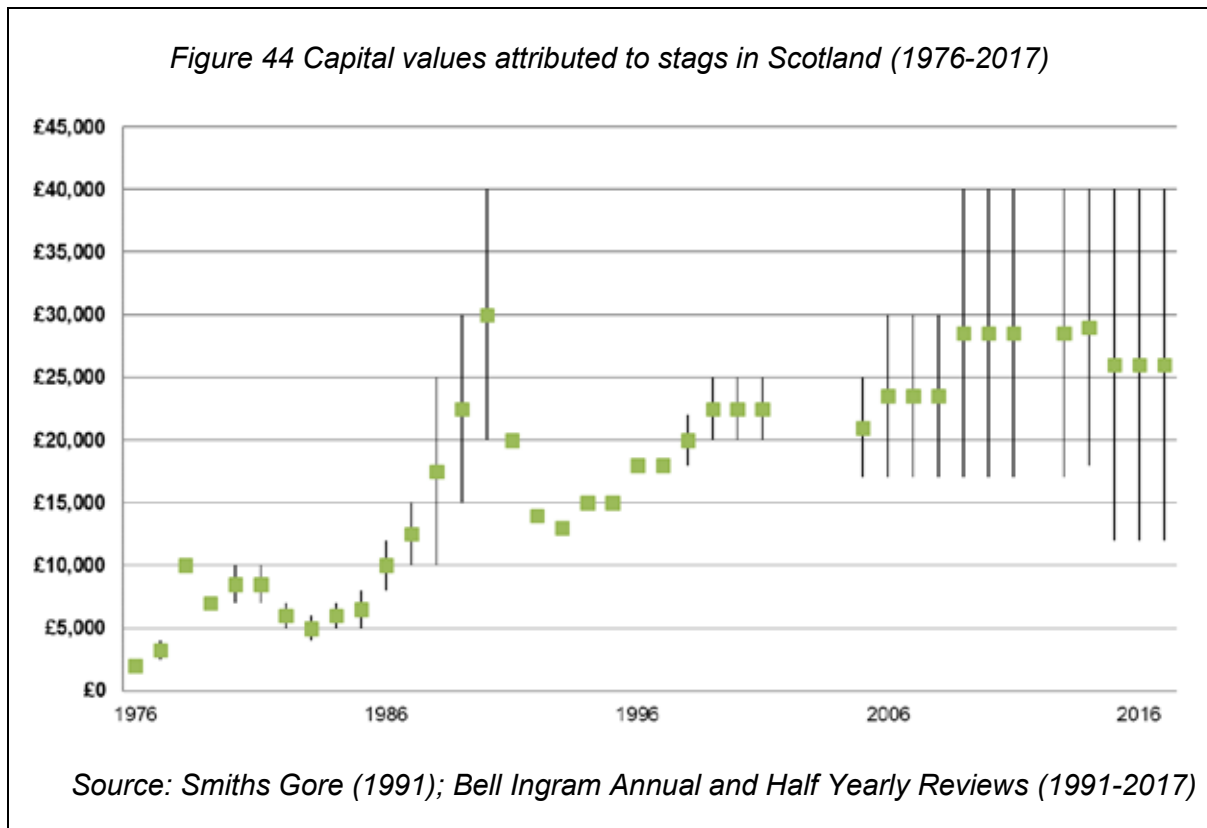
¹⁵ Jarvie, E. (1980) *The Red Deer Industry: Finance and Employment*. Scottish Landowners Federation. Callander, R. and Mackenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum.

¹⁶ MacMillan, D.C. and Phillip, S. (2008). Consumptive and non-consumptive values of wild mammals in Britain. *Mammal Review* 38, pp. 189–204.

¹⁷ SNH (2016) *Op cit*; Callander and MacKenzie (1991) *Op cit*.

¹⁸ SNH (2016) *Op cit*, p. iv.

¹⁹ SNH (2011). *Code of Practice on Deer Management*.



- 22 **The Working Group recommends that the Scottish Government should keep a clearer account of the expenditure by the public sector each year on the management of wild deer, and also ensure that it develops improved information on the estimated annual costs of damage by wild deer.**
- 23 The Group supports the continued promotion of the economic and other benefits that can be derived from wild deer. Wild deer in Scotland are a resource that should be managed to produce net economic benefits for Scotland as a nation. The Group considers, however, that the current economics of wild deer in Scotland has unnecessarily large costs at a national level in both financial and non-financial terms.
- 24 The nature and extent of the damage caused by wild deer to public interests in particular situations can be influenced by a range of factors. However, the issues might be considered generally to result from the fact that some owners do not shoot enough deer on their land to prevent or adequately limit damage by deer. The next Part of the Report examines the nature of the compulsory powers in the deer legislation and the extent to which these have been used by SNH and its predecessors as the deer authority.

20.2 Other Levels

- 25 One or more species of wild deer occur more or less throughout mainland Scotland and on many islands, so that information at a national level on the costs and benefits of deer needs to be built up from information that adequately encompasses the regional and local differences within Scotland.
- 26 The different main types of environments where deer management takes place in Scotland might be broadly categorised as agricultural, woodland, open hill and peri-urban/urban. These land use types occur across Scotland in a full spectrum of

combinations and all four types can be represented in a comparatively small area. However, the predominance of particular types of land use interests in different parts of Scotland creates a different context for deer management and the balance of public interests and costs in those areas.

- 27 The Central Belt with its concentrations of peri-urban/urban settlements and major infrastructure corridors is a very different environment for deer management compared to the North of Scotland with its relatively sparse population and extensive open hill ground. Other examples are South-West Scotland with its concentration of forestry and the North-East Lowlands and other parts of Eastern Scotland with their relatively extensive farmland.
- 28 The broad approach of the Scottish Government and SNH is to divide deer management in Scotland simply into upland deer management and lowland deer management. In this division, upland deer management tends to be equated with the management of open hill red deer, while deer management in the rest of the country is characterised as lowland deer management.²⁰
- 29 The traditional dominance of open hill red deer as the focus of public sector involvement in deer management in Scotland continues to be reflected in the allocation of SNH's budget for deer management.²¹ As discussed further in this Report, the Group considers that there should be a significantly improved balance in SNH's attention to deer issues across the whole of Scotland.
- 30 The Group also considers that, as part of that re-balancing, SNH should be developing a much clearer focus and account of the patterns of deer, damage caused by them and culling in the main different parts of Scotland, with these areas broadly defined from the point of view of deer management as indicated above.
- 31 The Group considers that this greater 'regional' emphasis should be incorporated into the 'Wild Deer: A National Approach' process, with the steps to be taken to improve deer management and reduce damage in different parts of the country.²² The particular value of also developing a clear account of issues caused by deer and deer management at the scale of Local Authority areas is discussed in Part Six.
- 32 The impacts of deer and deer management happen on the ground at a local level and Putman's 2012 report for SNH concluded that the costs of these "*may be better understood at a site level*".²³ Damage by deer on a landholding may result from the movement of deer from other land and a core purpose of the deer legislation is to protect individual land owners and occupiers from unacceptable levels of damage as result of "*any owner who has failed to take reasonable steps to control the number of deer on his land*".²⁴
- 33 The general view that land owners have a responsibility to manage the deer on their land within the carrying capacity of their land has long been recognised and was, for example, clearly reflected in the results of the PACEC survey. As discussed earlier,

²⁰ The lowlands are described by SNH as "*those parts of Scotland at lower altitudes, mainly South Scotland, Central Scotland and East and North East Scotland*" (SNH 2016 *Op cit*, p.10).

²¹ See Section 26.

²² See Section 25.

²³ Putman (2012) *Op cit*, p.i.

²⁴ Agriculture (Scotland) Act 1948, s.44.

the carrying capacity of land for wild deer is defined by avoiding unacceptable damage by the deer to the public interests covered by the deer legislation, including private interests considered to be in the public interest.²⁵

- 34 The economics of deer management on a landholding should therefore be seen as based on managing the deer within the carrying capacity of the land. The expenditure required to achieve that and any income that might arise from it, will depend on the particular circumstances.
- 35 These circumstances include an owner's management objectives for their land and how they go about controlling the number of deer that may occur on their land within the carrying capacity of the land. An owner may be able to improve any income they make from deer management by letting some of the culling on a commercial basis. However, the opportunity for that 'sport shooting' should be clearly seen as subject to the basic requirement of managing the deer within the land's carrying capacity to avoid unacceptable damage to public interests.
- 36 The substantially greater expenditure on deer management than income in the PACEC survey based largely on Highland estates, suggests that those estates generally manage their deer at a significant financial loss each year. However, the patterns between estates will vary greatly with, for example, a broad distinction between deer stalking estates in the North and West Highlands and estates in the Eastern and Central Highlands.
- 37 Estates in the Eastern and Central Highlands that have open hill red deer, may also have significant other resources such as grouse shooting and more commercial forestry. The greater importance attached to grouse shooting by some estate owners in these parts of the Highlands has resulted in the reduction or exclusion of open hill deer in some cases to control tick populations and reduce the risk of tick-borne diseases in grouse.²⁶
- 38 Traditionally, the culling on larger estates has tended to be carried out by the estate's own employees, including any accompanied stalking with other people such as the owner or paying clients. However, some estates have started to involve outside deer hunters to help to improve the estate's culling capacity. In some cases, professional deer controllers might be used to achieve significant reductions in open hill red deer numbers in a relatively short operation, rather than a long effort by estate stalkers or gamekeepers that can make the deer more unsettled and difficult to cull.
- 39 More generally in Scotland, there is a wide range of arrangements by which land owners carrying out deer culls on their land, use freelance deer hunters.²⁷ These may be recreational hunters or professional hunters who earn some or all of their income culling deer and a full spectrum of financial and non-financial arrangements might be involved depending on the circumstances.
- 40 The indications are that the number of competent deer hunters has continued to increase over recent decades and that across most of Scotland, there are options by which owners can arrange to have effective culls carried out in the most economic way in their particular circumstances.²⁸

²⁵ See Section 3.

²⁶ For example, in the Angus Glens.

²⁷ Some examples are given in Badenoch, C (2016), The management of deer in lowland woodland. *Scottish Forestry* 70(2).

²⁸ The Lowland Deer Panel noted that there may be a need in some lowland areas to make information more readily available to some land owners about local deer hunters in their area.

20.3 Deer Forests

- 41 The Land Reform (Scotland) Act 2016 re-introduced business rates over sporting rights. This involved repealing the exemption introduced for “*shootings and deer forests*” under the Local Government (Scotland) Act 1994.²⁹ This sub-section describes the background to sporting rates on shooting deer and considers the continued references to ‘deer forests’ in the current legislation.

20.3.1 Background

- 42 The fashion for establishing ‘deer forests’ in the Highlands as extensive areas of largely treeless hill and mountain land given over to the management of red deer for sport shooting, started in the late 18th century. The number and area of deer forests continued to increase during the 19th century and peaked just before the First World War, with the number of deer forests increasing from nine in 1790 to 213 in 1912.³⁰
- 43 Initially during that growth, the Courts considered that an owner’s right to shoot wild deer on their land, as an incidence or privilege of land ownership, was not sufficient to enable deer stalking to be formally leased under Scots law.³¹ That changed as a result of a court decision in 1839 that allowed sport shootings to be leased and, as a consequence, sport shootings then became liable for Local Authority rates.³² This was implemented through the Land Valuations (Scotland) Act 1854, which included “*shootings and deer forests*” in the legislation for the first time.³³
- 44 Under the 1854 Act, rates were only charged where ‘shootings and deer forests’ were let. However, that was changed by the Sporting Lands Ratings (Scotland) Act 1886 so that rates were charged whether ‘shootings and deer forests’ were let or not. This position over ‘shootings and deer forests’ was continued under the Valuation and Rating Act 1956 and the Local Government (Scotland) Act 1975.
- 45 In 1990, as a result of campaigning by the Scottish Landowners Federation, the government announced its intention to harmonise the position of sporting rates in Scotland with that in England and Wales, where rates were only charged when the sporting rights were let.³⁴ In 1993, the Secretary of State for Scotland then announced that sporting rights would be exempt altogether from liability for rates and this was implemented through the Local Government (Scotland) Act 1994.
- 46 With the change of government in 1997, the attitude of the Scottish Office towards sporting rates also changed. The Land Reform Policy Group established in 1998 under the chairmanship of a Scottish Office Minister, recommended in its final report the following year that the abolition of the exemption for sporting rights from rates should be investigated further as a potential reform.³⁵

²⁹ Land Reform (Scotland) Act, s.74.

³⁰ Green, P. (2016). Practical indicators to assess the welfare of wild deer in Scotland. SNH Commissioned Report No. 944.

³¹ Discussed in Rennie, R. with Blair, M., Brymer, S., McCarthy, F. and Mullen, T. *Leases* (2015) at 36.09.

³² Callander and MacKenzie (1991) *Op cit*.

³³ Land Valuations (Scotland) Act 1854, s.XLII.

³⁴ Callander and Mackenzie (1991) *Op cit*.

³⁵ Land Reform Policy Group (1999). Recommendations for Action. Scottish Office.

47 After the establishment of the Scottish Parliament, there was no change on sporting rates initially. However, the Scottish Government appointed Land Reform Review Group subsequently recommended in 2014, that the exemption should be reviewed with a view to removing it.³⁶ The Land Reform (Scotland) Act 2016 then removed the exemption and re-established the local taxation of sporting rights after an interval of 22 years.

20.3.2 Current Position

- 48 The re-introduction of sporting rates came into effect from April 2017, with Valuation Board assessors entering 'shootings and deer forests' into Valuation Rolls. The approach to valuation is based on a tiered rate per hectare being applied to six main land types to reflect their sporting potential. These land types and rates, which are footnoted below, include a category of deer forest/hill/moor valued at £2 per hectare.³⁷
- 49 Normal business rate reliefs apply, with 100% relief where a rateable value is less than the current threshold of £15,000. Other reliefs or allowances can also sometimes be available. The Scottish Government has, for example, issued non-statutory guidance to Local Authorities enabling Unoccupied Property Relief to be awarded at a 100% to shootings and deer forests where no commercial shooting or deer stalking takes place.³⁸
- 50 There was also a specific provision relating to deer forests introduced by the Land Reform (Scotland) Act 2016. Part 6 of the Act that re-introduced sporting rates had three sections. The first, s.74, removed the exemption for 'shootings and deer forests' in the 1994 Local Government Act, while s.75 amended the 1975 Local Government Act to include 'shootings and deer forests' on the valuation rolls. Section 76 then amended s.6 of the Valuation and Rating (Scotland) Act 1956 in three respects, two of which were minor technical updates. The third change, however, resulted from an amendment successfully promoted by the ADMG.³⁹ This introduced the following new sub-section into s.6 of the 1956 Act:
- “(8ZA) In arriving at the net annual value under subsection (8) of lands and heritages consisting of deer forests, regard may be had to such factors relating to deer management as the assessor considers appropriate.”*
- 51 Despite the continued references in the legislation to deer forests, including the special provision above relating to them, there is no clarity on what constitutes a 'deer forest'. There is no definition or interpretation of what is meant by 'deer forest' in any of the Acts relating to sporting rates mentioned here from 1854, 1886, 1956, 1975, 1994 and 2016. There is also no other statutory interpretation of 'deer forests' in other legislation or from court cases. As a result, the Scottish Assessors Association concluded for the re-introduction of sporting rates that there is no distinct definition of deer forests.⁴⁰

³⁶ Land Reform Review Group (2014). The Land of Scotland and the Common Good. Report to Scottish Ministers.

³⁷ Arable £4; Unimproved Grassland £4; Improved Grassland £3.50; Deer Forest/Hill/Moor £2; Woodlands/Forestry £5; Mixed Types £5.

³⁸ Scottish Farmer News Release, 4 May 2018.

³⁹ Cooke, R. (2018). Rates assessments raise more questions than answers. SCOPE, Issue 11, Winter/Spring 2018.

⁴⁰ Scottish Assessors Association (2018). Valuation of Shooting Rights and Deer Forests: Guidance Note, 25 May 2018.

- 52 The continued use of the label might be considered simply a legacy of its use in the 19th century rating legislation. However, after the First World War in the 1920s, there was a marked decline in the number of recognised traditional ‘deer forests’ in the Highlands. Changing land use patterns and management approaches then meant that the last official statistics for deer forests were collected in 1957, when the Department of Agriculture and Fisheries Scotland abandoned collecting the statistics because of the difficulty of defining what constituted a ‘deer forest’.⁴¹
- 53 The current rating legislation means that assessors have to decide what constitutes a deer forest for the purposes of entries on the valuation rolls. The current guidance on this noted that, in a court case in 2004, it was “*generally accepted*” that a deer forest was an area of “*wild land frequented by deer and used for stalking*”.⁴² The Guidance then defines deer forests for the purposes of rating as “*areas of predominantly managed open hill and moorland which deer now inhabit and used for the exercise of the rights to shoot deer*”.⁴³ This is a very broad definition covering all species of deer and all such land anywhere in Scotland.
- 54 The Group considers that references to ‘deer forests’ should be removed from Scotland’s rating legislation, because both the meaning of the term is unclear and its use is unnecessary. In the legislation, shooting red deer and other deer species in woodlands and everywhere else other than ‘deer forests’ is covered in ‘shootings’. The Group considers that all deer shooting could be covered straightforwardly by ‘shootings’.
- 55 The Group considers that there is no need or case for identifying ‘deer forests’ separately as a type of land in the legislation and in the Assessors’ land types. ‘Deer forest’ could simply be deleted from the hill/moor category. All such lands are eligible for the same current allowances and discounts.⁴⁴
- 56 The removal of references to ‘deer forest’ from the ratings legislation would also remove the inequitable position created by the insertion into the legislation of the special provision relating to ‘deer forest’ in sub-section 8ZA of the 1956 Act. This provision provides that, in considering lands and heritages consisting of ‘deer forests’, “*regard may be had to such factors relating to deer management as the assessor considers appropriate.*”
- 57 This special provision only for ‘deer forests’ was, as mentioned above, a result of successful lobbying by the ADMG to create scope for further rates discounts for its members. The Group considers that the scope for any special allowance or arrangement related to deer management in any land type should not be determined by the assessors. It should be a matter for the Scottish Government through non-statutory guidance as with the example referred to in paragraph 53 above.
- 58 **The Working Group recommends that amendments to the ratings legislation in the 1975 and 1994 Local Government (Scotland) Acts should remove references to ‘deer forests’ in the phrase ‘shootings and deer forests’, and that section 6(8za) of the Valuation and Rating (Scotland) Act 1956 should be repealed.**

⁴¹ Callander and MacKenzie (1991) *Op cit*.

⁴² Scottish Assessors Association (2018) *Op cit*, p.3.

⁴³ Scottish Assessors Association (2018) *Op cit*, p.3.

⁴⁴ For example: (a) extreme ‘disabilities’ such as very difficult access, when a discount of up to 10% might apply (SAA 2018 *Op cit*); (b) where the land is extensive a discount might apply due to ‘quantum’, for example, a ‘deer forest’ over 8,000 ha or more might have a 50% reduction of £2/ha rate (C. Innes, ‘Six month sporting rates appeal window vital for rural businesses’, Galbraith website).

PART FOUR - COMPULSORY POWERS

Introduction

- 1 Part One of this Report described two basic aspects of the management of wild deer in Scotland. Firstly, the legal context was described in terms of the legal status of wild deer, the ownership of deer hunting rights and the nature of the regulatory framework governing deer management. Secondly, the distributions, population sizes and annual culls of the four species of wild deer were described.
- 2 The second Part of the Report reviewed the basic standards of public safety and deer welfare that should apply under Scotland's deer legislation to the management of wild deer in all circumstances. Part Three then considered the damage that wild deer cause to a wide range of public interests in particular circumstances. These interests include agriculture, forestry, public safety, Scotland's natural heritage and the welfare of the deer themselves.
- 3 This Part of the Report reviews the compulsory powers available in Scotland's deer legislation for use in relation to the owners and occupiers of land, in order to assist the implementation of the legislation and the protection of public interests from damage by wild deer in particular circumstances.
- 4 These compulsory powers have always consisted of two basic types in both the Deer (Scotland) Act 1959 and its replacement, the Deer (Scotland) Act 1996. The powers are:
 - powers to require land owners and occupiers to provide certain types of information about the management of wild deer on their land; and
 - powers to cull wild deer on land in particular circumstances without the consent of the owner or occupier, to protect public interests from damage by wild deer.
- 5 The nature of these statutory powers and the extent to which they have been used are examined in the four Sections in this Part of the Report. Sections 21 and 22 consider the powers in the 1996 Act that can be used to require land owners and occupiers to provide information on deer management, while Sections 23 and 24 consider the two types of powers in the Act that can be used to control deer numbers to protect public interests.
- 6 The degree to which the use of these statutory powers is necessary, can depend on the non-statutory arrangements that exist to encourage deer management that protects public interests and delivers public policy. The current non-statutory arrangements are considered in Part Five of this Report.

Section 21 Information - Cull Returns

- 7 The Deer (Scotland) Act 1996 contains three sections that empower Scottish Natural Heritage (SNH), as the deer authority under the Act, to require information from owners and occupiers (ss.6A, 40 and 40A). Until the Land Reform (Scotland) Act 2016, the only power to obtain information was s.40 '*Power of Commission to require return of number of deer killed*'.¹ The 2016 Act then added s.40A '*Power of SNH to require return on number of deer planned to be killed*' and s.6A '*Deer management plans*'.

¹ See Section 1.

- 8 This Section of the Report is about the development and current use of s.40 Cull Returns. The following Section considers SNH's use of s.40A and s.6, together with SNH's powers under s.15 to enter on land to gather information related to its functions under the Deer (Scotland) Act 1996.

21.1 Cull Returns: Legislative History

- 9 The power to serve notice on a land owner requiring them to complete a return showing the number of deer killed on their land during a set period, is one of the oldest and least altered powers in Scotland's deer legislation. This authority to obtain information on the numbers of deer killed is also considered one of the most essential powers for the statutory authority responsible for regulating deer management.
- 10 The power to require a return of the number of deer killed on land was introduced by s.46 of the Agriculture (Scotland) Act 1948. A land owner served with a notice under s.46 was required to report the number of deer of each sex killed on their land during a specified period not exceeding five years, with deer defined as deer of any species.² Failure to submit a return within the 36 day time limit was an offence and could result in a fine.
- 11 The power to require a return was continued in the Deer (Scotland) Act 1959, except that the 'number of deer' was narrowed to the "*number of red deer*". The fact that the power was included as s.5 of the 1959 Act, immediately after the four sections dealing with the operation of the Red Deer Commission (RDC), might be considered to reflect the significance attached to the cull return system as part of the new statutory regime for deer management being introduced.
- 12 The only amendments to s.5 of the 1959 Act before the 1996 Act were made by the Deer (Amendment) (Scotland) Act 1982. This added "*or sika deer*" after "*number of red deer*" and increased the fine for failing to make a return or giving false information in a return.
- 13 The terms of s.5 of the 1959 Act were continued in the 1996 Act, except that "*red deer or sika deer*" was replaced by "*deer*" and the section was re-structured to give it four rather than two sub-sections. The cull return power was, however, moved from the start of the 1959 Act to near the end of the 1996 Act, as s.40 under the cross-heading '*Further Powers of the Commission*'.
- 14 In 2006, s.40 was modified by the insertion of sub-sections 2A and 2B to allow for electronic communication.³ In 2010, when SNH replaced the Deer Commission for Scotland (DCS), s.40 was amended to replace references to the Commission in the text of the section with SNH.⁴ The terms of s.40 have not been amended further since then.
- 15 It might also be noted that Scotland's deer legislation from 1948 until 2016 only referred to a 'return' rather than a 'cull return', as they are generally known. However, the Land Reform (Scotland) Act 2016, while it did not amend s.40, inserted s.17A '*Persons competent to shoot deer*' into the 1996 Act. That new section includes several references to 'a cull return' and 'cull returns'.⁵

² Agriculture (Scotland) Act 1948, s.54.

³ Electronic Communications (Scotland) Order 2006.

⁴ Public Services Reform (Scotland) Act 2010.

⁵ Section 17A is discussed in Section 8 of this Report.

21.2 Numbers of Cull Returns

- 16 The RDC was, following its establishment by the Deer (Scotland) Act 1959, principally focused on the large estates culling red deer on the open hill. The number of returns obtained by the RDC had increased to around 450 by 1980 and then to around 650 by 1990 due to red deer expanding their range. While the RDC's aim was to obtain cull returns from those regularly culling 10-20 red deer per year, analysis of the returns for the 10 years between 1985/86 and 1994/95 showed that around half the total recorded annual red deer cull was carried out by less than 100 estates.⁶
- 17 During the 10 years after the Deer (Scotland) Act 1996 replaced the RDC with the Deer Commission for Scotland (DCS), there was a significant increase in the number of cull returns obtained, because the DCS expanded the geographic distribution of the properties on which the DCS served notices requiring returns. In 2005/06, the total number of returns received was 2,549, recording 103,837 culled deer.⁷ The DCS estimated that collecting this information took 24 staff days.⁸
- 18 Figure 45 shows that during the next 10 years, 2006/07-2015/16, the number of notices sent out stayed broadly similar with an average of around 3,000 annually. Figure 45 also shows that the number of returns received also stayed at a broadly similar level with an average response rate to the notices sent out of 90%. However, there was some reduction in the response rate to the notices over the period.
- 19 In the first five years to 2010/11 when SNH replaced the DCS, the response rate to notices was 90% or more (peaking at 98% in 2007/08). The rate was then below 90% in the next five years to 2015/16 (the lowest being 85% in 2014/15). The following year, 2016/17, continued this pattern with 2,718 returns from 3,126 notices, representing a response rate of 87%.⁹ Figure 46 shows for that year, the geographic distribution of the number of notices served and returns received by Local Authority area.

Figure 45 Number of section 40 notices served and returns received (2006/07-2015/16)

Season	Notices served	Returns received	Response rate
2006/07	3,001	2,866	96%
2007/08	2,933	2,875	98%
2008/09	2,888	2,673	93%
2009/10	2,975	2,690	90%
2010/11	2,990	2,701	90%
2011/12	2,951	2,541	86%
2012/13	3,006	2,682	89%
2013/14	3,098	2,648	85%
2014/15	3,152	2,763	88%
2015/16	3,199	2,737	86%

Source: SNH Information Response 8

⁶ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland, pp. 37-38. The table on page 38 was extended to 1995 by a further Parliamentary Question in 1995.

⁷ Daniels, M. (2008). 'Limitations of data currently collected'. Internal DCS Report.

⁸ Daniels (2008) *Op cit*.

⁹ SNH Information Response 42.

Figure 46 Section 40 notices served and returns received by Local Authority area (2016/17)

Local Authority	Notices served	Returns received	Response rate
Aberdeen City	2	2	100%
Aberdeenshire	177	152	86%
Angus	61	50	82%
Argyll & Bute	448	405	90%
Clackmannanshire	6	3	50%
Dundee City	-	-	-
Dumfries & Galloway	410	343	84%
East Ayrshire	54	41	76%
East Dunbartonshire	7	6	86%
East Lothian	16	16	100%
East Renfrewshire	-	-	-
Edinburgh City	3	3	100%
Falkirk	14	14	100%
Fife	72	61	85%
Glasgow City	2	2	100%
Highland	891	801	90%
Inverclyde	3	3	100%
Midlothian	9	8	89%
Moray	69	69	100%
North Ayrshire	23	16	70%
North Lanarkshire	27	13	70%
Orkney	-	-	-
Perth & Kinross	255	239	94%
Renfrewshire	6	6	100%
Scottish Borders	200	171	86%
Shetland Isles	-	-	-
South Ayrshire	55	51	93%
South Lanarkshire	83	71	86%
Stirling	175	132	75%
West Dunbartonshire	14	5	36%
West Lothian	15	8	53%
Western Isles	29	27	93%
Total	3,126	2,718	87%

Source: SNH Information Response 42

- 20 In addition to the reduced response rate to notices, the number of returns that are received within the 36 days allowed for submitting returns in s.40 of the 1996 Act, is relatively low. The percentage of returns received by SNH within that time limit was, for example, 64% in 2014/15 and 56% in 2015/16.¹⁰ As a result, SNH has to spend time following up the failure of land owners and occupiers to submit returns after they have been served with a notice. For example, in 2016/17 SNH sent out around 400 letters in November 2017 warning of the risk of prosecution for failing to submit a return. The letters are then followed up with a phone call where necessary.
- 21 If a return is still not submitted to SNH after the various reminders, the next stage would be for SNH to initiate proceedings against the person involved. Section 40(4) of the 1996 Act provides that any person on whom a notice has been served who *“fails without reasonable cause to make the required return within thirty-six days after the service of the notice...shall be guilty of an offence”*. The penalty for this offence is given in Schedule 3 of the 1996 Act as *“a fine of level 3 on the standard scale or three months imprisonment or both”*. Level 3 fines can be up to £1,000.
- 22 SNH has never instigated proceedings against an owner or occupier over the failure to submit a return.¹¹ The process would involve SNH, if it is satisfied that the person did not have ‘reasonable cause’ and that it has adequate documentary evidence of the approach it had followed, submitting the case to Police Scotland.¹² If Police Scotland formed the view that an offence had been committed, they would submit the papers to the Procurator Fiscal.
- 23 The Crown Office and Procurator Fiscal Service (COPFS) would then assess the material to see whether the available and admissible evidence is sufficient to prove the offence has been committed by the person beyond reasonable doubt. If so, a case would then be taken to the Sheriff Court if it was judged in the public interest to do so, to be brought on a summary basis (i.e. has a notice been served in accordance with s.40(1) and if so, has the notice been responded to in accordance with s.40(4)(a)?). If it is established that an offence has been committed, the Sheriff has discretion over the penalty to be imposed in accordance with Schedule 3 of the 1996 Act.
- 24 This legal process might appear a relatively costly use of public funds to obtain some cull figures. However, the Group considers that the gradually declining cull return response rate and high percentage not submitted within the legal time limit, indicate that SNH should be taking a more robust approach. The Group considers that the proportion of properties in a Deer Management Group (DMG) submitting their cull returns within the 36 day period, should have been one of the criteria in SNH’s current assessment of the performance of DMGs.
- 25 At present, SNH spends significant resources chasing up cull returns and cannot produce complete data tables based on cull returns for a given year for most of the following year, due to the many months of delays before SNH receives a significant number of late returns.¹³ The lack of any prosecutions provides little incentive to those not complying with the terms of the Act.

¹⁰ SNH Information Response 16.

¹¹ SNH Information Response 16.

¹² Adequate documentary evidence may require some changes to SNH’s administrative procedures. At present, for example, SNH records the date on which a cull return is entered into its deer database and this might be some days after the return is received (SNH Information Response 37). The Group considers SNH should record the date on which a return is received.

¹³ As the Group found in requesting statistics from SNH.

- 26 The Group considers that a cull return system that functions effectively is a key component of deer management and that SNH should be discussing the position with COPFS with a view to bringing an initial case or two. While some successful prosecutions might help improve the current position, the Group also considers further proposals to make the cull return system more effective below and in Part Six of the Report.
- 27 One aspect of these improvements is developing the cull return system online. SNH introduced an online system (Deerline) for submitting returns in 2010/11 after a two season trial period started by the DCS. In 2010/11, 24% of returns were submitted online and five years later in 2015/16, the figure was 37.5%.¹⁴ In both 2016/17 and 2017/18, 36% of returns were submitted online.
- 28 The Group considers that SNH should be planning for the cull return system to go fully online. A number of other public bodies in Scotland have already made the transition to having their systems fully online.¹⁵ The Group recognises that this poses challenges for SNH given the nature of their current online cull return system. However, SNH is due to replace its current deer database and Deerline system, as discussed further below.
- 29 **The Working Group recommends that Scottish Natural Heritage should be planning to move its cull return system entirely online as soon as practically possible.**

21.3 Information Required in Cull Returns

- 30 The information that can be required with statutory authority in a cull return is limited to “*the number of deer of each species and of each sex... taken or killed on the land*”.¹⁶ This has been the case for the last 60 years since the original 1959 Act, subject to the change in the species covered from only red deer to all four species.
- 31 The legislation provides in s.40(1) of the 1996 Act that the return can be “*in such form as SNH may require*” and a copy of SNH’s cull return form for 2017/18 is included in Annex 9. The form, while it does not distinguish between deer that are ‘taken or killed’, includes additional questions beyond the terms of s.40. Currently, these are in/out of season totals, natural mortality totals and a yes/no question on whether the owner needs to control female deer in April or September.¹⁷ SNH’s online system also includes a question on deer-related traffic accidents.
- 32 The form does not distinguish between the information required by statute and that which would be supplied on a voluntary basis. Also, the form simply states “*Please return this form within 36 days of receipt*”. The form does not mention that returning the completed form within that period is a legal requirement. While that is mentioned in the notice requiring a return, the Group considers it might also be included on the form for emphasis given the large number of returns not received within this legal time limit.
- 33 There are also comments that might be made about the nature of the additional information requested by SNH on the forms. In addition, while the form distinguishes between deer killed in or out of season, SNH also issues separate, non-statutory return

¹⁴ SNH Information Response 16. Those returns submitted in hard copy are inputted manually to Deerline by a member of SNH staff.

¹⁵ Including, for example, Forestry and Land Scotland.

¹⁶ Deer (Scotland) Act 1996, s.40(1).

¹⁷ Seasons were discussed in Section 5, including the significance of the April/September question. Natural mortality was considered in Section 18.

forms with each out of season and night shooting authorisation.¹⁸ It has been long recognised that these additional forms, while increasing administration, also increase the risk of double counting or under-counting in the statutory cull returns.¹⁹

- 34 The Group considers the design and content of SNH's cull return form could be reviewed and improved. However, the main issue is the restricted information that can be required under the current terms of s.40. Increasing the scope of the specific information that can be required with statutory authority would not preclude including voluntary questions. The Group considers that an important addition to the form should be the voluntary option for those completing returns, to say whether they have experienced damage by deer in the year covered and the type of interest(s) damaged. This would provide SNH as the regulator with valuable information.
- 35 **The Working Group recommends that Scottish Natural Heritage should provide the option for land owners and occupiers completing cull returns to report whether they have experienced damage by deer in the year being reported and the nature of that damage.**
- 36 An example of a question that should be given statutory force is the fate of the carcasses of the deer reported as having been killed. The Group recommended this in Section 11 on Wild Venison and Food Safety, and suggested the types of options that would cover the uses of carcasses. In addition to the value of the information discussed in Section 11, the information would also be particularly useful in improving the scope to assess, when necessary, whether the cull figures given in a return are accurate.
- 37 Section 40(4) of the 1996 Act makes it an offence for a person, in making a return, to "*knowingly or recklessly furnishes any information which is false in a material particular*". The Group is not aware that anyone has ever been prosecuted under this provision, although there have long been anecdotal stories of some incidences of false figures being given by some land owners.
- 38 The Group considers, for example, in situations where SNH is encouraging land owners to take large culls, that SNH should be able to verify the cull figures being supplied. At present, there is no way of cross-checking the figures. However, including information on the fate of carcasses on the cull return form and combining that with the information that SNH can require from venison dealers, would at least make cross-checking possible.
- 39 The Group considers that there should be scope to require additional information on a statutory basis through cull returns. However, the Group considers that this should not be done through adding particular requirements to s.40 in the primary legislation, other than on the use of carcasses. Instead, the Group considers that "*and such other information as may be prescribed by order*" should be added at the end of s.40(1). This would enable a list of required information to be updated more readily from time to time through secondary legislation as priorities evolve.

¹⁸ There are no provisions in the 1996 Act to require a return of the number of deer shot under an authorisation, but SNH requires as a condition of their authorisation that their form with the authorisation should be returned to SNH within seven days of the expiry of the authorisation.

¹⁹ For example, Daniels (2008) *Op cit.*

- 40 **The Working Group recommends that section 40 of the Deer (Scotland) Act 1996 should be amended to enable secondary legislation to be used to add to the types of information that can be required on a statutory basis under the section.**
- 41 The 1996 Act already recognises the principle of the information to be included in cull returns being set out in secondary legislation. Scottish Ministers have the power to make regulations under s.17A ‘*Register of persons competent to shoot deer*’ that include in sub-paragraph (2)(a)(x) “*the information to be included in cull returns;*”.
- 42 Regulations have never been made under s.17A. However, the references to cull returns in s.17A are set within the context of the option of making persons registered as competent to shoot deer responsible for cull returns rather than the owners of land. As discussed earlier in Section 8, the Group considers that it remains important that cull numbers relate to an area of land and that the owner who holds the deer hunting rights on their land remains the person legally responsible for a cull return over that land when a notice is served.

21.4 Extent of Cull Return Coverage

- 43 The relatively limited coverage of the cull return system across Scotland at present was raised earlier in Section 2, including the fact that this means that the national cull statistics reported by SNH are significantly less than the actual cull of deer in Scotland each year.²⁰
- 44 Figure 9 in Section 2 of the distribution of cull returns across Scotland in 2015/16 showed that approximately 44% of Scotland’s land area is covered by the returns, with the actual figure possibly a percentage point or two higher due to some data in the lowlands that SNH had difficulty linking into the map.²¹
- 45 Figure 47 gives the percentage of each Local Authority’s land area covered by cull returns in 2015/16 and shows that only six areas have over 30% coverage (Angus 33%, Stirling 46%, Argyll & Bute 46%, Western Isles 52%, Perth & Kinross 53%, Highland 68%).²² Figure 48 uses Perth and Kinross to show the distribution of returns at a more detailed scale.
- 46 Figures 47 and 48 reflect that SNH’s use of the cull return system is very largely focused on the upland areas involving open hill red deer and DMGs. The total area of the 44 DMGs assessed by SNH in 2014, 2016 and 2019 is equivalent to c.39% of Scotland’s land area.²³ In these areas SNH aims to achieve 80-90% coverage.²⁴
- 47 This position reflects that SNH’s current policy is to largely limit its use of the cull return system to these upland areas, rather than expanding the coverage to other areas. This policy was set out by Cabinet Secretary Roseanna Cunningham in a written response to a Parliamentary Question in 2016:

“Scottish Natural Heritage (SNH) selects the owners from whom it requests statutory cull returns using their property database, which is largely comprised of properties within upland Deer Management Group areas where collaboration

²⁰ See Section 2.

²¹ SNH Information Response 15.

²² SNH Information Response 15.

²³ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

²⁴ SNH Information Response 15. This level of coverage is also reflected in the figures and map given in Box 3 ‘Cull Data’ in Albon, S. *et al.* (2017), Estimating national trends and regional differences in red deer density on open-hill ground in Scotland: identifying the causes of change and consequences for upland habitats. Scottish Natural Heritage Commissioned Report No. 981, p.11.

between ownerships is required; properties which apply for out of season or night shooting authorisations; or properties where SNH has identified a need to better understand cull levels in assessing impacts to public interest.”²⁵

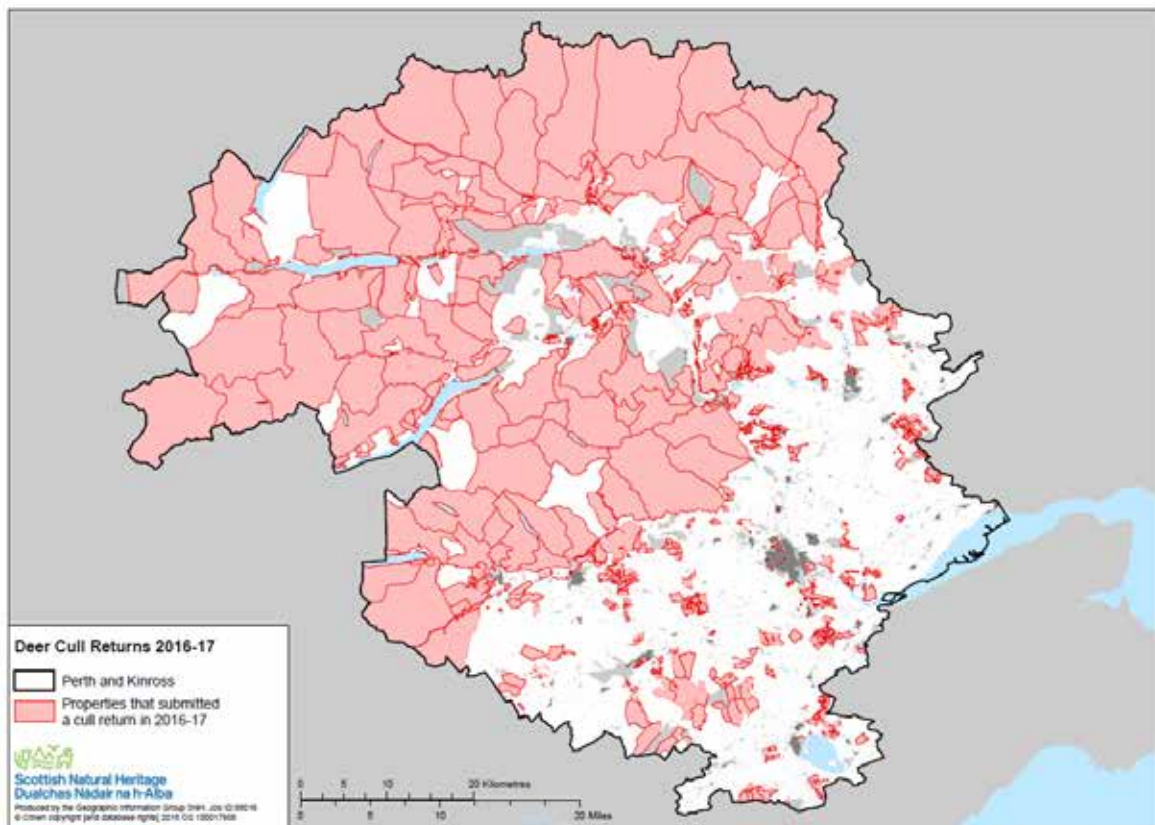
Figure 47 Local Authority land area covered by cull returns (2015/16)

Local Authority	Total area (ha)	Known area of properties covered by SNH cull return data (ha)	Local Authority area covered by cull returns
Aberdeen City	-	-	-
Aberdeenshire	631,264	172,087	27%
Angus	218,180	73,379	33%
Argyll and Bute	690,833	317,610	46%
Clackmannanshire	15,864	1,934	12%
Dumfries and Galloway	642,596	168,090	26%
Dundee City	-	-	-
East Ayrshire	126,212	12,466	10%
East Dunbartonshire	17,449	593	3%
East Lothian	67,918	846	1%
East Renfrewshire	17,379	107	1%
Edinburgh City	-	-	-
Falkirk	29,736	1,066	4%
Fife	132,503	2,450	2%
Glasgow City	-	-	-
Highland	2,568,393	1,757,138	68%
Inverclyde	16,043	726	5%
Midlothian	35,369	408	1%
Moray	223,756	59,452	27%
Na h-Eileanan an Iar	305,617	158,321	52%
North Ayrshire	88,534	25,975	29%
North Lanarkshire	46,989	2,388	5%
Orkney	-	-	-
Perth and Kinross	528,541	281,615	53%
Renfrewshire	26,194	462	2%
Scottish Borders	473,174	94,122	20%
Shetland	-	-	-
South Ayrshire	122,198	24,074	20%
South Lanarkshire	177,192	20,545	12%
Stirling	218,704	101,182	46%
West Dunbartonshire	15,883	796	5%
West Lothian	42,774	1,331	3%
Total	7,479,295	3,279,163	44%

Source: SNH Information Response 15

²⁵ Scottish Parliament, Written Answer S5W-00707, 29 June 2016.

Figure 48 Distribution of cull returns in Perth and Kinross (2016/17)



Source: SNH Information Response 29

- 48 This statement implies that there may be some additions each year to the coverage outside the DMG areas. However, the extent of additions through properties making returns for the first time after applying for an authorisation will be very limited due to factors such as General Authorisations and the significant proportion of repeat applications for authorisations.²⁶ Similarly, while SNH becomes involved in some new areas due to issues with deer damage, such as the red deer damage to agricultural crops in the Howe of Alford area of Aberdeenshire in 2017/18, these new involvements appear fairly limited year to year due to SNH focus on the DMG areas.
- 49 The Group considers that SNH should change its policy of making limited use of the cull return system, and start expanding its coverage over an increasing proportion of the 50+% of Scotland's land area outwith the DMG areas and not currently covered by cull returns.
- 50 The high degree of SNH's focus on open hill red deer and DMGs in its use of cull returns is also matched by the high proportion of SNH's total annual expenditure on deer management that is focused on open hill red deer and DMGs.²⁷ However, the increase in deer populations and expansions in their ranges over the decades mean that there is one or more species of deer now established across most of mainland Scotland.²⁸

²⁶ See Section 5 and Section 6. Also SNH Information Response 47.

²⁷ See Section 26.

²⁸ As shown in the distribution maps in Section 2 (Figures 4 and 5).

Similarly, as described in Part Three of this Report, damage caused by deer or the risk of it, is widely distributed in Scotland. This includes deer vehicle collisions and damage to agriculture, forestry, the natural heritage and other public interests.

- 51 The Group considers that SNH, as the regulator under the Deer (Scotland) Act 1996, needs a sufficiently clear picture of deer management in all areas. This should include information on which land owners and occupiers are or are not shooting deer and how many they might be shooting. Developing a fuller coverage of cull returns would enable SNH to address aspects such as gaps in culling and particular incidences of damage. The Lowland Deer Panel has also recently commented on the limitations imposed by the lack of such information.²⁹
- 52 Importantly, expanding the cull return coverage would mean that SNH started to build up information on existing cull patterns across an increasing proportion of deer range in Scotland. As a result, SNH would be much more readily positioned to respond to any issues that may arise over damage or the risk of it.
- 53 The Group considers that SNH is not going to deliver effective deer management in Scotland, when it is paying such limited attention to deer in half or more of the country. The Group considers that expanding the use of the cull return system is an essential component of providing the information required to promote effective deer management.³⁰
- 54 The coverage by returns could be expanded relatively straightforwardly from the existing pattern of returns by using the existing power of serving notices. The ways that expansion might be developed to best effect through a locality based approach are discussed in Part Six of the Report.
- 55 In Scotland, the submission of a return by a land owner reporting the details of deer killed in the previous year to the regulator is only a legal requirement on receipt of a notice, while “*in the vast majority of European countries some statistic return is compulsory*”.³¹ Removing the need to send out notices in Scotland by making the submission of a cull return compulsory for the owners of land where deer have been killed or taken, would be a direct approach towards achieving full geographic coverage of cull returns.
- 56 The Group considers that, given the current limited coverage by cull returns, the introduction of compulsory returns would not be realistic at this stage. However, if the coverage by returns is substantially expanded in coming years using notices as recommended, the introduction of mandatory cull returns should be considered as a measure to complete the process. This is discussed further in Part Six.

²⁹ Lowland Deer Panel (2019). Report to Scottish Natural Heritage, February 2019.

³⁰ The Group disagrees with SNH’s apparent view that the benefits of expanding cull return coverage would not be worth the effort. SNH correspondence with DWG 19 June 2019.

³¹ Putman, R. (2012). A review of the various legal and administrative systems governing management of large herbivores in Europe. In: R. Putman, M. Apollonio and R. Andersen (Eds.), *Ungulate Management in Europe: Problems and Practices*. Cambridge University Press, pp. 54-79.

- 57 Expanding the coverage of the cull return system requires identifying the owners of additional properties where deer are or might be being shot, for example, targeting properties of a few hundred hectares or more with or near deer habitat (i.e. woodland).³² There are a range of sources for identifying properties and their owners, including local knowledge or information from other public sector bodies (e.g. the Land Register of Scotland and Scottish Assessors Valuation Rolls).³³
- 58 One of the challenges that SNH identifies with the cull return system is keeping its property ownership database up to date. However, the Land Register will increasingly solve this problem. The percentage of Scotland's land area covered by the Register was only 32% or just over 2.5 million hectares in April 2018.³⁴ Figure 49 shows the areas already registered. However, the extent of coverage is due to rise rapidly over the next few years as the Registers of Scotland work towards complete coverage of Scotland by 2024.
- 59 Registers of Scotland also makes the information on the Land Register available through ScotLIS, a "*map-based online land and information service that will ultimately allow citizens, communities, professionals and businesses to discover comprehensive information about any piece of land or property in Scotland*".³⁵
- 60 Figure 49 reflects that much of the land yet to be registered in the Land Register is in the Highlands, where SNH's existing cull return coverage is greatest. The extent of Scotland covered by the Land Register will increase substantially when major public landholdings (including National Forest Estate land) and more of Scotland's larger private estates complete registration. A key factor in achieving full coverage will be the use of compulsory registration ('Keeper Induced Registration'), which started in 2016/17 and will increase significantly in the coming years.
- 61 SNH's administration of increasing numbers of cull returns would, as discussed above, be greatly improved if SNH pursued a transition to requiring all returns to be made online and also took a more robust approach to requiring returns to be submitted within the time limit of 36 days in the legislation.³⁶
- 62 A major improvement in the efficiency of SNH's handling of cull returns would also be achieved by replacing the increasingly aged database that SNH uses, as discussed further below. The Group considers that changes such as these would enable SNH to develop the expanded cull return coverage at relatively little administrative cost, particularly compared to the benefits that fuller coverage would provide.
- 63 The core benefits of much fuller coverage are, as mentioned above, the value of the information provided in enabling SNH to understand local deer management as part of acting to safeguard public interests from damage by deer. The Group considers that SNH needs to have that information much more widely across Scotland if it is going to perform its role under the legislation competently, given the widespread distribution of Scotland's deer populations and corresponding risks of deer damage to a range of public interests.

³² The cull return system, and indeed the link between land ownership and deer hunting rights, might be considered to become increasingly unsuitable in and around peri-urban and urban environments with particularly fragmented ownership patterns.

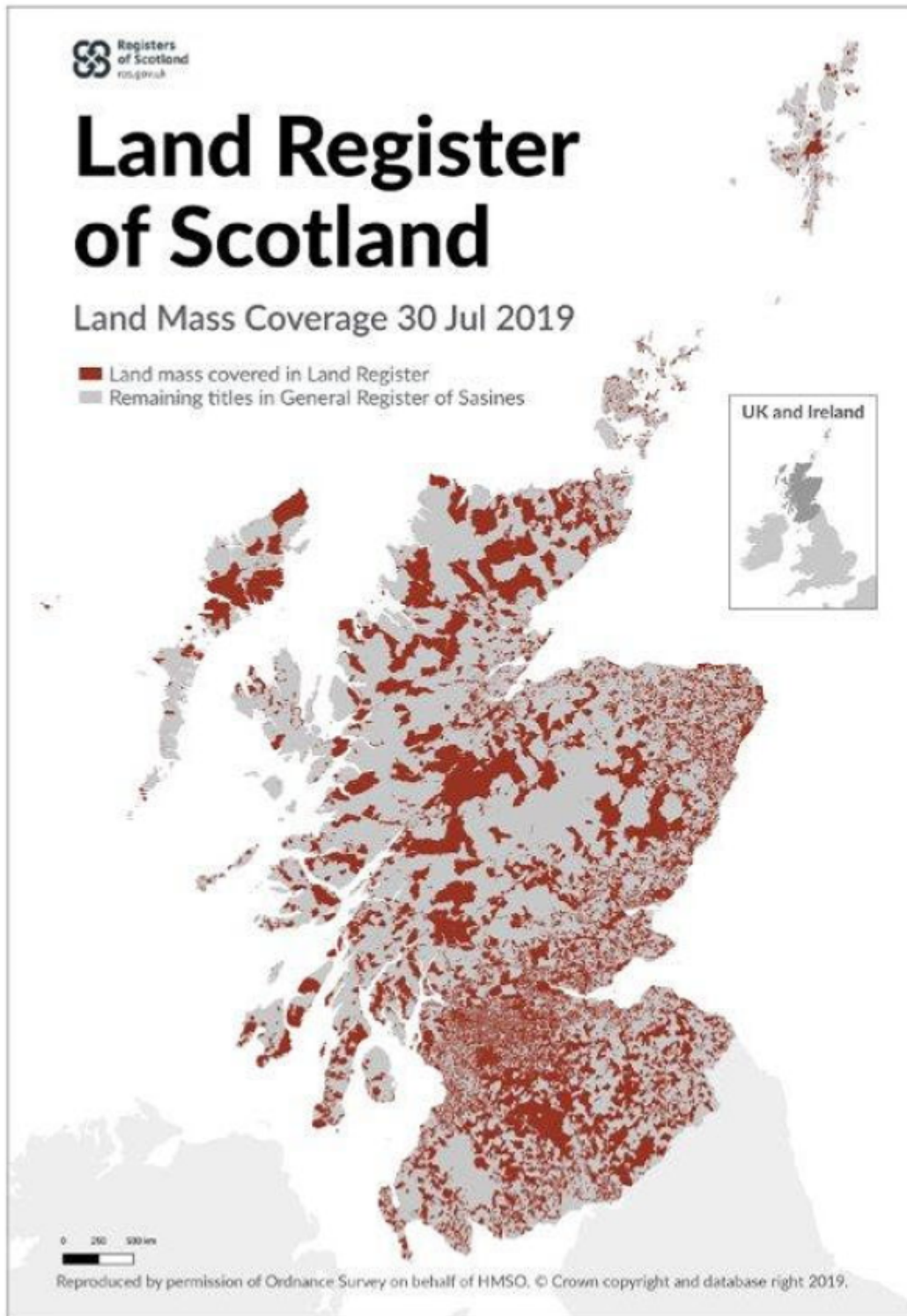
³³ Other public sources include data from Forestry and Land Scotland, the Scottish Environmental Protection Agency, and the Scottish Government Integrated Administration and Control System (IACS) Business References.

³⁴ Registers of Scotland Annual Report, 2017/18.

³⁵ Registers of Scotland Annual Report, 2016/17.

³⁶ While SNH currently serves around 3,000 notices, it was calculated in 2008 by the DCS that 2,500 returns took 24 staff days (Daniels 2008 *Op cit*).

Figure 49 Land areas recorded in the Land Register of Scotland



Source: Registers of Scotland

- 64 The Working Group recommends that Scottish Natural Heritage should, as an essential step, start to increase substantially the extent of Scotland covered by the cull return system, taking a targeted and prioritised approach to the areas where the coverage is to be increased.

21.5 National Cull Database

- 65 SNH currently enters its cull return data into Deerline, an online database that can be accessed by some SNH staff and people submitting cull returns.³⁷ The system was introduced by SNH for all cull returns from 2010/11 and is relatively complicated to use.
- 66 Deerline was designed by an external contractor, which now hosts the site and provides ongoing annual support.³⁸ SNH has access to very basic reporting functions, mostly related to tracking the submission of cull returns and authorisation reports. When more advanced reporting is required (i.e. asking questions of the data), SNH submits a chargeable request to the external contractor who provides the data for use by SNH staff in both numerical and spatial formats as required. SNH can then use this data for GIS and other analysis. This approach is currently SNH's preferred option when either extracting the required data is not possible with the current SNH access rights or the external contractor would complete the work much more quickly (albeit at a cost).
- 67 Data collected online via Deerline (and inputted manually by SNH from returns received by post/email) is not available publicly. Registered users can also only access the data they have submitted for their own property or properties.³⁹ The users can, in addition to their cull returns, submit authorisation applications and returns. There is also the option to report information on deer road traffic accidents and deer counts. The Group consider the system quite basic and not particularly clear for users entering their data, with repeated use generally needed to become familiar with the locations of the various functions.
- 68 The lack of public access to the cull return data on Deerline contrasts with the situation in some European countries where cull data is both collected and shared publicly online. In Norway, for example, the 'Cervid Register'⁴⁰ and the 'Set and Shot'⁴¹ data entry tool allow the reporting of the number and sex of animals shot, as well as natural mortality, numbers of animals killed in road traffic accidents and, in some cases, an estimate of losses to predation.⁴² Carcase attributes are also recorded. All of the aggregated data from different areas and regions is available publicly and it is possible to search the data by county, municipality and specific hunting ground, and to generate tables and/or graphs. The Register can also be used to examine hunting licences and reports.
- 69 Wild deer in Scotland are a national asset in the public domain and the Group considers that there should be a publicly accessible National Cull Database (NCD) to provide transparency and accountability over cull levels, so that the information is available to public bodies and other interests, including researchers and local land owners.⁴³

³⁷ Approximately 20 people at SNH have access to the system (ex-DCS staff and some wildlife licensing officers).

³⁸ SNH has an annual budget of £7,500 to cover hosting fees, IT support, any required changes, and data requests. There is no separate budget for data requests.

³⁹ While land owners have more than one property, 'a handful' of large private estates make multiple returns either for different 'beats' on their estate or because they own land in more than one DMG area (SNH Information Response 24).

⁴⁰ See <https://hjorteviltregisteret.no/>.

⁴¹ See <https://settogskutt.no/>.

⁴² Putman (2012) *Op cit*.

⁴³ The availability of the information would, for example, enable researchers other than SNH or those working through SNH to analyse the data.

- 70 At present, a land owner or occupier is only likely to know local cull levels on a regular basis if they are a member of a DMG that shares its cull data. Making this information accessible and transparent to local owners through a NCD would, of itself, be likely to encourage local discussion of deer management between neighbours and to open up the scope for cooperation where it was in their interest.⁴⁴
- 71 The Group considers that SNH's current Deerline system should be replaced with a more user-friendly NCD. This new system should enable the data it collects to be shared publicly as much as possible in both numerical and map-based formats (where applicable), recognising that there would be a level of information that cannot be shared due to the need for data protection.
- 72 The Group considers that the new system, while being easy to use, should provide SNH with advanced reporting functions and that SNH should know how to use the system so staff can manage it in-house. The new system should also provide improved opportunities for two-way communication between SNH and registered users, for example about local damage or other information relevant to the local area.
- 73 The Group is aware that SNH recognises that its relatively old Deerline system is no longer fit for purpose and is giving consideration to its replacement. The Group considers that a new system is an essential investment. The Group considers that the development of a fully online cull return system and a publicly accessible NCD should be important components in improving deer management in Scotland due to the information that they would provide to SNH, land owners and others.
- 74 **The Working Group recommends that Scottish Natural Heritage should replace its current online deer database with a new system and establish a publicly accessible National Cull Database.**

⁴⁴ The RDC traditionally considered the sharing of cull information as the first step in local cooperation that might lead to the formation of a DMG.

Section 22 Information - Other Powers

- 1 The previous Section considered Scottish Natural Heritage's (SNH) power under s.40 of the Deer (Scotland) Act 1996, to require an owner or occupier to submit a return of the number of deer of each species and sex killed or taken on their land. This Section considers, firstly, SNH's powers under s.40A to require a return of the number of deer of each species and sex that an owner or occupier plans to kill on their land in the following year, and secondly, SNH's power under s.6A to require an owner or occupier to produce a deer management plan. This Section also considers SNH's power under s.15 to enter on land to gather specified types of information.

22.1 Section 40A Planned Cull Returns

- 2 Over recent years in Scotland, there has been increasing emphasis on the value of information on planned or intended culls. In that context, the Land Reform (Scotland) Act 2016 amended the 1996 Act to introduce a new section (40A) empowering SNH to require an owner on receipt of a notice to submit a return "*showing how many deer of each species and each sex are planned to be killed on the land in the following year*".¹ As with a s.40 return, the return has to be submitted within 36 days.
- 3 As a result of s.40A, the meaning of a 'return' or cull return can now encompass both a previous cull and a planned cull. There are differences in the drafting style of ss.40 and 40A, but the sections have similar provisions. However, there are two significant differences. Firstly, while s.40(1) refers to the killing or taking of deer, s.40A(1) only refers to killing. The Group considers this should be amended both for consistency with the references to both killing and taking throughout the Act, and because taking deer by live capture can be part of a planned cull.
- 4 Secondly, while s.40(3) allows for cull information to be required for a period of up to five years previous, s.40A(2) only allows for planned cull information to be required for a period "*of not more than 1 year immediately following the date of service of the notice*". The Group considers this period unduly restrictive. While s.40 returns are generally only required for the past year and s.40A returns might be similarly required for just a year ahead, the Group considers that there are situations where it could be valuable to require a planned cull return for three or more years. The Group considers that s.40A should have the same flexibility over the duration of the period which can be covered as s.40 and that s.40A(2) should therefore be amended to a period "*not exceeding five years*".
- 5 **The Working Group recommends that section 40A of the Deer (Scotland) Act 1996 should be amended to refer to 'taken or killed' and to enable the information required to cover a period not exceeding five years.**
- 6 The introduction of the new power of s.40A might be seen in the context of other recent measures that have emphasised the value of having planned culls, for example, the Code of Practice introduced by the Wildlife and Natural Environment (Scotland) Act 2011 ('the WANE(S) Act') with its focus on planning as a key part of deer management. Another example is the power that was also introduced by the Land Reform (Scotland) Act 2016, which enables SNH to require an owner or owners to produce a Deer Management Plan (DMP).

¹ Deer (Scotland) Act 1996, s.40A(1).

- 7 There has also been an emphasis on planned cull levels in SNH's current Deer Management Group (DMG) assessment process discussed in the Section 26. With open hill red deer in these areas, there is usually information on the population of red deer based on open hill counts and scope to use population modelling. As a result, red deer culls in these areas can be calculated by large estates on a planned basis. The same can be the case elsewhere if there is systematic information available, for example, as on National Forest Estate land.
- 8 However, for many land owners and occupiers, factors such as the relatively limited size of their holdings and the extent of deer movement from other properties in any particular year, mean that the notion of a 'planned' cull can be misleading. In such situations covering much of Scotland, a planned cull should be seen as an expected or anticipated cull. This may be based on an owner's or occupier's experience in the previous year or years, but will still involve them in deciding the deer they plan or anticipate shooting in the next year.
- 9 An owner's planned or expected cull could be included on the existing cull return form as a simple line with boxes for males and females of each species. However, when a written question in the Scottish Parliament at the time s.40A was introduced, asked whether "*SNH will revise its statutory cull return forms for 2016-17 to include space for the owner's or occupier's planned cull in the following year*", the Minister answered "*For the 2016-17 season, this will likely include requests for future culls from some specific properties, but not necessarily be applied at a national scale*".²
- 10 The Ministerial statement reflects that SNH sees the use of s.40A as a regulatory intervention that might be used in particular situations, for example, "*in informing the development of a DMP under s6A, an Agreement under s7, a scheme under s8 or entering into emergency measures*".³
- 11 SNH promotes planned culls by the members of DMGs and the incorporation of these into the DMPs that DMGs are encouraged to produce. SNH recognises in that context that the use of s.40A "*may also be useful to force estates to engage in cull planning where they have been reluctant to do so*".⁴ SNH used s.40A for the first time in 2019 when it served both s.40 and s.40A notices on an estate to require it to provide information on its past culls and planned cull to inform the local DMG.⁵
- 12 The Group considers that SNH has a restricted view of the potential value of using s.40A more widely. The Group considers that the public authority responsible for safeguarding public interests from damage by deer should not only want to know what deer have been shot by owners in localities in the past year or years, but also to know the planned or expected cull levels for the following year or years in the localities. This allows the public authority to assess whether cull levels are being managed at appropriate levels or there is a risk of damage to public interests.

² Scottish Parliament Written Answer S5W-00706, 29 June 2016.

³ SNH draft guidance to staff on 'Exercising Regulatory Functions' (SNH 14 November 2018).

⁴ SNH draft guidance to staff on 'Exercising Regulatory Functions' (SNH 14 November 2018).

⁵ SNH (2019). Assessing Progress in Deer Management – Report from Scottish Natural Heritage to Scottish Government, September 2019.

- 13 Despite the increased emphasis in Scotland on the need for planned culls, as mentioned above, Scotland remains very unusual in not requiring owners to submit their planned culls to the public authority responsible for deer management. In Europe, this is “*mandatory in all countries apart from those where the State assumes entire responsibility for the control of hunting management ... or in the UK and Sweden*”.⁶ The value of information on planned culls is discussed further in Part Six of the Report.

22.2 Section 6A Deer Management Plans

- 14 The Land Reform (Scotland) Act 2016 amended the Deer (Scotland) Act 1996 to introduce s.6A ‘*Deer management plans*’. The new section enables SNH to require land owners and occupiers in a particular area to produce a DMP, where SNH is satisfied that deer have caused, are causing or are likely to cause damage and that measures are required to prevent further damage or to remedy the damage.⁷
- 15 The DMP to be produced under s.6A has to include the measures to be taken by the owners and occupiers and the time limit for such measures. The DMP then needs to be submitted to SNH for its approval no later than 12 months after the notice was served by SNH, or at such later date as may be specified by SNH. SNH can then approve the DMP, require modifications to it, or reject it.
- 16 In the Act, s.6A follows the short s.6 ‘*Control areas*’ that simply states that the areas involved in control agreements and schemes are known as control areas, and is then followed by s.7 ‘*Control Agreements*’ and s.8 ‘*Control Schemes*’. Section 6A is a precursor to those sections in that a s.7 Control Agreement is triggered under s.7(4A), if the s.6A DMP has not been submitted in time, has been rejected by SNH or the measures required in it are not being carried out. A voluntary s.7 agreement is then a pre-requisite to a compulsory s.8 scheme.
- 17 Each of these three sections, in ss.6A(1), 7(1) and 8(1), require SNH to have “*had regard to the code of practice on deer management*”. This requirement in s.6A is to be consistent with the requirements in ss.7 and 8 that were introduced by the WANE(S) Act 2011, when that Act added s.5A ‘*Code of practice on deer management*’ into the 1996 Act. However, s.5A only provides that the Code “*may... set out of examples of circumstances in which SNH may require*” a DMP to be produced, seek a s.7 agreement or make a s.8 scheme.
- 18 The Group considers the requirement in s.6A, 7 and 8 to have regard to the Code is a needless addition that should be removed as these references to the Code are not relevant to the implementation of the sections. The issue in each of these sections of the Act is not whether anyone has followed the voluntary Code or not, but whether there is damage or the risk of damage and measures need to be taken.
- 19 **The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to remove the reference to the Code of Practice on Deer Management in section 6A(1) of the Act.**

⁶ Putman (2012) *Op cit.*

⁷ Or a danger or potential danger to public safety.

- 20 The types of damage set out in s.6A(2) that may trigger SNH to require the production of a DMP are consistent with those in s.7, including the inclusive phrase “*damage to public interests of a social, economic or environmental nature*”. The Group has commented in Section 3 of the Report, on the case for rationalising the various statements in the 1996 Act over the public interests that can be protected under its provisions. The Group also considers in Section 24, which deals with s.7 Control Agreements, the significance of the statement in s.6A(4) that ‘the natural heritage’ in s.6A has the same meaning as in s.7(2).
- 21 The Group considers that the introduction of s.6A into the 1996 Act provides SNH with a useful new power. This includes the requirement for the first time in the 1996 Act for owners and occupiers to propose annual cull levels (amongst other measures in the DMP) for SNH approval, in contrast to s.7 where SNH specifies the measures and the choice for owners and occupiers is whether to agree or not.
- 22 However, the Group considers the fact that s.6A(5) allows a period of up to 12 months after a notice is served before a DMP has to be submitted to SNH, is unduly restrictive on the potential value of the power. The 12 months is a relatively long period to allow, given that there has to be an issue over damage or the risk of damage before a notice can be served to start the process.
- 23 The 12 month length appears to result from anticipating that SNH would be using the power with DMGs, as with SNH’s current aim of encouraging DMGs to produce DMPs as part of its on-going assessment of DMGs. However, the Group considers there are likely to be circumstances, whether with an individual owner or occupier or a number of them, where there is no pretext for waiting up to a year before a DMP is produced to tackle the issue(s) resulting in a s.6A notice being served.
- 24 The Group therefore considers that s.6A(5) should be amended to provide scope for SNH to require a DMP to be produced in a shorter period than 12 months, to improve the flexibility of using the power. At present, s.6A(5)(b) already enables SNH to specify a date later than 12 months for a DMP to be produced. The Group considers that SNH should also be able to specify a date between three months and 12 months following a s.6 notice, for a DMP to be produced. SNH would then be able to determine the actual period in particular situations according to circumstances, subject to a minimum period of three months’ notice.
- 25 **The Working Group recommends that section 6A(5) of the Deer (Scotland) Act 1996 should be amended to enable the period within which a Deer Management Plan has to be submitted to Scottish Natural Heritage to be less than 12 months, subject to a minimum of three months’ notice.**
- 26 SNH served its first s.6A notices in February 2018, issuing notices to nine adjoining properties in the North-West Highlands due to deer “*causing damage to woodland and the natural heritage generally*”.⁸ The properties involved make up a DMG sub-group that had previously received funding from SNH towards the costs of producing a DMP, but which had not completed the task due to the appointed contractor needing to withdraw from the work.⁹

⁸ SNH letter that served the notice, 14 February 2018.

⁹ West Sutherland DMG, Minutes of Meeting on 13 November 2017.

- 27 SNH's first use of s.6A was therefore to provide impetus to the completion of a DMP that the DMG sub-group had already agreed to produce. The use was also in the context of SNH's current assessments of DMGs focused on the production of DMPs. SNH has not, at the time of writing, served any further s.6A notices since then.
- 28 The Group considers that there is scope for SNH to make constructive use of s.6A in a range of circumstances that do not necessarily involve DMGs. However, the Group would be concerned if SNH started to use s.6A regularly or routinely as a first step before SNH considered serving a notice under s.7 '*Control Agreements*'. Both sections are intended to address issues over deer damage by voluntarily means and running them in sequence would further lengthen an already lengthy process before direct intervention could be taken (if necessary) under s.8 to address a particular case of damage by deer.
- 29 Under s.6A, a year could pass before a DMP is received and a longer period may be involved if modifications are discussed before SNH approves or rejects it or decides that the measures in an approved DMP are not being implemented. There has then to be a minimum of six months from a s.7 notice being served before SNH might decide agreement is not possible, or a longer period before SNH decides that a s.7 is not being implemented. Thus, in response to a recognised case of damage or where deer are likely to cause damage, years might pass before a s.8 might be triggered.
- 30 In the Act, s.6A is framed as a potential precursor to the use of s.7 and there is a high level of duplication in s.6A of the provisions in s.7. The use of both sections is triggered by the same circumstances and the basic contents of a DMP and control agreement are set out in the same terms. The principle difference can be considered to be that with s.6A the onus is on the owners and occupiers to produce the plan, while with s.7 the onus is on SNH. On the basis of informal comments by SNH, the Group considers that that some owners might not fulfil a s.6A notice to avoid the expense of producing a DMP that might be subject to modifications by SNH, preferring instead to put the onus and expense on SNH.
- 31 As the use of s.6A and s.7 are triggered by the same circumstances, the questions arises as to the reasons why SNH might decide to use s.6A rather than s.7. While s.6A might seem a less threatening regulatory measure because it is a step further away from the use of a compulsory s.8 Control Scheme, the very lengthy delay in the response to damage or the risk of it from running the sections in sequence has been described above.
- 32 The Group considers that there are circumstances where there are benefits in SNH being able to require the production of a DMP, as discussed further in Part Six. However, the Group considers that s.6A could have been linked to s.40A rather than s.7. The planned cull required by s.40A might be seen as the simplest form of DMP, with the use of s.6A where there is a need for more information in more complex situations.
- 33 With that approach, SNH would use s.6A like 40A to gather information to inform itself as regulator so that damage by deer or the risk of it can be avoided or minimised. Thus, s.6A would be an information requirement like ss.40 and 40A and failure to comply would result in an offence and potential fine, rather than a s.7 and potential s.8.

22.3 Section 15 Power to enter on land

- 34 In the Deer (Scotland) Act 1959, s.15 '*Entry on land*' provided the RDC with the power to enter on to an owner's land for particular purposes. The power was subject to providing notice in the specified terms and any person entering on land being duly authorised in writing by the RDC.
- 35 The purposes were of two types. Firstly, the RDC had the power to enter land as part of exercising its control powers to deal with marauding deer and to implement a control scheme. Secondly, the RDC had the power to enter land to gather information. This could be either to determine whether the RDC might need to exercise those control powers or to carry out a census of red deer or sika deer.
- 36 The s.15 in the 1959 Act became s.15 '*Power to enter on land*' in the Deer (Scotland) Act 1996. While the two sections are drafted differently, there are few differences in the provisions of the 1959 s.15 and the 1996 s.15. The current version covers all species of deer and s.15(2A) has been added to allow for electronic communication. The other notable change involves access to land to determine if regulatory powers should be exercised.
- 37 In the 1959 Act, s.15 enabled the RDC to enter on land to determine whether the RDC's power to control marauding deer under s.6 of the 1959 should be exercised. However, the current s.15 does not enable SNH to do the same for the successor power to s.6 in the 1996 Act, s.10 '*Emergency measures*'. While the current s.15 empowers SNH to enter on land to exercise s.10 measures and implement a control scheme, s.15(3)(b) only enables SNH to enter on land to determine if it should use its powers under ss.7 and 8 dealing with control agreements and control schemes.
- 38 The Group considers that the current position with s.15(3)(b) is an anomaly. The reasons that SNH might want to enter land to determine if ss.7 and 8 powers should be used, apply equally to s.10 and its associated s.11 '*Application of section 10 in relation to the natural heritage*'. The Group considers that s.15(3)(b) should be amended to reflect this.
- 39 **The Working Group recommends that s.15(3)(b) of the Deer (Scotland) Act 1996 should be amended to include sections 10 and 11 of the Act, rather than just sections 7 and 8.**
- 40 In s.15(2), the period of notice required to enter on land for any of the purposes in s.15(3) is two weeks. That period has been the same since 1959. The Group considers that two weeks is now an un-necessarily long time, particularly in situations where SNH require to enter on land to determine if it should use the control powers in the Act due to damage by deer.
- 41 **The Working Group recommends that the period of notice required to enter land under s.15(2) of the Deer (Scotland) Act 1996, should be reviewed with the intention of making the period of notice shorter.**

- 42 Under s.15(3)(a) in the 1996 Act, SNH is able to enter on land for the purpose of “*the taking of a census of deer in any area in pursuance of its functions under section 1(1) of this Act*”. That provision is expressed in very similar terms to the equivalent provision in s.15 of the 1959 Act, when a census was regarded as counting red deer on open hill range. Now, while a census can involve any species of wild deer, the census might also involve other methods such as the technique of dung counting analysis.
- 43 Dung counting analysis, which can be used in both open hill and woodland environments, can provide data on both the density of deer in an area and the pattern of occupancy by deer within the area. The technique is widely used by Forestry Land and Scotland, as well as by an increasing number of other deer managers.
- 44 Within the context of s.15, the principal value of a census of deer in an area is to relate the results to information on the impacts of the deer in the area. Combining the two sources of information can then inform culling in the area by providing guidance on the numbers of deer that might need to be shot, for example, to maintain or reduce the level of impacts.
- 45 The Group considers that it is now an historical anomaly that s.15(3)(a) only enables SNH to enter on land to carry out a census of deer in any area. The Group considers that SNH should also be able under s.15(3)(a) to enter on land to assess the impacts of deer in any area in pursuance of its functions under s.1(1) of the 1996 Act, not just under s.15(3)(b) to determine if its control powers should be exercised.
- 46 A central purpose of the 1996 Act and SNH’s role in implementing the Act, is to minimise the impacts by deer that are considered to amount to damage or the risk of damage. The focus of public policy is to reduce the damaging impacts of deer, not the numbers of deer *per se*. The Group consider that it is important for SNH’s role in relation to the Act, that SNH should be able to enter on land in any area to be able to assess the current levels of impacts by deer in the area.
- 47 **The Working Group recommends that section 15(3) of the Deer (Scotland) Act 1996 should be amended to include as a purpose for entering on land, carrying out an assessment of the impacts of deer in any area in pursuance of Scottish Natural Heritage’s functions under section 1(1) of the Act.**

Section 23 Emergency Control Measures

- 1 Statutory powers to kill wild deer on an owner's land were first introduced in Scotland as war time measures during the First and Second World Wars.¹ Fuller powers were subsequently included in the Agriculture (Scotland) Act 1948. These included the power of the Secretary of State for Scotland to respond to complaints of damage by deer by authorising reductions in deer numbers "*on the land of any owner who has failed to take reasonable steps to control the number of deer on his land*".²
- 2 The Secretary of State's compulsory control power under the 1948 Act was then replaced by the Deer (Scotland) Act 1959, which gave the Red Deer Commission (RDC) two types of control powers. One of these powers, s.6 '*Power of Commission to deal with marauding deer*', was a short term measure to reduce deer numbers on "*particular*" land in response to damage. The other power, s.7 '*Control Schemes*', was a wider measure to reduce deer numbers at a "*locality*" scale to reduce damage.
- 3 These two types of powers were continued in the Deer (Scotland) Act 1996. Thus, s.6 was succeeded by s.10 '*Emergency Measures to prevent damage by deer*' and its associated s.11 '*Application of section 10 in relation to the natural heritage*', while s.7 was succeeded by s.8 '*Control Schemes*' and its necessary precursor, s.7 '*Control Agreements*'.
- 4 These two control powers in the 1996 Act, s.10 and s.8, remain the current legislation. This Section considers the history and development of the terms of s.10 and the extent to which the power has been used. Section 24 then considers s.8.

23.1 Section 6 of the Deer (Scotland) Act 1959

23.1.1 Legislative History of s.6

- 5 In the 1959 Act, s.6 '*Power of Commission to deal with marauding deer*' provided in s.6(1) that, subject to its other provisions:

"where the Commission are satisfied that red deer are coming on to any agricultural land or woodland or garden ground and are causing substantial damage to crops, pasture or animal or human foodstuffs, or trees on that land, and that the killing of the deer is necessary for the prevention of further damage as aforesaid, they shall authorise...any person who in their opinion is competent to do so to follow and kill on any land mentioned in the authorisation such red deer as appear to that person to be causing the damage".
- 6 Amongst the other provisions, s.6(2) required that the RDC must first consult the person with the right to kill deer on the particular land involved and not issue an authorisation if that person agreed to carry out the necessary culling. In s.6(4), any authorisation that was issued was limited to a period "*not exceeding 14 days*".
- 7 The only amendments to s.6 before the 1959 Act was replaced, were through the Deer (Amendment) (Scotland) Act 1982. It substituted s.6(1) with a revised s.6(1) that covered both red deer and sika deer, and re-structured the provisions into sub-paragraphs. The only other change by the 1982 Act to s.6 was to increase the period of the authorisation to "*not exceeding 28 days*".

¹ See Section 3.

² Agriculture (Scotland) Act 1948, s.44.

- 8 The 1982 Act also, however, introduced a new s.6A ‘*Further power of Commission to deal with marauding deer*’. This gave powers to the RDC in much more succinct terms than s.6, to control deer species other than red or sika deer causing damage to agricultural land or woodland. There is no record available of whether s.6A was ever used by the RDC, but the Group considers it unlikely. The section was repealed when s.6 was replaced by s.10 in the Deer (Scotland) Act 1996, which covers all species of deer.

23.1.2 Use of s.6 of 1959 Act

- 9 At the time of the 1959 Act, there was relatively widespread marauding by red deer in the Highlands³ and the RDC immediately started to make relatively extensive use of s.6 authorisations in response to complaints of marauding.
- 10 Figure 50 shows the number of cases where s.6 authorisations were used to control marauding red deer in each year during the 30 year period 1960 to 1989. The second column in the table shows the number of reported cases where the RDC used its own staff to carry out an authorisation under s.6. The third column shows the number of s.6 authorisations issued to estates and farms to control marauding deer out of season on unenclosed land.
- 11 The third column does not start until 1962/63 as the new close seasons for red deer introduced by s.21 of the 1959 Act, did not come into effect for three years. At that point, while s.33(3) of the 1959 Act retained the 1948 Act right of occupiers of enclosed agricultural land and woodland to kill red deer on that land at any time of year, the introduction of the close season meant no-one could kill red deer on unenclosed land during the close season without an authorisation. A s.6 authorisation to control marauding red deer was therefore the only way that red deer could be shot out of season on unenclosed land.
- 12 Figure 50 shows that the number of reported cases dealt with by RDC staff under s.6 declined significantly over the 30 year period cover. There were an average of 66 cases per year during the 1960s, 24 cases per year during the 1970s and 6 cases per year during the 1980s. Correspondingly, the number of deer killed each year by the staff declined from several hundred a year to a few dozen.
- 13 The number of s.6 authorisations issued to owners and occupiers for out of season control of marauding deer on unenclosed land between 1960 and 1989 reduced after the first few years and then stayed relatively constant, before the start of an increase in the final years shown in the table. That increased continued with the number of these s.6 authorisation being 93, 95 and 183 in the final three full years of the 1959 Act to 1995/96.⁴
- 14 This reduction in culls by RDC staff while the number of s.6 authorisations to estates increased, reflected a reduction in the number of complaints received by the RDC. This was considered to be because improved “*venison prices have meant farmers, crofters and foresters have tended to kill the marauding deer themselves rather than seek RDC assistance*”.⁵ The reduction in RDC staff carrying out s.6 authorisations did not reflect a reduction in serious damage by marauding red deer or in calls for action to tackle the problems. This is illustrated by the extract below from a House of Commons Select Committee report in 1990 on Land Use and Forestry:

³ North of the Highland Boundary Fault and west of the eastern edge of the Grampians.

⁴ RDC Annual Reports.

⁵ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland, p.40.

- 197 ...More serious problems are associated with the open-hill [deer] population, with bad management practices resulting in over-population, damage to neighbouring properties and the environment. The expansion of this population is resulting in the necessity for expensive deer fencing to protect tree planting over an increasing area and the invasion and colonisation of existing plantations, with consequent problems.
- 198 The RDC's evidence to the Committee clearly indicated that the present position is unacceptable. Their efforts over many years have produced little sign of any improvement and we endorse their conclusion that "a lack of statutory power to enforce cull levels is seen as a handicap in reducing overall numbers".⁶

Figure 50 Number of cases where section 6 authorisations were used to control marauding red deer (1960-1989)

Year	RDC staff cull (no. of cases reported)	Out of season authorisations (no. of estates/farms)
1960	86	
1961	109	
1962	62	
1963	68	70
1964	61	50
1965	88	70
1966	58	59
1967	37	57
1968	44	55
1969	42	39
1970	37	31
1971	34	39
1972	24	32
1973	27	37
1974	19	35
1975	35	41
1976	27	53
1977	18	63
1978	11	40
1979	10	37
1980	4	29
1981	2	25
1982	7	19
1983	6	26
1984	10	41
1985	6	27
1986	4	18
1987	6	29
1988	8	45
1989	2	58

Source: Callander and MacKenzie (1991)

⁶ Agriculture Committee Report, 'Land Use and Forestry' (House of Commons, 29 September 1990).

23.2 Sections 10 and 11 of the Deer (Scotland) Act 1996

23.2.1 Legislative History of ss.10 and 11

- 15 The 1959 Act was, as discussed previously, replaced through a two stage parliamentary process.⁷ The 1959 Act was first amended by the Deer (Amendment) (Scotland) Act 1996 and then a consolidation exercise was carried out to incorporate those and previous amendments to the 1959 Act, into a new principal Act - the Deer (Scotland) Act 1996.
- 16 Prominent changes made by the Amendment Act to the 1959 Act were modernising the RDC into the DCS and adding public safety and the natural heritage to the interests that could be protected under powers in the 1996 Act.
- 17 In the Amendment Act, s.4 amended s.6 of the 1959 Act, including changing the section's name ('side note') to the current '*Emergency measures...*' to avoid the use of 'marauding' in the Act. This was done on legal advice about the difficulty of defining marauding.
- 18 Section 4 of the Amendment Act also amended the provisions of s.6 by substituting s.6(1) with a new s.6(1) incorporating the following changes so that the text:
- Covered all species of deer;
 - Included the protection of public safety;
 - Removed the restriction in the 1959 Act so that it had only applied to deer "*on any agricultural land, woodland or garden ground*", because public safety issues are not confined those types of land (nor natural heritage damage, as dealt with separately in s.5 of the Amendment Act as discussed below);⁸
 - Changed 'forestry' to 'woodland' to reflect the fact that government forestry policy was encouraging multi-purpose woodlands rather than simply commercial forest.⁹ A definition of woodland was also added to the Interpretation section.
 - Added the requirement that s.6 could only be used by the RDC/DCS if "*none of their other powers is adequate to deal with the situation*". The justification for this was explained in terms of the "*new greatly strengthened powers for control agreements being introduced by the Act, together with greater flexibility for authorising out of season shooting*".¹⁰
- 19 The last addition above was a concession to pressure in the House of Lords during the passage of the Amendment Bill. The change was seen as clarifying, given the new provisions for separate out of season authorisations in particular, that s.6 powers would be "*powers of last resort (in keeping with their emergency nature)*".¹¹
- 20 The only other change made to s.6 was to add a new sub-section (now s.10(5) in the 1996 Act) to allow deer to be taken or removed from land (rather than shot), when that is the most appropriate means of protecting public safety.

⁷ See Section 3.

⁸ Deer (Amendment) (Scotland) Bill, Notes on Clauses (House of Commons, 1996).

⁹ Deer (Amendment) (Scotland) Bill, Notes on Clauses (House of Commons, 1996).

¹⁰ Deer (Amendment) (Scotland) Bill, Notes on Clauses (House of Commons, 1996).

¹¹ Deer (Amendment) (Scotland) Bill, Amendments accepted in the House of Lords (House of Lords, 2 April 1996).

- 21 The Government had also intended to add the protection of the natural heritage to s.6, but there was opposition in the Lords to that approach. This resulted in the use of s.6 powers to protect the natural heritage being treated separately in s.5 of the Amendment Act. As a result, ss.4 and 5 of that Act then became ss.10 and 11 in the Deer (Scotland) Act 1996.
- 22 The opposition was from peers, who nearly all declared their interest as owner of a deer forest in Scotland. They were concerned that including the protection of the natural heritage in s.6 of the 1959 Act and thus the 1996 Act, would allow those powers to be used to carry out drastic reductions in red deer numbers in deer forests. A particular concern was the way that the natural heritage and new definition of ‘woodland’ in the Act might be used to regenerate native woodlands.¹²
- 23 The Government amendment to address this concern of the peers created a new s.5 in the Amendment Bill that would then become s.11 in the 1996 Act. The Government’s amendment was passed on 2nd April 1996 and the parliamentary record of the amendments passed that day includes a note on each amendment, with the background to the new s.5 summarised as:
- “On agricultural, forestry and enclosed natural heritage land it is not acceptable that deer should be causing damage on land where they have no right to be or are not the primary land use. But unenclosed natural heritage land may form part of the deer range where deer may be a primary land use and damage is likely to be habitual, long-term and predictable. The use of emergency powers to tackle this would be inappropriate.”*¹³
- 24 Since the 1996 Act was passed, there have been limited amendments to ss.10 and 11. Two of these changes were the addition of new sub-sections (4A) and (4B) to s.10 in 2006 to allow for electronic communication and the replacement of the DCS by SNH in 2010 in ss.10 and 11 (and the Act generally).¹⁴ The only other changes to date were through the Wildlife and Natural Environment (Scotland) Act 2011 (‘the WANE(S) Act’). It removed “serious” from in front of “damage” in both sections (and the Act generally) and added deer welfare to the interests in s.10(1) that can be protected.
- 25 The removal of ‘serious’ by the WANE(S) Act 2011 was intended to remove the inconsistencies in the 1996 Act over the use of ‘damage’ and ‘serious damage’ and end the ambiguity of the distinction between serious damage and damage.¹⁵ In particular, the intention was to avoid the risk of a challenge over the distinction if SNH was to implement a s.8 control scheme.¹⁶
- 26 The Group considers that the need to add ‘deer welfare’ to the interests that can be protected under s.10 and the terms in which the addition was expressed, strengthen the case discussed earlier in the Report for a consistent, inclusive statement of the interests that can be protected under each of SNH’s regulatory powers (ss.5, 6A, 7, 8, 10, 11, 18), to remove the current inconsistencies and anomalies.¹⁷

¹² Lord Pearson of Rannoch illustrated his concern by noting that there were “large areas of deer forest and grouse moor where small trees, shrubs, rowan and birch two or three inches high are in among the heather”, Hansard, 6 March 1996, column CWH69.

¹³ Deer (Amendment) (Scotland) Bill, amendments accepted in the House of Lords (House of Lords, 2 April 1996).

¹⁴ Through the Electronic Communications (Scotland) Order 2006 and Public Services Reform (Scotland) Act 2010 respectively.

¹⁵ WANE Bill Committee Stage 1 Report, Summary of Conclusions and Recommendations, paragraph 99.

¹⁶ Agriculture Committee Report, ‘Land Use and Forestry’ (House of Commons, 29 September 1990).

¹⁷ See Section 3.

- 27 However, the Group considers that the treatment of the natural heritage in ss.10 and 11 is a particular issue that needs to be addressed. As it stands, s.11 ‘*Application of section 10 in relation to the natural heritage*’ provides that:
- “*Section 10 of this Act shall apply in relation to the natural heritage as it applies to woodland, where SNH is satisfied that deer are causing damage to the natural heritage*
-
- (a) *on enclosed land; or*
- (b) *on unenclosed land, but only if SNH is also satisfied that the damage is being caused by reason of the presence on the land in question of a significantly higher density of deer population than is usual in all the circumstances.*”
- 28 The Group considers that the ‘higher density’ requirement in s.11(b), while its meaning in practice would be unclear, is an inappropriate threshold to set for the protection of the natural heritage on unenclosed ground. The case made for the inclusion of this threshold in the House of Lords is based on a number of incorrect presumptions illustrated by the description of its origins above.
- 29 The Group considers that the questions in any situation involving the natural heritage should not be about the density of deer and whether it is higher than normal. The questions should be whether there is evidence of damage to the natural heritage and whether that damage is judged sufficient in terms of the value of the particular aspects of the natural heritage involved to warrant the use of s.10 powers, all factors considered.
- 30 The Group considers that s.11(b) and thus s.11 should be repealed and the natural heritage incorporated with all the other interests in s.10(1). This could be done by inserting a new sub-paragraph in s.10(1) using the same terms for the natural heritage as elsewhere in the Act (e.g. s.5(6)). For example:
- 10(1)(a)(iia) are causing damage, directly or indirectly, to the natural heritage generally.*
- 31 **The Working Group recommends that section 10(1) of the Deer (Scotland) Act 1996 Act should be amended to include damage, directly or indirectly, to the natural heritage and that section 11 of the Act should be repealed.**
- 32 The other provision that was also included by the Government to further reassure those peers opposed to revised powers in the Deer (Amendment) (Scotland) Bill during its passage through House of Lords, became in the 1996 Act s.10(1)(b) “*that none of their other powers is adequate to deal with the situation*”.
- 33 As noted above, the justification for this was explained in terms of the “*new greatly strengthened powers for control agreements being introduced by the Act, together with greater flexibility for authorising out of season shooting*”.¹⁸ However, that might only be considered the case to a limited extent. For example:
- The development of voluntary control agreements from a paragraph in the 1959 Act to a section in the 1996 Act, was an elaboration not a strengthening of the provisions. The two measures, s.7 and s.10, are also of a very different character. The short term nature of s.10 powers on particular land contrast with the longer term, voluntary nature of s.7 agreements that may involve more than one owner or occupier. As

¹⁸ Deer (Amendment) (Scotland) Bill, Notes on Clauses (House of Commons, 1996).

described below, s.10 powers may also be used within the area covered by a s.7 agreement.

- The new arrangements introduced for out of season authorisations in the 1996 Act replaced the use previously made by land owners of s.6 of the 1959 Act as the only means of shooting deer on unenclosed land out of season. However, that does not replace the need for a short term control power to tackle damage where needed.
- 34 The Group considers that the ambiguity and restriction of s.10(1)(b) should be removed by being repealed. The question with s.10 should not be whether it is the only power that is sufficient, but whether it is the most appropriate power in the circumstances.
- 35 While the use of s.10 can result in direct intervention on an owner's land, the person with the right to kill deer on the particular land involved is given the opportunity through s.10(2) to address the issue themselves. In addition, as illustrated below, the use of s.10 powers can be part of a collaborative approach to addressing an issue over damage by deer.
- 36 **The Working Group recommends that section 10(1)(b) of the Deer (Scotland) Act 1996 should be repealed.**

23.2.2 Use of ss.10 and 11

- 37 The Deer Commission for Scotland (DCS) was established by the 1996 Act and used s.10 in the majority of the 14 years before it was replaced by SNH in 2010. During the first half of that period to 2002/03, the DCS appears to have used s.10 on 16 occasions with all the uses involving the control of red deer.¹⁹ The uses were mainly to protect agriculture, but also included the protection of woodland.
- 38 The thirteen locations where the DCS used ss.10 and 11 during the second half of that 14 year period are shown in Figure 49. The number of times that s.10 was used was greater than the number of locations. This was because repeated use was made of s.10 at Caenlochan over the winter in 2006/07, to extend the period of control for several of the s.10 authorisations there beyond the 28 day limit on each use. As shown in Figure 51, the Caenlochan area was also already covered by a s.7 agreement.
- 39 In 2003/04, the DCS made the only apparent use to date of s.11 to protect the natural heritage. While the reason for that use at Glenfeshie is described in Figure 51 as woodland, the protection of the natural heritage is also listed as part of the purpose at the Caenlochan sites.
- 40 All the uses of ss.10 and 11 shown in Figure 51 involved the control of red deer, except the uses for public safety in 2004/05 and 2008/09 which involved controlling fallow and roe deer. Both those cases involved night shooting and s.10 was only used because it was not possible to authorise night shooting under s.18(2) for public safety until that was changed by the WANE(S) Act 2011.²⁰
- 41 Figure 51 shows that six of the twelve uses of s.10 were under s.10(2) and the other six under s.10(4). All uses of s.10 require the deer authority (DCS/SNH) to write under s.10(2) to the person with the right to kill on the land involved asking them to undertake the required cull. If that person is unable or unwilling to carry out the cull, s.10(4) is then used to authorise someone else to implement it.

¹⁹ DCS Annual Reports.

²⁰ SNH Information Response 11.

Figure 51 Locations where sections 10 and 11 were used by the DCS (2004-09)

Type	Property	Year	Reason
s.11	Glen Feshie	2004	Woodland
s.10(2)	Strathglass	2004	Agriculture
s.10(4)	Atholl (Dunkeld)	2005	Public Safety
s.10(2)	Millden	2005	Agriculture
s.10(4)	Alrick	2007	Caenlochan s.7
s.10(4)	Auchavan	2007	Caenlochan s.7
s.10(4)	Invercauld (Glenshee)	2007	Caenlochan s.7
s.10(4)	Invercauld (Glencallater)	2007	Caenlochan s.7
s.10(2)	Glenhead	2007	Agriculture
s.10(2)	Crackaig	2008/09	Public Safety
s.10(4)	MOD Machrihanish Airfield	2009	Public Safety
s.10(2)	Uig, Lewis	2009	Agriculture
s.10(2)	Glen Rinnes	2009	Agriculture

Source: SNH Information Response 11

- 42 Under s.10, the owner of the land involved has no liability for the costs of a cull carried out under s.10(4). Instead, s.10(10) provides that the deer authority (DCS/SNH) can sell or otherwise dispose of any carcass killed or taken under a s.10(4) authorisation. This contrasts with a s.8 control scheme under which, if the deer authority has to carry out the measures required, it can charge a land owner for any net costs after the sale of any venison.
- 43 The Group's view is that consideration should be given to amending s.10 to be the same as s.8, so that the deer authority can charge any net costs for carrying out s.10(4) measures. The Group considers that, if a land owner declines the option of carrying out the measures themselves after a request made under s.10(2), it would be reasonable that the owner should have a liability for any net public expenditure involved in implementing the measures.
- 44 The introduction of a liability for net costs might help incentivise owners to take action under s.10(2), rather than being able to leave SNH to cover the costs by using s.10(4). While the use of a s.10 is limited to 28 days and there may be no significant net costs in some situations, other situations can involve the repeated use of s.10(4) to address the issues involved. The Group considers that, if a liability for net costs is introduced, SNH should have the scope to waive the net costs. This might be, for example, because the net costs are too low to warrant charging or because the situation is one where it might not be clear which owner or owners should be liable for the net costs.
- 45 **The Working Group recommends that the Scottish Government should consider amending Section 10 of the Deer (Scotland) Act 1996, so that the owners of land where Scottish Natural Heritage implements measures under section 10(4) have a liability for any net cost involved in carrying out the measures, subject to scope for Scottish Natural Heritage to waive any net cost in appropriate circumstances.**

- 46 Assistance provided by SNH through s.12 already has to be charged for unless Scottish Ministers give consent for the charges to be waived. If the charges are waived, this can give rise to issues over European state aid rules.²¹ These issues do not arise where the assistance is provided as part of regulatory action under s.10. While the DCS did make some very limited use of s.12 to provide equipment, SNH has made no use of s.12.²²
- 47 The two ways that ss.10 or 11 are viewed are illustrated by a paper setting out SNH's decision-making process if ss.10 or 11 are being considered.²³ This includes two entries for ss.10 and 11. One describes ss.10 and 11 as a mechanism to allow a collaborative approach to damage by deer or a public safety issue, while the other entry refers to SNH staff taking regulatory action measures.
- 48 While the DCS did not use ss.10 or 11 in its final year before it was replaced by SNH in 2010, SNH had not used either section by the time of its report on deer management in Scotland to the Scottish Government in 2016. The use of ss.10 and 11 was also not identified amongst the possible actions that SNH planned to take as part of its "*enhanced approach to deer management*" following the Cabinet Secretary's response to SNH's 2016 report.²⁴
- 49 SNH's first use of s.10 started in 2018 in part of the Carse of Stirling, where high numbers of red deer were causing increasing damage to agricultural crops, forestry and the natural heritage.²⁵ The area involved includes SNH's Flanders Moss National Nature Reserve covering over 800 hectares. The Moss is designated as an SSSI and Special Conservation Area, as one of the largest lowland raised bogs in Britain and one of the most intact raised bogs in Europe.²⁶
- 50 SNH's recourse to s.10 in the Carse of Stirling followed three years during which an increased culling effort by local landowners and occupiers had failed to reduce the red deer population. SNH has used both s.10(2) and s.10(4) as part of facilitating cross-boundary, out of season and night shooting in the area, with the aim of achieving a significant increase in coordinated deer control across the area over three years to reduce the red deer numbers. With the 28 day limit on the use of s.10, SNH issued successive s.10 notices on a monthly basis from November 2018 to the end of March 2019.²⁷
- 51 The Group was surprised that SNH has not made more use of s.10 since it became the deer authority in 2010. The Group recognises the benefits of achieving reductions in deer damage without the use of regulatory powers. However, the Group considers that s.10 is an effective short term measure that can provide impetus to addressing issues by giving land owners the option of carrying out required culls under s.10(2) backed up by SNH's potential use of s.10(4). The Group considers that SNH should be making fuller use of s.10 as part of improving deer management in Scotland.

²¹ Scottish Government website, 'State aid: guidance'. Guidance to help public sector bodies understand and comply with state aid rules.

²² SNH Information Response 51.

²³ Paper provided by SNH to DWG on 13 March 2018 and consisting of 'Annex 1 Intervention Panel' and 'Annex 2 Deer Decisions and Delegated Authority Table'.

²⁴ For example, letter from SNH to DMGs on 30 August 2017 and update to SNH Board on 7 March 2018.

²⁵ SNH correspondence with DWG (26 May 2019).

²⁶ SNH website, 'Flanders Moss National Nature Reserve'.

²⁷ SNH correspondence with DWG (26 May 2019).

- 52 There are only two control powers in the 1996 Deer Act, s.10 Emergency Measures and s.8 Control Schemes. The readiness with which s.10 can be used as a short-term power to tackle situations involving damage by deer, contrasts markedly with the protracted processes involved in a s.8 control scheme. The requirements of a control scheme make implementing one a power of last resort and there has not been a control scheme in the 60 years since the power was first introduced in 1959. Control schemes are discussed in the following Section, while the use of s.10 is discussed further in Part Six.
- 53 In contrast to s.8, s.10 is a versatile short-term power. The Group considers that s.10, amended as recommended above, is a valuable and essential regulatory power to have as part of Scotland's deer legislation. The Group considers that it is no longer appropriate to label s.10 as 'emergency measures'. That title might be seen as a legacy of the origin of the power to deal with marauding red deer. However, the current and potential use of s.10 is much broader than situations that might be reasonably regarded as actual emergencies.
- 54 The Group considers that, for accuracy and clarity, 'Emergency Measures' should be replaced as the title of s.10. The s.10 power is about short term action and the Group considers that s.10 should be re-titled 'Control Actions', in comparison to s.8 'Control Schemes'.
- 55 The Working Group recommends that the title of section 10 of the Deer (Scotland) Act 1996 should be replaced with 'Control Actions' or a title similar to that and that the section should be amended to cover public interests of a social, economic or environmental nature.**

Section 24 Control Schemes

- 1 The Agriculture (Scotland) Act 1948 provided the Secretary of State for Scotland with the power to respond to complaints of damage by wild deer, by authorising reductions in deer numbers “*on the land of any owner who has failed to take reasonable steps to control the number of deer on his land*”.¹ This compulsory control power was then replaced by powers in the Deer (Scotland) Act 1959.
- 2 The 1959 Act included two types of control powers that could be exercised by the Red Deer Commission (RDC). One of these powers, s.6 ‘*Power of Commission to deal with marauding deer*’, was a short-term measure to reduce deer numbers on “*particular*” land in response to damage. The other power, s.7 ‘*Control Schemes*’, was a wider measure to reduce deer numbers at a “*locality*” scale to reduce damage.
- 3 These two types of powers were continued in the Deer (Scotland) Act 1996. S.6 of the 1959 Act was succeeded by s.10 ‘*Emergency Measures to prevent damage by deer*’ and its associated s.11 ‘*Application of section 10 in relation to the natural heritage*’, while s.7 of the 1959 Act was succeeded by s.8 ‘*Control Schemes*’ and its necessary pre-cursor, s.7 ‘*Control Agreements*’.
- 4 The previous Section of the Report considered the short-term powers under s.6 of the 1959 Act and ss.10 and 11 of the 1996 Act. In this Section, the Group considers the development and use of s.7 of the 1959 Act and ss.7 and 8 of the 1996 Act. While some use has been made of control agreements that can precede a control scheme, neither the RDC nor its successors the Deer Commission for Scotland (DCS) and Scottish Natural Heritage (SNH), have ever implemented a compulsory control scheme in the 60 years since the 1959 Act.

24.1 Section 7 of the Deer (Scotland) Act 1959

24.1.1 Legislative History of s.7 of 1959 Act

- 5 In the 1959 Act, while s.6 provided a short-term measure to deal with marauding red deer on ‘*particular land*’, s.7 ‘*Control Schemes*’ provided the power to reduce red deer numbers at a wider scale. Under s.7(1), the RDC could determine the measures required to prevent further damage by red deer to agriculture and forestry “*in any locality*” by reducing the number of red deer “*in the area in which the locality is situated*”.
- 6 Section 7(2) required the RDC to consult the owners and occupiers of land in the area on the measures that the RDC required. The RDC could then make a “*control scheme*” under s.7(3) if they were satisfied that agreement could not be reached with the owners and occupiers or that the measures agreed were not being carried out.
- 7 For the RDC to implement a control scheme over the “*control area*”, s.7(5) stipulated that the scheme had to be made or varied in accordance with the Second Schedule of the Act and confirmed by the Secretary of State for Scotland before it could come into operation. The Schedule, ‘*Provisions for making control schemes*’, had four parts setting out the procedures for making, varying or revoking a control scheme.

¹ Agriculture (Scotland) Act 1948, s.44.

- 8 In the 1959 Act, s.7 was followed by a further four sections related to s.7 schemes: *s.8 Contents of Control Schemes; s.9 Liability of owners or occupiers under control schemes; s.10 Enforcement of control schemes; and s.11 Recovery of expenses incurred under section 10.*
- 9 The only amendments to ss. 7-11 and the Second Schedule of the 1959 Act before it was replaced by the 1996 Act, were made by:
- the Deer (Amendment) (Scotland) Act 1982, which inserted “*or sika deer*” after each reference to red deer and which also increased the fine in s.9(2) for non-compliance;
 - the Local Government (Scotland) Act 1973, which replaced the previous local government legislation referenced in the Second Schedule Part III, paragraph 11, regarding the provisions for the holding of local inquiries in response to an objection to a control scheme.

24.1.2 Use of s.7 of 1959 Act

- 10 The RDC made early use of its s.7 powers, establishing five control agreements under s.7(2) by agreement with groups of estates during the period 1961-65.² However, cull targets were not met in most years and the agreements had all been discontinued by 1969 with very limited success.³
- 11 The RDC, however, never made a compulsory control scheme as provided for under s.7(3), either at that time or subsequently, as they came to regard the powers in s.7 and its associated provisions as unworkable.
- 12 The RDC relied instead on advice and persuasion, encouraging owners to form Deer Management Groups (DMGs) and advising farmers and foresters to use their rights (supported by out of season authorisations where required) to kill deer when damage was being caused to their crops.
- 13 However, the RDC remained concerned at the continuing levels of damage by deer and the lack of progress. In 1988, for example, the RDC Chairman considered the situation “*very serious*” and wrote to deer managers that “*Criticism from agriculture, forestry and conservation interests about bad management practices resulting in over-population, damage to neighbours’ property and the environment is rising to a level where statutory interventions will have to be considered*”.⁴
- 14 The following year (1989), RDC stated in its Annual Report that “*The Deer (Scotland) Act 1959 ... provides powers for the RDC to introduce statutory control schemes to reduce deer numbers. The Commission continues to believe that voluntary solutions are more acceptable, but the cooperation of both deer management and the agriculture and forestry industries is essential. Without the necessary level of cooperation voluntary solutions may no longer be achievable.*”⁵
- 15 This concern resulted, after the government had confirmed its intention to review Scotland’s deer legislation in 1991, in the RDC making its first use of voluntary control

² Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland. The five areas were: Glenavon/Upper Strathdon; North Ross; Hunthill/Glenogil; Cabrach/Glenbuckat; Ross of Mull; and South Ross.

³ Callander and MacKenzie (1991) *Op cit*.

⁴ RDC Annual Report, 1988, p.34.

⁵ RDC Annual Report, 1989, p.18.

agreements under s.7(2) in nearly 25 years. In the RDC's final three years, 1993/94-1995/96, it established five s.7(2) control agreements that were intended to be forerunners of the greater use of voluntary agreements anticipated after the 1959 Act was replaced by a new Deer Act.

- 16 This use of control agreements was subsequently reflected in the official notes on the Deer (Amendment) (Scotland) Act 1996 that resulted in the 1996 Act. The notes commented that "*In more recent years the Commission have promoted a number of voluntary control agreements in the East Grampian area*".⁶ The locations of the RDC's final five s.7(2) agreements are listed later in this Section in Figure 52.

24.2 Sections 7 and 8 of the Deer (Scotland) Act 1996

- 17 The five sections 7-11 dealing with control schemes in the Deer (Scotland) Act 1959 were replaced by the four sections 6-9 in the Deer (Scotland) Act 1996 through the Deer (Amendment) Act 1996:

s.6 *Control areas*

s.7 *Control agreements*

s.8 *Control schemes*

s.9 *Recovery of expenses incurred in fulfilment of control scheme*

- 18 The new s.6 simply stated that the area covered by a control agreement or control scheme will be referred to as the "*control area*", while s.9 had the same provisions as in the 1959 Act for the recovery of expenses subject to minor changes (e.g. to refer to 'deer' and to clarify the basis on which the Land Court determines any appeal over the recovery expenses by the Commission from an aggrieved owner or occupier).

24.2.1 Legislative History of s.7 of 1996 Act

- 19 The main change from the 1959 Act was the new s.7 in the 1996 Act. This developed the previous paragraph about voluntary control agreements in s.7(2) in the 1959 Act, into a series of sub-sections setting out the process by which the DCS would establish a "*control agreement*" with the land owners and occupiers in the "*locality*" concerned.
- 20 In comparison to the 1959 control agreements, the new s.7 covered all deer species and included the scope:
- to prevent damage (rather than just prevent further damage);
 - to take deer (rather than just kill them);
 - to protect public safety and the natural heritage (rather than just agriculture and forestry);
 - to agree variations to the terms of a control agreement at any time.
- 21 Section 7(1) covered the interests that could be protected under a control agreement. While they included damage "*whether directly or indirectly, to the natural heritage generally*", s.7(2) also provided that:

"For the purposes of subsection (1) above 'the natural heritage' includes any alteration or enhancement of the natural heritage which is taking place, or is proposed to take place, either naturally or as a result of a change of use determined by the owner or occupier of the land in question; and 'damage' shall be construed accordingly."

⁶ Deer (Amendment) (Scotland) Bill Amendments accepted in the House of Lords (House of Lords, 2 April 1996).

- 22 Section 7(3) and (4) covered the DCS forming a view on the measures to be taken in the circumstances and consulting the owners and occupiers on them to secure their agreement. Section 7(5) then set out the required contents of a control agreement, with s.7(6) enabling the parties to vary a control agreement at any time.
- 23 While s.7 was amended in 2010 to replace the DCS with SNH, the Wildlife and Natural Environment (Scotland) Act 2011 ('the WANE(S) Act') made a range of amendments to the section. The changes in s.7(1) included, amongst others, adding "*or steps taken or not taken for the purposes of deer management*" as a potential cause of damage and adding both "the welfare of deer" and "*public interests of a social, economic or environmental nature*" to the interests that can be protected under s.7. In addition, references in s.7(1) to reducing the number of deer were removed and the phrase "*measures require to be taken in relation to deer management*" included instead.
- 24 The WANE(S) Act also:
- added in 7(4) a reference to notices to owners and occupiers;
 - added a new 7(5)(f) to require a control agreement to include the measures to be taken in each twelve month period;
 - added a new 7(7) requiring SNH to review each control agreement annually.
- 25 The only change to s.7 since the WANE(S) Act has been by the Land Reform (Scotland) Act 2016. This added new sub-sections 4A and 4B to provide for a control agreement being used to follow up s.6A 'Deer Management Plans' (DMP), where a DMP has not been produced, has been rejected by SNH or has not been implemented.
- 26 The Group has already recommended in Section 13 of this Report that the phrase "*steps taken or not taken for the purposes of deer management*" inserted into s.7(1) by the WANE(S) Act should be repealed. The Group also considers that the reference to the Code of Practice added to s.7(1) by the WANE(S) Act should be repealed as it is un-necessary and inappropriate. The basis for the use s.7 is whether damage has been caused, is being caused or is likely to be caused, not about having regard to the voluntary Code of Practice. The same applies to the reference to the Code inserted by the WANE(S) Act into s.8(1).
- 27 **The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to remove references to the Code of Practice on deer management from section 7(1) and (3) and from section 8(1).**
- 28 The Group considers that the addition of further interests by the WANE(S) Act to those that can be protected under a s.7 agreement, including "*public interests of a social, economic or environmental nature*", illustrates the case discussed in Section 3 of the Report, for a consistent, inclusive statement of the interests that can be protected under each of SNH's regulatory powers (ss.5, 6A, 7, 8, 10, 11, 18), to remove the current inconsistencies and anomalies.
- 29 The Group also considers that the specific provision related to the natural heritage in s.7(2) quoted above, should be repealed. While it simply provides that a voluntary agreement can include altering or enhancing the natural heritage, the inclusion of s.7(2) is a product of s.8(2) limiting the circumstances where the natural heritage can be protected through

a s.8 Control Scheme. As discussed below, the Group considers that s.8(2) should be repealed and that, as a result, s.7(2) becomes redundant.

- 30 The failure of owners and occupiers to agree a control agreement under s.7 or to implement it, is the only trigger for a s.8 Control Scheme. However, under s.8(2), this does not apply to control agreements that involve altering or enhancing the natural heritage unless “*a purpose of the control agreement is to remedy damage caused...*”.

24.2.2 Legislative History of s.8 of 1996 Act

- 31 Section 8 in the 1996 Act consolidated the provisions for control schemes from ss.7-9 of the 1959 Act with very limited changes. While s.8 covered all deer species and included the addition of public safety and the natural heritage to the interests that could be protected, the other main change was to s.8(1):
- Under the 1959 Act, the requirements were “*have caused damage*” and “*to prevent further damage*”, while the new s.8 inserted “*and are causing serious damage*” and also added “*serious*” in “*have caused serious damage*” and “*to prevent such serious damage*”.
- 32 Schedule 2 of the 1959 Act dealing with the making, confirmation, variation and revoking of control schemes remained in the 1996 Act with the same four parts and headings. It also appears that the 13 paragraphs in Schedule 2 remained unchanged, apart from an increased use of sub-paragraphs to present the provisions in the text more clearly.
- 33 The WANE(S) Act 2011 subsequently amended s.8 and Schedule 2 in a number of significant respects, while the Land Reform (Scotland) Act 2016 increased the fine for failure to comply with a control scheme. The changes through the WANE(S) Act included replacing s.8(1) with new sub-sections (A1) and (1) that included:
- removing the requirement in the previous s.8(1) that deer “*are causing serious damage*” so that the requirements are the same as in s.7(1)(a);
 - adding reference to notice being given under s.7 and setting a time limit of six months for reaching a control agreement under s.7;
 - adding reference to the Code of Practice;
 - removing “*serious*” when referring to damage; and
 - removing the repetition from s.7 of the interests that can be protected.
- 34 The Group considers the addition of a time limit for agreeing a s.7 control agreement to be a valuable change. Similarly, as commented in Section 13 of this Report, the removal of ‘serious’ ended the ambiguity between damage and serious damage created by the introduction of the distinction through the 1996 Act. The Group has also commented above that the reference to the Code of Practice in s.8 is unnecessary and inappropriate.
- 35 The WANE(S) Act 2011 also:
- clarified the provision in s.8(2) against control schemes including altering or enhancing the natural heritage, by adding “*except where a purpose of the control agreement is to remedy damaged caused, directly or indirectly, by deer or by steps taken or not taken for the purposes of deer management*”;
 - repealed s.8(5) that provided that an owner or occupier could not be required under a

control scheme to erect a fence on their land; and

- added a new sub-section (7A) requiring SNH to review a confirmed control scheme annually for compliance with its provisions.

- 36 The Group has commented above on s.8(2) when discussing the related provision in s.7(2). The restrictions on altering or enhancing the natural heritage in these sub-sections were a product of the debates in the House of Lords that also gave rise to the restrictions in ss.10 and 11 on the scope to protect the natural heritage, as discussed earlier in Section 23.
- 37 The Group considers the amendment of s.8(2) by the WANE(S) Act improved the position regarding the natural heritage. However, there remains a significant degree of ambiguity that could give rise to challenges over what constitutes altering or enhancing the natural heritage and remedying damage to the natural heritage. The Group considers that both s.7(2) and s.8(2) should be repealed. Damage, whether directly or indirectly, to the natural heritage is already listed in s.7(1) with the other interests covered by s.7 and thus possibly s.8. The Group considers that natural heritage interests should be covered by that provision, without the complicating qualifications dating from amendments in the House of Lords.
- 38 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to repeal section 8(2) and that, as a consequence, s.7(2) should also be repealed.**
- 39 Section 8(3), which was not amended by the WANE(S) Act, sets out the required contents of a control scheme, with the requirements matching those for a control agreement in s.7(5) to facilitate a s.7 agreement becoming a s.8 scheme if necessary. The Group considers that the terms of both s.7(5)(c) and s.8(3)(c), including the requirements for SNH to specify numbers of deer, still reflect the original expectation in the 1959 Act that control schemes would be dealing with red deer on open hill range.
- 40 In those sub-sections, SNH is only required to specify the species, sex and age of the deer to be killed “*if necessary in the opinion of SNH*”. The Group considers that SNH should only be required to specify the numbers of deer to be killed on the same basis. The issue to be addressed is the damage and reducing or preventing that, rather than the number of deer *per se*. In the area covered by the Caenlochan s.7 agreement, for example, the agreement is based on habitat targets rather than target culls.⁷
- 41 As noted above, the WANE(S) Act 2011 repealed s.8(5) which provided that an owner or occupier could not be required to construct a fence on their land as part of a control scheme. That provision had been part of the legislation since 1959 and the Group does not support its removal from the Act. The Group recognises that erecting a deer fence may be an appropriate part of addressing an issue over deer damage in some circumstances. However, the Group considers that the choice of whether to erect a deer fence or not on their land should remain with the land owner or occupier.

⁷ SNH (2019). Assessing Progress in Deer Management – Report from Scottish Natural Heritage to Scottish Government, September 2019.

- 42 During the passage of the WANE(S) Bill, the Cabinet Secretary linked the repeal of s.8(5) to the proposals in the Bill to reduce the emphasis on deer numbers in s.7.⁸ That change allows SNH as the regulator to use the damaging impacts of the deer as a measure in a s.7 agreement rather than just numbers of deer. However, the Group considers there is an important distinction between SNH requiring a reduction in damage to public interests by controlling wild deer as a shared ‘public resource’, and compelling an owner or occupier to address the issue by erecting and maintaining a deer fence on their land.
- 43 The Cabinet Secretary also commented during the passage of the Bill on the need to avoid proposing measures that might not be enforceable.⁹ The Group considers that the repeal of s.8(5) was potentially a measure that was not fully considered in practical terms. The Group considers that trying to compel one or more owners or occupiers to incur the expense of erecting and maintaining a deer fence as part of s.8 Control Scheme, would be fraught with difficulties and problems. The Group considers that s.8(5) should be re-instated both as a matter of principle and for clarity.
- 44 **The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to re-instate section 8(5), which was repealed in 2011.**
- 45 The changes made by the WANE(S) Act also involved significant amendments to Schedule 2. These included:
- replacing throughout the Schedule, firstly, the requirement to publish schemes in the Edinburgh Gazette and local newspapers, with “*publish in such manner as [SNH/ Scottish Ministers] think fit*”; and secondly, removing the requirement that the place where a copy of a scheme can be seen should be “*within the district*”;
 - removing from paragraph 3 the requirement to hold a public inquiry if an objection is made to the planned scheme, and the consequential amendments to remove references to a public inquiry from later paragraphs (e.g. 4(b), 8, 9, 11); and
 - substituting revised text for paragraph 13(2)-(4) so that an aggrieved party appeals to the Scottish Land Court rather than the Court of Session.
- 46 Both the first two changes above regarding publishing schemes and removing the need for a public inquiry in response to an objection, made the arrangements for a control scheme more straightforward. However, the Group considers the changes to paragraph 13(2)-(4) need further reform.
- 47 The Group’s concern is not the change of court. The Land Court, which is presided over by a judge of the same legal rank and standing as a Court of Session judge, would seem a more appropriate venue for a deer issue. The Land Court is also already involved in the Deer Act as the court to which an owner or occupier, if aggrieved over the recovery of expenses for a control scheme, would appeal through s.9(4).
- 48 The issue is that the WANE(S) Act changed not just the court, but the grounds of an appeal and the basis on which the court would make its judgement on an appeal from an aggrieved owner or occupier. Previously, under s.13(2), an appeal to the Court of Session could question the validity of a control scheme on the ground that it was not within the powers of the Deer Act or had not complied with a requirement in the Act. If the Court was satisfied that either of these were the case, then under s.13(3) the Court could quash the scheme either generally or in so much as it affected the applicant.

⁸ Scottish Parliament Rural Affairs and Environment Committee, WANE(S) Bill Stage 2 Amendments, December 2010 to January 2011.

⁹ Scottish Parliament Rural Affairs and Environment Committee, WANE(S) Bill Stage 1 Report, 3 November 2010.

- 49 The new s.13(2) as a result of the WANE(S) Act broadened the basis of any appeal to the Court to include being aggrieved either at a decision by Scottish Ministers to confirm, vary or revoke a control scheme, or at the terms or conditions of a scheme. While a new s.13(3) shortened the time for lodging an appeal from 48 to 28 days, s.13(4) requires the Land Court to consider an appeal “*on its merits rather than by review*”. This means that the Court is not considering the appeal on the basis of whether the scheme conforms to the legislation as previously, but examining the merits of the actual scheme itself. As a result in s.13(2), the Land Court can either confirm the scheme, direct Ministers to revoke the scheme “*or make such other order as it thinks fit*”.
- 50 This new arrangement means that an appeal could be a very time consuming and expensive exercise, as the Land Court could be asked to consider any aspect of the details of a scheme. However, the draft scheme will have already been through a consultation process before the scheme is confirmed by Scottish Ministers, with the consultation repeated for any variation of the draft scheme in response to objections that may have arisen during that process.
- 51 The confirmation of a scheme or its variation or revocation therefore involves Scottish Ministers making a judgement in determining the public interest in the circumstances. As has been recognised in other contexts, the public interest can only be determined in the specific circumstances of each case, and it is the role of Scottish Ministers through their democratic position to decide what they judge to be in the public interest in each instance.¹⁰
- 52 The Group considers therefore that the role of the court in the context of a s.8 Control Scheme, should be to consider whether the scheme was within the powers of the Act and had complied with the requirements in the Act. That was the case until 2011.
- 53 The Group therefore considers that the current paragraph 13 of Schedule 2 should be changed in two respects. Firstly, the grounds for an appeal should be as previously, that a scheme is not within the powers of the Act or does not comply with any of the requirements of the Act. Secondly, the options for the Land Court should be, as previously, to confirm the scheme or direct Scottish Minister to revoke it or part of it in so much as it affects the applicant.
- 54 **The Working Group recommends that paragraph 13(2) of Schedule 2 of the Deer (Scotland) Act 1996 should be amended, so that the grounds for appeal are that a control scheme is not within the powers of the Act or that any of the requirements of the Act has not been complied with.**
- 55 **The Working Group recommends that paragraph 13(4) of Schedule 2 of the Deer (Scotland) Act 1996 should be amended, so that the options for the Land Court are to confirm the scheme or direct Scottish Ministers to revoke it or part of it in so much as it affects the applicant.**

¹⁰ Land Reform Review Group (2014). *The Land of Scotland and the Common Good*. Report to Scottish Ministers.

24.2.3 Use of ss.7 and 8 of 1996 Act

- 56 When the 1996 Act came into effect and the DCS replaced the RDC, the DCS continued the five voluntary control agreements initiated under the 1959 Act by the RDC in its final years. The DCS then established over 40 further voluntary agreements under s.7 of the 1996 Act before it was replaced by SNH in 2010. While SNH took over the current s.7 agreements at that time, SNH has not initiated a new s.7 agreement so far. As commented earlier, the DCS never converted any of its unsuccessful s.7 agreements into a s.8 Control Scheme and this has also been the case with SNH to date.
- 57 A significant factor in the increased use of voluntary control agreements under the 1996 Act was the change in the nature of the agreements under the new legislation. In the 1959 Act, the scope for a control agreement under s.7(2) was to implement the measures for an intended control scheme voluntarily before the RDC carried them out directly. The elaboration of voluntary agreements into a separate section in the 1996 Act was seen as reducing the apparent imminent threat of a voluntary agreement becoming a control scheme under the 1959 Act. The change appears to have made land owners more willing to enter control agreements.
- 58 Figure 52 is an approximate record of the number of s.7 control agreements established under the 1996 Act. The information for the period from 1996 to SNH taking over in 2010 is not necessarily fully accurate as it is drawn from the DCS's Annual Reports and for some years they do not provide a clear account of the s.7 agreements in operation at the time.
- 59 Nearly all the s.7 agreements have been to control red deer on open range. The only exceptions to that are the agreements recorded at the bottom of the table involving sika in the Borders between 1998/99-2002/03 and roe deer in the Ben Nevis/Blackmount area in 2001/02-2002/03. While the red deer s.7 agreements have been widely dispersed across red deer open hill range in the Highlands and Islands, there has been a particular preponderance of them in the Eastern Highlands over the years.
- 60 Figure 53 shows the build-up under the DCS of the number of s.7 agreements in operation each year until 2002/03, followed by a significant reduction until the six new agreements it established as it was about to be replaced by SNH. The reduction resulted from the DCS's decision in 2002 to focus its limited resources on reducing damage on designated natural heritage sites.¹¹ This has been a policy continued by SNH and is illustrated by Figure 53 recording the public interest reasons for each agreement involving open hill red deer. The change from agreements involving a mix of agriculture, woodland and natural heritage interests before 2002, to agreements only for woodland/natural heritage interests after 2002 is conspicuous. All the s.7 agreements with which SNH has been involved since 2010 have been to protect the natural heritage interests of Natura designated sites.
- 61 There is no clear record available of the extent to which the red deer s.7 agreements achieved their objectives prior to SNH taking over in 2010. However, the indications are that there was very limited success due either to cull targets not being met or to deer numbers building up again where targets were met, whether as a result of deer subsequently moving in from adjoining areas or reduced cull levels.

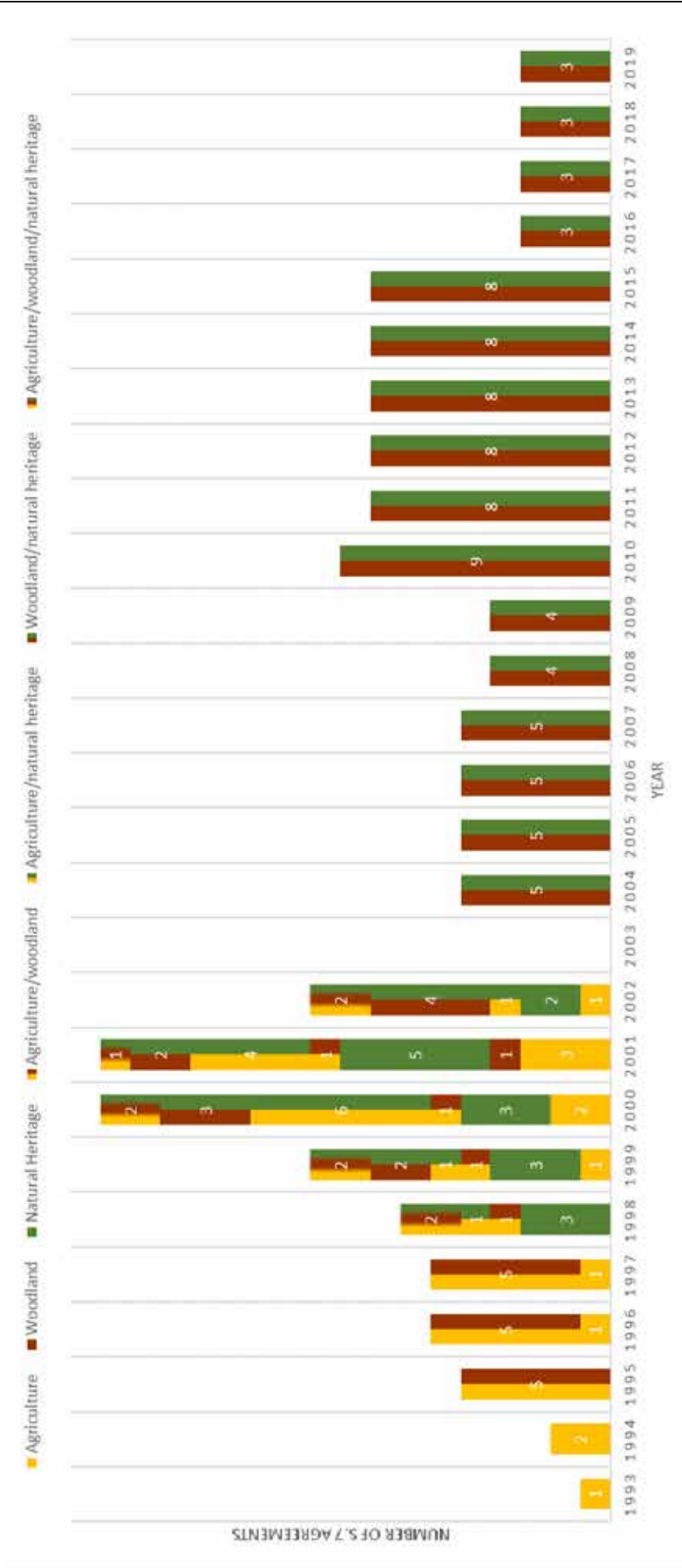
¹¹ See Section 16.

Figure 52 Section 7 Control Agreements locations and durations (1993/4-2018/9)

RED DEER	1959 Act s.7(2)				1986 Act s.7																						
	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	
1 Angus Glens	X																										
2 Glen Isla / Glen Shee		X	X	X																							
3 Strathdon		X	X	X	X																						
4 Deeside		X	X	X	X																						
5 Speyside		X	X	X	X																						
6 Part Angus Glens																											
7 Mount Blair				X	X																						
8 S.Dunrobin / Morvich						X	X																				
9 Glenfermate						X	X																				
10 West Lochaber DMG						X	X	X																			
11 Rannoch						X	X	X	X																		
12 Glen Finglas						X	X																				
13 Strathay						X	X		X																		
14 Wester Ross DMG						X	X	X																			
15 E.Sutherland (part)						X	X	X	X																		
16 Trossachs						X	X	X	X																		
17 Ben Lawers						X	X																				
18 Tullich Hills (Speyside)						X	X																				
19 Ben Nevis / Blackmount						X	X	X	X																		
20 East Grampian (part) (1)						X	X	X	X													X	X	X	X	X	X
21 East Grampian (part)						X	X	X	X																		
22 East Grampian (part)						X	X	X	X																		
23 East Grampian (part)						X	X	X	X																		
24 East Grampian (part)						X	X	X	X																		
25 West Grampian (part) (2)						X	X	X	X																		
26 West Grampian (part)						X	X	X	X																		
27 West Grampian (part)						X	X	X	X																		
28 Harris & Lewis						X	X	X	X																		
29 North Uist						X	X	X	X																		
30 South Uist						X	X	X	X																		
31 West Inverness-shire						X	X	X	X																		
32 West Sutherland						X	X	X	X																		
33 Inchmadamph						X	X	X	X													X	X				
34 Kinweachy						X	X	X	X													X	X				
35 Drumtunie						X	X	X	X													X	X				
36 Ardar						X	X	X	X													X	X				
37 Inverpolly						X	X	X	X													X	X				
38 Beinn Dearg						X	X	X	X													X	X				
39 Ben Wyvis						X	X	X	X													X	X				
40 Breadalbane						X	X	X	X													X	X				
41 Fannich Hills						X	X	X	X													X	X				
42 Mar Lodge						X	X	X	X													X	X				
No. of Red s.7's (above)	1	2	5	6	6	7	10	17	17	10	3	5	5	5	5	4	5	9	9	9	9	8	8	5	5	5	
No. of Roe (B.Nevis/Blkmt)						2	2	1	11	1																	
No. of Sika s.7's (all Borders)						9	12	18	29	12	3	5	5	5	4	5	9	9	9	9	9	8	8	5	5	5	
No. of s.7's operating in year.	1	2	5	6	6	9	12	18	29	12	3	5	5	5	4	5	9	9	9	9	8	8	5	5	5	5	

(1) Caenlochan
(2) Glenfeshie
Sources: RDC/DCS Annual Reports and SNH Information Response 41

Figure 53 Number and purpose of section 7 Control Agreements in operation (1993-2019)



Source: RDC/DCS Annual Reports and SNH Information Response 41

- 62 There were nine s.7 agreements operating when SNH took over in 2010 and SNH reported on progress with those agreements and two other previously completed agreements in its 2016 report on Deer Management in Scotland. The report includes a list and map of the eleven agreements, nearly all of which had been in force for over five years and some significantly longer. SNH reported that, while red deer density targets had been met in six agreement areas, habitat targets had only been met in three and partially met in two.¹²
- 63 Only one of those eleven s.7 agreements has been concluded successfully, Glenfeshie, that might be attributed to the commitment of the Glenfeshie Estate owner. Four others have been concluded with partial success and SNH is now apparently relying on the local DMG DMPs for further progress.¹³ Five other agreements are continuing after being reviewed and amended,¹⁴ while one has been abandoned in favour of an agreement outwith the scope of the deer legislation.¹⁵
- 64 The five continuing agreements, which cover a total of over 100,000 ha, range in size from approximately 12,000-46,000 ha and involve between three and 13 owners.¹⁶ SNH has recently published an assessment of progress with each of these agreements.¹⁷ While SNH has not used a s.7 agreement in any new areas since it replaced the DCS in 2010, SNH has identified two DMG areas where it might use s.7 agreements to reduce the impacts of deer on designated natural heritage features.¹⁸
- 65 In 2016, SNH estimated that it spends an average of £250,000 a year on s.7 agreements. The Group's own estimates from examining the figures available confirm that general figure and indicate that c.£3 million was spent on s.7 agreements in the 13 years between 2006-18. The costs include staff time negotiating agreements and deer counts and habitat impact assessment surveys to monitor their implementation. In some instances, the costs also include providing SNH stalkers to help with culls at public expense.
- 66 The costs of individual s.7 agreements will vary. However, the Group considers that the Caenlochan area in the Eastern Highlands will have been by far the most expensive to date, as there have been a succession of s.7 agreements over the area for more than 15 years since 2003. The Caenlochan s.7 area was expanded to c.34,000 ha in the current agreement, which is due to be reviewed.
- 67 The position at Caenlochan with s.7 agreements over so many years has involved on-going negotiations, repeated deer counts and habitat surveys, as well as culling assistance, and these costs are continuing due to a lack of progress with habitat improvement and a significant increase in deer numbers in the area in recent years.¹⁹ There has been very substantial public expenditure over the years at Caenlochan with a lack of apparent progress. The Group considers that the on-going situation at Caenlochan should be investigated in a way that has not been possible for the Group (owing to the Group's scope), to make all the public expenditure and related information public and accountable.

¹² SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

¹³ Inchnadampf, Mar Lodge, Breadalbane, Kinveachy.

¹⁴ Inverpolly, Ben Dearg, Ben Wyvis, Fannich Hills and Caenlochan.

¹⁵ Assynt Peninsula.

¹⁶ SNH (2016) *Op cit*; SNH Information Response 41.

¹⁷ SNH (2019) *Op cit*.

¹⁸ SNH (2019) *Op cit*.

¹⁹ SNH Information Response 41.

- 68 **The Working Group recommends that the Environment, Climate Change and Land Reform Committee of the Scottish Parliament should consider holding a short inquiry into the use of section 7 Control Agreements under the Deer (Scotland) Act 1996 in the Caenlochan area.**
- 69 SNH considers that one factor at Caenlochan has been that the population model used previously under-estimated recruitment.²⁰ However, the area might also be considered to illustrate the wider problem of trying to implement reductions in red deer densities in a wider landscape with relatively high red deer densities.²¹
- 70 Deer movement into a control area can mean that cull targets prove inadequate to achieve habitat improvements, even where the targets are achieved by the properties involved. Increasing the cull levels may reduce the local deer density, but deer movement into an area can mean that the higher cull levels have to be maintained and that any reduction in those culls can result in previous progress being lost.
- 71 The average density of open hill red deer across the Highlands and Islands has increased by over 50% since 1961 and the start of the deer legislation. SNH reported in 2016 that the average density over the region in the 1960s was around seven to eight red deer per km² and around 12.5 red deer per km² in 2016.²²
- 72 That average density over such a substantial region means that there are significantly higher densities of red deer in parts of the region, as shown in recent reports.²³ The average densities in those reports are calculated over wide areas and locally within those areas, average densities will be even greater. This includes deer being concentrated on particular parts of the areas in summer and winter and within those areas, making heavier use of parts that are particular favourable, for example, for feeding or shelter.
- 73 The challenge of wider deer densities may be part of the reason that SNH has concluded some s.7 agreements, and is hoping that local DMG DMPs will result in reductions in the density of red deer over a wider area. While SNH has not so far put in place a s.7 Control Agreement over any new area since it took over from the DCS in 2010, SNH has stated its intention to establish further s.7 agreements on new sites.²⁴ However, the Group's understanding is that there is an increasing reluctance amongst some estate owners to enter a s.7 agreement.²⁵

²⁰ SNH (2019) *Op cit.*

²¹ For example, for the overall density in the area, see Figure 3 in Albon, S. et al (2017), Estimating national trends and regional differences in red deer density on open-hill ground in Scotland: identifying the causes of change and consequences for upland habitats. Scottish Natural Heritage Commissioned Report No. 981, p.7.

²² SNH (2016) *Op cit.*

²³ For example: Albon *et al* (2017) *Op cit.* See also: Albon, S. D., McLeod, J., Potts, J., Irvine, J., Fraser, D. and Newey, S. (2019). Updating the estimates of national trends and regional differences in red deer densities on open-hill ground in Scotland. Scottish Natural Heritage Commissioned Report No. 1149.

²⁴ SNH letter to DMGs, 'SNH Enhanced Approach to Deer Management', 30 August 2017.

²⁵ SNH correspondence with DWG, 14 August 2019.

- 74 This increasing reluctance appears to be due in part to concern that a s.7 agreement could now be more likely to lead to s.8 Control Scheme, given calls from the Scottish Ministers for SNH to make full use of its regulatory powers.²⁶ The reluctance is reminiscent of land owners being unwilling to enter a control agreement under s.7(2) of the 1959 Act, because that was part of the section on control schemes and a control agreement might be readily converted into one (as mentioned earlier in this Section).
- 75 The separation of control agreements and control schemes into different sections in the 1996 Act, was followed by the marked increase in the use of control agreements under the DCS shown in Figure 53 above. This use appears to have been seen more as illustrating the voluntary collaboration between the public and private sectors that the RDC had been calling for prior to the 1996 Act, than as a prelude to a control scheme. Now that there might be more prospect of a control agreement becoming a control scheme, there appears to be a preference amongst some estate owners to increase the separation again by dealing with any issues through DMG DMPs.
- 76 The Group considers that the tradition of referring to s.7 Control Agreements as ‘voluntary’ control agreements, is something of a misnomer. While owners and occupiers are given the option to carry out the required measures, measures are required to address a problem under the terms of the section. A control agreement is a regulatory provision, not a means of collaboration.
- 77 Much of the use of control agreements by the DCS and the continuation of some of those by SNH can be characterised as limited success over extended periods. The Group considers, however, that SNH needs to ensure that any replacement or new control agreements are set out in terms that could then lead straight to a s.8 Control Scheme, if necessary. The Group’s understanding from SNH is that this was not the case with some agreements until they were reviewed recently.
- 78 The Group also considers that SNH should not be negotiating and entering any replacement or new s.7 agreements unless SNH has already decided, at an appropriate internal management level, that it has sufficient evidence to be able to proceed straight to a s.8 scheme if an agreement is not agreed within the six month time limit or if it is not successfully implemented.
- 79 **The Working Group recommends that Scottish Natural Heritage should ensure that it sets out any section 7 Control Agreements in terms that can be readily converted into a s.8 Control Scheme under the Deer (Scotland) Act 1996, and that Scottish Natural Heritage should also ensure that it already has the evidence to enforce a s.8 Control Scheme if Scottish Natural Heritage is entering into any new section 7 agreements.**
- 80 There is, as described above, a high degree of continuity between ss.7 and 8 of the 1996 Act and s.7 of the 1959 Act. That original s.7 was framed for dealing with open hill red deer and the current ss.7 and 8 reflect that. Current discussions about the use of s.7 Control Agreements and the possible use of a s.8 Control Scheme have also continued to be about open hill red deer. However, the powers apply to all species of deer across the whole of Scotland.

²⁶ Letter from the Cabinet Secretary for Environment, Climate Change and Land Reform to the Convener of the ECCLR Committee, 29 June 2017.

- 81 Previously, s.7 agreements have been used to control sika deer in the Borders in 1999-2003 and roe deer in the Ben Nevis/Blackmount area in 2001-03. However, ss.7 and 8 remain best suited for dealing with open hill red deer in the Highlands, where there are usually relatively few large properties involved. The Group considers that the use of s.7 and possibly s.8 can become more challenging in more complex situations with more diverse patterns of land ownership, more woodlands and more species of deer.
- 82 The Group considers that SNH should view its short-term control powers under s.10 as providing a versatile power that might be used effectively in some situations where a s.7 agreement might have been considered in the past. SNH has only used its s.10 powers in one location to date. However, the Group considers that use of s.10 in 2018/19, described in Section 22 of this Report, appears to provide an example of the effective use of s.10 as an alternative to a s.7 agreement in a more complex environment. The Group considers that s.10 could also be used in a range of situations as a means of progressing a deer management plan produced under s.6A.
- 83 The Group supports the view that a successful regulatory system is one where the regulatory powers seldom need to be used. However, achieving that depends on a credible expectation that the powers will be used where necessary, and there has never been a control scheme in the 60 years since the 1959 Act.
- 84 There has been a long history of situations where a control scheme has nearly been used. The RDC concluded in the end that the s.7 powers in the 1959 Act were unworkable. The powers then remained little changed in the 1996 Act and the Group's experience is that there continued to be a reluctance by government to change the powers if they had not been tested. However, significant changes were made to s.8 by the WANE(S) Act in 2011, as described above.
- 85 Since 2011, SNH has appeared on the verge of using s.8 on a number of occasions. For example, SNH stated in evidence to the Scottish Parliament's Rural Affairs Climate Change and Environment Committee in 2013 that SNH anticipated testing the amended s.8 powers before long.²⁷ More recently, in 2017-18, there was an issue over SNH's possible use of a s.8 in north-west Sutherland that resulted in SNH deciding against it.²⁸
- 86 The Group considers that the influence of the House of Lords on the nature of s.7 control schemes in the 1959 Act and on the continuation of those provisions in the 1996 Act, resulted in making a control scheme unduly difficult to implement. The subsequent amendments by the WANE(S) Act 2011 to s.8 and the associated Schedule 2, have made improvements to the provisions to make a control scheme a more workable option, if ever needed. However, the Group considers that the changes recommended above to the natural heritage provisions and terms of Schedule 2 paragraph 13 are essential further amendments.

²⁷ SNH evidence to Rural Affairs, Climate Change and Environment (RACCE) Committee, 20 November 2013.

²⁸ For example, 'Competing interest groups take up arms over deer shooting', The Herald, 17 December 2017.

PART FIVE - NON-STATUTORY ARRANGEMENTS

Introduction

- 1 The aim of Scotland's system for the management of wild deer is that the deer should be managed to the best effect in the public interest. The system to achieve this has three main components. The first of these is property law that defines the legal status of wild deer and the nature of deer hunting rights, as discussed in Section 1.
- 2 The second component is the regulatory laws governing how wild deer can be managed. These include the Deer (Scotland) Act 1996 and associated secondary legislation discussed in the previous Parts of the Report, as well as related legislation covering topics such as food safety and firearms.
- 3 The statutory framework of the first two components of the system of deer management is the responsibility of the Scottish Parliament representing the overall public interest. The third component is then the non-statutory public sector arrangements to influence the management of wild deer in the public interest. This Part of the Report considers these non-statutory arrangements.
- 4 The nature of the non-statutory arrangements is determined by the Scottish Government (SG) and its agencies, representing the public interest below the level of the Scottish Parliament. The key government agency is Scottish Natural Heritage (SNH) as the public authority responsible for implementing the deer legislation.
- 5 The SG sets the public policy context within which SNH operates and the level of resources available to SNH to carry out its functions under the Deer (Scotland) Act 1996 and other legislation. The public policy context, including the SG's policy for deer management and its relationship with SNH, is considered in Section 25 below. Section 26 considers the non-statutory approach adopted by SNH.
- 6 SNH's non-statutory approach will influence the extent to which SNH uses both its regulatory powers under the 1996 Act and its enabling powers in the Act. SNH's enabling powers are mainly set out in s.3 '*Power of SNH to facilitate exercise of functions*' and are wide ranging. They include, for example, the power to issue guidance or advice, to conduct research and investigations and to carry out experiments or trials. Other enabling powers in the Act include s.4 '*Appointment of panels*' to provide advice to SNH and s.12 '*Power of Commission [SNH] to provide services and equipment and to make certain payments*'.
- 7 A central element in the effectiveness of public sector non-statutory measures is appropriate engagement with the land owners and occupiers, deer hunters and others directly associated with carrying out deer management. The many people and organisations involved in deer management from both the private and public sectors are generally referred to as the deer sector.

Section 25 Scottish Government

25.1 Overall Policy Context

- 8 The SG's policy for the management of wild deer is framed within the context of the SG's overall policy goals. These start with the National Performance Framework with its four strategic aims for Scotland and 11 national outcomes to achieve those aims.¹ A wide range of other high-level SG policy documents flow from this including, for example, the current Scottish Economic Strategy, the Climate Change Plan 2018-32 and the Scottish Biodiversity Strategy.²
- 9 A core document in setting the context for the SG's deer management policy is the SG's Land Use Strategy for Scotland 2016-21.³ The Land Use Strategy (LUS), which includes a commitment to applying an ecosystem approach, is based on a vision, three objectives and 11 principles for sustainable land use. The vision is "*A Scotland where we fully recognise, understand and value the importance of our land resources, and where our plans and decisions about land use will deliver improved and enduring benefits, enhancing the wellbeing of our nation*".
- 10 The SG has also produced a Scottish Land Rights and Responsibilities Statement, which is intended to apply to all land owners and land management, and which is based on a vision and six principles.⁴ Another part of the context is the Scottish Regulators' Strategic Code of Practice. This was first produced as a requirement of the Regulatory Reform (Scotland) Act 2014 and the public sector regulators covered by the Code include SNH.⁵ The Code is based on five principles of better regulation, which require that any regulation is transparent, accountable, proportionate, consistent and targeted.

25.2 Deer Management Policy

- 11 Responsibility for the management of wild deer within the SG comes under the Cabinet Secretary for Environment, Climate Change and Land Reform and is managed within the SG's Environment and Forestry Directorate. Within the Directorate, deer management comes under the Deputy Director dealing with Natural Resources and below that, the Head of Wildlife and Biodiversity.
- 12 The relationship between the SG and SNH is central to the delivery of public policy for deer management. SNH is a non-departmental public body and, as one of the SG's agencies, is funded by and answerable to the SG. SNH's funding is provided by an annual budget allocation from the SG. The amount was £50.45 million in 2018/19.⁶ SNH then decides how much of that overall funding to allocate to deer management, with the budgeted amount being approximately £1.5 million in 2018/19.⁷ The SG also sometimes provides additional funding to SNH for specific purposes. For example, the SG provided £200,000 to support SNH's work with Deer Management Groups (DMGs) ahead of the 2016 DMG assessment.⁸

¹ Scottish Government (2018). National Performance Framework.

² Scotland's Economic Strategy (Scottish Government, 2018); Climate Change Plan – third report on proposals and policies 2018-2032 (Scottish Government, 2018); 2020 Challenge for Scotland's Biodiversity (Scottish Government, 2013).

³ Scottish Government (2016). Getting the best from our land – a Land Use Strategy for Scotland 2016-2021.

⁴ Scottish Government (2017). Scottish land rights and responsibilities statement.

⁵ Scottish Government (2015). Scottish regulators' strategic code of practice.

⁶ SNH correspondence with DWG, 19 March 2019.

⁷ See Section 26.

⁸ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

- 13 The SG determines public policy for deer management and all public bodies are expected to follow that policy. SNH has the lead role in implementing the policy through its responsibilities for deer management under the Deer (Scotland) Act 1996. In the Act, SNH has powers and duties, and only requires permission from Scottish Ministers in the Act for two particular actions.⁹ However, in s.2 of the Act, SNH is required to provide advice to Scottish Ministers on any matter relating to the purposes of the Act that Ministers might refer to SNH, and also to bring to the attention of Ministers any matters relating to deer which SNH consider Minister should be appraised.
- 14 The relationship between the SG and SNH over deer policy is that SNH advises and the SG decides.¹⁰ The SG considers that its policy on deer management is represented by ‘Wild Deer: A National Approach’ (WDNA) and also by the Code of Practice on Deer Management.^{11, 12} These documents are seen as part of a sequence that starts at the level of the SG’s Land Use Strategy and descends through the WDNA and the Code to the practical level of Wild Deer Best Practice guidance (WDBP).¹³
- 15 The Group reviews the WDNA, Code and WDBP below. However, the Group considers that neither the WDNA nor the Code are policy documents. They potentially reflect SG policy, but they do not provide a statement of public policy for the management of wild deer in Scotland. The Group considers there is a need for a clearer statement of SG policy.
- 16 The Group is also unclear about the boundaries between the SG and SNH in terms of responsibilities for deer management. While SNH advises and the SG decides, the Group considers there is a lack of clarity on the extent to which the SG controls SNH’s scope to take initiatives to improve deer management. The Group recognises that there is on-going contact between SG and SNH officials. However, when the Environment, Climate Change and Land Reform (ECCLR) Committee criticised SNH in 2017 for not providing “*the level of leadership on deer management that might have been expected*”, the Group’s view is that the comment might have been directed at least equally at the SG.¹⁴
- 17 There is no plan for what the SG expects SNH to achieve on deer management over a set period, whether linked to SNH’s budget or otherwise. The WDNA provides a sense of direction, but the document is not a plan of what SNH intends to do to improve deer management. The SG does issue instructions to SNH from time to time, such as requiring SNH to produce reports on deer management in Scotland in 2016 and 2019.¹⁵
- 18 The SG called for those two reports as part of the series of assessments that SNH has carried out of DMGs in 2014, 2016 and 2019.¹⁶ That assessment process has been the main focus of SNH’s work on deer management over the last five years and also the SG’s statements on deer management during that time. However, that dominant focus on deer management planning by DMGs over the last five years did not result from the initiative of either SNH or the SG, but the ECCLR Committee and its predecessor, the Rural Affairs, Climate Change and Environment (RACCE) Committee.

⁹ Implementing a s.8 Control Scheme and waiving charges under s.12.

¹⁰ Scottish Government discussion with DWG, 12 December 2018.

¹¹ Scottish Government discussion with DWG, 12 December 2018.

¹² Scotland’s Wild Deer: A National Approach including 2015-2020 priorities (SNH, 2014a); Code of Practice on Deer Management (SNH, 2011).

¹³ SNH (2014a) *Op cit.*

¹⁴ ECCLR Committee (2017). Deer Management in Scotland: Report to the Scottish Government from SNH 2016, SP Paper 117, 5th Report (Session 5), 3 April 2017, Executive Summary, paragraph 13.

¹⁵ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016. SNH (2019). Assessing Progress in Deer Management – Report from Scottish Natural Heritage to Scottish Government, September 2019.

¹⁶ The assessment process is discussed in Section 26.

25.3 Wild Deer: A National Approach

- 19 The Deer Commission for Scotland (DCS) replaced the Red Deer Commission (RDC) as a result of the Deer (Scotland) Act 1996. In 2000, the DCS published 'Wild Deer in Scotland - A long term vision'. The vision was for 15-20 years time (i.e. the current period) and is included in Annex 10. In 2001, the DCS then published a Long Term Strategy for how the DCS intended to implement the vision.
- 20 In 2008, both the DCS's documents were replaced by the publication of the SG's 'Wild Deer: A National Approach' (WDNA). The WDNA included a new 20 year vision for deer management in Scotland (see Annex 10), and set out guiding principles, objectives and actions to work towards that vision. The SG described the WDNA as a strategy that provided a new approach to "*managing deer for the benefit of the nation*" and which would rely for its successful delivery "*on the collaborative effort of the Government and the deer sector*".¹⁷ The WDNA was based on consultations with the deer sector and collaboration is a prominent theme in the document.
- 21 The 2008 WDNA strategy included a commitment to review the document every five years. There was also a commitment to produce reports annually on both the actions taken by the public and private sectors that contributed to the delivery of WDNA, and on revised action plans for the coming years.
- 22 SNH became responsible for managing the WDNA process in 2010 after it replaced the DCS. The first review included a Progress and Gaps Analysis 2008-14.¹⁸ A revised 2014 version of the WDNA was then produced covering 2015-20. This included a revised vision for 2030 (see Annex 10) and the same six guiding principles as the 2008 version. The objectives based on the public interest in deer management were modified and revised actions set out. SNH continues to publish annual reports on actions in the past year and on actions for the coming year. There is also on-going engagement over WDNA with organisations representing the deer sector.¹⁹
- 23 In the revised WDNA, it is stated that WDNA "*is a 20 year vision for wild deer management*".²⁰ However, WDNA is also described in other documents as "*the Scottish Government's joint Agencies strategy*".²¹ That label reflects that the WDNA Steering Group, which is responsible for overseeing the WDNA reviews and action plans, consists of representatives of the SG, SNH, Scottish Forestry, Forestry and Land Scotland and the two national park authorities.²²
- 24 The WDNA Steering Group met four times in 2007 in the lead up to WDNA being published in 2008.²³ The Steering Group then met twice in 2008 and once in 2009, before there was a gap until the Steering Group met again in 2013 at the start of the WDNA five year review. In the six years 2013-18, the Steering Group averaged 1.5 meetings a year.

¹⁷ Scottish Government (2008). Scotland's Wild Deer: A National Approach. Foreword by the Minister for Environment.

¹⁸ SNH (2014b). Scotland's Wild Deer: A National Approach - Progress and Gap Analysis 2008-14.

¹⁹ These include the British Deer Society, the British Association for Shooting and Conservation, the Association of Deer Management Groups and the Scottish Gamekeepers Association.

²⁰ SNH (2014a) *Op cit*, p.3,

²¹ SNH (no date). Deer Management Plans: Delivering the Public Interest.

²² WDNA Steering Group, Draft Terms of Reference.

²³ SNH correspondence with DWG, 20 March 2019.

- 25 SNH chairs the Steering Group and provides the agendas and minutes for meetings, and also carries out the annual process of producing reports. While the Steering Group currently has not met since December 2017, the minutes of its three meetings that year indicated that little of substance was discussed.²⁴ The next WDNA five year review is due in 2020.
- 26 WDNA and its associated process have been in place for over 10 years. The Steering Group's Terms of Reference state that "*WDNA sets the strategic direction for government and stakeholders to work together to deliver practical deer management actions*". The focus of the annual reporting on WDNA is also on actions and the number of organisations involved and, for example, following the review of the first five years of WDNA, it had been reported that "*more than 200 actions have been delivered by over 20 organisations over the past 5 years*".²⁵
- 27 SNH continues to compile these statistics each year with, for example, 69 actions by 18 organisations reported for 2017/18. SNH records the number of these actions under each of the priorities for WDNA in 2015-20 and categorises them on the basis of whether they were carried out, carried forward or deferred/not achieved. However, no account is taken of the relative significance of the different actions, some of which are fairly minor activities. There has also been no adequate assessment of what the WDNA might have achieved in practice over the last 10 years.
- 28 The 2008 version of WDNA stated that the impacts of implementing the strategy on the environment, economy and society would be monitored through "*a collection of indicators*" to "*build a picture of trends and progress*".²⁶ The same statement was included in the 2014 version. A set of 11 indicators was developed in 2009/10 and an initial attempt made to assess them at the time of 2014 review of WDNA. Indicators were scored whether the trend was positive, uncertain or negative and the results put on SNH's website.²⁷
- 29 Following the 2014 review of WDNA, a modified set of 13 indicators was developed by SNH as a basis for assessing progress on the WDNA priorities for 2015-20.²⁸ An assessment of the indicators and trends was then carried out in time for possible use in SNH's 2016 report to the SG on deer management in Scotland. However, the results were not included in that report and have not been published. As there has also been no subsequent assessment yet, a summary table of the results is included here as Annex 11.
- 30 In the 2016 summary table of WDNA indicators and trends, the trends for the 13 indicators were scored as five positive, four negative and four stable. The five positive trends after eight years of WDNA were limited in their nature and not necessarily attributable to the influence of WDNA, for example, a public opinion survey that found "*the number of people with concerns about deer has decreased*". Similarly, the increase in the number of DMGs with improved administration reflected the separate DMG assessment process since 2014 that resulted from the critical comments of a parliamentary committee.

²⁴ 'Currently' is at 27 August 2019 (SNH correspondence with DWG); minutes of meetings via DWG correspondence with SNH, 18 December 2018.

²⁵ SNH (2014a) *Op cit*, p.21.

²⁶ Scottish Government (2008), *Op cit*, p.18.

²⁷ SNH (2016). Scotland Wild Deer: A National Approach. Update on Deer Indicators, revised June 2016.

²⁸ SNH (2015). Description of WDNA Indicators for period 2015-20.

- 31 The other three positive trends included that the value of deer stalking to the Scottish economy had increased based on the two consultants reports described in Section 20, and that the number of people with Deer Stalking Certificate Level 1 had increased, although the number of new holders each year has been reducing.²⁹ The one other positive trend was that Scotland still had only four species of wild deer, which might more accurately have been scored as stable.
- 32 While the development of metrics for the public interest was identified as a priority in the WDNA action plan for 2017, the Group considers that the limited number and scope of the WDNA indicators reflects the fairly anodyne nature of the current document. The Group considers the minimalist vision adopted in 2014 is an unrealistic expectation based on progress to date, while defined steps or targets are not set for working towards the 14 aspirational public interest objectives.
- 33 The focus of the WDNA is on outputs (actions) rather than outcomes (practical results) and the Group considers that the bureaucratic process of annual reports and action plans creates the impression of greater progress than is the case. The WDNA document gives a good sense of the general direction of public of policy and, in line with its original purpose, provides a strategic context for discussions with the representatives of some of the main deer sector organisations through a WDNA Action Group. However, the Group considers that the WDNA lacks focus and intent.
- 34 The Group's impression is that the SG pays little or no attention to the WDNA process. The public agency steering group also appears to have very limited input, despite the impacts that deer are having on the interests of Scottish Forestry, Forest and Land Scotland and the national park authorities. The WDNA is the SG's document, but the process appears to be managed essentially by SNH staff and the representatives of a relatively small number of deer sector organisations.
- 35 Collaboration between public and private sectors can be very positive and is to be supported. However, the Group considers that both the WDNA document and process place an overemphasis on it. The Group also considers that the actual influence of WDNA on the management of wild deer in Scotland is very limited compared to the profile that WDNA is given.
- 36 The limitations of the current WDNA approach are particularly significant because of its key position in the hierarchy of documents from the SG's Land Use Strategy down to Best Practice guidance, as described earlier. The limitations are also emphasised by the lack of a document that gives a clear statement of SG policy for the management of wild deer and the lack of any plan of the actions that SNH intends to take over a set period to achieve improvements in deer management.
- 37 The Group supports public-private sector collaboration. However, the Group considers that either a clear statement of SG policy or an SNH action plan, if they were appropriately done, could be more effective in securing progress in standards of deer management than the current WDNA. The Group considers both the policy and the plan are needed.
- 38 **The Working Group recommends that the review of 'Wild Deer: A National Approach' (WDNA) which is due in 2020, should be a major and thorough review of the WDNA approach and should result in a more focused and targeted outcome.**

²⁹ See Section 8.

25.5 Code of Practice on Deer Management

- 39 The origin of the Code of Practice on Deer Management was the view that there should be a legal requirement on the owners of land to manage wild deer that occur on their land responsibly. The RDC, DCS and others seeking to improve deer management in Scotland had long argued that owners have a moral or social responsibility to do this. The DCS then proposed to the SG shortly before the DCS was replaced by SNH in 2010, that all land owners should have a statutory duty of 'sustainable deer management'. The proposal was supported by SNH and the Forestry Commission.³⁰
- 40 The SG consulted on this proposal as part of developing measures to include in the Wildlife and Natural Environment (Scotland) Bill (WANE(S) Bill). However, the SG did not include the proposed statutory duty in the Bill. This was because the SG concluded that such a duty would be "*unreasonably vague*" for any breach to be enforceable as an offence, and would therefore not meet the standards required by Article 7 of the European Convention on Human Rights.³¹ Instead of the statutory duty, the SG sought "*to bring about a de-facto duty*" by including provisions in the Bill for a voluntary Code of Practice in the Bill.³²
- 41 The SG explained at Stage 1 of the WANE(S) Bill in the Scottish Parliament, that the Code "*will set out in detail what we mean by sustainable management*" and will "*be taken into account when SNH decides whether to use its intervention powers*".³³ The SG considered that the Code will be "*a more useful approach than just setting out in the bill a general duty to manage deer sustainably. It is more useful to describe in the code of practice what that actually means, and to link that with the intervention powers*".³⁴
- 42 Subsequently, the WANE(S) Act 2011 amended the Deer (Scotland) Act 1996 by inserting a new section, s.5A '*Code of practice on deer management*'. This placed a duty on SNH in s.5A(1) to "*draw up a code of practice for the purpose of providing practical guidance in respect of deer management*".
- 43 Under s.5A, SNH is also required to consult on the proposed Code or any replacement, and to submit the proposed Code or replacement to Scottish Ministers for approval. The first Code and any replacement then has to be laid before the Scottish Parliament for approval by resolution before the Code can come into effect. The first Code of Practice came into effect on 1st January 2012 and remains the current Code. There is no statutory duty or legal requirement on land owners or others involved in deer management to follow the Code.
- 44 In s.5A(2), some topics that the Code "*may*" cover are listed. When the Act was first passed, these included the option to "*set out examples of the circumstances in which SNH may seek to secure a control agreement or make a control scheme*". Linked to that, the WANE(S) Act added the need for SNH to have regard to the Code of Practice into SNH's powers under s.7 '*Control agreements*' and s.8 '*Control schemes*'.

³⁰ Scottish Parliament Rural Affairs and Environment Committee. Discussion of the purpose of the Code of Practice during the Passage of the WANE(S) Bill 2010. SPPB 159, para 561.

³¹ Scottish Parliament Rural Affairs and Environment Committee, *Op cit*, para 559.

³² Scottish Parliament Rural Affairs and Environment Committee, *Op cit*, para 557.

³³ Scottish Parliament Rural Affairs and Environment Committee, *Op cit*, para 579.

³⁴ Scottish Parliament Rural Affairs and Environment Committee, *Op cit*, para 579.

- 45 Subsequently, when the Land Reform (Scotland) Act 2016 (LR(S) Act) amended the 1996 Act to include s.6A giving SNH the power to require a deer management plan to be produced, the provisions included the requirement for SNH to have regard to the Code. The requirement to produce a deer management plan was also added to the examples in s.5(2) of topics that might be covered in the Code.
- 46 However, the use of the powers under ss.6A, 7 and 8 is dependent on the fact that damage to the interests covered by those three sections has occurred, is occurring or is likely to occur. In those circumstances, neither the contents of the Code nor whether someone has or has not followed the voluntary Code are directly relevant to SNH deciding whether or not to use the powers. The Group has therefore recommended earlier in considering those powers in Part Four of the Report, that the provision to have regard to the Code should be removed from ss.6A, 7 and 8.
- 47 The current Code mentions ss.7 and 8, but does not follow the option in s.5(2) to set out examples of the circumstances in which the powers might be used. That would be difficult to do at more than a very general and therefore superficial level, because of the variety of circumstances that could be involved. The Code also makes no mention of SNH's regulatory powers under ss.10 and 11 to control deer numbers.
- 48 The Group considers that the SG's intention to link the Code directly to SNH's regulatory powers was overambitious for what might realistically be achieved through a voluntary Code of Practice. The Group also considers that, while the topics listed in s.5A(2) are optional, the list is unnecessarily prescriptive for primary legislation.
- 49 The purpose of the Code in s.5A(1) is to provide "*practical guidance in respect of deer management*". The Group considers the primary legislation, which may be seldom changed, should avoid specifying what the Code might cover as it places emphasis on particular topics. Under s.5A(3) there is the requirement that "*SNH must from time to time review the code of practice*". The Group considers that the contents of s.5A(2) were a product of the time and could be repealed to maintain flexibility in the focus of versions of the Code over the time.
- 50 While s.5A(12) already required SNH to monitor compliance with the Code, the LR(S) Act 2016 then amended the Deer (Scotland) Act 1996 to add s.5B '*Review of compliance with code of practice on deer management*'. That new section elaborated on the nature of the review to be carried out. The section also set the date for SNH's first review of compliance and placed a requirement on SNH to review compliance every three years after the first review.
- 51 SNH completed its first review of compliance with the Code in 2019. The review was based on a questionnaire that was distributed through the organisations making up the Deer Management Round Table.³⁵ The questionnaire was mainly based on the actions identified in Chapter 3 of the Code, which has 14 actions that should be taken to avoid the risk of the use of SNH's regulatory powers and 17 actions that should be taken to demonstrate good practice. The questionnaire also sought to assess the role of the Code in promoting sustainable deer management through questions on awareness of the Code and how effective the respondents thought the Code had been in influencing behaviour.

³⁵ The Deer Management Round Table was established by the RDC and others in the mid 1990s in the lead-up to the 1996 Act to facilitate round table discussions between all the interests involved in deer management. The DCS and now SNH have continued the round table as a useful forum for sharing information and discussing deer management issues.

- 52 The results of the questionnaire survey have been published by SNH.³⁶ There were 160 responses, with 100 from owner-occupiers and 60 from representatives of organisations. However, not all the respondents had any responsibility for deer management, so that the responses included 86 owner-occupiers and 46 representatives of organisations with direct responsibilities for deer management. Not all these respondents replied to each question. Thus, while SNH's analysis is mainly presented as percentages of respondents, the response rates to some of the questions were very low (for example, 14%, 22%, 28% of those who responded).
- 53 The Group considers that the nature of the questions used by SNH in the questionnaire reflects the lack of measures in the current version of the Code that could be used to audit compliance effectively. In SNH's comments on the outcome of the questionnaire in its recent report on deer management to the SG, SNH also noted the need for some caution in the interpretation of the results "*due to the small sample size and potential for bias in self-selecting responses*".³⁷ The prominent finding that 55% of respondents considered that the Code is effective, for example, was the view of 73 respondents.
- 54 SNH took into account a number of other sources of information in addition to the questionnaire in reaching the overall conclusion of its review.³⁸ SNH's main conclusion was that "*we consider the majority of land managers are complying with the letter and spirit of the Code*".³⁹ The Group has examined both the results of the questionnaire and, as part of the work for this Report, the other sources that SNH cites. The Group considers that SNH does not have adequate information to reach this conclusion at a national level. The conclusion also appears at odds with the extent of damage still being caused by deer, as described in Part Three of this Report.
- 55 However, the Group does not support the requirement in s.5B of the Deer (Scotland) Act 1996 that SNH carry out another review of compliance with the Code every three years from 2019 onwards. The Group considers that this is unnecessarily frequent for monitoring the effect of the voluntary Code and will require the use of SNH resources that could be deployed on addressing more pressing deer management issues.
- 56 The Group considers that the three-yearly requirement is a legacy of the SG's unrealistic expectations of the Code might achieve. The Group considers that the requirement should be removed from s.5B and that the requirement to review compliance should be as provided in s.5A(12) without a time commitment. The Group considers that circumstances will be sufficient to identify times at which a review of compliance would be appropriate. The Group also considers that ss.5A and 5B could and should be integrated into one section to make the legislation clearer.
- 57 **The Working Group recommends that section 5B of the Deer (Scotland) Act 1996 should be amended to remove the requirement for compliance with the Code of Practice on Deer Management to be reviewed every three years.**

³⁶ Granville, S. and Hunter, R. (2019). Review of compliance with the Code of Practice on Deer Management. Scottish Natural Heritage Research Report No. 1095.

³⁷ SNH (2019) *Op cit*, p.60.

³⁸ DMG assessments, SNH's use of its regulatory powers and the reports of the Lowland Panel and Lowland Deer Management Project (SNH 2019, *Op cit*).

³⁹ SNH (2019) *Op cit*, p.4.

- 58 Codes of Practice are used in many sectors and can be helpful in setting out the standards of management expected. Other similar approaches can also be helpful as illustrated, for example, by the European Charter on Hunting and Biodiversity.⁴⁰The Group therefore supports the principle of having a Code of Practice as part of the public interest framework for the management of wild deer. However, the Group considers much could be done to improve the current Code
- 59 As quoted above from s.5A(2), “*SNH must review from time to time the code of practice*” and the Group considers that the Code should be reviewed for the first time. The current Code is a relatively long, often repetitive and complex document, and difficult to assimilate. At the start of Code, for example, there is a summary list of seven steps to follow the Code and this suggests the Code is arranged around the seven steps, but they are not followed in the rest of the document.
- 60 The seven steps are written as questions and are about deer management planning, which is a dominant topic in the Code, along with collaboration. While the seven steps are on page three, the public interests to be protected from damage by deer under the deer legislation are not listed until page 22 of 27. There is relatively little in the Code about actual practical deer management other than frequent references to the existence of Wild Deer Best Practice guides.
- 61 There is also no basic introduction to the law governing deer management, for example, the various aspects of how and when deer can be killed or captured alive as described in Part Two of this Report. The Group considers that a synopsis of the legal position would be more helpful than the repeated references to Acts of Parliament in the current Code.
- 62 The Group considers that, over eight years after the current Code of Practice was drafted, it should be reviewed. The Group considers that, with the benefit of that first version of the Code as a starting point, a review should result in a clearer, shorter and more useful version of the Code that also allows more effective audit of compliance. The Group considers that a revised version could and should be more effective at promoting high standards of practical deer management in Scotland.
- 63 **The Working Group recommends that the Scottish Government should instruct Scottish Natural Heritage to carry out a review of the contents of the current Code of Practice on Deer Management with the aim of producing a clearer and more effective version of the Code.**

25.6 Wild Deer Best Practice

- 64 The SG is not directly involved in Wild Deer Best Practice (WDBP), which is an initiative managed by SNH and representatives of the deer sector. However, WDBP is considered in this Section because it is an important component of the public sector framework for deer management with the SG’s Land Use Strategy, WDNA and the Code of Practice.

⁴⁰ Convention on the Conservation of European Wildlife and Natural Habitats (2007). European Charter on Hunting and Biodiversity. Adopted at the Bern Convention, November 2007.

- 65 WDBP provides practical guides on a wide range of topics related to deer and their management. The WDBP introduction states that *“At the heart of the guides is the need for clarity on the law; along with three central aims: safeguarding public safety; ensuring food safety; and taking full account of deer welfare”*.
- 66 The DCS started WDBP in 2002/03 as a major new initiative after the DCS had produced its 15-20 year Vision for wild deer in Scotland and a Long Term Strategy to implement the Vision, both of which were subsequently replaced by WDNA.⁴¹ The DCS recognised that the practical guides would be most useful if they were developed with and endorsed by deer practitioners. The guides were therefore developed by a Steering Group involving representatives of key deer sector organisations.⁴² The DCS chaired the Steering Group and was responsible for the final approval of any guide to be published.
- 67 The first tranche of WDBP guides were published in 2003. The guides were produced in both hard copy and on the DCS website, which had been significantly re-designed to accommodate them. There were over 70 guides by 2008 as the DCS and WDBP Steering Group continued to develop new guides and update existing ones. SNH continued to chair the Steering Group when it replaced the DCS in 2010 and there are currently over 100 WDBP guides on a wide range of topics.
- 68 The WDBP guidance is recognised as a valuable part of deer management in Scotland. As a result, there is now equivalent WDBP guidance in England and Wales managed by the Deer Initiative, which is a broad partnership of statutory, voluntary and private interests dedicated to *“ensuring the delivery of a sustainable, well-managed wild deer population in England and Wales”*.⁴³ There is also equivalent WDBP guidance in Ireland managed by the Irish Deer Management Forum covering both the Republic and Northern Ireland and involving a similar type of partnership to the Deer Initiative.
- 69 There was, however, a lack of leadership and loss of momentum with WDBP in Scotland after SNH took over. At that stage, SNH appointed a project officer to maintain and develop the WDBP with the ultimate aim of SNH withdrawing from the WDBP project and transferring it to the bodies forming the WDBP Steering Group. However, SNH’s approach was unsuccessful and, as a result, the WDBP project *“stagnated for several years”*.⁴⁴
- 70 SNH remained responsible for WDBP, including its funding, and there was increasing concern about the position. As a result, SNH contracted a project worker from the Deer Initiative for up to half a full time equivalent job for three years starting in 2017-18 to help with the management and coordination of WDBP. The project worker is supervised by SNH and the work is *“largely concerned with maintaining an overview of different BP initiatives in E&W, Ireland and Scotland”* and will *“particularly ensure consistency across guides within the Scottish suite”*.⁴⁵

⁴¹ DCS Annual Report, 2002/03.

⁴² The British Deer Society, the British Association for Shooting and Conservation, the Association of Deer Management Groups, the Scottish Gamekeepers Association, Lantra Scotland and the Forestry Commission.

⁴³ The Deer Initiative website (www.thedeerinitiative.co.uk).

⁴⁴ SNH correspondence with DWG, 30 October 2018.

⁴⁵ SNH correspondence with DWG, 30 October 2018.

- 71 In May 2018, SNH also produced the first WDBP newsletter for some years prompted by the need to implement the UK's General Data Protection Regulations (GDPR). Previously, the DCS and SNH had published hard copies of each new guide and posted copies to everyone on the WDBP mailing list. To comply with GDPR, SNH made sure all guides were on the WDBP website, which was also re-vamped to make it mobile/tablet friendly and to enable the downloading and printing of guides. SNH then deleted the WDBP mailing list with approximately 2,000 names and addresses, with information on new guides to be disseminated through the WDBP Steering Group organisations and other channels.
- 72 SNH continued to chair the WDBP and remained "*the driving force behind maintaining the project and suggesting new guides*".⁴⁶ While the system for new or updated guides is based on the approval of the Steering Group, SNH retains the final say on whether a guide is published. However, SNH still aspires to transfer responsibility for WDBP to the Steering Group organisations.⁴⁷ As a step in that direction, an external Convener was appointed in 2019 to chair the Steering Group.⁴⁸
- 73 The Group, however, does not support SNH's ambition to transfer responsibility of the WDBP project. This could threaten the sustainability of the WDBP project as already illustrated. The Group considers that the WDBP is a valuable and important part of the current public interest framework for deer management in Scotland.
- 74 The WDBP is a public sector initiative and there is a clear public interest in ensuring that the guidance provided continues to be of a high standard, both for the value of the guides themselves and given the significance of the WDBP in WDNA and the Code of Practice. The Code states, for example, that "*Throughout the Code there are references to Wild Deer Best Practice Guides*".⁴⁹
- 75 The Group considers that SNH should make a policy decision to maintain the WDBP. The decision could be subject to a review in, for example, five years' time. The WDBP should continue to operate under the current arrangements, with all guides needing to be approved by the Steering Group and SNH having the final say on whether a guide is published.
- 76 The Group considers that the SG should support such a decision by SNH because of the value of WDBP as part of the wider public interest framework. The Group considers that the SG should recognise the maintenance of the WDBP as part of SNH's deer management roles, just as SNH maintains the WDNA process and the operation of the Code of Practice.
- 77 The Working Group recommends that Scottish Natural Heritage should make a policy decision with the Scottish Government's support, to continue to manage the Wild Deer Best Practice project for at least the next five years.**

⁴⁶ SNH correspondence with DWG, 30 October 2018.

⁴⁷ SNH correspondence with DWG, 30 October 2018.

⁴⁸ The Steering Group organisations are currently the British Deer Society, the British Association for Shooting and Conservation, the Association of Deer Management Groups, the Scottish Gamekeepers Association, Lantra Scotland, Forestry and Land Scotland, Scotland's Rural College, University of the Highlands and Islands, Borders College, the Lowland Deer Network Scotland and the Deer Initiative.

⁴⁹ SNH (2011). Code of Practice on Deer Management, p.3.

Section 26 Scottish Natural Heritage

- 1 Scottish Natural Heritage (SNH) became the deer authority under the Deer (Scotland) Act 1996 in 2010 and a range of SNH's statutory and non-statutory involvements with deer management have been covered in previous Sections. This Section starts by examining both the changes associated with SNH becoming the deer authority and the enabling powers in the 1996 Act to facilitate the implementation of SNH's functions under the Act.
- 2 The Section then describes SNH's division of deer management in Scotland into upland deer management and lowland deer management, before considering SNH's approach in upland and lowland areas. There is further consideration of SNH's management of its role as the deer authority in Part Six.

26.1 The Deer Authority

- 3 The Deer (Scotland) Act 1959 established the Red Deer Commission (RDC) as the public authority responsible for implementing Scotland's deer legislation and government policy for deer management in Scotland.
- 4 In 1989-90, when the UK Government was re-organising the countryside and nature conservation organisations in Scotland, the Secretary of State for Scotland consulted on merging the RDC into the new body to be created. However, the RDC was amongst those arguing against the change as it considered this "*would be counter-productive to its work and its independence*".¹ As a result, the merger was not included in the Natural Heritage (Scotland) Act 1991 that established Scottish Natural Heritage (SNH).
- 5 The RDC was subsequently converted into the Deer Commission for Scotland (DCS) by the Deer (Scotland) Act 1996. The DCS continued in the same headquarters building in Inverness that the RDC had occupied since 1959. However, in 2007, the DCS moved into office space in SNH's new headquarters in Inverness, Great Glen House. Then in 2008, 20 years after the original merger proposal, the Scottish Government proposed merging the DCS into SNH as part of the Scottish Government's approach to "*simplifying and streamlining the public bodies and public services delivery landscape*".²
- 6 The Scottish Government established a Merger Programme Board to plan the merger, which was enacted through the Public Services Reform (Scotland) Act 2010. The Act amended the Deer (Scotland) Act 1996 and the Natural Heritage Act 1991 so that, since 1 August 2010, SNH has been the public authority responsible for implementing Scotland's deer legislation and government policy for deer management. In contrast to the RDC and DCS, SNH also owns land and carries out deer culls on its own behalf as a land manager.
- 7 SNH established a Transition Deer Panel in 2009/10 for three years to manage the merger of the DCS into SNH, including the transfer of most of the DCS's staff (c.20) into SNH with a staff complement of c.600.³ As concerns had been expressed about the merger, the Scottish Government made a commitment to the Rural Affairs, Climate Change and Environment Committee of the Scottish Parliament to evaluate the merger.⁴ SNH submitted the Final Evaluation Report in December 2012.⁵ The Report concluded that the Merger Board's key objectives "*had been partly or wholly met*".

¹ RDC Annual Report, 1990, p.19.

² Letter from Paul Wheelhouse MSP, Minister for Environment and Climate Change, to the Convener of the Rural Affairs, Climate Change and the Environment (RACCE) Committee, 8 February 2013.

³ The Panel was not a panel of the type that can be established under s.4 of the Deer (Scotland) Act 1996.

⁴ Letter from Paul Wheelhouse MSP, Minister for Environment and Climate Change, to the Convener of the Rural Affairs, Climate Change and the Environment (RACCE) Committee, 8 February 2013.

⁵ SNH (2012). Final Report on the merger of the Deer Commission for Scotland and Scottish Natural Heritage, December 2012.

- 8 Cost savings had been one of the key objectives of the merger and the Evaluation Report concluded that there had been average efficiency savings of £189,000 per year. The DCS's annual expenditure varied, but was generally around £1.7 million in its latter years.⁶ In 2016, SNH's reported its average annual expenditure on carrying out its role as the deer authority as £1.5 million.⁷ SNH's expenditure on that role has since reduced due to budget constraints affecting SNH and was £1.3 million in 2018/19.⁸ The adequacy of SNH's current allocation of funds for deer management from its overall annual budget, is discussed further in Part Six.
- 9 The Evaluation Report also commented favourably on the integration of the DCS into SNH to create "a single organisation responsible for deer and natural heritage policy, advisory and regulatory functions", noting that it will take time for some of the benefits of the merger to fully emerge.⁹ The Group considers that conclusion remains the case.
- 10 The Group supports the benefits to be gained from the merger of the DCS into SNH as Scotland's main public sector wildlife management organisation. Over and above efficiency savings, the benefits include access to the wider services within SNH and the scope for more integrated consideration of deer management issues with staff involved in other land uses and wildlife management issues. However, there has also been the risk that the responsibilities of the deer authority would become submerged within SNH and that there could be a loss of focus.
- 11 When the Group started its work, it had difficulty in understanding where deer management responsibilities lay within SNH. These had been dispersed into a complex pattern of responsibilities involving a wide range of individuals. This appears to be reflected in SNH informing the Lowland Deer Panel for its 2019 report, that SNH had 40 individuals involved in deer management in SNH's South of Scotland Area.¹⁰ SNH manages its operations through seven Areas covering Scotland (Argyll and Outer Hebrides, Forth, South Highlands, Southern Scotland, Strathclyde and Ayrshire, Tayside and Grampian, Northern Isles and North Highlands).
- 12 During the period of the Group's work, however, SNH carried out an internal "*line-of-sight restructure*" that resulted in most of SNH's deer work being consolidated under Wildlife Management Activity and the Head of that part of SNH.¹¹ The Group hopes that the change will provide greater clarity over where SNH's responsibilities as the deer authority lie for both staff within SNH and for those outside dealing with SNH over deer management.
- 13 The Group considers that SNH needs to maintain a clear distinction between its natural heritage and deer management functions and responsibilities under the legislation. When the Deer (Scotland) Act 1996 was amended in 2010 for SNH to replace the DCS, s.1(1) of the 1991 Natural Heritage Act was also amended to distinguish SNH's responsibilities under the respective Acts. Overlapping staff responsibilities can cloud the difference.

⁶ DCS Annual Reports.

⁷ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

⁸ SNH correspondence with DWG, 30 August 2019 and 9 September 2019.

⁹ SNH (2012) *Op cit*.

¹⁰ Lowland Deer Panel (2019). Report to Scottish Natural Heritage, February 2019.

¹¹ SNH correspondence with DWG, 20 November 2018.

- 14 The distinction can be particularly important in the use of SNH's regulatory powers under the 1996 Act. SNH might consider, for example, that the impacts of deer on a particular natural heritage interest amount to damage under its natural heritage responsibilities. Different factors then need to be considered by SNH as the deer authority, in deciding whether the situation warrants the use of regulatory powers.
- 15 **The Working Group recommends that Scottish Natural Heritage should ensure an appropriate level of distinction between Scottish Natural Heritage's responsibilities under the Deer (Scotland) Act 1996 and the Natural Heritage (Scotland) Act 1991 respectively.**
- 16 The Group considers that one consequence of the merger of the DCS into SNH has been a reduction in the transparency and accountability over the implementation of the deer authority's role under the 1996 Act. The Group commented in the previous Section on the lack of an available management plan for SNH's work in the role, for example, for the next three years with measurable targets. However, the Group also considers that an important factor in the reduction in transparency and accountability has been the loss of annual reporting.
- 17 Under s.2(2) of the 1996 Act, the DCS had to submit an annual report to Scottish Ministers "*on the exercising of their functions under this Act*". That report then had to be laid before the Scottish Parliament by Scottish Ministers under s.2(3). However, both those provisions were repealed by the Public Services Reform (Scotland) Act 2010 that replaced the DCS with SNH as the deer authority.
- 18 The repeal of the reporting provisions might have been viewed as a procedural reform resulting from the differences in reporting to government of the DCS as a standalone Commission and SNH as a large government agency. However, the Group considers that there was no reduction in the need for the deer authority report annually on the exercising of its functions under the 1996 Act.
- 19 The Group considers that re-instating annual report provisions in the Act would, in addition to improved transparency and accountability, help add a clearer focus to SNH's work as the deer authority. The main elements in such annual reports should be what SNH has done in that role in the year being reported, together with SNH's plans for the coming year. The reports should also include a summary of SNH's expenditure in its deer authority role.
- 20 **The Working Group recommends that section 2 of the Deer (Scotland) Act 1996 should be amended to include provisions requiring, firstly, Scottish Natural Heritage to report annually to Scottish Ministers on the exercising of Scottish Natural Heritage's functions under the Act and secondly, Scottish Ministers to present a copy of Scottish Natural Heritage's report to the Scottish Parliament.**
- 21 The Group considers that such annual reports should, in comparison to DCS reports, only be produced as electronic documents. The reports could also be shorter, given the scope to put associated material on SNH's website. The Group considers that SNH has been slow to put more deer management statistics on its website since it took over from the DCS, although the position has been improving. The Group has already commented in Section 21 on the need for SNH to improve its deer management data handling with a new database.

26.2 Enabling Powers

- 22 In the Deer (Scotland) Act 1996, s.1 sets out the functions of SNH as the deer authority before s.2 which deals with advice to Scottish Ministers. The next two sections of the Act, s.3 '*Power of SNH to facilitate exercise of functions*' and s.4 '*Appointment of panels*' then set out what can be described as enabling powers. Another enabling power, s.12 '*Power of Commission [SNH] to provide services and equipment and to make certain payments*' was discussed earlier in Section 23.
- 23 SNH's enabling power under s.3 covers a wide range of activities. They include in s.3(1), for example, the power to issue guidance and advice, to conduct research and investigations and to carry out experiments or trials. The scope of the power in s.3 was spelt out more fully in the 1996 Act than the equivalent power in the 1959 Act and developed further in two respects by the Wildlife and Natural Environment (Scotland) Act 2011 (the WANE(S) Act).
- 24 The WANE(S) Act added s.3(1)(c) to provide SNH with the power "*to assist any person or organisation in reaching agreements with third parties*". SNH might use this power, for example, to help neighbouring land owners settle a disagreement over the management of local deer numbers. The WANE(S) Act also added s.3(3) which requires that a public body or office-holder issued with advice or guidance under s.3(1) "*must have regard to such guidance or advice*".
- 25 SNH, like the RDC and DCS before it, carries out the types of activities listed in s.3(1) on an on-going basis as part of its operations as the deer authority. However, the power to appoint Panels under s.4 of the 1996 Act has seldom been used by the DCS and SNH. The same was the case with the equivalent power in the Deer (Scotland) Act 1959, although the nature of that power was substantially different from the power in the 1996 Act.
- 26 The appointment of Panels was dealt with in s.2 of the 1959 Act, reflecting the more significant nature of the power in that Act. Under s.2(1), the RDC could set up a panel in any locality with the Secretary of State's approval. The Panel was to consist of a chairman and four other persons, with two representing land owning and sporting interests and two representing agricultural and crofting interests. Under s.2(2), the RDC could refer any matter relating to its functions to a Panel for advice. However, under s.2(3) and (4), the RDC could also delegate authority to the Panel to exercise the RDC's power to control marauding deer under s.6 of the 1959 Act.
- 27 The RDC established three Panels in 1960 and 1961 to exercise the RDC's s.6 powers in their respective localities, but the Panels were discontinued by 1963.¹² This was because, while reports of deer damage were declining, the RDC concluded that the level of supervision required meant that the RDC was better to exercise the s.6 power itself. The RDC never appointed any further Panels.
- 28 The power to appoint Panels was changed significantly in the Deer (Scotland) Act 1996 by making the membership of a Panel more flexible and removing the scope to delegate control powers to a Panel. There have also been further amendments since. The size of the Panel for any locality can now be the number of persons that SNH considers appropriate,

¹² Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland.

with the members appointed after SNH has consulted persons and organisations considered to have an interest. SNH can refer any matter related to its deer function to a Panel and it is the duty of a Panel to provide advice. In addition, the functions of a Panel can now also include engagement over deer management with the local community in a Panel's locality.

- 29 The DCS only ever appointed three Panels. They were set up in 2004/05 and 2005/06 to investigate mitigation measures at hotspots for deer vehicle collisions on three main roads and all the Panels reported in 2006-07.¹³ Further information on these Panels was described earlier in Section 15.
- 30 SNH has established two Panels since it took over from the DCS in 2010. In both cases, the interpretation of “locality” in s.4 was set very wide. The first Panel, which reported in 2016, provided advice to SNH on the system of authorisations for out of season and night shooting in Scotland under the 1996 Act.¹⁴ The second Panel reported in 2019 and provided advice to SNH on deer management in lowland Scotland, with that “locality” interpreted by the Panel as being Scotland outwith the areas covered upland Deer Management Groups. Both reports are referred to elsewhere in this Report.
- 31 The nature of s.4 means that a Panel is little more than an advisory committee that might be set up without the need for statutory provisions. However, the requirement in s.4 for the approval of Scottish Ministers to set up a Panel, gives a Panel and its advice an added importance. The Group discusses making greater use of Panels in Part Six.
- 32 The Group considers, however, that the role of Scottish Ministers in the appointment of a Panel should be clarified. Under s.4(1), SNH may appoint a Panel subject to the approval of Scottish Ministers. The Group considers the approval should cover the locality involved, the purpose of the Panel and the intended membership. However, the Scottish Government interprets s.4(1) to mean that Scottish Ministers should also appoint the members.¹⁵ The Group considers that unnecessary and that allowing SNH to appoint members would reduce bureaucracy and improve the flexibility to changes in the membership, for example, with a replacement or additional member.
- 33 **The Working Group recommends Scottish Ministers should no longer be responsible for appointing the members of a Panel under section 4 of the Deer (Scotland) Act 1996.**

26.3 Upland Deer Management

- 34 For the last 60 years since the Deer (Scotland) Act 1959, the work of the three public bodies responsible in turn for implementing Scotland's deer legislation, the RDC, DCS and SNH, has been dominated by a focus on open hill red deer in the Highlands and Islands. The Highlands in this Report are defined as the mainland and islands north of the Highland Boundary Fault and west of the eastern edge of the Grampian Mountains.
- 35 The RDC was entirely focused on open hill red deer in the Highlands during its early decades and even after the RDC became responsible for management of all species of wild deer in Scotland from 1982, that remained very largely the case. Despite the

¹³ DCS Annual Report, 2006/07.

¹⁴ Deer Panel – Review of Authorisations (2016). Report to Scottish Natural Heritage, September 2016.

¹⁵ SNH discussion with DWG, 21 March 2018.

expansion in the distribution and numbers of deer elsewhere in Scotland, it was not until 1993/94 that the RDS decided that “*the Commission will be represented on a regional basis outwith traditional red deer range*”.¹⁶ In 1994/95, the RDC acquired an office in Stirling and established a South of Scotland team.

- 36 Following the Deer (Scotland) Act 1996, the DCS maintained and in part developed its involvements outwith the Highlands. However, the work of the DCS remained heavily focused on open hill red deer. This was reinforced by the DCS’s priority site policy and the requirement to ensure European designated Special Areas of Conservation were in favourable condition, with the extent of those sites concentrated in the Highlands.¹⁷
- 37 SNH’s work on deer management, since it became the deer authority in 2010, has also continued to be substantially dominated by SNH’s focus on open hill red deer. SNH’s approach has been to describe deer management in Scotland as consisting of upland deer management and lowland deer management.¹⁸ However, SNH has equated upland deer management with open hill red deer range in the Highlands, with lowland deer management seen as covering deer management outwith that range in the Highlands and rest of Scotland.¹⁹
- 38 SNH has recently refined this approach by describing deer management in Scotland in terms of four land use types.²⁰ Upland deer management is sub-divided into open hill range and what SNH calls the “*shoulder of the hill*” consisting of commercial forestry and hill farms. Lowland deer management is sub-divided into mixed agricultural and woodland areas, and urban areas with a population over 10,000.
- 39 One of the potential benefits of SNH replacing the DCS was SNH’s existing structure of six Areas and area staff covering Scotland. This provided scope for SNH to adopt more of a Scotland-wide approach to deer management than the DCS. However, SNH’s slowness to devote more attention to deer management in lowland areas drew criticism from the Rural Affairs, Climate Change and Environment (RACCE) Committee of the Scottish Parliament in 2015.²¹ That Committee’s successor, the Environment, Climate Change and Land Reform (ECCLR) Committee, also added to this criticism in 2017.²²
- 40 In response, SNH has started to devote more time and resources to lowland deer management as discussed further below. However, SNH work has continued to be predominantly on upland deer management. In a breakdown of SNH’s 2018/19 expenditure on deer management as the deer authority, the items that could be clearly attributed to either upland or lowland deer management accounted for £600,000 or close to half of the total expenditure of £1.3 million.²³ Of the £600,000 expenditure, 78% was upland and 22% lowland. A number of other main items in the list of expenditure that were not sub-divided into upland or lowland, are likely to reflect a similar approximate split.²⁴

¹⁶ RDC Annual Report, 1994.

¹⁷ See Section 16.

¹⁸ For example, SNH (2016), *Deer Management in Scotland: Report to the Scottish Government from SNH*, October 2016.

¹⁹ SNH (2016) *Op cit.*

²⁰ SNH (2019). *Assessing Progress in Deer Management – Report from Scottish Natural Heritage to Scottish Government*, Annex 1.

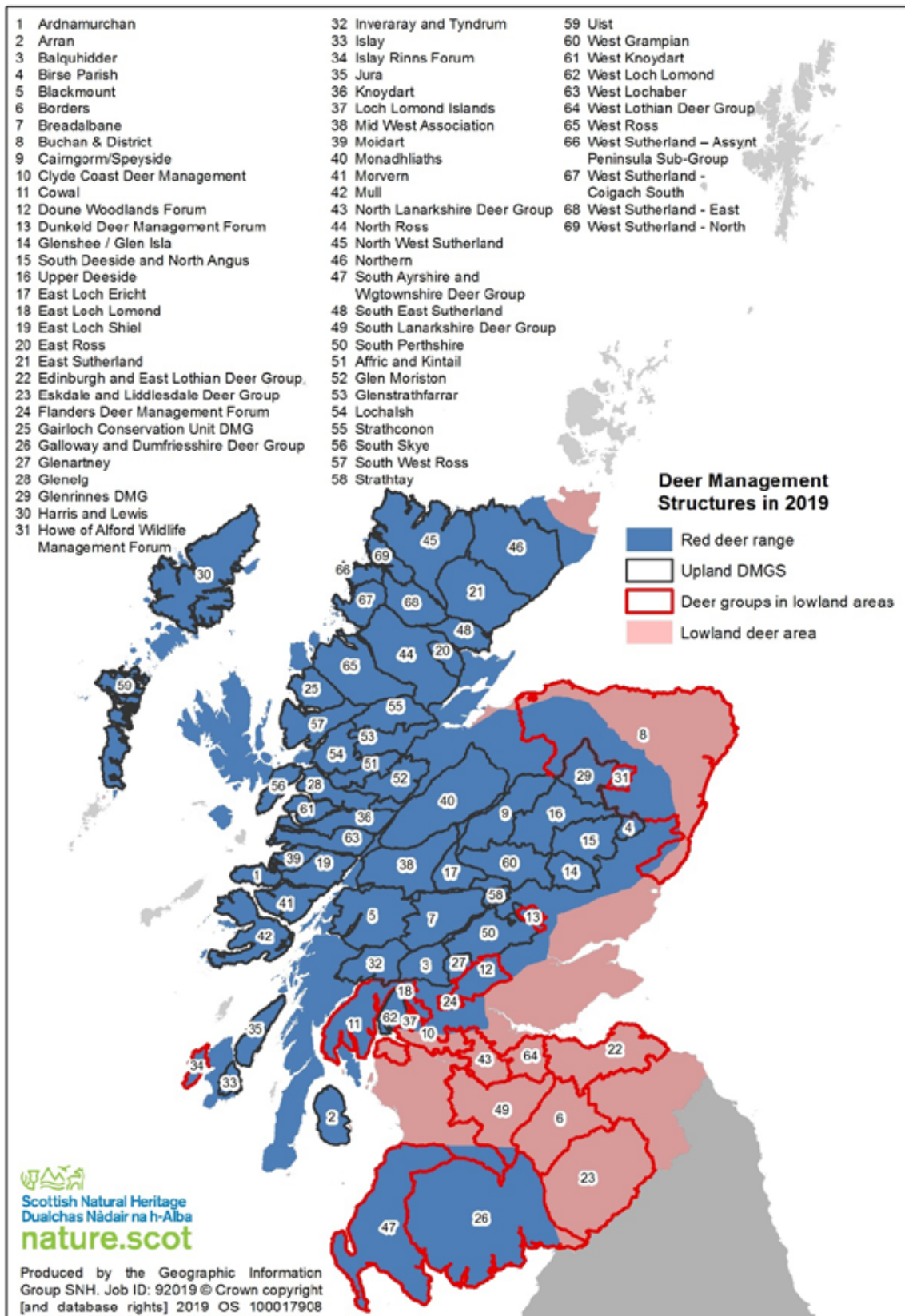
²¹ Rural Affairs, Climate Change and Environment Committee (2015). *Stage 1 Report on the Land Reform (Scotland) Bill*, SP Paper 845, 4 December 2015.

²² ECCLR Committee (2017). *Deer Management in Scotland: Report to the Scottish Government from SNH 2016*, SP Paper 117, 5th Report (Session 5), 3 April 2017.

²³ SNH Information Response 27.

²⁴ For example, SNH unattributed staff time on deer management and managing the cull return system.

Figure 54 Deer management structures in 2019



Source: SNH (2019)

41 SNH's focus on open hill red deer in the Highlands has, like that of the RDC and DCS, mainly involved encouraging and supporting Deer Management Groups (DMGs). These are voluntary associations of land owners and managers in a particular locality with an interest in the management of the red deer and other deer species in that locality. The map in Figure 54 shows the current distribution of the DMGs and broadly reflects SNH's division of Scotland into upland and lowland deer management areas.

26.3.1 Upland DMGs: Background

- 42 For over 50 years, the public sector has viewed DMGs as an important mechanism by which to try to improve the management of open hill red deer populations in the Highlands.
- 43 The first DMGs were formed in the 1960s with encouragement from the RDC.²⁵ The DMGs were initially only involved in sharing cull information, which had traditionally been confidential. However, the RDC also viewed DMGs more widely as a means by which more 'progressive' land owners could influence other owners. In the 1970s, the Highlands and Islands Development Board provided funding and specialist advice to encourage the formation of DMGs and by the 1980s the number of DMGs had doubled.
- 44 By 1990, there were approximately 39 DMGs, all in the Highlands except one in Galloway. The RDC had hosted annual meetings for DMGs in Inverness from 1982 and supported the setting up of the Association of Deer Management Groups (ADMG) in 1992. The main activities of the DMGs were coordinating local open hill deer counts and sharing cull information, while also providing a channel for the RDC to communicate information to deer managers. This included the results of the extensive scientific research that had been carried out since the 1950s into the management of open hill red deer.²⁶
- 45 The research had shown that estates could maintain their sporting culls with fewer red deer by culling sufficient hinds, and thereby reduce the damage by red deer to agriculture and forestry.²⁷ However, the RDC made little headway with, for example, the culls of hinds being less than recruitment in more than 75% of the RDC's open hill counting blocks in 1986.²⁸ By the 1990s, the size of the open hill red deer population had doubled compared to when the RDC was set up.²⁹ SNH commented at the time that, while the results of the research could have been communicated more effectively, "*some people involved in estate management have clung to tradition, however misguided*".³⁰
- 46 When the DCS took over as the deer authority in 1996, it continued the RDC's work with DMGs based on promoting collaboration and providing information.³¹ However, the DCS placed a greater emphasis on deer management planning. In 1999, the DCS published 'Collaborative Deer Management - Guidelines for a Deer Management Plan', in which the aim was "*to manage populations of all species of deer at levels and in ways which will enable the achievement of sustainable land use*". At the same time, the DCS developed pilot Deer Management Plans (DMPs) with seven DMGs.

²⁵ Callander and MacKenzie (1991) *Op cit*.

²⁶ As described in Section 16.

²⁷ For example, Mitchell, B., Staines B. and Welch, D. (1997), *The Ecology of Red Deer - A research review relevant to their management in Scotland*. Institute of Terrestrial Ecology, Cambridge.

²⁸ Clutton-Brock, T. H. and Albon, S. (1989). *Red Deer in the Highlands*. BSP Professional, Oxford.

²⁹ 150,000 in 1963, 300,000 in 1989 (Callander and MacKenzie, 1991, *Op cit*).

³⁰ SNH (1994). *Red Deer and the Natural Heritage*.

³¹ This included further research showing that sporting culls could be maintained with fewer deer, for example, Buckland, S., Ahmadi, S., Staines, B., Gordon, I. and Youngson, R. (1996), Estimating the minimum population size that allows a given annual number of mature red deer stags to be culled sustainably, *Journal of Applied Ecology* 33, pp.118-130.

- 47 In addition, the DCS also commissioned a major review of DMGs from the Macaulay Land Use Research Institute (MLURI). The report of the study, 'DMGs: Operation and Good Practice', was published in 2001.³² The study identified 45 DMGs, including two in the south of Scotland. Amongst the 43 DMGs in the Highlands, five shared a total of 16 sub-groups. The study asked each DMG 12 main questions each with a varying number of sub-questions. The nature of many of the questions means that they can be viewed as precursors to questions in the current assessments of DMGs by SNH which are discussed below.
- 48 The results of the MLURI study showed that only half of the DMGs in 1998/99 and a third in 1999/2000 achieved the culls that the DCS advised. The study also found that only 12 of the DMGs had DMPs, with seven of those following the DCS guidelines. However, the study concluded that the DMPs were inconsistent in providing quantitatively established targets and lacked any detailed analysis in formulating targets and actions, while few of them set out actions necessary for monitoring progress and achievement. A separate DCS study of seven pilot DMPs three years after they were established, found that they were neither being updated nor followed through.³³
- 49 However, the DCS continued to place great emphasis on DMGs as central to addressing issues over open hill red deer numbers and impacts, encouraging DMGs to improve standards while providing them with information and developing tools intended to help them (e.g. the Hilldeer computer programme developed by MLURI).

26.3.2 Upland DMGs: Recent History

- 50 The transfer of DCS staff into SNH when SNH became the deer authority in 2010, ensured that SNH continued the same approach with DMGs. However, a short inquiry into deer management by the Scottish Parliament's RACCE Committee in autumn 2013 gave a new focus to SNH's relationship with DMGs and the ADMG.
- 51 One of the Committee's findings was that only 16 of the existing 40 DMGs had DMPs, while another 12 had DMPs in preparation. In a short report on its inquiry to the Scottish Government in early 2014, the Committee concluded that "*the current and predicted pace of movement towards all DMGs having demonstrably effective and environmentally responsible management plans in place is too slow*".³⁴ The Committee therefore recommended that the position with DMGs should be assessed at the end of 2016 and if there was not sufficient progress, other powers should be considered.
- 52 In the Scottish Government's response to the Committee, the Minister agreed that progress had been too slow in terms of DMGs developing and implementing DMPs, and that "*the end of 2016 would be a suitable juncture to consider progress and look to take action if the current voluntary system has not produced a step change in the delivery of effective deer management*".³⁵ The Scottish Government also provided £200,000 extra funding spread over two years through SNH to assist DMGs with developing DMPs.

³² Nolan, A., Hewson, R. and Maxwell, T. (2001). DMGs: Operation and Good Practice. Macaulay Land Use Research Institute.

³³ Evidence given to RACCE Committee by J. Milne, 20 November 2013, col.3019.

³⁴ Letter and 'Themes emerging from evidence' from the Convener of the RACCE Committee to the Minister for Environment and Climate Change, 5 February 2014.

³⁵ Letter from the Minister for Environment and Climate Change to the Convener of the RACCE Committee, 5 March 2014.

- 53 SNH's publication 'Deer Management Plans - Delivering the Public Interest' provided guidance to DMGs and SNH carried out an assessment of 44 DMGs against 101 criteria in autumn 2014 to give a baseline against which to measure change in 2016. The criteria were developed by SNH in dialogue with the ADMG, with 56 being public interest criteria and the other 45 being the ADMG's benchmark for the operation of DMGs.
- 54 In 2015, when the RACCE Committee considered deer measures in the Land Reform (Scotland) Bill, the Committee commented on concern at the lack of progress so far by DMGs as reflected in the results of SNH's 2014 assessment. The Committee considered that the Scottish Government should be ready for action with further statutory measures to ensure effective deer control to protect public interests.³⁶ The Scottish Government agreed in its response to the Committee in early 2016, and commented that "*if the position remains unsatisfactory we will look to bring in a statutory management system for deer*".³⁷
- 55 In 2016, SNH used the same 101 criteria to reassess the same 44 DMGs and two further DMGs. SNH and the ADMG had continued to work together since the 2014 assessment to improve standards amongst DMGs and in 2016, as in 2014, the ADMG could be represented at a DMG assessment if requested by a DMG. SNH published the results of the comparison of the two assessments in a report to the Scottish Government in 2016. While SNH noted the progress that had been made, it concluded overall "*that progress was too slow to allow the Scottish Government to meet some its targets*".³⁸ SNH also considered there was a particular lack of progress in linking planning to implementation.³⁹
- 56 SNH's 2016 report, which covered many topics over and above DMGs, was the subject of an inquiry by the ECCLR Committee. The Committee recognised in its report that there had been improvements between the two DMG assessments. However, the Committee considered that the performance was variable and that many of the DMPs "*do not have an action plan that adequately addresses public interests*". The Committee concluded that "*overall the Committee cannot be confident that the situation at present, without further significant action, is capable of delivering the required change on the ground*" and that the Scottish Government should be considering additional powers.⁴⁰
- 57 The Scottish Government's response to the Committee was a letter in June 2017 in which the Cabinet Secretary stated that "*We will ask SNH to report on progress on deer management in 2019. We will be looking to see effective deer management that protects the public interest embedded across the upland deer range, with appropriate deer management plans in place and commensurate action being taken on the ground*".⁴¹ At the same time, the Cabinet Secretary announced that the Scottish Government would appoint an independent deer working group and a Lowland Deer Panel as part of taking things forward.

³⁶ RACCE Committee (2015) *Op cit*.

³⁷ Scottish Government response to the RACCE Committee report, January 2016, para 208.

³⁸ Press statement by Chair of SNH, 3 April 2017.

³⁹ SNH (2016) *Op cit*.

⁴⁰ ECCLR Committee (2017) *Op cit*.

⁴¹ Letter from the Cabinet Secretary for Environment, Climate Change and Land Reform to the Convener of the ECCLR Committee, 29 June 2017.

26.3.3 Upland DMGs: Current Position

- 58 The ADMG, which had been urging DMGs to improve standards because of the risk that new powers would be introduced, stepped up its efforts following the ECCLR Committee report and Scottish Government response. SNH and the ADMG continued to work together in preparation for the 2019 DMG assessment, with DMGs due to be assessed on the same 101 criteria and scored red, amber or green on each of the criteria as previously.
- 59 SNH identified 37 of the criteria as priority criteria, with nine from the 45 ADMG benchmark criteria and 25 from the 56 public interest ones. SNH agreed the priority criteria with the ADMG and advised DMGs that “*The overall progress of the upland deer sector as a whole in 2019 will therefore be measured by the number of groups scoring green in these specific criteria*”.⁴² SNH and the ADMG both provided support to DMGs in preparation for the assessment, with SNH informing DMGs that “*The ultimate goal for both SNH and ADMG is for all DMGs to score green on all criteria*”.⁴³
- 60 SNH’s 2019 DMG assessment covered 48 DMGs. Before SNH had published the results of its assessment, the ADMG was in a position to pre-empt SNH by producing a detailed analysis of the assessment results for 45 of the DMGs and provide a commentary on the progress made since the 2014 and 2016 assessments.⁴⁴ SNH subsequently published the results for the 48 DMGs, with specific comparisons for the 44 DMGs that were part of the previous assessments.⁴⁵
- 61 Following the effort and resources that SNH and ADMG invested into helping DMGs and work by DMGs themselves, SNH’s analysis of the 2019 assessment showed a statistically significant improvement compared to 2016. Overall, the average percentage of green scores against the 45 ADMG Benchmark criteria was 90% compared to 73% in 2016, while the average percentage for the 56 public interest criteria was 85% compared to 56% in 2016.⁴⁶ There was also a reduction in the variation in performance amongst DMGs, with lower performing DMGs in 2016 closing the gap with the better performing ones.
- 62 The notable improvement in the performance of DMGs against the 101 criteria over the five years 2014-19 would not have happened if the RACCE Committee had not raised the issue of deer management planning in the first place. The Group considers that the suggestions of the need for extra control powers in the Committee reports in 2014, 2015 and 2017 mentioned above and in responses by Ministers, also helped. The ADMG used the threat of more statutory powers to help galvanise private estates in the DMGs to engage with the process.
- 63 The shared experience of going through the DMG assessment process and developing increasingly shared standards through the criteria, can be considered to have consolidated upland DMGs as a component of the deer sector. Against that background, the ADMG has proposed and raised with SNH, that there could be an accreditation scheme for DMGs achieving a certain standard of deer management.

⁴² Letter sent from SNH to all DMG Chairs and Secretaries, 14 August 2018.

⁴³ Letter sent from SNH to all DMG Chairs and Secretaries, 3 July 2018.

⁴⁴ ADMG (2019). Analysis and report on the 2019 Deer Management Group Assessment Process.

⁴⁵ SNH (2019) *Op cit.*

⁴⁶ SNH (2019) *Op cit.*

- 64 The improvement in the organisation of the DMGs and in their deer management planning comes after the history recounted above, including the focus on trying to improve these aspects of DMG performance started by the DCS 20 years ago. However, as SNH identify, a number of key public interests “*are still the criteria where greatest progress remains to be made*”.⁴⁷ These include actions in the DMPs to deliver protected area feature condition, to maintain and improve native woodland cover and condition, and to monitor and mitigate deer impacts in the wider countryside.
- 65 There are also other aspects of DMG performance that could have been included in the assessments. An example is the submission of cull returns to SNH by DMG members, given the importance of cull data to the DMP process. For 2016/17, SNH sent cull return notices to 1,002 properties in the 44 DMGs in the assessment process and received 909 returns.⁴⁸ The National Forest Estate land in 39 of the DMGs accounted for 82 of the submitted returns. Of the remaining 827 properties that submitted returns, only 32% submitted their return online and only 15% within the legal time limited for submitting returns.
- 66 In acknowledging the improved performance of the DMGs in the 2019 assessment, SNH commented in its report that “*It has yet to be demonstrated if the progress will be sustained*”.⁴⁹ Also, as the RACCE noted back in 2015, the assessments are only concerned with process issues, such as improving the effective operation and transparency of DMGs and ensuring they have a meaningful DMP in place.⁵⁰ They are not about outcomes on the ground. SNH also recognised in its 2019 report that “*DMG assessments are not designed to quantify action on the ground*” and therefore do not cover whether “*commensurate action*” is being taken on the ground as stipulated by the Cabinet Secretary in 2017.⁵¹
- 67 The Group considers that the focus for SNH and the DMGs should now become the standards of management on the ground. SNH has spent a substantial amount of effort over the five years 2014-19 in facilitating improvements in the operation and deer management planning of DMGs through the assessment process. The Group considers that SNH should now concentrate on monitoring the impacts of deer in the DMGs area, identifying the areas where the impacts are considered to amount to damage and taking appropriate action. This is discussed further in Part Six.
- 68 The Group considers that the sequence of assessments with their 101 criteria have served their purpose and should not be repeated again after another three years or after five years as the normal duration of DMPs. After five years, the nature of any assessment and criteria should be significantly different to reflect changes in circumstances and a clear focus on the standards of deer management on the ground.
- 69 **The Working Group recommends that the sequence of assessments of Deer Management Group’s carried out by Scottish Natural Heritage in 2014, 2016 and 2019 should come to an end and that Scottish Natural Heritage’s focus should now be ensuring the standards of practical deer management implemented on the ground by land owners minimise the damaging impacts which deer can cause to public interests.**

⁴⁷ SNH (2019) *Op cit*, p.28.

⁴⁸ SNH Information Response 37.

⁴⁹ SNH (2019) *Op cit*, p.65.

⁵⁰ RACCE Committee (2015) *Op cit*.

⁵¹ SNH (2019) *Op cit*, p.66.

26.4 Lowland Deer Management

- 70 As described above and shown in Figure 54, SNH views the ‘lowlands’ in lowland deer management as covering the rest of Scotland outwith the DMGs in parts of the Highlands. Criticism of SNH’s lack of attention to lowland deer management compared to its concentration on the DMGs and open hill red deer, has also been alluded to above.
- 71 SNH’s first notable initiative in the lowlands was the establishment of the Lowland Deer Network Scotland (LDNS) in 2012. This was a publicly funded joint initiative with the ADMG, to encourage collaborative deer management in the lowlands. The first LDNS Chair, also the ADMG Chair at the time, commented in 2012 that “*Deer management groups also have an important role to play where there is an identifiable common interest and the LDNS is keen to encourage the formation of more low ground groups based on existing models*”.⁵²
- 72 The LDNS was formed at the time that the Code of Practice on Deer Management was published and in addition to encouraging collaboration, the LDNS aims included promoting the Code and the adoption of Wild Deer Best Practice guidance, facilitating information exchange and developing a better understanding of the deer and their impacts in lowland areas.
- 73 SNH’s relative lack of attention to lowland deer management was criticised, however, by the RACCE Committee in 2015. In advance of the report on deer management in Scotland that SNH was due to submit to the Scottish Government in 2016, the Committee commented that “*The significant problems in many parts of Lowland Scotland therefore require specific consideration in the upcoming review*”.⁵³ The Committee also recommended that “*the Scottish Government seeks to address these issues as a matter of urgency, and also ensures they are taken into account when setting the remit for the 2016 review*”.⁵⁴
- 74 SNH identified some of the challenges related to deer management in the lowlands in its 2016 report. These included the damage to nature conservation interests, agriculture and woodlands, deer vehicle collisions, wildlife crime involving deer and public perceptions of shooting deer. SNH also considered the pattern of smaller scale land ownership compared to upland areas as a constraint on establishing collaborative groups, while recording that there were 11 Lowland Deer Groups.
- 75 SNH also acknowledged in the 2016 report that its “*ability to undertake a full assessment of deer and deer impacts in the lowlands is limited due to insufficient data*”.⁵⁵ SNH reported the development of a Lowland Deer Management Project to better understand deer management in the lowlands, while a review of research into deer management commissioned by SNH identified particular information and knowledge transfer gaps in a lowland context. These included an improved understanding of lowland deer populations and management issues, greater information exchange and improved use of the resource of local deer hunters.⁵⁶

⁵² LDNS News, Summer 2012, Issues No.1.

⁵³ RACCE Committee (2015) *Op cit*, para 373.

⁵⁴ RACCE Committee (2015) *Op cit*, para 374.

⁵⁵ SNH (2016) *Op cit*, p.11.

⁵⁶ Holland, J., McMorran, R., Morgan-Davies, C., Bryce, R., Glass, J., Pollock, M., McCracken, D., Glass, R., Woolvin, A. and Thomson, S. (2017). Meeting the challenge of wild deer research to support delivery of sustainable deer management in Scotland. Scottish Natural Heritage Commissioned Report No. 963.

- 76 SNH claimed in its 2016 report that “*The growth in development of deer management in the lowlands has been substantial in the last five years as a result of industry initiative and support from public bodies.*”⁵⁷ However, when the ECCLR Committee held an inquiry into SNH’s report, the Committee concluded that “*There are significant challenges for deer management in lowland Scotland and the Committee is disappointed that there has been so little progress.*”⁵⁸
- 77 The Scottish Government announced as part of its response to the ECCLR Committee, the setting up of a Lowland Deer Panel under s.4 of the Deer (Scotland) Act 1996 to provide advice on deer management in the lowlands. The Panel’s remit consisted of four questions about lowland deer management. These related to: the need for collaboration and the best approach to that; the knowledge and information needed to support that process and deliver public interests; the practical implications of public perceptions for deer management; and further action SNH could take within current frameworks.
- 78 The Group considers that the Lowland Panel’s report in 2019 was helpful in countering two aspects of SNH’s approach to lowland deer management that appeared a legacy of its concentration on open hill red deer. These were the degree of emphasis that SNH had been placing on the need for collaboration through local groups and the need for deer population information on which to base culls.⁵⁹
- 79 The Panel concluded that collaboration was not a necessary component of deer management in many parts of the lowlands, depending on the species of deer and patterns of land ownership. The Panel also recognised the limited scope for deer population information away from the open hill in more wooded and complex lowland environments. The Panel instead emphasised the importance of adaptive management, where the level of culls is managed in response to the extent and nature of the impacts that deer are having in the local environment.
- 80 The Group also supports the Panel’s conclusion that SNH should take a systematic approach to gathering more information on deer impacts, culls and other local factors in lowland areas. In that context, the Panel commended SNH and Scottish Forestry’s joint Lowland Deer Management Project (LDMP) covering a study area of 950 square kilometres to the north of Glasgow and incorporating a range of deer management environments.⁶⁰ The Project has completed two phases with a third one planned.
- 81 The LDMP has focused on the types of data available for the area from different sources and the deer management approaches used in the area. This has identified gaps in information availability and scope for some types of information to be collected by more consistent approaches. The LDMP has also illustrated that there are different approaches to deer management that depend on the more diverse patterns of land use. This led SNH to the unsurprising conclusion that “*the upland red deer range model is unlikely to be an effective delivery mechanism in most lowland areas.*”⁶¹

⁵⁷ SNH (2016) *Op cit*, p.13.

⁵⁸ ECCLR Committee (2017) *Op cit*, para 8.

⁵⁹ Lowland Deer Panel (2019). Report to Scottish Natural Heritage, February 2019.

⁶⁰ Mc Morran, R., Gibson-Poole, S. and Hamilton, A. (2018). Lowland Deer Management: Assessing the Delivery of Public Interests. SAC Commercial Ltd.

⁶¹ SNH (2019) *Op cit*, p.37.

- 82 SNH has recently commented on the Lowland Panel's report, on the LDMP and on SNH's other work on lowland deer management in its latest report on deer management to the Scottish Government.⁶² Those other involvements include SNH's work on deer vehicle collisions, which was considered earlier in Section 15, and SNH work with Local Authorities, which is discussed in Section 27.
- 83 SNH's report reflects that SNH's approach to lowland deer management is only to become involved in a locality if it is informed that there is damage or the risk of damage by deer. The Group considers that this limited, reactive approach will not deliver effective deer management that safeguards public interests.
- 84 While the Group has reservations about aspects of the ambitions and approach set for the LDMP, the Group considers that the Project was valuable for its focus on a locality and understanding the factors involved in the management of deer there. While the LDMP has been time consuming and expensive because of its wider ambitions, the Group considers that there is ready scope for SNH to develop a pragmatic understanding of deer management in the different localities in the lowlands. The need for SNH to take a more proactive and systematic approach to this is discussed further in Part Six.

⁶² SNH (2019) *Op cit.*

PART SIX - REFOCUSSED APPROACH

Introduction

- 1 The Group's remit from Scottish Ministers is to review the statutory and non-statutory arrangements involved in the management of wild deer in Scotland and "*make recommendations for changes to ensure effective deer management in Scotland that safeguards public interests and promotes the sustainable management of wild deer*".¹
- 2 In the previous Parts of this Report, the Group has considered the statutory provisions of the Deer (Scotland) Act 1996 and related legislation governing the management of wild deer in Scotland. The Group has also examined the non-statutory approaches adopted by the Scottish Government and Scottish Natural Heritage (SNH) to encourage appropriate standards of deer management.
- 3 In reviewing those statutory and non-statutory arrangements, the Group has made over 80 recommendations in Parts One to Five. The recommendations are listed in Section 30. The Group considers that those recommendations, while varying in their importance, will all contribute to effective deer management in Scotland that safeguards public interests and promotes the sustainable management of wild deer.
- 4 The Group also considers, however, that those recommendations by themselves will not "*ensure*" effective deer management in Scotland that safeguards public interests, as specified in the Group's remit. This Part of the Report therefore considers further changes required to deliver the terms of the Group's remit in practice.
- 5 Section 27 below reviews a number of aspects of the non-statutory approach adopted by SNH as the deer authority, where the Group considers that SNH needs to re-balance the focus its work. Section 28 then considers the need for further refinements to the provisions of the Deer (Scotland) Act 1996 to ensure effective deer management that protects public interests.

Section 27 Deer Authority

- 6 The Group's remit quoted above is a statement of the Scottish Government's aim for the management of wild deer in Scotland. The Group commented in Section 3 on the similarity between the two elements in the Group's remit and the purposes in s.1 of the Deer (Scotland) Act 1996. The aim is to ensure public interests are adequately protected from unacceptable damage by deer and then, against that background, to promote the sustainable economic and other benefits that can be derived from deer management. SNH's role as the deer authority under the 1996 Act is to try to deliver that aim.
- 7 The need for collaboration has become a dominant theme in the Scottish Government and SNH's approach to trying to achieve that public policy aim. The emphasis on collaboration is at both national and local levels, and intended to minimise the situations where the regulatory powers in the Deer (Scotland) Act 1996 to control deer to prevent damage might need to be used.

¹ DWG Terms of Reference, Scottish Government, September 2017.

- 8 At a national level, the only document representing the Scottish Government's policy for deer management, 'Wild Deer: A National Approach' (WDNA), is a collaborative strategy for working with the deer sector. While the Group has commented in Section 25 on the need for a more direct statement of Scottish Government policy, there are clear potential benefits from a constructive relationship between SNH as the deer authority and bodies seen as representing the deer sector.
- 9 Many of these bodies represent hunting interests, including the Association of Deer Management Groups (ADMG), the British Association for Shooting and Conservation and the Scottish Gamekeepers Association. SNH works constructively with these and other bodies on a range of deer related topics including, for example, the implementation of WDNA and the development of Wild Deer Best Practice guides.
- 10 There is a traditional tension between hunting organisations and public sector regulators in many European countries, with the former wanting to maintain high levels of hunting opportunities and the latter trying to limit damage to other interests.² The situation might be considered no different in Scotland. The Group considers that it is important that SNH as the deer authority is seen to be appropriately independent and robust in representing and implementing public policy in its relations with hunting interests.
- 11 The other level at which there is a strong emphasis on collaboration, is the approach of encouraging land owners to collaborate together in local deer management groups. The aim of this approach has been and continues to be that local land owners would, by collaborating in voluntary local deer groups, reconcile any differences in their deer management objectives and reduce damage by deer to other land use interests, thereby benefiting public interests.³
- 12 The previous Section described how the Red Deer Commission (RDC), Deer Commission Scotland (DCS) and SNH have in turn over the last 50 years, supported the formation and operation of local Deer Management Groups (DMGs) as a mechanism to try to improve the management of open hill red deer in the Highlands. The previous Section also described how the continuing limited effectiveness of DMGs resulted in a series of assessments of DMGs over the last five years by SNH, to try to improve their operation as groups and ensure that they have suitable Deer Management Plans (DMP).
- 13 The results of the DMG assessments showed a very marked improvement in standards on both those accounts over the assessments in 2014, 2016 and 2019.⁴ However, as SNH has commented, it is too early to judge whether this progress will be maintained.⁵ Also, as the assessments were not about improvements in deer management in terms of outcomes on the land, it remains to be seen whether such improvements will follow the recent progress in the assessments.
- 14 Those two questions are discussed further in turn below. The Group has recommended that SNH should end its DMG assessment process and concentrate on measuring deer impacts.⁶ It is the reduction of the damaging impacts of open hill red deer that forms the real test of the DMG structure's ability to deliver deer management that protects the public interest.

² An example of an initiative to help address that tension is 'The European Charter of Hunting and Biodiversity' (Bern Convention 007).

³ DCS (1999). 'Collaborative Deer Management'.

⁴ SNH (2019). *Assessing Progress in Deer Management – Report from Scottish Natural Heritage to Scottish Government.*

⁵ SNH (2019) *Op cit.*

⁶ See Section 26.

27.1 Local Deer Groups

- 15 The shared experience for DMGs of going through the assessment process and developing increasingly shared standards through the criteria in the assessments, might be considered to have consolidated Highland DMGs as a component of the deer sector. Nearly all the DMGs in the assessment process are members of the ADMG and, as the ADMG's Benchmark accounted for 45 of the 101 criteria in the assessments, the implication is that any new group would need to have reached that benchmark before the group was considered an established DMG by the ADMG.
- 16 One result of this situation is that the idea of a DMG has become heavily associated with one particular model of local collaboration and represented by the positions that the ADMG takes over deer management issues. It is notable that new local deer management groups on the edge of traditional open hill red deer range have adopted different names, for example, the Dunkeld Deer Management Forum. Local groups might avoid calling themselves a DMG if they want to have a different level or form of collaboration to the ADMG benchmark, if they want to avoid the risk of becoming involved in SNH's assessment process or if they do not want to be represented by the ADMG.
- 17 Another consequence of the assessment process has been that a number of the larger DMGs sub-divided into several separate DMGs. This was because the production of a DMP for SNH's assessment made little sense at their previous geographic scale as, for example, with the East Grampian DMG. The Group considers that there might still be some DMGs where sub-division and then liaison as neighbouring groups could allow more effective deer management, if deer management planning and implementation are to become more detailed.
- 18 The Group considers that the pattern of DMGs is also likely to continue to evolve due to other factors, in particular changes in land owners and land use. New owners may have different objectives for their land compared to previous owners. The expansion of forestry could also change the balance of interests in particular areas, with the Scottish Government increasing its planting targets for new woodlands as part of its climate change mitigation measures.
- 19 The Group considers that a key factor in the future of DMGs as a mechanism to help deliver public policy, is the extent to which they follow their progress in the assessments with improved deer management on the ground that protects public interests. That is considered further below. However, if DMGs are not making that progress, the Group considers that there is a risk that some land owners may leave or not join. Most DMGs have a range of land use types in their area and owners with different balances of objectives. However, most DMGs and the ADMG have tended to be principally concerned with the interests of estates that manage open hill red deer for sporting purposes.
- 20 The ADMG has always encouraged its members to improve their deer management in the public interest. However, the Group considers that there could be a risk that the newly consolidated DMG sector could become a factor slowing the delivery of public policy, rather than a mechanism to help delivery public policy sooner. The concentration at the DMG scale reduces the attention on individual properties, when it is particular properties and not the DMG that should be the focus of attention when regulation is being considered by SNH to reduce damage by deer. The Group also knows of instances where undue pressure has been brought to bear on members of DMGs who wish to reduce deer numbers on their land in order to deliver environmental benefits.

- 21 SNH has a close working relationship with the ADMG and progress has been made through the assessment process. However, the Group considers that SNH should recognise more explicitly that there is scope for different forms and levels of collaboration, cooperation or liaison between land owners in localities within the substantial part of the Highlands that SNH's maps show covered with DMGs. SNH already recognises that scope elsewhere in Scotland.⁷
- 22 SNH's initial approach to paying more attention to deer management in lowland Scotland outwith the DMGs areas, was based on the same model of encouraging land owners to collaborate in local deer groups. However, as described in the previous Section, SNH now recognises that there is no necessary need for land owners in many parts of lowland Scotland to participate in groups to carry out effective deer management on their land. The Group considers that SNH should also recognise clearly that this can equally be the case with properties within the wide area in the Highlands shown as covered with DMGs.
- 23 While the Group recognises the contribution that the DMG structure has brought to the management of open hill red populations, the Group considers that SNH should avoid the danger of repeating that land owners need to collaborate in formal groups to manage open hill red deer. Liaison with neighbours can be essential in managing such populations and collaboration is desirable in certain circumstances. However, it is important for SNH not to lose sight of the fact that the distribution of hunting rights is based on individual properties and as such, the individual property is the unit of regulation in the Deer (Scotland) Act 1996.
- 24 Collaboration is therefore not an end in itself, but can be a means in some situations of helping deliver the public interest in its broadest sense. However, collaboration in formal structures does not always bring benefits to the participants and so it is important for SNH to recognise this and to be flexible in its approach to this aspect of deer management.
- 25 **The Working Group recommends that Scottish Natural Heritage should avoid over-emphasising the need for formal collaborative groups for deer management and adopt a more flexible approach to supporting other forms of liaison and collaboration where these develop, including in open hill red deer range.**

27.2 Open Hill Red Deer

- 26 The RDC, DCS and SNH have argued for decades that there needs to be a reduction in the numbers of open hill red deer to reduce the damaging impacts they have on the environment and other land uses. The estimated population doubled in size and expanded its range between the Deer (Scotland) Act 1959 and the Deer (Scotland) Act 1996. While the population increase has levelled out since 2000, the average density of red deer on open hill range is still higher than in 2000.⁸ The 'culling effort' (or level of cull per square kilometre) had also been declining since then, until a larger cull in 2017/18.⁹

⁷ SNH (2019) *Op cit*.

⁸ Albon, S. D., McLeod, J., Potts, J., Irvine, J., Fraser, D. and Newey, S. (2019). Updating the estimates of national trends and regional differences in red deer densities on open-hill ground in Scotland. Scottish Natural Heritage Commissioned Report No. 1149.

⁹ Albon et al. (2019) *Op cit*.

- 27 The national cull of red deer from cull returns in 2017/18 was 79,568 and substantially higher than the cull of 62,910 in 2016/17.¹⁰ Nearly all that increase came from higher cull totals in the 44 DMGs involved in the three DMG assessments carried out by SNH. The Group notes that the last time that the annual national cull of red deer was recorded as over 70,000 was in 1989/99 and 1999/2000, which was when the Deer Commission for Scotland undertook an assessment of DMGs similar to the ones recently carried out by SNH. The annual national cull total then fell back after 1999/2000 to lower levels, with the cull less than 60,000 in seven of the 17 years to 2017/18. It remains to be seen if culls will reduce again in the years following SNH's assessments.
- 28 Figure 55 shows the annual cull totals for the 44 DMGs from the start of the assessment process in 2013/14 to 2017/18. There was no apparent increase in the level of the annual red deer cull total until 2017/18, when the cull total increased nearly 16,000 to 62,785 compared to 46,803 in 2016/17. Figure 56 shows the distribution of the 2016/17 red deer cull in the 44 DMGs by size of the cull recorded in the cull returns, excluding the culls on National Forest Estate land.
- 29 The analysis in Figure 56 reflects that the majority of the cull in the 44 DMGs was carried out on less than 250 properties and much of it on a smaller number of properties. A similar analysis of the estate sector red deer culls 30 years ago in the late 1980s showed the same broad pattern. At that time, the number of returns for red deer was around 500 each year and there were around 120 estates that shot over 100 red deer a year.¹¹ Those estates accounted for over half of the total estate sector cull and less than 30 estates accounted for a third of it. The position remains similar now to the extent that a relatively small number of properties can have a marked influence on the annual red deer cull totals.
- 30 SNH has commented that the higher red cull in 2017/18 is encouraging as it reflects DMGs carrying out reduction culls as part of implementing their DMPs.¹² The 2017/18 figures are the most recent available at the time of writing. It remains to be seen whether the higher culling effort will be sustained to reduce the still high average densities of open hill red deer in parts of open hill deer range and the current levels of damaging impacts in places. The cull targets in the DMG DMPs were set by the groups themselves and are not cull targets advised by SNH.
- 31 The current average density of red deer on open hill range across the whole of the Highlands is estimated to be around 10 red deer per square kilometre.¹³ This is based on the densities of deer in the Deer Management Areas (DMAs) used by the researchers responsible for the figure, with DMAs closely related to the areas covered by SNH's open hill red deer counting areas and by DMGs. The distribution of the 53 DMAs is shown in Figure 57 with the estimated density of red deer in each in 2019. The researchers did not publish the size of the DMAs or the extent of land within DMAs over which their DMA density figures were calculated.

¹⁰ See Figure 8 (National cull statistics) in Section 2.

¹¹ Callander, R. and MacKenzie, N. (1991). *The Management of Wild Red Deer in Scotland*. Rural Forum, Scotland.

¹² SNH (2019) *Op cit*.

¹³ Albon et al. (2019) *Op cit*.

Figure 55 Annual cull totals for the 44 DMGs in the SNH assessment process (2013/14-2017/18)

DMG in assessment process	Red					Sika					Fallow					Roe					
	13/14	14/15	15/16	16/17	17/18	13/14	14/15	15/16	16/17	17/18	13/14	14/15	15/16	16/17	17/18	13/14	14/15	15/16	16/17	17/18	
1 Ardnamurchan	38	353	45	289	75	0	0	0	0	0	0	0	0	0	10	0	5	11	5	7	5
2 Arran	255	313	462	429	583	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 Balquhider	1,301	1,221	772	669	1,099	1	1	0	0	0	0	0	0	0	0	109	140	97	167	279	0
4 Blackmount	1,383	1,465	1,050	1,233	1,549	1	1	1	2	1	0	0	0	0	0	151	135	125	123	170	0
5 Breadalbane	3,151	3,026	1,747	1,736	2,498	1	0	0	2	4	0	4	1	0	0	98	111	105	100	137	0
6 East Grampians (4 DMGs, 3 in assessment)	5,648	5,079	4,932	4,009	5,722	0	1	0	0	8	19	17	30	38	0	1,584	1,760	1,659	1,620	755	0
7 "																					
8 "																					
9 East Loch Erich	864	1,193	1,075	729	938	2	6	1	2	4	5	11	11	5	7	49	48	45	58	131	0
10 East Loch Shiel	686	471	275	510	546	0	0	3	1	0	0	0	0	0	0	25	37	31	25	38	0
11 East Sutherland	2,104	2,225	2,259	1,883	3,423	193	256	251	228	205	0	0	0	0	0	108	100	119	86	113	0
12 East Ross	211	276	293	349	385	12	20	28	31	17	2	0	0	0	0	29	27	20	9	9	0
13 Gairloch Conservation Group	317	325	172	237	471	4	0	6	5	11	0	0	0	0	0	35	19	31	29	37	0
14 Glenartney	1,045	558	781	889	1,236	1	0	0	0	1	1	1	3	6	2	74	68	87	70	77	0
15 Glenelg	596	604	517	684	798	12	12	16	17	14	0	0	0	0	0	40	45	60	129	32	0
16 Harris/Lewis	426	265	368	429	383	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17 Inveraray/Tyndrum	1,651	1,496	1,348	1,401	1,762	9	23	13	11	20	0	0	0	0	0	80	95	159	128	197	0
18 Islay	345	353	483	531	504	0	0	0	0	0	14	34	49	33	58	37	4	31	63	54	0
19 Knoydart (2 DMGs)	1,744	1,849	1,300	1,297	1,811	35	21	22	14	20	0	0	0	0	0	78	74	105	79	82	0
20 Knoydart																					
21 West Lochaber	784	759	284	675	741	5	7	4	2	6	0	0	0	0	0	10	14	0	10	13	0
22 Mid West Assoc	1,516	1,978	1,681	1,723	3,160	22	13	35	71	122	0	0	0	0	0	181	245	261	279	414	0
23 Moidart	358	391	208	327	377	0	0	1	0	0	0	0	0	0	0	3	5	0	2	5	0
24 Monadhliaths	3,221	4,240	3,881	3,788	5,536	911	1,150	954	1,052	1,855	2	0	0	0	0	776	731	647	821	875	0
25 Morvern	571	717	542	724	800	0	0	0	0	0	0	0	0	0	0	39	37	31	27	60	0
26 Mull	1,419	1,459	1,106	1,362	1,346	0	0	0	0	0	0	36	18	16	0	0	0	0	0	0	0
27 North Ross	2,294	2,654	2,191	2,158	3,067	1,180	1,086	1,131	695	993	1	0	0	0	1	394	372	301	391	337	0
28 North West Sutherland	1,885	2,007	1,384	1,396	2,322	139	55	43	46	94	0	0	0	0	0	62	18	16	29	35	0
29 Northern	1,684	2,171	2,103	2,548	2,909	25	30	22	8	12	0	0	0	0	0	268	370	235	216	187	0
30 South Perthshire	1,212	1,375	1,282	1,215	1,371	0	0	0	0	0	271	216	208	203	272	552	667	722	671	783	0
31-35 South Ross (5 DMGs)	4,266	4,796	3,537	5,554	6,446	507	440	359	326	398	2	2	0	1	1	452	416	463	465	685	0
36 South West Ross	541	619	447	499	632	4	2	3	6	1	0	0	0	0	0	2	3	3	2	7	0
37 Cairngorms Speyside	1,252	2,887	2,945	1,384	2,633	0	1	0	0	4	0	0	0	0	0	946	1,091	1,440	1,088	1,118	0
38 Strathgairn	484	610	691	678	699	0	3	0	0	0	0	0	0	0	0	137	183	152	159	215	0
39 Tayside West Grampians	2,684	3,066	3,124	2,646	3,504	0	0	0	1	4	9	14	18	5	30	266	337	336	309	424	0
40-43 West Sutherland (4 DMGs)	1,023	1,580	1,300	1,840	2,096	175	255	214	639	816	0	0	0	0	0	14	30	21	136	186	0
44 West Ross	1,298	1,669	714	982	1,363	122	121	66	122	133	0	0	0	0	0	14	5	11	26	19	0
Totals	48,257	54,050	45,299	46,803	62,785	3,361	3,503	3,173	3,281	4,743	326	335	338	317	371	6,618	7,198	7,318	7,324	7,479	0

Source: SNH Information Response 38

Notes:

- The information is drawn from Deerline. The way the database is set up, the DMGs of East Grampians (East Grampians sub area 1, Upper Deeside & Donside, Birse Parish and South Deeside & North Angus) are all recorded together. However, East Grampian Sub area 1 was not part of the DMG assessment process although it was assessed in 2016. Accordingly, only 3 DMGs in East Grampians are included in the 44, although the cull figures for all four combined are shown.
- Knoydart figures are for 2 DMGs - East & West Knoydart. South Ross figures include the 5 DMGs - Strathconon, Glenstrathfarrar, Lochalish, Affric & Kintail and Glenmoriston. West Sutherland includes 4 DMGs - North, South, East and West (Assynt Peninsula). All of these DMGs are part of the assessment process.
- North Loch Arkaig (shown in the original spreadsheet) is an historical area comprising FCS Glegarry and is part of East Knoydart DMG, so figures have been added to the Knoydart totals.

Figure 56 Distribution of the red deer cull in the 44 assessed DMGs by size of cull recorded (2016/17)

Number of red deer killed	Number of cull returns
0-20	251
21-50	150
51-100	122
101-250	100
251-500	20
over 500	5
Total number of returns	648

Source: SNH Information Response 52

- 32 The 44 assessed DMGs cover just under 3 million hectares and with additional DMGs not included in all three assessments, there are DMG DMPs covering 3.2 million hectares or 40% of Scotland's 7.9 million hectare land area.¹⁴ SNH's maps of DMGs, like the maps of DMAs in Figure 57, show them as contiguous areas covering a substantial part of the Highlands. However, within these areas, there is woodland, agricultural land, other land uses, open water and settlements. The 3.2 million hectares does not equate to open hill red deer range, but the Group was unable to find available information on the actual extent of open hill red deer range or the extent to which it has been reducing over time through forestry expansion.¹⁵
- 33 The overall average of 10 red deer per square kilometre has been more or less stable for the last 20 years.¹⁶ The densities in the DMAs currently vary from less than two red deer per square kilometre to more than 25 red deer per square kilometre and there has a changing pattern over the last 20 years. In general, the density has decreased in 67% of the DMAs that had higher than average densities in 1999 and the density has increased in 68% of DMAs that had lower than average densities then. This indicates that lower densities are not being maintained as lower densities in many of the areas which had them.
- 34 Average open hill red deer density figures over large stretches of countryside such as DMAs and DMG areas, do not directly provide helpful information about impacts. The deer are not spread evenly over the areas. They are likely to be concentrated in different parts of the areas in summer and winter and within that wider distribution, will be concentrated in particular locations for feeding, shelter and other reasons. It is that pattern of occupancy in terms of how many deer spend how much time in a location, that is correlated with impacts.

¹⁴ SNH Information Response 57.

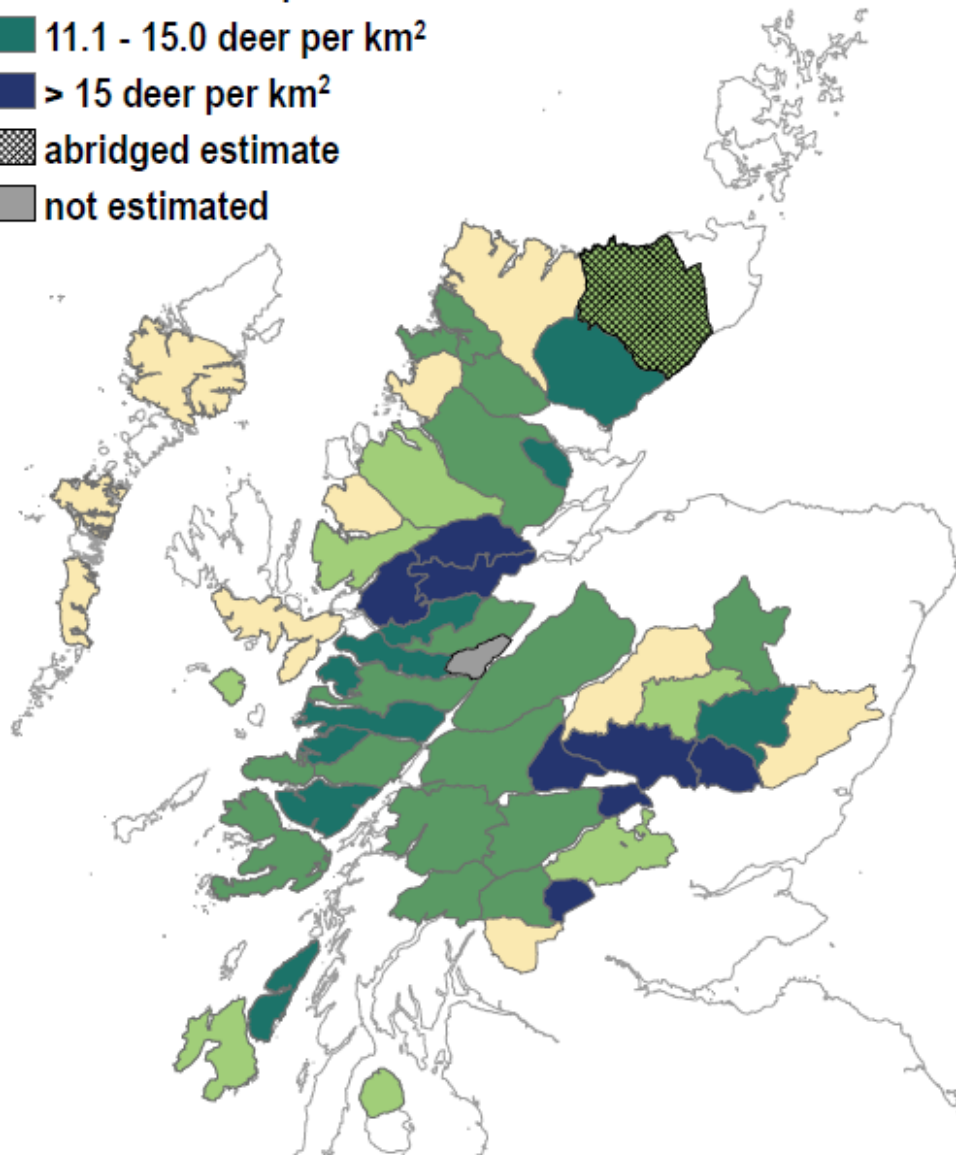
¹⁵ While the extent of open hill red deer range previously increased due to expansion in the distribution of red deer, the Group considers that the degree of colonisation has meant there has not been scope for further expansion for some decades.

¹⁶ Albon et al. (2019) *Op cit*.

Figure 57 Densities of red deer in the 53 DMAs (2019)

Red Deer (Stags/Hinds/Calves) Densities in 2019

- < 6 deer per km²
- 6.1 - 8.0 deer per km²
- 8.1 - 11.0 deer per km²
- 11.1 - 15.0 deer per km²
- > 15 deer per km²
- abridged estimate
- not estimated



Source: Albon (2019)

- 35 Most DMAs and DMGs cover tens of thousands of hectares, with the 44 assessed DMGs averaging over 67,000 hectares each. The Group considers, as discussed in Section 16, that with many habitats such as native woodlands and peatlands requiring densities well below 10 deer per square kilometre, the average density on open range across the Highlands of 10 red deer per square kilometre strongly indicates that deer will be causing damaging impacts within those DMAs and DMGs with densities above that average figure due to the patterns of occupancy.
- 36 The Group also reported in Section 16 that the Cairngorms National Park Authority (CNPA) has adopted a policy that the CNPA will aim to have red deer densities over 10 deer per square kilometre reduced where the deer are restricting habitat enhancement. Given the imperative of habitat enhancement for climate change mitigation, and the evidence of wider impacts of deer resulting from higher densities already considered in the Report, the Group considers that SNH should also adopt this upper limit of 10 red deer per square kilometre over large areas of open hill red deer range. The Group considers therefore that SNH should have a clear position nationally that densities over that threshold are unacceptable because of the high likelihood of damage or the risk of damage by the deer to public interests, recognising that the threshold will need reviewed from time to time in the light of developments in public policy and further information on the levels of damaging impacts by deer.
- 37 **The Working Group recommends that Scottish Natural Heritage should adopt 10 red deer per square kilometre as an upper limit for acceptable densities of red deer over large areas of open range in the Highlands, and review that figure from time to time in the light of developments in public policies, including climate change measures.**
- 38 The concern for SNH is not directly the numbers or densities of deer, but the impacts of the deer. As the deer authority under the terms of the Deer (Scotland) Act 1996, SNH's core role is minimising the impacts of deer that amount to unacceptable levels of damage to the public interests covered by the Act.
- 39 Now that DMGs are implementing their DMPs and the cull targets that they have identified, the priority for SNH should be to improve the information that it has on the impacts of the deer species in DMG areas. As discussed further later in this Section, this should not just be the impacts on designated sites, but on the natural heritage generally, woodlands and forestry, agriculture, other land uses and where relevant, settlements, together with the levels of deer vehicle collisions and the welfare of the deer including the levels of winter mortality.
- 40 There is relatively limited recent information available on the impacts of open hill red deer, despite the history of issues associated with them. Instead, SNH has continued to spend around £250,000 a year and thus a significant proportion of its expenditure on deer management, on its annual programme of counting red deer on the open hill. The Group considers that the value of the information obtained from these counts for SNH's role as the deer authority, is very limited. The Group considers that SNH should be concentrating its resources on gathering and monitoring information on the impacts of deer, and combining this with more use of indirect methods of assessing deer densities where appropriate.

- 41 The Group recognises that many DMGs may want to carry out open hill counts to inform themselves about the red deer using their area. However, counts on one day by SNH in different areas that are repeated in an area after some years, provides very little practical information for the deer authority. The Group considers SNH has continued a tradition of carrying out an annual counting programme each year without any adequate evaluation and scrutiny of value of investing a large amount of money in it. This is despite SNH's repeated comments in recent reports about the limited resources that it has for deer management.¹⁷
- 42 The Group recognises that there may still be situations where it might be particularly useful for SNH to carry out an open hill red deer count. However, SNH does not need to carry out such a count to use its regulatory powers, which are based on evidence of damage or the risk of damage and involve reducing the damage or risk of it. SNH has the level of culling by a land owner or owners or can require the information to be provided. If SNH has information on damage as well as culls, SNH can adopt an adaptive management approach by requiring or enforcing higher annual culls until the damage or risk of it is reduced to acceptable levels.
- 43 **The Working Group recommends that Scottish Natural Heritage should very substantially reduce the extent to which Scottish Natural Heritage carries out direct counts of red deer on open hill range and refocus Scottish Natural Heritage's limited resources on building up more information on the impacts that deer are having on the natural heritage, woodlands, forestry, agriculture and other public interests in Scotland.**
- 44 The Group considers that SNH should not be waiting to see how DMGs get on with implementing and developing their DMPs. SNH should be acting to ensure that it has the information it needs on deer impacts, starting by prioritising the localities where SNH has most concerns that damage to public interests is occurring based on existing information. As part of improving that information, the Group considers that SNH should be making more use of surveys that combine gathering information on patterns of deer occupancy with habitat impact assessments.
- 45 The Group recognises that SNH has encouraged DMGs to carry out habitat impact assessments as part of their deer management planning process. The Group considers, however, that SNH should ensure as the regulator that it has its own independent assessments of the impacts of deer in different locations. The Group also considered the complex SWARD computer programme that SNH has been trying to develop as an aide to DMGs in interpreting the management implications of their habitat impact assessments. The Group considers on the basis of a report commissioned by SNH, that SNH should not be trying to develop this further due to the expense and its potentially limited application in practice.¹⁸
- 46 The Group also considers on the basis of its discussions with SNH, that SNH should be making faster and greater progress in recognising and following through the implications of climate change mitigation measures for the management of open hill red deer in the Highlands. The Climate Change Committee, which covers all of the UK and all devolved administrations, produced a report on land use in 2018 and two elements of the Committee's recommendations have particular relevance for the management of open hill red deer range.¹⁹

¹⁷ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016. Also SNH (2019) *Op cit.*

¹⁸ Sylva Foundation (2019). Business analysis for scoping the roll out, platform and hosting of the SWARD (solving wide area range management for deer) application and database. Report to SNH.

¹⁹ Committee on Climate Change (2018). Land use: Reducing emissions and preparing for climate change. November 2018.

- 47 The Committee's recommendations call for the creation of more new woodlands and the potential for this in Scotland is concentrated in the Highlands, given the extent of open hill land in the region. The recommendations also highlight the need to protect and restore peatlands, with the distribution of existing peatlands in the UK also concentrated in the Highlands. The Scottish Government has adopted these measures in its own climate change mitigation measures, along with related measures including biodiversity targets and improving the condition of other types of semi-natural open habitats, native woodlands and the vegetation and associated wildlife more generally.²⁰
- 48 Land use climate change mitigation measures are highly relevant to the management of wild deer across Scotland, as discussed further in Section 28. The Group considers that SNH should be providing clear advice on this to the Scottish Government, so that the importance of adequate deer control is more fully recognised in the Scottish Government's mitigation plans, such as its Climate Ready Scotland: Climate Change Adaptation Programme 2019-24.
- 49 SNH has recently recognised that implementing the Scottish Government's mitigation measures will involve "*significant changes*" to the management of wild deer, but without providing further details.²¹ The Group considers that successfully implementing these measures within open hill red deer range in the Highlands will, while it also involves other factors, require reducing the densities of open hill red deer in those parts of the Highlands that currently have higher densities of 10 or more red deer per square kilometre.²²
- 50 The Working Group endorses Scottish Natural Heritage's identification of the need for significant changes in deer management as an important issue in climate change mitigation measures, and recommends that Scottish Natural Heritage treats this as a high priority.**
- 51 SNH included criteria related to ecosystem services and climate change mitigation in its assessment of DMGs based on the aims in WDNA.²³ The Group recognises that habitats which have been suppressed by browsing pressure for a long time, can take several years before they start to recover fully once that pressure has been reduced. However, where a land owner is not making adequate progress in reducing browsing pressure by the red deer and not responding to further advice, SNH needs to be able and willing to use its regulatory powers.
- 52 One of the criticisms of SNH's approach to deer management made by the Scottish Parliament's Environment, Climate Change and Land Reform (ECCLR) Committee in 2017, was that "*SNH appears to have been unable, or unwilling, to enforce legislation to secure the natural heritage interests*".²⁴ The Group described in Sections 23 and 24 the inappropriate constraints in the Deer (Scotland) Act 1996 that limit SNH's ability to use its control powers to protect and enhance the natural heritage and recommended their removal. The Group has also recommended other amendments to those existing powers and considers the adequacy of SNH's current control powers further in Section 28.

²⁰ See Section 16.

²¹ SNH (2019). SNH's Climate Change Commitments – towards a nature-rich future, p.4.

²² Other factors include, for example, the levels of sheep grazing and muirburn.

²³ SNH (2014). Scotland's Wild Deer: A National Approach. Including 2015-2020 Priorities.

²⁴ ECCLR Committee (2017). Deer Management in Scotland: Report to the Scottish Government from SNH 2016, SP Paper 117, 5th Report (Session 5), 3 April 2017, para 13.

- 53 However, even with appropriate control powers, SNH needs to be willing to use them when required to reduce damage being caused by deer. As described in this Report, SNH has made little use of the powers so far. The Group appreciates that SNH is keen to maintain constructive relations with land owners and DMGs to be able to provide advice on improving standards of deer management. However, the Group also came across the view within SNH that, after SNH has continued to put so much emphasis on collaboration in its dealing with land owners and DMGs, the use of regulatory powers would seem like a betrayal of those relations.
- 54 The Group recognises that persuasion has benefits over the use of regulation. However, an appropriate balance needs to be struck. Advice is likely to be more effective if it is backed by an expectation that regulatory powers might be used. The Group also considers that SNH should be cautious about the extent to which it might displace issues that need to be addressed, on to the local DMG as a problem for it to solve. The unit of regulation in the deer legislation is individual landholdings not groups, and the Group considers that SNH should concentrate the use of its powers on the particular properties where higher culls are required to reduce damage by deer or the risk of it.
- 55 Another factor that needs to be considered in aiming to protect and enhance public interests by reducing the levels of damage caused by open hill red deer, is the public interest benefit to be attributed to shooting open hill red deer on a commercial basis with clients.²⁵
- 56 The Group commented in Section 20 on the lack of information from recent decades on the number of properties undertaking commercial open hill red deer stalking or the proportions of the open hill red deer stag and hind culls that tend to be taken on a commercial basis each year. The economic importance of the commercial culls can also vary markedly between estates. Some estates view it as an important part of their management, even though its commercial value may be a small part of the overall economics of the estates.
- 57 The Group has also mentioned earlier that there still continue to be estates that have not responded to the research evidence provided over the years and that could maintain and improve their stag culls by reducing the number of hinds on their land.²⁶ The need to reduce red deer numbers in some situations also needs to be viewed in the context of the increases in numbers that have occurred in many areas over recent decades. As discussed in Section 21, wild deer are part of the public domain and land owners have no entitlement to certain numbers of deer on their land. All land owners have to adapt to changes in public standards and changes in management on neighbouring lands.
- 58 In considering the economic interests of estates carrying out commercial culls, the ADMG and SNH often refer to SNH's 'balancing duties'. These have been seen previously by the DCS and SNH in terms of the duty to take such account as may be appropriate in the circumstances of the interests listed in s.1(2) of the Deer (Scotland) Act 1996, including the interests of owners and occupiers of land. Now, however, there is the Scottish Regulators' Strategic Code of Practice.²⁷

²⁵ Putman, R. (2012). Scoping the economic benefits and costs of wild deer and their management in Scotland. SNH Commissioned Report No. 526. PACEC (2016). The Contribution of Deer Management to the Scottish Economy.

²⁶ For example, Buckland, S.T., Ahmadi, S., Staines, B.W., Gordon, I.J. and Youngson, R.W. (1996), Estimating the minimum population size that allows a given annual number of mature red deer stags to be culled sustainably. *Journal of Applied Ecology*, 33, pp. 118-130.

²⁷ Scottish Government (2015). Scottish Regulators' Strategic Code of Practice.

- 59 Under that Code, SNH is expected to adopt a number of “*high level operational approaches*” when applying or considering applying its regulatory powers. One of these approaches is that SNH should “*In pursuing their core regulatory remit be alive to other interests, including relevant community and business interests; taking business factors appropriately and proportionately into account in their decision making processes*”.²⁸
- 60 SNH needs to apply that stipulation to the use of its regulatory powers in any situation. However, in consider the use of those powers within the cultural context open hill red deer stalking in the Highlands, the Group considers that it is particularly necessary for SNH to ensure that the SNH staff involved take an objective and well-informed public interest approach to any balanced judgement that might need to be made.

27.3 Scotland-wide Approach

- 61 The previous parts of this Section have been largely about open hill red deer in the Highlands. They remain a particularly important component of deer management in Scotland environmentally, economically and culturally. However, the time and resources that SNH has spent on its role as the deer authority since 2010, have continued to be disproportionately focused on the management of open hill red deer, as described in Section 26.
- 62 Most wild deer in Scotland live in woodland environments and most of the wild deer shot each year in Scotland are culled in woodland environments. The damaging impacts that all four species of wild deer can have in and around woodlands were described in Part Three. The Group considers, as described in Section 26, that SNH has been rightly criticised for the degree of its focus on open hill red deer and the relative lack of attention that it has paid to the management of wild deer in the rest of Scotland.
- 63 The Group considers that it is essential for effective deer management in Scotland that safeguards public interests, that SNH as the deer authority has a clear understanding of deer management in all parts of Scotland where wild deer occur. The Group considers that SNH should be systematically building up its knowledge of deer impacts and deer culls in different localities across Scotland outwith open hill red deer range. The Group considers that, as part of that, SNH needs to re-balance its time and expenditure on deer management away from the current concentration predominantly on the management of open hill red deer.
- 64 **The Working Group recommends that Scottish Natural Heritage should allocate a significantly greater share of its resources as the deer authority under the Deer (Scotland) Act 1996, to the management of wild deer in Scotland outwith open hill red deer range.**
- 65 The limited extent of SNH’s use of cull returns outwith the area covered by DMGs was described in Section 21. The Group recommended in that Section that SNH should start to increase substantially the extent of Scotland covered by cull returns, taking a targeted and prioritised approach to the localities where the coverage is to be increased first. The Group considers that approach should be linked to appropriately experienced member of SNH staff developing an understanding of the deer impacts and other factors involved in deer management in each locality, as discussed below.

²⁸ Scottish Government (2015), *Op cit*, para 2.

- 66 The Group considers that SNH as the deer authority needs such appropriately experienced members of staff in each of SNH's seven operational Areas covering Scotland. The Group refers to these members of staff here as 'deer officers' as they would be acting in SNH's capacity as deer authority, to distinguish them amongst the Wildlife Management Officers (WMOs) that SNH has in its Areas. The Group recognises that some existing WMOs could act as deer officers.
- 67 The size of the area that a deer officer could cover at an adequate level varies with the character of the area and the various localities within it. Developing a systematic account of deer management in a locality would include a deer officer establishing the pattern of local land ownership, obtaining cull data from cull returns and using a range of sources to build up information on deer management and the impacts of deer. SNH's Lowland Deer Management Project illustrated this type of locality approach, although the Project was designed with other objectives.²⁹
- 68 An essential part of a deer officer understanding deer management in a locality, is engaging with land owners and occupiers, deer hunters and other relevant interests. A question about deer damage on cull return forms, as recommended in Section 21, would help target that engagement, as would applications to SNH for out of season or night shooting authorisations. The other interests might include local representatives of NFU Scotland and the Crofters Federation, and Forestry and Land Scotland and Scottish Forestry staff. While other SNH staff might have information, there should also be contact with Local Authority (LA) staff for relevant LA responsibilities, for example, for roads and information on local deer vehicle collisions.
- 69 A deer officer could also link information on deer impacts in a locality from the above sources, with other existing information. This might include other deer vehicle collision data for Scotland's main roads as described in Section 15 and information from the Native Woodland Survey of Scotland described in Section 16. Other national data sources may become available.³⁰ There may also be existing habitat surveys by SNH and others in the locality, as well as surveys in some places of deer occupancy using dung counting analysis. Site visits by a deer officer to walk through woodlands and other habitats will also given an impression of deer impacts, while more detailed surveys could be carried out at sites where there is considered to be damage by deer.
- 70 With the type of approach described above, a deer officer could develop and maintain an understanding of deer management and deer impacts over a relatively wide area involving a number of different localities. The deer officer can provide advice to land owners and occupiers who should increase their culls to reduce damage by deer or the risk of it, with SNH's control powers in the Deer (Scotland) Act 1996 as back-up if necessary. The deer officer can also provide advice on deer management to other SNH staff in the SNH Area in which they are based, as well as to SNH's headquarters on applications for authorisations and any possible use of SNH's control powers.

²⁹ The Project is described in Section 26. Mc Morran, R., Gibson-Poole, S. and Hamilton, A. (2019). Lowland deer management: assessing the delivery of public interests. Scottish Natural Heritage Research Report No. 1069.

³⁰ For example, see Section 14 regarding the possible use of the Scottish Government's annual agricultural census to gather information on damage by deer on agricultural holdings.

- 71 While the size of area that a deer officer might cover adequately will vary with the character of different areas, the Group considers the areas covered by deer officers should be based on LA boundaries.³¹ That might mean a deer officer covering several smaller LA areas or part of a larger LA, with SNH's seven Areas based on LA boundaries except the Highland Council area, which is divided between two Areas. The Group considers that SNH should ensure there is adequate knowledge succession when there is a staff change involving a deer officer, so that the understanding of local deer management that is built up is not lost.
- 72 The Group is not aiming to be prescriptive over whether such deer officers might do other SNH work. However, while SNH staff are involved in implementing provisions in a wide range of legislation, the Group considers that SNH needs to be clearer that it has two different types of statutory functions as an organisation. These are set out in s.1 of the Natural Heritage (Scotland) Act 1991 and they are SNH's natural heritage functions under that Act and SNH's deer functions under the Deer (Scotland) Act 1996.
- 73 The Group considers that for SNH to fulfil its functions and responsibilities as the deer authority under the Deer (Scotland) Act 1996, SNH deer officers should cover all LA areas where wild deer occur (i.e. all except the Orkney and Shetland Islands). The Group recognises that, to some extent, SNH has WMOs who might be considered to be acting as deer officers in parts of the country. However, the Group considers that SNH needs to adopt a new approach with dedicated staff acting as deer officers in all SNH's Areas and clear roles in relation to SNH's functions and responsibilities under the 1996 Act.
- 74 **The Working Group recommends that Scottish Natural Heritage should be using suitably experienced staff based in Scottish Natural Heritage's seven Areas and acting for Scottish Natural Heritage's responsibilities under the Deer (Scotland) Act 1996, to develop a systematic account of deer management and deer impacts in all parts of Scotland where wild deer occur.**
- 75 The Group also considers that SNH should move on from its simplistic division of Scotland into upland and lowland deer management, based on open hill red deer range and elsewhere. Deer are shot in a range of different environments in Scotland and, for example, there is a continuity between the deer on open hill and the deer in adjoining environments including woodlands and agricultural land. The Group considers that the focus should be on geographic localities, some of which may or may not have open hill red deer to varying degrees.
- 76 The Group considers that SNH needs to change to presenting cull statistics, authorisation data and other information on deer management at a LA area scale. Currently SNH generally only publishes information at a national level. The Group considers that also producing information LA area scale will provide a valuable intermediate level between national statistics and deer management on the ground in different localities. This is discussed further in Section 28.
- 77 A range of other public sector land use statistics relevant to deer management are produced at a LA scale, while further development of the Scottish Government's Land Use Strategy is also focused at that scale. LAs are also required, for example, to produce forestry and woodland strategies for their areas under Scotland's planning

³¹ The Group considers that relatively few properties extend across LA boundaries. The Group recognises that there can be some deer movement across LA boundaries, particularly red deer. However, that is also likely to happen with open boundaries at other scales.

legislation.³² The proposed regional land use plans recently announced by the Scottish Government in its Programme for Government 2019-20, are also likely to be based on LA boundaries.³³

- 78 LAs also have responsibilities related to deer management, including roads and venison dealer licensing. In addition, since 2016, SNH has been engaging LAs to make them aware of their responsibilities under the Deer Code and encourage deer management planning. SNH's gradual progress is described in SNH's 2019 report to the Scottish Government.³⁴ The Group considers, however, that SNH itself should also be developing and implementing deer management strategies at a LA area scale. The Group considers deer management in Scotland should be considered at four main levels: landholdings, localities, LA areas and nationally.
- 79 **The Working Group recommends that Scottish Natural Heritage should, in fulfilling its responsibilities for deer management under the Deer (Scotland) Act 1996, be developing Local Authority areas as an important intermediate level between national and local levels.**

27.4 Leadership and Resources

- 80 SNH replaced the DCS as the deer authority in the Deer (Scotland) Act 1996 in 2010. The Group considers that the change resulted in a loss of focus, momentum and accountability as the deer authority's role became submerged in SNH.³⁵ SNH's performance was subsequently criticised in the ECCLR Committee's report in 2017, when the Committee concluded "*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*".³⁶
- 81 SNH responded to the criticism by producing a paper for the SNH Board in 2017 called 'An Enhanced Approach to Deer Management'. The paper set out "*how we intend to take forward an enhanced approach to show more leadership on deer management*".³⁷ Updates to the Board followed and SNH concluded in its 2019 report to the Scottish Government that "*The evidence presented demonstrates SNH's proactive leadership role in deer management within a voluntary system. We have balanced our use of support, intervention and regulation to promote sustainable deer management and the protection of public interests*".³⁸
- 82 The Group acknowledges that SNH manages to carry out a wide range of involvements with deer management each year. The Group considers, however, that the question is not so much one of 'leadership' as effectiveness in terms of not simply outputs, but tangible outcomes on the ground that are reducing the level of damaging impacts by deer that occur in Scotland. The Group recognises that SNH has a challenging role as the deer authority, but considers that the full benefits of the merger of the DCS into SNH will only emerge when SNH takes a refocused approach to that role. The Group considers that SNH needs a clearer sense of direction and greater intent to make progress.

³² Town and Country Planning (Scotland) Act 1997, section A159.

³³ Scottish Government (2019). Protecting Scotland's Future: The Government's Programme for Scotland 2019-2020.

³⁴ SNH (2019), *Op cit*.

³⁵ See Section 26.

³⁶ ECCLR Committee (2017) *Op cit*, para 13.

³⁷ SNH (2017). An enhanced approach to deer management. Paper to SNH Board.

³⁸ SNH (2019), *Op cit*, p.5.

- 83 The Group appreciates that part of the challenge for SNH staff in making progress to improve deer management, is the amount of funding available within SNH to fulfil its role as the deer authority. SNH has highlighted working with limited resources in its reports on deer management to the Scottish Government in 2016 and 2019. Those resources were expected in 2016 to continue at an average annual expenditure of £1.5 million a year, but had reduced to an expenditure of £1.3 million in 2018/19 due to SNH receiving a reducing annual budget allocation from the Scottish Government.³⁹
- 84 The Group has identified aspects of SNH's deer expenditure that the Group considers could be spent more effectively, particularly by reducing the amount that SNH spends on its annual open hill red deer counting programme as described earlier. The Group also considers that, with the reallocation of the time and funds that SNH has been spending on some activities, the changes recommended by the Group to SNH's approach as the deer authority could potentially be accommodated without an increase from SNH's previous average expenditure of £1.5 million a year.
- 85 The Group recognises that all public sector budgets are under pressure and that SNH's use of resources for its work as the deer authority needs to be more effective at achieving progress on the ground than at present. However, the Group considers that maintaining an adequate level of funding for SNH's work as the deer authority is an important public investment, given the scale of the net cost of damage caused by wild deer to public interests.⁴⁰ The need to reduce that damage is now also particularly important in terms of implementing climate change mitigation and adaptation measures.
- 86 While SNH implements public policy for deer management, responsibility for the delivery of public policy rests in the first instance with the Scottish Government. The Group considers that the Scottish Government should ensure that there is an appropriate level of allocation from the annual budget allocation that it provides to SNH, for SNH's functions under the Deer (Scotland) Act 1996. At present, SNH makes the decision over the allocations of funds between its functions under the Deer Act and SNH's natural heritage functions under the Natural Heritage (Scotland) Act 1991.
- 87 The Group considers that the Scottish Government should distinguish between those two roles of SNH in its annual budget allocations to SNH. The Group also considers that the Scottish Government should base the allocation for SNH's deer authority role on a forward plan from SNH that sets out the actions that SNH plans to take with targets for the improvements in deer management it intends to achieve. This approach should also be linked to the Group's recommendation in Section 26, that s.2 of the Deer (Scotland) Act 1996 should be amended to require SNH to produce an annual report on the exercise of its functions under the Act.
- 88 **The Working Group recommends that the Scottish Government should, in making its annual budget allocation to Scottish Natural Heritage, distinguish between the budget allocated to Scottish Natural Heritage for its functions under the Deer (Scotland) Act 1996 and the budget allocated for Scottish Natural Heritage's functions under the Natural Heritage (Scotland) Act 1991.**

³⁹ See Section 26.

⁴⁰ See Section 20.

Section 28 Regulatory System

28.1 Voluntary Principle

- 1 The Group's recommendations, which are listed in Section 30, include replacing both the Deer (Scotland) Act 1996 Act and the existing three Orders under the Act with revised versions. The changes recommended by the Group could therefore be described as replacing Scotland's current deer legislation. However, the recommended changes do not alter the approach upon which the legislation is based. That approach is, as discussed in Part One, usually described as the voluntary principle.
- 2 The voluntary principle contrasts with the legislation governing deer management in some European countries, where the state sets the culls that land owners are required to take each year and where land owners may also be required to participate with other land owners in deer hunting districts. In Scotland, while owners are not compelled to be members of a deer management group covering a particular locality, an essential feature of the voluntary principle is that land owners and occupiers decide their own deer culls in the first instance.
- 3 As described in Part One, the carrying capacity of an area of land for wild deer can be defined as a level that does not cause damage to public interests on that land or neighbouring lands. If a land owner's culls are achieving that, they can be described as carrying out socially responsible culls. The voluntary principle means that the powers in the Deer (Scotland) Act 1996 to enforce culls to prevent damage or the risk of damage by deer, are only used where a land owner is not carrying out socially responsible culls.
- 4 The approach in Scotland's deer legislation of relying on land owners and occupiers to decide their own culls in the first instance, means that the statutory framework for preventing damage by deer to public interests is often described as a voluntary system of deer management. The Scottish Government contrasts this with statutory deer management, under which the government takes over setting the culls required and carrying them out where necessary.¹
- 5 Describing Scotland as having a voluntary system of deer management can be misleading, as this only refers to the restricted aspects of land owners and occupiers deciding their own culls for their own varied objectives in the first instance and not being compelled to participate in deer groups. The statutory framework regulates a range of other aspects of deer management and a land owner or occupier who does not conform to the regulations will be committing an offence that could result in legal action being taken against them. The Association of Deer Management Groups (ADMG), for example, recognises that the voluntary principle needs to be seen as operating in a regulated environment.²
- 6 The Group considers that describing Scotland's statutory framework for the management of wild deer as a voluntary system can be over-emphasised. There is also a need for clarity between the voluntary nature of the system and voluntary actions by land owners and occupiers. The fact that the system is described as voluntary does not reduce the need for Scottish Natural Heritage (SNH) as the deer authority under the 1996 Act, to use compulsory control powers where there is evidence that, despite

¹ See Section 1.

² ADMG (2019), Scotland's Upland Deer Management. The voluntary approach: rising to the challenge. December 2019.

advice from SNH, individual owners or occupiers have not voluntarily carried out culls that protect public interests from damage by deer.

- 7 The effectiveness of the voluntary principle approach requires that owners and occupiers have an expectation that enforcement powers will be used when necessary. The Group is, however, not confident that is the case at present, given the limited use that SNH has made of the enforcement powers in the Deer (Scotland) Act 1996 during the nearly 10 years since SNH became responsible for implementation of the legislation in 2010.³
- 8 Later in this Section, the Group considers whether the existing regulatory powers in the Deer (Scotland) Act 1996 are adequate to deliver effective deer management that safeguards public interests and promotes the sustainable management of wild deer. First, however, the Group considers further the non-statutory arrangements that should underpin the statutory framework.

28.2 Non-Statutory Improvements

28.2.1 Use of s.40A Cull Returns

- 9 The Group considers that, as part of addressing the current levels of damage caused by deer, that SNH needs to take a more systematic approach to establishing and monitoring the impacts of wild deer and cull levels across all the parts of Scotland where wild deer occur. The Group considers that, as discussed in Section 27, this is essential if SNH is to deliver public policy by minimising the damage that deer can cause in order to achieve effective deer management that safeguards public interests.
- 10 SNH already has high levels of cull return coverage and engagement by its deer staff in the approximately 40% of Scotland's area covered by DMGs in the Highlands, with DMG members involved in deer management planning and target culls as discussed in previous Sections. SNH also has more information on the impacts of deer in those areas than other parts of Scotland, although the Group has commented on the need for SNH to improve the information that it has on deer impacts outwith sites designated for their natural heritage interest.
- 11 The Group recognises that it will take time for SNH to build up its knowledge and understanding of deer impacts and culls across the remaining 60% of Scotland's area, where it has limited information at present. The time required to implement such a programme will be greatly influenced by the resources available. The Group anticipates, however, that the coverage could be completed in three to five years.
- 12 The Group also considers that, in monitoring deer impacts and culls in localities, SNH should not just be obtaining returns under s.40 of the 1996 Act of the deer culled in the past year. SNH should also be obtaining returns under s.40A of the planned culls, with these more appropriately viewed as intended or expected culls as discussed earlier. If SNH is seeking to reduce damaging impacts or the risk of damage, SNH needs to monitor the intended culls so SNH can consider if the culls will be sufficient in the circumstances. If not, SNH might need to provide advice or intervene more directly.

³ SNH's use of its control powers was described in Part Four. At the time of writing, SNH has not established any new areas under s.7 Control Agreements, not followed any existing s.7 agreements with a s.8 Control Scheme and has only used s.10 Emergency Measures in one situation. SNH's new power under s.6A Deer Management Plans from 2016 has also only been used once.

- 13 The information on planned or expected culls under s.40A could be included in the existing s.40 cull return forms by adding an additional line for the planned or expected cull. The Group has recommended amendments to both s.40 and s.40A and at some stage, the provisions in both sections could be abbreviated into a single section in the Act that still enabled the option to ask about previous and planned culls separately if required.
- 14 The Group considers that SNH should start combining notices for returns under s.40 and 40A from those to whom it sends notices, and provide space for both returns on SNH's cull return forms. The Group considers that SNH should already have guidance available for those completing return forms, in which SNH clarifies any points about the information required by statute and other questions (for example, over the land type of land where deer were culled). The addition of the s.40A requirement would add to the need for such guidance.
- 15 **The Working Group recommends that Scottish Natural Heritage should start obtaining returns under both sections 40 and 40A of the Deer (Scotland) Act 1996, by combining the notices that are sent and providing space for each return on Scottish Natural Heritage's cull return form.**

28.2.2 Use of s.4 Advisory Panels

- 16 The Group considers that SNH should be establishing and monitoring the patterns of culling in localities across Scotland, together with basic information on the impacts of deer in the localities, as an essential ingredient of an effective system of deer management. The extent to which SNH might need to provide advice to land owners and occupiers or to intervene more directly would vary according to the circumstances.
- 17 The Group also recommended in Section 21 that, as part of taking this approach forward, SNH should be moving all cull returns online and that SNH's replacement online deer database should provide a portal for improved communication to and from those completing the returns. In addition, the Group has recommended that SNH should establish a publicly accessible National Cull Database, with that database structured on Local Authority (LA) areas.
- 18 In Section 27, the Group described the reasons why it recommends there that SNH should be developing LA areas as an important intermediate level for considering deer management. The Group considers that this would provide a valuable level of focus between the details of local situations and the generalities of information at a national level. This intermediate level would reflect and respond to the different balances of deer species and associated issues in the different parts of Scotland in a way that does not happen currently.
- 19 The Group considers that a public interest focus at the scale of LA areas is a missing level in deer management in Scotland at present. The intermediate scale of LA areas would provide a level of synthesis and analysis both for use within the area and as part of building up a better informed national picture. The Group considers that SNH should, as part of its analysis at the LA area scale, be liaising with all relevant public sector partners, so that SNH's approach within the area is informed by their knowledge and experience.

- 20 The Group considers that SNH should achieve this public sector involvement by setting up advisory Panels for LA areas under s.4 of the 1996 Act, with the membership consisting of representatives of those public sector partners. Such Panels might cover several adjoining LA areas where the LA areas are relatively small such as in the central belt, while larger LA areas would each have a Panel.
- 21 The Group considers that these advisory Panels would be managed by the deer officer or officers acting in SNH's capacity as the deer authority in the LA areas. There is no requirement in the 1996 Act for a Panel to be time limited. However, the Group anticipates that the Panels and their members might be appointed for set, renewable terms. The Group has recommended earlier that SNH rather than Scottish Ministers, should be responsible for appointing Panel members.⁴ While such a Panel might only meet once or twice a year, it would provide a focused and structured way of obtaining the input of the public sector partners with a direct interest in deer management.
- 22 **The Working Group recommends that Scottish Natural Heritage should, as part of developing Local Authority areas as an intermediate level for considering deer management, appoint a Panel under section 4 of the Deer (Scotland) Act 1996 for each such area with a membership made up of public sector representatives.**
- 23 The Panel members in all areas should include representatives of Scottish Forestry, Forestry and Land Scotland, Scottish Government Rural Payments and Inspections Directorate and the relevant LA or LAs. There should be several LA representatives to cover the different LA involvements with deer, including roads, venison dealer licensing and planning. Police Scotland also has a range of interests in deer management, including firearms, road traffic accidents, poaching and other offences against the deer legislation. Other public sector bodies may also be relevant in some areas, for example, one of the National Park Authorities.
- 24 The Group considers that a SNH representative should also be a member of the Panel for SNH's natural heritage responsibilities under the Natural Heritage (Scotland) Act 1991. At present, the provisions of s.4 of the Deer (Scotland) Act 1996 mean that a SNH Board Member or member of staff can participate in a Panel as an observer, but cannot be a member of a Panel. This provision dates from the original Deer (Scotland) Act 1959 and the Group considers that it is no longer needed. However, even if the provision is retained for SNH fulfilling its functions under the 1996 Act, the provision should be amended to allow SNH to be represented for its functions under the Natural Heritage (Scotland) Act 1991.
- 25 **The Working Group recommends that section 4 of the Deer (Scotland) Act 1996 should be amended to allow a member of Scottish Natural Heritage staff to be a member of a Panel established under section 4, in order to represent Scottish Natural Heritage's natural heritage functions under the Natural Heritage (Scotland) Act 1991.**
- 26 These public sector Panels at the intermediate scale of LAs might be seen as operating at a level below the Steering Group of public sector representatives responsible for Wild Deer: A National Approach (WDNA).⁵ The Panels would be more directly involved in deer management issues in their areas and could help inform the WDNA Steering Group at the national level.

⁴ See Section 26.

⁵ See Section 25.

- 27 In addition to establishing public sector Panels for LA areas, the Group anticipates that SNH deer officers in these areas would also be holding other meetings and events to engage with other stakeholder interests in that area, for example, land owners and occupiers, deer hunters, other land use interest groups and local community interests.

28.2.3 Use of s.6A and s.10 Powers

- 28 With the information from land owners and occupiers on previous culls from s.40 returns and on planned or intended culls for the coming year from s.40A returns, SNH can then assess whether it judges the intended culls will be sufficient in situations where there is evidence of damaging by deer or the risk of it. When SNH considers an intended cull will not be sufficient, SNH can then provide advice to the owner and occupier on the need to increase their cull.
- 29 In some situations, the cull level might need to be increased in stages using an adaptive management approach until the evidence of damage or the risk of it is reduced. The Group has noted earlier that there can be a risk of an owner or occupier putting an inflated number in their culls returns and the Group has suggested measures that could make it easier to test the reliability of the information.⁶ However, the key measure for SNH is level of deer impacts rather the cull totals *per se*.
- 30 While SNH deer staff already have a relatively high level of engagement with owners and occupiers in the areas covered by DMGs in the Highlands, the Group considers that the proposed greater engagement by SNH deer staff in those parts of Scotland outwith those areas, should lead to improvements in deer management in many localities. The relative lack of attention to deer management at a local level by SNH in many parts of Scotland outwith open hill red deer range, has meant that the extent to which individual land owners and occupiers may cull the deer that occur on their land has been of little consequence.
- 31 The greater presence and engagement by providing information and advice should help encourage improved cull levels where that is required to reduce the damaging impacts of deer. While densities might be high in some places in those localities due to owners and occupiers wanting to maximise hunting opportunities, others may not have realised the need to pay more attention to their culls or how many deer they actually need to cull to limit deer dispersing from their land, for example, with the high productivity of roe deer in suitable environments.
- 32 In situations where owners or occupiers are not responding adequately to SNH's advice, the Group considers that SNH needs to be making greater use of its enforcement powers than the minimal use described above since it became responsible in 2010 for implementing the deer legislation.⁷ The Scottish Government has already considered it necessary to instruct SNH to ensure that it is using the full range of enforcement powers at its disposal in dealing with non-cooperative land owners.⁸

⁶ For example, in Section 11.

⁷ See footnote 3.

⁸ Scottish Government Press Statement, 'Strengthening Deer Management' (29 June 2017).

- 33 SNH has two powers that enable it to enter land to cull deer to reduce damage or the risk of it. These are the short term powers under s.10 Emergency Measures and the longer term provisions of a s.8 Control Scheme, which has to be preceded by an unsuccessful attempt to use a voluntary S.7 Control Agreement. SNH also has the power under s.6A to require owners and occupiers to produce a deer management plan for its approval and if the plan is not produced or not successfully implemented, that can lead to a s.7 agreement and possibly the use of s.8. The Group has recommended amendments to those powers in Part Four to make them more effective to use.
- 34 The Group considers that SNH should be making more use of its s.6A and s.10 powers where an owner or occupier is not responding adequately to advice, as SNH improves the information that it has on deer impacts and culls outwith open hill deer range. The Group considers that, where necessary to minimise damage, s.6A deer management plans should be backed up by the use of s.10 if there is not sufficient progress.
- 35 The Group recognises that, within open red deer range, SNH considers that the DMG assessment process over the last five years has achieved *“the potential for greater natural heritage benefit than could be achieved by a narrower focus on preventing damage on a selection of sites through regulatory provisions”*.⁹ However, the Group still considers that SNH should be making more use of s.6A and s.10 where individual properties, whether in a DMG or not, are not carrying out adequate culls to protect public interests and are not responding sufficiently or sufficiently promptly to SNH advice.
- 36 The Group considers that evidence of a greater intent by SNH to use these powers would have a helpful influence of standards of deer control in Scotland. The Group also considers, for example, that the transparency and accountability of property culls in the publicly accessible National Cull Database recommended by the Group, is likely to help improve standards along with the other benefits of the Database.
- 37 **The Working Group recommends that Scottish Natural Heritage should make more use than so far of its powers under sections 6A and 10 of the Deer (Scotland) Act 1996, where deer are causing or are likely to cause damage to public interests.**

28.3 Climate Change Context

- 38 One or more of Scotland’s four species of wild deer now occur throughout most of the mainland and some of the islands. Red, sika and fallow deer are also continuing to expand their distributions. While no-one knows the actual number of wild deer in Scotland, the indications are that the overall population could be around one million. Scotland is also continuing to improve as a habitat for deer through on-going woodland expansion, the restructuring of existing woodlands and climate warming resulting in longer growing seasons and more benign winters.
- 39 Wild deer are, in general terms, thriving in Scotland and the number of deer shot each year has increased over the years. The annual cull recorded from cull returns has been over a 100,000 each year since 2013/14 and the total was over 135,000 in 2017/18, with the culls for each of the four species being the highest ever recorded. In addition, as described in Section 2, estimates suggest the unrecorded cull could add 60,000 or more very largely through the unrecorded cull of roe deer.

⁹ SNH (2019). Assessing Progress in Deer Management – Report from Scottish Natural Heritage to Scottish Government, p.5.

- 40 However, despite the culls, the evidence discussed in Part Three shows that wild deer are continuing to have damaging impacts on the environment, forestry, agriculture and other land uses. Amongst other damaging impacts, the number of recorded deer vehicle collisions is increasing with consequent human injuries and other costs. Against that background, as SNH has pointed out, the evidence indicates that reducing deer densities over much of Scotland would reduce many of their damaging impacts and costs, while still allowing the benefits derived from wild deer to be largely maintained.¹⁰
- 41 The increasing need for climate change mitigation measures provides an important imperative for minimising unacceptable levels of damage by wild deer and the costs associated with that damage or the risk of it. This is a topic which the Group has raised earlier in the Report, particularly in Sections 14, 16 and 27, and which the Group considers should have a particularly major influence on standards of deer management in the coming years. The Group expects that low standards that might have been tolerated before, will become no longer acceptable.
- 42 At a UK level, the Climate Change Committee monitors the factors involved in climate change and makes recommendations for the types and scales of mitigation measures required to meet targets. In particular in this context, the Committee's Land Use Report in 2018 identified actions to increase woodland cover and improve condition of peatlands as being essential components of mitigation measures.¹¹
- 43 In Scotland, the Scottish Government has had a series of five year Climate Challenge Plans from 2009 to the current 2019-24 Plan. The Scottish Government's Plans are then taken forward through other plans and strategies, for example in this context, the Scottish Forestry Strategy 2019-24 and the Scottish Biodiversity Strategy and Route Map 2020.
- 44 The Scottish Government's sense of urgency in responding to climate change trends has increased since the First Minister declared a climate emergency in April 2019.¹² Initiatives since then have included setting up the Just Transition Commission to advise the Scottish Government on how to develop a net zero carbon economy that is fair to all, and create a cohesive and resilient economy by 2045. The Commission's report is due in 2021 and likely to have implications for all rural land use sectors, including the deer management sector as part of that.
- 45 There is also the Climate Change Bill currently in the Scottish Parliament and the Scottish Government's commitment to updating its Climate Change Plan 2019-24 within six months of the Bill receiving Royal assent. Another commitment announced as part of the Scottish Government's Programme for Government 2019-20, is to "*make regional land use plans for maximising the potential of every part of Scotland's land to contribute to the fight against climate change*".¹³

¹⁰ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016.

¹¹ Committee on Climate Change (2018). Land use: reducing emissions and preparing for climate change.

¹² First Minister's Climate Emergency Statement, 28 April 2019.

¹³ Scottish Government (2019). Protecting Scotland's Future: the Government's Programme for Scotland 2019-2020.

- 46 The Group anticipates that the proposed regional land use plans should have major implications for the standards of deer management in Scotland in order to reduce the current levels of damaging impacts to public interests by deer in many places. However, the Group considers that it is important that sufficient attention is paid to deer in the proposed regional plans and related initiatives such as the Scottish Government's Land Use Strategy. There is a risk that deer can be neglected in such plans, because they are mobile and a part of all rural land uses rather a distinct land use sector like agriculture, forestry and others.
- 47 The implementation of the Scottish Government's climate change plans is increasingly being reflected in the plans and actions of public bodies. SNH has, for example, recently published a short document on SNH's Climate Change Commitments. In the document, SNH states that the landscape scale land use changes that it will be promoting as part of climate change mitigation will require "*significant changes*" to the management of wild deer. Scottish Forestry has also stated, as discussed in Section 14, that the current levels of deer densities in many places are a major obstacle to the successful implementation of the Scottish Forestry Strategy 2019-24 with its role in climate change mitigation and adaptation.
- 48 The targets for improving the ecological condition of Scotland's native woodland and enabling their natural regeneration, and for safeguarding and restoring Scotland's important extent of peatlands, are prominent examples of the need for improved levels of deer control. However, as described in Part Three, the evidence shows that the current deer densities in many places are damaging the natural heritage more generally. There are also the resource implications of these densities for creating new woodlands and re-stocking existing ones. The same is the case with damage to agricultural and horticultural crops, and damage to vehicles and people from deer vehicle collisions.
- 49 The implementation of the Scottish Government's climate change mitigation and adaption plans may result in other factors that encourage owners and occupiers to carry out socially responsible culls that minimise deer damage to public interests. The UK Climate Change Committee has recommended, for example, that governments should provide incentives to land managers to help them make the necessary transitions.
- 50 Public funds are already used through grants to support aspects of deer management as described in this Report, including the production of deer management plans, deer fencing, habitat impact assessments and the promotion of the market for wild venison. Simply providing grants to shoot deer through a bounty system is difficult to verify.¹⁴ However, funding is provided to support deer control for other specific and measureable purposes as with, for example, Scottish Forestry's forestry grants to reduce deer densities at a landscape scale to 5-10 per square kilometre based on dung counting analysis.¹⁵

¹⁴ Before SNH became the deer authority, it carried out a short lived trial of this by providing payments for red deer hinds culled (information from Group member).

¹⁵ Sustainable Management of Forest Reducing Deer Impact grant, Scottish Forestry, March 2019.

- 51 The Group considers that there should be an appropriate balance between regulation and incentives to achieve change, with that balance evolving over time to fit changing circumstances. The availability of public sector grants to support the delivery of climate change mitigation measures, such as new woodlands, native woodland regeneration and peatland restoration, may encourage some land owners to reduce the densities of deer using their land. This has, for example, started to be the case with some members of DMGs involved in SNH's DMG assessment process.¹⁶ The Group has not made a recommendation on the balance between regulation and incentives, given current uncertainty about future public sector support.
- 52 Concern over countering climate change trends might also possibly lead in time to the development of more independently audited land use certification schemes, focussed on climate change mitigation and adaptation. The UK Woodland Assurance Scheme (UKWAS) provides a model for how a regulator can facilitate the development of such a standard, with implementation and audit functions carried out by an independent assessor. Certification and accreditation schemes can provide a commercial incentive for land owners and occupiers to participate and it is possible that this approach might be developed to exert influence on standards of deer management. This could include the development of an independent accreditation scheme for standards of deer management that would complement the existing Scottish Quality Wild Venison assurance scheme.¹⁷
- 53 The Group considers that another important factor that will result in improved standards of deer control is cultural change as a result of the growing social concern over climate change. Decades have been spent to relatively limited avail by SNH and its predecessors, the Red Deer Commission and the Deer Commission for Scotland, in trying to achieve a cultural change in the management of open hill red deer in the Highlands. However, awareness amongst land managers of the pressing need to address climate change may have more influence. As the Chair of the ADMG recently stated "*The climate emergency is a matter for us all and DMGs are particularly well placed to make a contribution to Scottish Government net zero carbon targets*".¹⁸

28.4 Enhanced Regulation

- 54 The Group's remit is to "*make recommendations for changes to ensure effective deer management in Scotland that safeguards public interests and promotes the sustainable management of wild deer*".¹⁹
- 55 This remit has two elements. The first involves controlling local wild deer populations at levels that safeguard public interests by minimising unacceptable damage by deer to those interests, including the natural environment, forestry, agriculture, other land use interests, public safety and deer welfare. The second element is then managing the local deer populations at around the controlled levels to promote sustainable deer management by optimising the benefits that can be derived from wild deer, including hunting and sport shooting opportunities and venison.

¹⁶ SNH (2019) Op cit; ADMG (2019) Op cit.

¹⁷ The Group's understanding is that the possible development of a deer management accreditation scheme is being considered by the ADMG.

¹⁸ ADMG press release, 29 November 2019. The same point is also made in ADMG (2019) Op cit.

¹⁹ DWG Terms of Reference, Scottish Government, September 2017.

- 56 The first priority, whether nationally or locally, is to manage local wild deer populations at controlled levels to minimise unacceptable damage to public interests by deer. Scotland's system of deer legislation and associated non-statutory arrangements is intended to deliver that aim. However, as evidenced in this Report, the system is not adequately achieving that across Scotland at present.
- 57 In this Report so far, the Group has recommended a range of amendments to the Deer (Scotland) Act 1996 and its associated secondary legislation, and also a number of changes to the non-statutory approaches of the Scottish Government and SNH to the implementation of the legislation and improvement of the standards of deer management. The Group considers that, while the recommendations vary in their significance, the proposed modifications to the current statutory and non-statutory arrangements will make Scotland's system of deer management more effective at protecting public interests.
- 58 The Group's existing recommendations will, if adopted, take time to implement. The amendments to the Deer (Scotland) Act 1996 and its secondary legislation will be dependent on opportunities in the Scottish Parliament during the coming years. Similarly, for example, it will take SNH time to improve the information that it has on local deer impacts and culls outwith the areas covered by DMGs and to build up the information it has on deer impacts more generally outwith statutorily designated sites.
- 59 The Group considers that the influence of its recommendations should, if implemented, have started to become clearer over the next two to three years. It should also become clear during that time whether the members of DMGs are following up their recent progress in deer management planning, by making sufficient real progress on the ground in reducing the current levels of damage by deer to public interests within the areas covered by DMGs. During the same period, other factors may emerge that help improve the standards of deer control as illustrated in 28.3 above.
- 60 The Group considers that over that period, its recommendations and other factors, including SNH's ongoing deer management work, should be delivering more effective deer management. However, on the basis of the evidence available from its review of the current arrangements governing the management wild deer, the Group cannot be sure that its recommendations and other factors will ensure effective deer management as required by its remit.
- 61 The Group therefore considers, as discussed below, that the Scottish Government needs to be in the position to be able to introduce in due course additional measures to give SNH greater influence over the levels of culls carried out by land owners and occupiers, if that proves necessary. The Group considers that an important factor in this is the higher standards of deer control than previously that will be required to support the successful implementation of Scottish Government climate change mitigation and adaptation measures. The Group identifies below one important measure to be considered in the circumstances where extra powers are deemed necessary to guarantee the desired outcomes.²⁰

²⁰ The Group notes that other approaches have been recommended in the past. For example, a statutory duty of 'sustainable deer management' (see ECCLR Committee 2017 *Op cit*, para 249), as discussed in Section 25.

- 62 The Group supports, as described earlier, the voluntary principle under which land owners and occupiers (abbreviated to owner(s) in the following) decide in the first instance how many deer they may cull on their land. SNH can monitor existing and planned culls through ss.40 and 40A of the Deer (Scotland) Act 1996. SNH then only becomes more involved where it considers on the basis of information on deer impacts, that an owner's culls will not be sufficient to reduce damage by deer or the likelihood of damage on that land or neighbouring lands.
- 63 SNH describes its three levels of involvement as assistance, intervention and regulation.²¹ The first level involves providing advice and if that advice is not followed sufficiently, SNH can intervene to require a land owner to produce a Deer Management Plan (DMP) for SNH's approval under s.6A of the 1996 Act or to agree a Control Agreement under s.7. The final level, if an owner does not carry out the culls required by SNH, is for SNH to use its enforcement powers under s.10 Emergency Measures or a s.8 Control Scheme to intervene directly on the owner's land to carry out the culls.
- 64 The Group considered the ss.6A, 7, 8 and 10 powers in detail in Part Four and recommended refinements to their terms to improve their usability. The Group has described the constraints on using a s.7 Control Agreement and therefore potentially a s.8 Control Scheme, except in the most intractable cases of serious damage to an important public interest. At present, the use of s.6A leads to the use of s.7 and potentially s.8, if an owner does not produce a DMP or one that SNH can approve, or if the owner does not adequately implement an approved DMP. The Group has recommended amendments intended to enable the use of s.10 to enforce a notice served under s.6A and to reduce the time given to produce a DMP from 12 months or longer.
- 65 These powers provide SNH with few options for how it can influence the cull levels of an owner who is not responding sufficiently to SNH's advice. The powers in ss.7, 8 and 10 date from the Deer (Scotland) Act 1959 and, while amended since, were designed to regulate the management of red deer by estates on open hill range in the Highlands. The new s.6A power, introduced in 2016, was also intended for use in that environment. Also, as SNH has pointed out, if it uses s.6A, 7, 8 or 10 to secure deer control that reduces damage, there is no means in the legislation by which it can maintain the gains, other than through repeated use of these regulatory tools.²² Thus, an owner can allow deer numbers and their impacts to build up again until SNH may need to repeat the use of its powers.
- 66 The distinction between SNH simply providing an owner with advice to increase their cull level and reaching the threshold of deploying its powers under ss.6A, 7, 8 and 10, means that the current provisions might be described as having a relatively coarse-grained approach to trying to minimise damage to public interests by deer. A system of deer management needs to have enforcement powers and there should be an expectation that they will be used where necessary. However, in an effective system of deer management, such powers should be used relatively seldom and, as SNH has commented, using its regulatory powers at a few selected sites has limited influence on securing appropriate standards of deer control more generally.²³

²¹ SNH (2011). Code of Practice on Deer Management.

²² DWG correspondence with SNH, 26 November 2018.

²³ SNH (2019) *Op cit*.

- 67 The Group anticipates that a system that ensures effective deer management that safeguards public interests across Scotland, will require SNH to have more scope to directly influence where necessary the culls that owners are taking. Deer management now involves many smaller scale properties than the estates typical of open hill red deer range, and ensuring adequate culls to protect public interests adequately where necessary, is likely to require relatively modest adjustments to cull levels given the smaller scales of the culls and more complex environments.
- 68 If SNH had more ability to directly control cull levels, it could achieve those adjustments where necessary in a more proportionate way than the possible use of its existing powers and before the need for those powers might arise. This influence also needs to be able to ensure in contrast to now, that adequate cull levels are maintained each year. This includes, for example, in corridors along higher risk stretches of public roads to minimise deer vehicles collisions and in peri-urban cordons to limit deer dispersal into urban areas.
- 69 The lack of an appropriate way to control cull levels in Scotland is not a new issue. For example, after 30 years, the Red Deer Commission (RDC) concluded in its evidence to a parliamentary committee in 1989 that “*a lack of statutory power to enforce culling levels is seen as a handicap in reducing overall numbers*”.²⁴ Others have contrasted the position in Scotland with the position in European countries, where the power of the regulator to control cull levels is typically a feature of systems for regulating the management of wild deer populations.²⁵
- 70 The Land Reform Review Group (LRRG) identified in its 2014 report to the Scottish Government, that “*a key distinction between the statutory frameworks governing deer hunting in Scotland compared to other European countries, is the lack of arrangements when necessary to ensure that appropriate numbers of deer are killed to protect public interests and deliver sustainable deer management*”.²⁶
- 71 The LRRG’s main proposal to address this situation was that there “*should be a requirement for land owners who intend to cull wild deer on their land, to apply to SNH for a consent for the number of deer they plan to cull*”.²⁷ The LRRG considered this was required to “*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*”.²⁸
- 72 In European countries, regulators control annual cull levels in a number of ways.²⁹ These include universal systems where the regulator sets the culls that owners need to take and others where owners submit their planned culls to the regulator for approval. However, it was beyond the scope of the Group’s work to investigate those countries with universal planned cull approval systems to examine the details of how their systems work to learn lessons relevant to how such a system might work best in the Scottish context.

²⁴ House of Commons Agriculture Committee (1990). Land Use and Forestry, para 198.

²⁵ Land Reform Review Group (2014). The Land of Scotland and the Common Good. Report to Scottish Ministers. The Group notes that this is normally achieved via approved management plans.

²⁶ Land Reform Review Group (2014) *Op cit*, p.232.

²⁷ Land Reform Review Group (2014) *Op cit*, p.233.

²⁸ Land Reform Review Group (2014) *Op cit*, p.233.

²⁹ Putman, R. (2011). A review of the various legal and administrative systems governing management of large herbivores in Europe. In: Putman, R., Apollonio, M. and Andersen, R. (eds.) Ungulate Management in Europe: Problems and Practices. Cambridge University Press, pp. 54-79.

- 73 The Group was also particularly constrained in developing its consideration of the operation of an appropriate cull approval system in Scotland, due to the death of the Group's Chairman Simon Pepper and the loss of his contribution to the Group's work. As a result, the Group needed to complete its Report with a reduced capacity. However, two sections of the 1996 Act, ss.6A and 40A, can be used to illustrate in the next three paragraphs how such a planned cull approval system might work.
- 74 The principle of owners being required to submit planned cull totals to SNH for approval, already exists in the 1996 Act under s.6A. In that case, the planned culls are part of a DMP with an expectation that the DMP will include additional information. A DMP can be used at any scale, but is normally associated with larger properties.³⁰ However, the same principle of approval could be applied to s.40A, which requires an owner to provide SNH with their planned cull and which the Group has recommended should cover up to five years like s.40 returns of previous culls.
- 75 The Group has already recommended that owners should be making online returns of previous and planned culls under ss.40 and 40A under the current provisions. A cull approval system would then add the requirement to obtain approval from SNH for the planned cull, with owners potentially submitting their planned culls for three to five years ahead. If SNH had no information of concern about deer damage relating to a property, SNH would grant an approval. This approval might be called a deer hunting permit or licence. Each year as the previous year's cull was reported and the planned culls rolled forward a year, there would be scope for the owner and SNH to adjust the planned culls as part of an adaptive management approach.
- 76 In situations where SNH has information on damage and judged an owner's planned cull was insufficient, SNH would advise the land owner that they need to increase their cull to obtain a hunting permit. This would give SNH the scope to achieve adjustments in the planned cull before the damage reaches a level that might warrant the use of SNH's enforcement powers. In situations where no approvable planned cull is submitted after advice or where the culls carried out are consistently below the minimum level required, the Group anticipates that these situations might potentially be addressed by using an amended s.10 of the 1996 Act.
- 77 The points above are only illustrative and the Group recognises that there are many factors that would need to be considered in developing a planned cull approval system in Scotland, including a suitable pathway for any legal right to appeal. However, the Group anticipates that if such a system was established, it could become more refined over time as deer management standards improved. The system could develop, for example, from specifying minimum numbers of deer of each species to be culled to include the sexes of each species to be culled and provide scope for SNH to set maximum numbers, if that was considered appropriate in some situations.

³⁰ The members of DMGs had planned culls as part of the DMPs they submitted for assessment by SNH as part of SNH's recent DMG assessment process, though the planned culls were not subject to SNH's approval.

- 78 The Group also notes that one very helpful indirect benefit of the introduction of a cull approval system, would potentially be to reduce the current problems over the response rate for submitting cull returns and submitting them within the legal time limit allowed.³¹ The Group considers that land owners would be more likely to submit returns within that period, as they would need to do so to obtain a hunting permit to shoot deer. The Group anticipates that shooting deer without a permit other than under s.25 to prevent suffering, would be regarded as a more serious offence than not submitting a cull return.
- 79 The Group has not had the scope to investigate the operation of a planned cull approval or hunting permit system in any detail. However, as the Group has argued earlier in this sub-section, the Group considers that the Scottish Government needs to be in a position to introduce such a system in due course, if improvements in deer control are not sufficient in the next few years to ensure effective deer management that safeguards public interests.
- 80 The Group notes that the Scottish Government did not follow up the LRRG recommendation in 2014 that there should be a cull approval system. The LRRG's proposals were then considered by the Scottish Parliament's Rural Affairs, Climate Change and Environment (RACCE) Committee in 2015 during the passage of the Land Reform (Scotland) Bill. As a result, the Committee recommended that the Scottish Government should consider

amending the Bill to make the "*statutory changes proposed by the Land Reform Review Group*".³² However, the Scottish Government did not make the changes.

- 81 The LRRG's proposals were also then considered by the RACCE Committee's successor, the Environment, Climate Change and Land Reform (ECCLR) Committee when it reviewed SNH's 2016 report on deer management in Scotland.³³ The Committee recommended in their 2017 report that the Scottish Government should appoint a short term independent deer working group to consider "*the recommendations contained within the Committee's report, reflecting the positions of the Land Reform Review Group and those of the predecessor Committee*".³⁴ The Government subsequently appointed this Group with a wider remit and longer reporting period than proposed by the ECCLR Committee.
- 82 The ECCLR Committee also stated in its report that it was "*not convinced the currently available suite of powers are adequate*" and called for "*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*".³⁵ The Group considers that the introduction of a planned cull approval system could answer the ECCLR Committee's call.

³¹ The current problem with late submissions is discussed in Section 21.

³² RACCE Committee (2015). Stage 1 Report on the Land Reform (Scotland) Bill, SP Paper 845, 4 December 2015, para 370.

³³ ECCLR Committee (2017). Deer Management in Scotland: Report to the Scottish Government from SNH 2016, SP Paper 117, 5th Report (Session 5), 3 April 2017, para 11.

³⁴ ECCLR Committee (2017) *Op cit*, para 15.

³⁵ ECCLR Committee (2017) *Op cit*, para 11.

- 83 A hunting permit as outlined above would retain the voluntary principle in Scotland's system of deer management, in that owners would still decide how many deer they intend to shoot and that number would only be changed if SNH had evidence of damage or the likelihood of it.³⁶ Wild deer are part of the public domain and the Group considers that a well-designed cull approval system could provide a proportionate and effective way to ensure the public interest is delivered. Such a system might be seen as sitting between the current inadequate arrangements and statutory deer management threatened by the Scottish Government in recent years.³⁷
- 84 A cull approval system could not be introduced in Scotland for some years for the reasons mentioned above, including the need to expand the number of landholdings covered by cull returns and the eventual adoption of a mandatory cull return system.³⁸ However, the Group considers that the Scottish Government should now take the steps below to be able to introduce a cull approval system in due course as and when needed.
- 85 The Group considers that the Scottish Government should, firstly, investigate appropriate hunting permit systems in European countries, learn from the positive and negative experiences of operating such systems in those countries, and consider how such a system might operate to best effect in Scotland taking account of relevant factors, for example, the nature of the existing deer legislation, other Scottish Government licensing systems and relevant policy agendas, such as Better Regulation.
- 86 The Group considers that the Scottish Government should, secondly, once it has formed a view on an appropriate system, consult on that system and then amend the Deer (Scotland) Act 1996 (or its successor) to provide scope for the system to be introduced in practice by secondary legislation.
- 87 The Group anticipates that at each stage in the process (before consulting, before amending the Act, before introducing in practice), the Scottish Government would assess the extent of progress that has been made in reducing the overall levels of damage to public interests by deer at the time, before potentially proceeding to the next stage.
- 88 The Working Group recommends that the Scottish Government develop proposals for a planned cull approval system that would work to best effect in Scotland and then amend the Deer (Scotland) Act 1996 to provide scope for such a system to be introduced by secondary legislation as and when required.**

³⁶ The Group notes that the assessment process linked to the development of a cull approval system would need to address the concerns that some groups may raise about the potential erosion of the voluntary system.

³⁷ Scottish Government response to the 2015 RACCE Committee report, January 2016, para 208.

³⁸ See Section 21.

PART SEVEN - WAY FORWARD

Introduction

- 1 There are two Sections in this final Part of the Report. Section 29 describes the Group's overall conclusions from its work and Section 30 provides a summary list of the Group's recommendations.
- 2 The Group was appointed by the Scottish Government after it concluded that "*significant issues*" remained over the management of wild deer in Scotland, following reports by Scottish Natural Heritage (SNH) in 2016 and the Scottish Parliament's Environment, Climate Change and Land Reform (ECCLR) Committee in 2017.¹
- 3 The Group's task under its Terms of Reference has been to review the current statutory and non-statutory arrangements for the management of wild deer in Scotland within the context of current deer management, and "*make recommendations for changes to ensure effective deer management in Scotland that safeguards public interests and promotes the sustainable management of wild deer*".²

Section 29 Conclusions

- 4 Wild deer in Scotland belong to no-one until killed or captured and are part of the public domain to be managed to safeguard and promote the public interest or common good of the people of Scotland. The right to hunt wild deer generally goes with the ownership of land and since the Deer (Scotland) Act 1959, there has been a statutory framework to govern the management of wild deer with the aim of protecting the public interests covered by the legislation. The submission of the Group's Report to the Scottish Government in 2019 coincides with the 60th anniversary of the 1959 Act.
- 5 During the last 60 years, much has changed about the management of wild deer in Scotland. The distributions and numbers of each of Scotland's four species of wild deer, red, roe, sika and fallow deer, have increased substantially and one or more species now occurs throughout mainland Scotland. Most of the deer are associated with woodlands and on-going woodland expansion continues to improve Scotland as a habitat for wild deer. The numbers of wild deer shot annually has also increased substantially over the decades, with a consequent increase in wild venison production and sales.
- 6 Scotland's deer legislation has also evolved over the last 60 years, with the 1959 Act being replaced by the Deer (Scotland) Act 1996 and SNH replacing the Deer Commission for Scotland in the Act in 2010 as the public authority responsible for implementing the legislation. Amendments to the 1996 Act have also continued in recent years through the Wildlife and Natural Environment (Scotland) Act 2011 and the Land Reform (Scotland) Act 2016. At the same time, however, there has been a high degree of continuity in the legislation with the 1996 Act still largely based on the terms of the 1959 Act.

¹ DWG Terms of Reference, Scottish Government, September 2017.

² DWG Terms of Reference, Scottish Government, September 2017.

- 7 There has also been a high level of continuity over the decades in the issues that occur over damage caused by wild deer to forestry, agriculture, other land uses and the natural environment. While there have also been continuing concerns over standards of deer welfare, additional issues over the damage that wild deer can cause have become more important. These include the numbers of deer vehicle collisions that now take place each year and the damaging impacts that can result from the colonisation of Scotland's urban areas by wild deer.
- 8 The changes to the legislation and many non-statutory initiatives over the years to try to improve standards of deer management, can be viewed as progress. However, the Group considers that it is understandable that some commentators should be struck "*by the limited progress in addressing some of the issues over the management of wild deer in Scotland, particularly red deer, despite many years of debate over these issues*".³
- 9 The Group was appointed by the Scottish Government because of the continuing issues over the management of wild deer. The Group has therefore, as required by its Terms of Reference, carried out a wide ranging review of Scotland's current system of statutory and non-statutory arrangements for deer management to make recommendations to fulfil its remit.
- 10 In Part One of the Report, the Group started by considering three main factors that underlie Scotland's system of deer management: the legal status of wild deer, the nature of deer hunting rights and the character of the statutory framework governing the management of wild deer. The Group then reviewed the information available on the distributions, populations and culls of Scotland's four species of wild deer. Finally in Part One, the Group examined the statutory functions of SNH in the Deer (Scotland) Act 1996, as the public body responsible for implementing Scotland's deer legislation, and the public interests covered by the legislation
- 11 In Part Two, the Group then reviewed the basic standards of public safety and deer welfare that should apply to the management of wild deer in all circumstances. In Part Three, the Group considered the nature and extent of the damage that deer can cause to different types of land uses and public interests in particular circumstances. In Part Four, the Group examined the compulsory powers in the Deer (Scotland) 1996 that SNH can exercise either to require land owners and occupiers to provide certain types of information or to control deer numbers to prevent damage or reduce the likelihood of damage by deer in particular circumstances.
- 12 In Part Five, the Group then reviewed the Scottish Government's and SNH's current non-statutory arrangements to support the implementation of the deer legislation and to improve the standards of deer management. In Part Six, the Group first considered further improvements to SNH's current non-statutory approach. The Group then discussed the need for the Scottish Government to take steps now to be in a position to introduce further statutory measures in due course, if the Group's recommendations, the ongoing work of SNH and other factors that may improve the standards of deer control, are not ensuring in the next few years effective deer management that safeguards public interests.

³ Land Reform Review Group (2014). The Land of Scotland and the Common Good. Report to Scottish Ministers, p.227.

- 13 The Group has examined many different aspects of the current system for the management of wild deer in Parts One to Six and, as a result, made nearly 100 recommendations. These are listed in Section 30. In broad terms, approximately half of these recommendations are for amendments to the Deer (Scotland) Act 1996 and its associated secondary legislation, while the other half relate to the non-statutory approaches adopted by the Scottish Government and SNH to support the implementation of the legislation and improvements in the standards of deer management more generally.
- 14 The Group's recommendations for changes to Scotland's deer legislation include a wide range of amendments to the Deer (Scotland) Act 1996. They also involve replacing the existing three Orders passed under the Act with revised versions, and adding a fourth Order in due course.⁴ The recommended changes are to update and improve the current provisions to make the legislation more effective at safeguarding public interests.
- 15 The recommended changes to the 1996 Act are wide ranging and involve many different sections in the Act, as listed in Annex 6. Some of these recommendations are simply to remove anomalies and inconsistencies in the Act, while others are more significant changes. The Act has already been much amended since it was passed nearly 25 years ago and the Group considers that, after further amendments as recommended in this Report, the changes should be consolidated into a new principal Deer Act.
- 16 **The Working Group recommends that the Deer (Scotland) Act 1996 should, after amendments to implement recommendations in this Report, be replaced with a new Deer (Scotland) Act.**
- 17 The Group's recommendations reflect the Group's overall conclusions that, to fulfil the Group's remit, the deer legislation needs to be modernised, SNH needs to take a re-focused non-statutory approach and the Scottish Government needs to take steps to be in a position to introduce further statutory measures in due course if that proves necessary.
- 18 The Group considers that the need for adequate standards of deer control to support the successful implementation of the Scottish Government's climate change mitigation and adaptation measures, provides an important imperative for ensuring that Scotland has an effective system for the management of wild deer that safeguards public interests and promotes the sustainable management of the deer.
- 19 The Group considers that all its recommendations will contribute to delivering a system of deer management that will fulfil the Group's remit. The recommendations, however, vary in their individual significance and each needs to be considered on its own merits. The recommendations also vary in the time that will be required to implement them. Changes to the deer legislation will be dependent on the Scottish Government's wider priorities and opportunities in the Scottish Parliament. Similarly, the implementation of some of the non-statutory changes will also take time.

⁴ The existing Orders are The Licensing of Venison Dealers (Prescribed Forms etc.) (Scotland) Order 1984, The Deer (Firearms etc.) (Scotland) Order 1985, The Deer (Close Seasons) (Scotland) Order 2011. The fourth Order would be made under an amended s.17A 'Register of persons competent to shoot deer'.

- 20 The role of SNH as the deer authority under the 1996 Act will be central to implementing the Group's recommendations, both in providing advice to the Scottish Government on statutory changes and in taking forward non-statutory measures. SNH's resources for its work as the deer authority will be an important factor in this. The Group considers that implementing its recommendations could possibly be seen within the context of the existing levels of funds that SNH allocates to deer management, by re-allocating some elements of the allocation. However, as SNH has pointed out itself, the Group considers that SNH's progress on improving deer management is already constrained by its limited funds.⁵
- 21 The Group considers that a greater investment in improving deer management has the potential both to quicken progress and to produce substantial savings in the financial and non-financial costs resulting from the current levels of damage by deer to public interests. As SNH has concluded, the available evidence indicates that if deer densities were lower across much of Scotland, the benefits arising from deer could be largely maintained and many of the costs reduced, leading to enhanced public benefits.⁶
- 22 The Group considers that its recommendations, if adopted, could be converted into a programme of changes. The recommended changes to Scotland's deer legislation can be divided, for example, into those that are straightforward and could be made relatively quickly if there was a legislative opportunity, through to those that would require greater parliamentary time to a varying extent. Similarly, some of the non-statutory recommendations could be implemented soon, while others will take longer. Some of the recommendations are also dependent one or more of the other recommendations being implemented first.
- 23 The Scottish Government's current vision for the management of wild deer in Scotland by 2030, is set out in 'Wild Deer: A National Approach' and included in Annex 10 in this Report. The Group considers that its recommendations to fulfil its remit will make an essential contribution with other factors in achieving that vision before or by that date.
- 24 **The Working Group recommends that the Scottish Government and Scottish Natural Heritage should develop and implement a programme of changes to the current system of deer management based on the Group's recommendations, so that Scotland will have a system that ensures effective deer management that safeguards public interests and promotes the sustainable management of wild deer.**

⁵ SNH (2016). Deer Management in Scotland: Report to the Scottish Government from SNH, October 2016. SNH (2019). Assessing Progress in Deer Management – Report from Scottish Natural Heritage to Scottish Government.

⁶ SNH (2016) *Op cit*.

Section 30 Recommendations

Part One - Wild Deer in Scotland

Section 1 Legal Status, Hunting Rights and Regulatory Framework

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

Section 2 National Distributions, Populations and Culls

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

Section 3 Public Authority, Functions and Interests

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

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

Section 4 How wild deer can be killed lawfully

- 4 The Working Group recommends that the Scottish Government should make a clear commitment to end the use of lead bullets to shoot deer in Scotland, carry out the necessary research and promotion to enable that change to be made after a transition period and, as a part of that, amend The Deer (Firearms, etc.) (Scotland) Order 1985 so that the specifications in paragraph 3(a) of the Order are suitable for the use of non-lead bullets (*paragraph 21*).
- 5 The Working Group recommends that the use of a shotgun to kill wild deer should be made subject to authorisation by Scottish Natural Heritage through a new provision in the Deer (Scotland) Act 1996, that the owner or occupier of any land should be able to apply for such authorisation and that the terms of paragraph 4 of The Deer (Firearms, etc.) (Scotland) Order 1985 should be amended accordingly (*paragraph 31*).
- 6 The Working Group recommends that the Scottish Government should instruct Scottish Natural Heritage to carry out the planned trials into the use of night sights without further undue delay (*paragraph 38*).

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

Section 5 Times of year when deer can be killed lawfully

- 8 The Working Group recommends that The Deer (Close Seasons) (Scotland) Order 2011 should be replaced with a new Order in which the close season for females of each species is set to start on a date in the period 1st to 15th April (inclusive) and end on a date in the period 31st August to 15th September (inclusive), and in which no close seasons are set for males of each species (*paragraph 67*).
- 9 The Working Group recommends, firstly, that section 5(6) of the Deer (Scotland) Act 1996 should be amended to apply to any land and to cover public interests of a social, economic and environment nature; and, secondly, that section 5(8) should be repealed (*paragraph 79*).

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

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

Section 7 How and when wild deer can be taken lawfully

- 11 The Working Group recommends, firstly, that section 41(2) of the Deer (Scotland) Act 1996 should be amended or replaced so that the taking of wild deer requires to be authorised by Scottish Natural Heritage and secondly, that section 37(5) should be amended at the same time to require Scottish Natural Heritage to produce a code of practice for the taking or live capture of wild deer (*paragraph 26*).

Section 8 Occupiers, Authorised and Competent Persons

- 12 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended so that the statutory rights of occupiers to prevent damage by wild deer should apply to the occupiers of any type of land and cover public interests of a social, economic and environmental nature (*paragraph 19*).
- 13 The Working Group recommends, firstly, that section 37(1A) should be repealed so that all out of season shooting authorised by Scottish Natural Heritage requires to be carried out by a person judged fit and competent for that purpose by Scottish Natural Heritage, and secondly, that section 10(4) should be amended so that an authorised person requires to be judged both fit and competent (*paragraph 36*).
- 14 The Working Group recommends that the Scottish Government should make a clear statement of its commitment to establishing a register of persons competent to shoot deer in Scotland under section 17A of the Deer (Scotland) Act 1996, and develop proposals for a register as set out in this Report (*paragraph 84*).

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

Section 9 Prevention of Suffering and Wildlife Crime

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

Section 10 Wild Deer and Diseases

- 17 The Working Group recommends that the Scottish Government should ensure that the role of wild deer in increasing the risk of Lyme disease is given greater prominence in its policies for deer management in Scotland, and that greater priority is given to that risk in considering the need to reduce deer densities in locations across Scotland (*paragraph 33*).
- 18 The Working Group recommends the Scottish Government and its agencies should, following the current Scottish Deer Health Survey, develop and maintain an ongoing national programme to monitor wild deer in Scotland for existing and potential diseases (*paragraph 36*).

Section 11 Wild venison and food safety

- 19 The Working Group recommends that The Licensing of Venison Dealers (Prescribed Forms etc.) (Scotland) Order 1984 should be replaced by a new Order that requires clearer and more robust information on the prescribed form about the source of any purchases or receipts of wild venison (*paragraph 21*).
- 20 The Working Group recommends that section 34 of the Deer (Scotland) Act 1996 should be amended to empower those with the authority under that section, to require a licensed venison dealer to submit a return summarising their throughput of wild deer carcasses during a period not exceeding three years and in a form to be prescribed (*paragraph 55*).
- 21 The Working Group recommends that the Scottish Government should review sections 33-36 of the Deer (Scotland) Act 1996 that cover the licensing of dealing in venison, with a view to making changes in addition to the related recommendations in this Report, so that the arrangements are fit for purpose in contemporary circumstances (*paragraph 60*).
- 22 The Working Group recommends that section of 40 of the Deer (Scotland) Act 1996 dealing with cull returns should be amended by inserting 'and the use of the carcasses' at the end of section 40(1) (*paragraph 65*).
- 23 The Working Group recommends that the Scottish Government should ensure that the requirement for those supplying venison to Approved Game Handling Establishments to be able to demonstrate Trained Hunter status under EU regulations is enforced (*paragraph 67*).

Section 12 Wild Deer and Other Deer

- 24 The Working Group recommends that section 43 of the Deer (Scotland) Act 1996 should be amended at the end of the definition of farmed deer in s.43(4) to include 'and be clearly marked to show they are kept as such' (*paragraph 21*).
- 25 The Working Group recommends that the Animals (Scotland) Act 1987 should be amended to establish clearly that an owner or occupier of land can shoot a stray farmed deer on that land to prevent damage by the deer, where that is the only reasonable practical means in the circumstances to detain the stray deer under the Act (*paragraph 28*).
- 26 The Working Group recommends that there should be a legal requirement for all deer that are owned as private property and not farmed deer or deer in zoos, to be tagged to identify them as private property (*paragraph 46*).
- 27 The Working Group recommends that the Scottish Government should give serious consideration to the introduction through the Animal Health and Welfare (Scotland) Act 2006, of a scheme to require an owner of deer to have a licence for the keeping of deer as private property that are not farmed deer, deer in zoos nor muntjac deer (*paragraph 51*).
- 28 The Working Group recommends that either the Deer (Scotland) Act 1996 or the Wildlife and Countryside Act 1981 should be amended so that any release of captive red deer and captive roe deer into the wild requires to be authorised by Scottish Natural Heritage (*paragraph 62*).
- 29 The Working Group recommends that the Scottish Government and its agencies should agree and apply practical criteria to identify and correct situations where deer enclosed by deer-proof barriers are being managed as if they are wild deer, when it is clear from the assessment that they should be managed as captive deer (*paragraph 83*).

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

Section 13 Damage by Wild Deer

- 30 The Working Group recommends that Scottish Natural Heritage should develop fuller statements of the public and private land use interests that can be protected under the Deer (Scotland) Act 1996, and that Scottish Natural Heritage should also ensure that the Wild Deer Best Practice guidance on damage is replaced (*paragraph 18*).
- 31 The Working Group recommends that the Scottish Government should ensure that Scottish Natural Heritage has the capacity to encourage complaints of unacceptable levels of damage by wild deer and to respond by taking effective action where warranted to reduce the damage (*paragraph 33*).
- 32 The Working Group recommends that the phrase "or steps taken or not taken for the purposes of deer management" should be repealed from sections 6A(2) and 7(1) of the Deer (Scotland) Act 1996, and that consideration might be given to whether an appropriately termed and practical power for Scottish Natural Heritage to reduce deer control on a property might be introduced through a new section in that Act (*paragraph 49*).

Section 14 Agriculture and Forestry

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

Section 15 Public Safety

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

Section 16 Natural Heritage

- 38 The Working Group recommends that the Cairngorms National Park Authority and Scottish Natural Heritage should adopt and enforce a clear policy against the establishment of any populations of Scotland's two non-native deer species, fallow and sika deer, in the Cairngorms National Park (*paragraph 47*).
- 39 The Working Group recommends that the Cairngorms National Park Authority and Scottish Natural Heritage should have a much greater focus on the need to improve the management of wild deer in the Cairngorms National Park, to reduce deer densities in many parts of the Park to protect and enhance the Park's biodiversity (*paragraph 52*).
- 40 The Working Group recommends that the Scottish Government should remove the current references to deer from the Muirburn Code and end financial support for muirburn for wild deer through its Rural Payments and Services Agri-Environment Climate Scheme (*paragraph 73*).
- 41 The Working Group recommends that the Hill Farm Act 1946 should be amended to make it an offence to carry out muirburn for wild deer without a licence from Scottish Natural Heritage (*paragraph 74*).

Section 17 Non-Native Deer Species

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

Section 18 Deer Welfare

- 47 The Working Group recommends that the Scottish Government should ensure that a fuller contemporary interpretation of the welfare of wild deer becomes a more important factor in determining standards of deer management in Scotland than is currently the case (*paragraph 22*).
- 48 The Working Group recommends that Scottish Natural Heritage should be developing a fuller interpretation of the welfare of wild deer that is based on a wider consideration of their biological performance (*paragraph 32*).
- 49 The Working Group recommends that the Scottish Government should make clear that the ongoing levels of annual winter mortality amongst red deer on open hill range in the Highlands are unacceptable and need to be reduced (*paragraph 59*).
- 50 The Working Group recommends that Scottish Natural Heritage should consider developing the use of the average carcase weights of yearlings in the autumn as an indicator of the welfare of the local population of the deer species involved (*paragraph 71*).

Section 19 Other Public Interests

- 51 The Working Group recommends that Scottish Natural Heritage should be implementing a strategic approach to limiting ongoing dispersal by deer into both peri-urban areas from the wider countryside and urban areas from peri-urban areas, selecting target areas on a prioritised basis (*paragraph 26*).
- 52 The Working Group recommends that the Scottish Government should ensure that increasing attention is focused on implementing effective deer management in peri-urban and urban areas to limit damage to public interests, and that Scottish Natural Heritage adopts a more focused approach towards achieving this (*paragraph 39*).

Section 20 Economics of Wild Deer

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

Part Four - Compulsory Powers

Section 21 Information – Cull Returns

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

Section 22 Information – Other Powers

- 60 The Working Group recommends that section 40A of the Deer (Scotland) Act 1996 should be amended to refer to ‘taken or killed’ and to enable the information required to cover a period not exceeding five years (*paragraph 5*).
- 61 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to remove the reference to the Code of Practice on Deer Management in section 6A(1) of the Act (*paragraph 19*).
- 62 The Working Group recommends that section 6A(5) of the Deer (Scotland) Act 1996 should be amended to change the period within which a Deer Management Plan is to be submitted to Scottish Natural Heritage, so that the period is not less than three months and not more than 12 months as Scottish Natural Heritage may determine, according to circumstances (*paragraph 25*).
- 63 The Working Group recommends that section 15(3)(b) of the Deer (Scotland) Act 1996 should be amended to include sections 10 and 11 of the Act, rather than just sections 7 and 8 (*paragraph 39*).
- 64 The Working Group recommends that the period of notice required to enter land under section 15(2) of the Deer (Scotland) Act 1996, should be reviewed with the intention of making the period of notice shorter (*paragraph 41*).
- 65 The Working Group recommends that section 15(3) of the Deer (Scotland) Act 1996 should be amended to include as a purpose for entering on land, carrying out an assessment of the impacts of deer in any area in pursuance of Scottish Natural Heritage’s functions under section 1(1) of the Act (*paragraph 47*).

Section 23 Emergency Control Measures

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

Section 24 Control Schemes

- 70 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to remove references to the Code of Practice on deer management from section 7(1) and (3) and from section 8(1) (*paragraph 27*).
- 71 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to repeal section 8(2) and that, as a consequence, s.7(2) should also be repealed (*paragraph 38*).
- 72 The Working Group recommends that the Deer (Scotland) Act 1996 should be amended to re-instate section 8(5), which was repealed in 2011 (*paragraph 44*).
- 73 The Working Group recommends that paragraph 13(2) of Schedule 2 of the Deer (Scotland) Act 1996 should be amended, so that the grounds for appeal are that a control scheme is not within the powers of the Act or that any of the requirements of the Act has not been complied with (*paragraph 54*).
- 74 The Working Group recommends that paragraph 13(4) of Schedule 2 of the Deer (Scotland) Act 1996 should be amended, so that the options for the Land Court are to confirm the scheme or direct Scottish Ministers to revoke it or part of it in so much as it affects the applicant (*paragraph 55*).
- 75 The Working Group recommends that the Environment, Climate Change and Land Reform Committee of the Scottish Parliament should consider holding a short inquiry into the use of section 7 Control Agreements under the Deer (Scotland) Act 1996 in the Caenlochan area (*paragraph 68*).
- 76 The Working Group recommends that Scottish Natural Heritage should ensure that it sets out any section 7 Control Agreements in terms that can be readily converted into a section 8 Control Scheme under the Deer (Scotland) Act 1996, and that Scottish Natural Heritage should also ensure that it already has the evidence to enforce a section 8 Control Scheme if Scottish Natural Heritage is entering into any new section 7 agreements (*paragraph 79*).

Part Five - Non-Statutory Arrangements

Section 25 Scottish Government

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

- 80 The Working Group recommends that Scottish Natural Heritage should make a policy decision with the Scottish Government's support, to continue to management the Wild Deer Best Practice project for at least the next five years (*paragraph 77*).

Section 26 Scottish Natural Heritage

- 81 The Working Group recommends that Scottish Natural Heritage should ensure an appropriate level of distinction between Scottish Natural Heritage's responsibilities under the Deer (Scotland) Act 1996 and the Natural Heritage (Scotland) Act 1991 respectively (*paragraph 15*).
- 82 The Working Group recommends that section 2 of the Deer (Scotland) Act 1996 should be amended to include provisions requiring, firstly, Scottish Natural Heritage to report annually to Scottish Ministers on the exercising of Scottish Natural Heritage's functions under the Act and secondly, Scottish Ministers to present a copy of Scottish Natural Heritage's report to the Scottish Parliament (*paragraph 20*).
- 83 The Working Group recommends Scottish Ministers should no longer be responsible for appointing the members of a panel under section 4 of the Deer (Scotland) Act 1996 (*paragraph 33*).
- 84 The Working Group recommends that the sequence of assessments of Deer Management Groups carried out by Scottish Natural Heritage in 2014, 2016 and 2019 should come to an end and that Scottish Natural Heritage's focus should now be ensuring the standards of practical deer management implemented on the ground by land owners minimise the damaging impacts which deer can cause to public interests (*paragraph 69*).

Part Six - Refocused Approach

Section 27 Deer Authority

- 85 The Working Group recommends that Scottish Natural Heritage should avoid over-emphasising the need for formal collaborative groups for deer management and adopt a more flexible approach to supporting other forms of liaison and collaboration where these develop, including in open hill red deer range (*paragraph 25*).
- 86 The Working Group recommends that Scottish Natural Heritage should adopt 10 red deer per square kilometre as an upper limit for acceptable densities of red deer over large areas of open range in the Highlands, and review that figure from time to time in the light of developments in public policies, including climate change measures (*paragraph 37*).
- 87 The Working Group recommends that Scottish Natural Heritage should very substantially reduce the extent to which Scottish Natural Heritage carries out direct counts of red deer on open hill range and refocus Scottish Natural Heritage's limited resources on building up more information on the impacts that deer are having on the natural heritage, woodlands, forestry, agriculture and other public interests in Scotland (*paragraph 43*).

- 88 The Working Group endorses Scottish Natural Heritage's identification of the need for significant changes in deer management as an important issue in climate change mitigation measures, and recommends that Scottish Natural Heritage treats this as a high priority (*paragraph 50*).
- 89 The Working Group recommends that Scottish Natural Heritage should allocate a significantly greater share of its resources as the deer authority under the Deer (Scotland) Act 1996, to the management of wild deer in Scotland outwith open hill red deer range (*paragraph 64*).
- 90 The Working Group recommends that Scottish Natural Heritage should be using suitably experienced staff based in Scottish Natural Heritage's seven Areas and acting for Scottish Natural Heritage's responsibilities under the Deer (Scotland) Act 1996, to develop a systematic account of deer management and deer impacts in all parts of Scotland where wild deer occur (*paragraph 74*).
- 91 The Working Group recommends that Scottish Natural Heritage should, in fulfilling its responsibilities for deer management under the Deer (Scotland) Act 1996, be developing Local Authority areas as an important intermediate level between national and local levels (*paragraph 79*).
- 92 The Working Group recommends that the Scottish Government should, in making its annual budget allocation to Scottish Natural Heritage, distinguish between the budget allocated to Scottish Natural Heritage for its functions under the Deer (Scotland) Act 1996 and the budget allocated for Scottish Natural Heritage's functions under the Natural Heritage (Scotland) Act 1991 (*paragraph 88*).

Section 28 Regulatory System

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

Section 29 Conclusions

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

ANNEXES

1. Deer Working Group Terms of Reference
2. Deer Working Group Members and Advisers
3. List of legislation related to the management of wild deer in Scotland: 1948-2018
4. Deer (Scotland) Act 1996 - Table of Contents
5. Summary of Amendments to the Deer (Scotland) Act 1996 in 2011 and 2015
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7. Notes on some Notifiable Diseases affecting wild deer
8. Comparison of cull returns and venison dealer returns for red deer 1973-2009
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10. Long Term Visions for Wild Deer in Scotland from 2000, 2008 and 2014
11. Wild Deer: A National Approach - Indicators and Trends (2016)

ANNEX 1

Deer Working Group Terms of Reference

Purpose

The Scottish Government (SG) welcomed the recent reports from SNH (2016) and the ECCLR Committee (2017) on deer management in Scotland. The Government also noted that both reports concluded that, while there have been some improvements in deer management, significant issues remain.

The SG therefore announced on 29th June 2017¹ that it would establish an independent working group to examine the current issues over the standards of deer management in Scotland and recommend changes to help resolve these issues in ways that promote sustainable deer management.²

The working group will consider the position with all species of wild deer in Scotland and the varying circumstances across Scotland in both the uplands and lowlands.

Remit

The Group will make recommendations for changes to ensure effective deer management in Scotland that safeguards public interests and promotes the sustainable management of wild deer.

The SG may also refer specific topics to the Group that might be considered by the Group as part of its work.

Recommendations

The Group will set out its recommendations in its final report. The Group will also be able to make interim recommendations to the SG prior to its final report, if the Group considers that appropriate.

Final Report

The Group will submit its final report to the Cabinet Secretary before the end of April 2019. The SG will aim to publish the report within approximately four weeks of receiving it.

The report will be published as an electronic document on the SG website. The design of the report will be agreed between the Group and SG prior to submission.

The SG will aim to give an initial formal response to the Group's recommendations before the Scottish Parliament's summer recess in 2019.

¹ *Scottish Parliament, Written Answer S5W-10023, 29 June 2017.*

² *Sustainable deer management as defined in the statutory Code of Practice on Deer Management (SNH, 2011)*

Term

The term of the Group will end once it has submitted its final report to the Cabinet Secretary, subject to the Chair and one or more members of the Group appearing before the ECCLR Committee after publication of the report, if requested by the Committee.

Membership

The Group will have 4 members, each of whom will have experience relevant to the Group's remit. They will be appointed by the Cabinet Secretary and be members of the Group in a personal capacity. One member will be appointed as the Group's Chair and another as its Special Adviser. The Group will also have an External Adviser, who will be appointed in a personal capacity for their particular expertise in deer management.

**Natural Resources Division
Scottish Government
September 2017**

ANNEX 2

Deer Working Group Members and Advisers

Members

Simon Pepper OBE (Chair) (*died September 2018*)

Simon had a longstanding interest in deer management. He was the Director of WWF Scotland for 20 years to 2005 and subsequently held public appointments with the Scottish Government, Forestry Commission, Deer Commission for Scotland and Scottish Natural Heritage.

Andrew Barbour (*Acting Chair from September 2018*)

Andrew is a farmer and forester working on his family owned and run property in Highland Perthshire. He has worked on deer management in woodland and open hill settings and is a former Deer Commissioner for Scotland. He chaired the SNH Panel reporting on the use of authorisations in deer management.

Dr Jayne Glass

Jayne is a Research Fellow and Lecturer in the Rural Policy Centre at Scotland's Rural College (SRUC) and Honorary Lecturer at the University of Edinburgh. The focus of her work is sustainable rural land use and effective participatory decision-making for environmental management.

Special Adviser

Robin Callander (*until 30th November 2019*)

Robin is an experienced land manager and rural policy adviser. He has been involved in deer management for over 30 years and is a former Deer Commissioner for Scotland. He has worked as an independent Special Adviser for Committees in both the UK and Scottish Parliaments, as well as other public interest committees

External Advisers

Richard Cooke (*until 6th September 2019*)

Richard is a qualified chartered surveyor and has been General Manager for Dalhousie Estates in Angus since 1989. He is the current Chair of the Association of Deer Management Groups and was also Chair of the Lowland Deer Network Scotland. He is a former Deer Commissioner for Scotland.

Malcolm Combe

Malcolm was a solicitor in private practice until 2011 and was a senior lecturer in the School of Law at the University of Aberdeen while advising the Group. He moved to the University of Strathclyde in December 2019. He has written and lectured widely on Scots property law and rural law more generally. He was an Adviser to the Scottish Government appointed Land Reform Review Group.

ANNEX 3

List of legislation related to the management of wild deer in Scotland: 1948-2018

This list includes the two principal Deer (Scotland) Acts (1959, 1996), the main amending Acts and the most directly relevant secondary legislation or statutory instruments (in italics) during the last 60 years.

- 1948 Agriculture (Scotland) Act 1948 (sections re. deer repealed)
the provisions in ss.39-54 and in particular ss.43-47, were precursor to 1959 Act
- 1959 Deer (Scotland) Act 1959** (repealed)
established RDC and main elements of current statutory framework
- 1966 The Deer (Close Seasons) Order 1966 (repealed)
introduced seasons for first time for roe, sika and fallow deer
- 1967 Deer (Amendment) (Scotland) Act 1967 (repealed)
amended s.15 (Entry on land) and s.33 (Exemption of certain acts) of 1959 Act
- 1968 Sale of Venison (Scotland) Act 1968 (repealed)
concerning the registration by local authorities of dealers in venison and related matters
- 1982 Deer (Amendment) (Scotland) Act 1982 (repealed)
added sika, red/sika hybrids, roe, fallow deer to RDC responsibilities and other changes
- 1984 The Deer (Close Seasons) (Scotland) Order 1984 (repealed)
replaced 1966 Order and included red/sika hybrids for the first time
- 1984 The Licensing of Venison Dealers (Prescribed form, etc.)(Scotland) Order 1984
set out the form of the records to be kept by venison dealers
- 1985 The Deer (Firearms etc.) (Scotland) Order 1985
specified firearms and ammunition for first time under s.23A of 1959 Act
- 1989 The Tuberculosis (Deer) Order 1989 (application to Scotland revoked)
made the notification of tuberculosis in deer compulsory under Animal Health Act 1981
- 1989 The Movement of Animals (Records) (Amendment) Order 1989
added deer to list of species for which a record needed to be kept
- 1996 Deer (Amendment) (Scotland) Act 1996 (repealed)
passed and repealed within 1996, the Act was the precursor to the 1996 Act
- 1996 Deer (Scotland) Act 1996**
replaced RDC with DCS, added nat. heritage & public safety, and other amendments
- 1999 The Wildlife and Countryside Act 1981 (Variation of Schedule 9) Order 1999
added sika hybrids, and also all cervids in respect to Outer Hebrides and some islands
- 2006 The Electronic Communications (Scotland) Order 2006
insertions in ss.15, 16, 26, 34, 37 and 40 of 1996 Act to allow electronic communication

- 2007 Crofting Reform etc. Act 2007
amendments to s.26 (Right of Occupier in respect of...) of 1996 Act
- 2010 Public Services Reform (Scotland) Act 2010
replaced the DCS with SNH in the 1996 Act
- 2011 Wildlife and Natural Environment (Scotland) Act 2011
extensive amendments as annotated on 1996 Act
- 2011 The Deer (Close Seasons) (Scotland) Order 2011
replaced the 1984 Order (specifying red deer seasons by Order for the first time)
- 2015 The Tuberculosis in Specified Animals (Scotland) Order 2015
replaced application of Tuberculosis (Deer) Order 1989 in Scotland
- 2016 Land Reform (Scotland) Act 2016
extensive amendments as annotated on 1996 Act
- 2016 Criminal Justice (Scotland) Act 2016
repeal of s.28 (Power of Arrest) of 1996 Act (on 25.1.18)
- 2017 The Crown Estate Transfer Scheme 2017
amendments to s.44 (Application to Crown) of 1996 Act

ANNEX 4

Deer (Scotland) Act 1996 – Table of Contents

Introductory Text

Part I Scottish Natural Heritage's deer functions

1. The Deer Commission for Scotland.
2. Advice and annual reports to Secretary of State.
3. Power of SNH to facilitate exercise of functions.
4. Appointment of panels.

Part II Conservation, control and sustainable management of deer

Close seasons

5. Close seasons.

Code of practice on deer management

- 5A. Code of practice on deer management.
- 5B. Review of compliance with code of practice on deer management.

Deer management plans, control agreements and control schemes

6. Control areas.
- 6A. Deer management plans.
7. Control agreements.
8. Control schemes.
9. Recovery of expenses incurred in fulfilment of control scheme.

Emergency measures

10. Emergency measures to prevent damage by deer.
11. Application of section 10 in relation to the natural heritage.

Control agreements, control schemes and emergency measures: supplementary provisions

12. Power of Commission to provide services and equipment and to make certain payments.
13. Offences in relation to Part II.
14. Limitation of criminal liability.
15. Power to enter on land.
16. Service of notices.

Part III Offences in relation to deer*Unlawful killing, taking and injuring of deer*

17. Unlawful killing, taking and injuring of deer.

Register of persons competent to shoot deer

- 17A. Register of persons competent to shoot deer.
- 17B. Review of competence etc. by SNH.

Other offences and attempts to commit offences

18. Taking or killing at night.
19. Use of vehicles to drive deer.
20. Other offences connected with moving vehicles.
21. Firearms and ammunition.
22. Offences committed by more than one person.
23. Illegal possession of deer.
24. Attempts to commit offences.

Exemption for certain acts

25. Action intended to prevent suffering.
26. Right of occupier in respect of deer causing serious damage to crops etc. on certain ground.

Part IV Enforcement, licensing of venison dealing and miscellaneous provisions*Enforcement*

27. Powers of search and seizure.
28. Power of arrest.
29. Offences by bodies corporate.
- 29A. Offences by Scottish partnerships etc.
30. Power of court on trial for one offence to convict of another.
31. Powers of court on conviction for offences.
32. Disposal of deer liable to forfeiture.

Licensing of dealing in venison

33. Licences to deal in venison.
34. Records kept by venison dealers.
35. Reciprocal arrangements.
36. Offences in connection with venison dealing.

Further powers of SNH

37. Restrictions on granting of certain authorisations.
38. Limitation on requirement to obtain game licence.
39. Deer killed under the authority of SNH.
40. Power of Commission to require return of number of deer killed.
- 40A. Power of SNH to require return of number of deer planned to be killed.

Miscellaneous and general provisions

41. Savings for certain rights.
42. Information to be supplied to owner of certain land.
43. Application of Act to farmed deer.
44. Application of Act to the Crown.
45. Interpretation.
46. Financial provisions.
47. Orders, regulations etc.
48. Short title, consequential amendments, repeals, extent and commencement.

SCHEDULES

SCHEDULE 1 - Deer Commission for Scotland: supplementary provisions.

SCHEDULE 2 - Provisions as to control schemes.

SCHEDULE 3 – Penalties.

SCHEDULE 4 – Consequential amendments.

SCHEDULE 5 – Repeals.

SCHEDULE 6 - Transitional, transitory and saving provisions.

ANNEX 5

Summary of Amendments to the Deer (Scotland) Act 1996 in 2011 and 2015

Wildlife and Natural Environment (Scotland) Act 2011 - Part 3 Deer

26. Deer management etc.
amended ss.1 (re. interests), 3 (re. advice), 4(1) (re. panel size)+18(2)(a) (re. public safety)
27. Deer management code of practice
added s.5A requiring SNH to produce a Code of Practice
28. Control agreements and control schemes etc.
amended ss.7, 8, 10, 11 + Sch.2, added 7(1)(ia),10(ia), deleted 'serious' + other changes
29. Deer: close seasons etc.
amended ss.5, 26 and 37 re. occupiers needing out of season authorisation; deleted 'serious'
30. Register of persons competent to shoot deer etc.
added s.17A enabling a register by Order and s.17B review of competence if no register
31. Action intended to prevent suffering
in s.25, added (za) 'a deer which is starving and which has no reasonable chance...'
32. Offences by bodies corporate, Scottish partnerships etc. under the 1996 Act
minor amendments to s.29 and added s.29A Offences by Scottish Partnerships etc.

Land Reform (Scotland) Act 2016 - Part 8 Deer management

78. Functions of deer panels
amended s.4 by adding the three sub-sections (7)-(9)
79. Review of compliance with code of practice on deer management
added s.5B requiring SNH to review compliance with the Code of Practice every three years
80. Deer management plans
added s.6A enabling SNH to require the production of a deer management plan
81. Power to require return on number of deer planned to be killed
added s.40A enabling SNH to require a cull return of the planned number of deer to be killed
82. Increase in penalty for failure to comply with control scheme
in Schedule 3, replaced a level 4 fine on the standard scale (i.e. max £2,500) with £40,000

ANNEX 6

Deer (Scotland) Act 1996 - sequential list of recommended amendments

The tables below link recommendations from the numbered list in Section 30 of the Report to the relevant sections of the Deer (Scotland) Act 1996 and to the secondary legislation under the Act. The tables are only for ease of reference and do not include more general recommendations related to the Act, for example, recommendations numbers 12 and 93.

Deer (Scotland) Act 1996	Recommendation Numbers
Section 1	1, 3
Section 2	82
Section 4	1, 83, 96
Section 5	9
Section 5B	78
Section 6A	32, 61, 62
Section 7	32, 70, 71
Section 8	70, 71, 72
Section 10	13, 66, 67, 68, 69
Section 11	66
Section 12	1
Section 15	63, 64, 65
Section 17A	15
Section 18	10
Section 21	1
Section 33	21
Section 34	20, 21
Section 35	21
Section 36	21
Section 37	11, 13
Section 40	1, 22, 57
Section 40A	60
Section 41	11
Section 43	24
Section 47	1
Schedule 2	1, 73, 74

Secondary legislation under the Deer (Scotland) Act 1996	Recommendation Numbers
The Licensing of Venison Dealers (Prescribed Forms etc.) (Scotland) Order 1984	19
The Deer (Firearms etc.) (Scotland) Order 1985	4, 5, 7
The Deer (Close Seasons) (Scotland) Order 2011	8

ANNEX 7

Notes on some Notifiable Diseases affecting wild deer

Bovine Tuberculosis (TB)

While primarily a cattle disease, TB is found in deer, is endemic and zoonotic, with affected humans developing a TB very similar to the normal type. It can be passed between most mammals. Deer are generally considered to be 'spill-over hosts', meaning that they are unlikely to sustain the infection within their own population in the absence of infected cattle or other wildlife. However, they do have the potential to transmit disease to other susceptible co-located species, including cattle and also to humans with close contact. The view that deer appear to pose only a small risk of spreading TB to cattle is questioned by some academic studies, with fallow showing 2.6 – 6.5% prevalence, muntjac 1.0 - 14.4% , red 0.1 – 3.5% and roe 0.4 – 1.9% . In contrast, badgers show 9.7 – 12.2% prevalence and foxes 2.0 – 4.7%. Red and fallow deer in particular may play a 'potentially substantial' role in maintaining infection levels in an area, particularly if densities are high.³ The Tuberculosis in Specified Animals (Scotland) Order 2015 revoked all previous legislation for TB in non-bovine species and introduced a regime of TB controls covering deer and other susceptible species.

Foot and Mouth

The last outbreak in the UK was in 2007. Deer are classed as 'susceptible' and are therefore under movement and carcass restrictions during an outbreak. Some cases of the disease in deer were reported in the press during the 2001 outbreak but this evidence is disputed. The disease can be fatal in roe and muntjac, with other species acting as reservoirs for unknown periods of time. Laboratory tests for the virus are undeveloped for the disease in deer, with cattle and sheep testing procedures being used with an unknown efficacy of detection, which may have contributed to the uncertainty about the occurrence in deer during past outbreaks.

Chronic Wasting Disease (CWD)

This is an exotic disease, which is not transmissible to humans. It is a transmissible spongiform encephalopathy (TSE), similar to scrapie. This disease has not been identified in Scotland, nor is there any evidence to date of TSE in deer in the UK. However, it has been reported in Norway in reindeer and moose (2016) and is widespread in USA. If it was to become established in the wild deer population in the UK, it would have major consequences for deer populations. A leaflet has been produced by Scottish Natural Heritage in partnership with the Scottish Government and other members of a CWD Expert Working Group, which is aimed at raising awareness of the disease.⁴

Warble fly

Flies of the genus *Hypoderma* are widespread through the northern hemisphere. Two species cause disease in cattle (*H. bovis* and *H. lineatum*). The resulting disease caused by these species ('Warbles') is a notifiable disease in Scotland only. Deer are susceptible to both these species. Another species, *H. diana*, continues to affect deer throughout the UK. Warbles was widespread prior to the 1980s and was finally eradicated in 1990, having been made notifiable in 1982. The main legislation on warble fly is the Warble Fly (Scotland) Order 1982. A related species, *H. tarandi*, is found in the boreal zone where zoonosis has been reported. This latter species has also been found in red deer in Norway, where reindeer are the normal host. If warble fly is reported in Scotland, the actions identified in the contingency plan for exotic notifiable diseases will be followed.⁵ Another parasitic fly that is a member of the same family as warble flies, the nasal bot fly, can affect deer and while harmless, can cause them significant irritation.

Bluetongue

This is an insect-borne viral disease that affects all ruminants, including deer, but most severely sheep. It cannot be spread directly between animals and relies on the midge as a vector for transmission. The disease does not affect humans and there are no public health or food safety implications. While not present in Scotland, an outbreak occurred in Dumfries in 2017 as a result of imported cattle. The significance of deer as a reservoir species is unknown, although this is thought to be significant in continental Europe.

Epizootic haemorrhagic disease

A similar viral disease to bluetongue, principally affecting deer but not yet recorded in UK. It is associated with lower latitudes than Scotland's and has not yet been recorded in Europe. It is present in the USA, Africa, Asia and Australasia.

³ Bovine Tuberculosis Workshop, 'TB Wildlife Reservoirs', University of Glasgow, 9-10 May 2013.

⁴ SNH, 'Chronic Wasting Disease of Deer' leaflet, 2017.

⁵ Scottish Government (2017). Exotic Animal Disease Contingency Framework Plan, Version 5.

ANNEX 8

Comparison of cull returns and venison dealer returns for red deer 1973-2009

Year	Cull returns for red deer	Venison dealer returns for red deer	Difference between cull returns and venison returns	% difference of cull returns from venison returns
1973	24,273	24,782	-509	-2
1974	25,225	26,842	-1,617	-6
1975	28,674	29,138	-464	-1
1976	31,777	30,293	1,484	+4
1977	36,667	40,149	-3,482	-9
1978	35,447	39,694	-4,247	-12
1979	34,127	38,125	-3,998	-12
1980	31,165	35,085	-3,920	-13
1981	33,688	37,788	-4,100	-12
1982	35,445	38,131	-2,686	-8
1983	37,566	39,469	-1,903	-5
1984	32,609	31,329	1,280	+4
1985	34,790	35,572	-782	-2
1986	36,705	37,500	-795	-2
1987	37,619	35,784	1,835	+5
1988	41,184	39,784	1,400	+3
1989	45,324	46,409	-1,085	-2
1990	47,041	45,385	1,656	+4
1991	-	-	-	-
1992	-	-	-	-
1993	-	-	-	-
1994	-	-	-	-
1995	57,575	48,711	8,864	+15
1996	-	-	-	-
1997	53,950	52,157	1,793	+3
1998	59,894	51,353	8,541	+14
1999	71,536	61,687	9,849	+14
2000	70,962	62,070	8,892	+13
2001	66,931	54,449	12,449	+19
2002	67,282	58,649	8,633	+13
2003	57,363	46,404	10,959	+19
2004	61,957	42,224	18,733	+30
2005	68,610	53,741	14,869	+22
2006	63,611	39,552	24,059	+38
2007	62,563	46,364	16,199	+26
2008	62,414	39,837	22,577	+36
2009	61,458	41,961	19,497	+32

Sources: RDC Annual Reports, 1973-89, in Callander & MacKenzie (1991); RDC Annual Reports 1990 and 1995; 1997-2009 in M. Daniels 'Estimate of number of deer shot that do not go through game dealers' (DCS, 2007) and 'Scottish Venison: An Industry Review' (2010).

ANNEX 9

Scottish Natural Heritage Cull Return Form (2016-17)



SCOTTISH NATURAL HERITAGE ANNUAL CULL RETURN - 1st April 2016 to 31st March 2017

PROPERTY: _____ CODE: _____ CONTACT: _____

ALL DEER CULLED ON PROPERTY	RED			SIKA			ROE			FALLOW		
	Stag	Hind	Calf	Stag	Hind	Calf	Buck	Doe	Kid	Buck	Doe	Kid
Seasons	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Woodland												
Agriculture												
Open Range												

Please can you also indicate the number of carcasses you have observed due to natural mortality on the property identified between 1st October 2016 and 31st March 2017.

RED			SIKA			ROE			FALLOW		
Stag	Hind	Calf	Stag	Hind	Calf	Buck	Doe	Kid	Buck	Doe	Kid

Can you please indicate if you have a need to control female deer (over 12 months old) in the months of April or September by circling the appropriate options.

FEMALE DEER			
April		September	
Y	N	Y	N

Signature of Owner/Owner's Representative..... Date.....

Please return this form within 36 days of receipt

The information that you supply in this return is subject to the provisions of the Freedom of Information (Scotland) Act 2002 (FOISA), the Data Protection act 1998 (DPA) and the Environmental Information (Scotland) Regulations 2004 (EIRs). We will use this information to further the sustainable, collaborative, management of deer in Scotland and, as such we may share the relevant data, including historical data, with other organisation's for legitimate purposes and when required to do so. This is in accordance with the Data Protection Act 1998 and will meet our legal obligations under the access to information legislation, FOISA or the EIR's.



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ANNEX 10

Long Term Visions for Wild Deer in Scotland from 2000, 2008 and 2014

'Wild Deer in Scotland - A long term vision' (DCS, 2000)

The vision adopted by the Deer Commission for Scotland for the place of wild deer in Scotland in 15-20 years is that:

Species & Distribution

- Scotland will have the same four species of wild deer as at present (roe, red, sika and fallow). No significant colonisation by muntjac will have occurred.
- Roe deer will still be distributed throughout mainland Scotland.
- The expansion in the range of red deer will have largely ended. A growing proportion of the overall red deer population will live in woodlands or use woodlands for much of the year. The genetic integrity and viability of island refuge populations of red deer will have been maintained.
- Sika will not have spread throughout mainland Scotland and they will generally be restricted to woodland populations and excluded so far as possible from the open range.
- There will have been little, if any, expansion in the range of the localised populations of fallow deer and in some cases, a reduction.
- Deer will occupy land of a higher ecological value than at present. The process of improvement will be ongoing.

Populations & Management

- Deer populations will be managed locally so that their management is fully integrated with all local land uses and land use objectives.
- Deer management will be planned and decided locally on the basis of sound knowledge of all the factors involved and a thorough collaborative process involving those responsible for land management in co-operation with local communities and all other relevant interests.
- The management of local deer populations will ensure high standards of deer welfare and public safety, and play a constructive role in the long term stewardship of natural habitats.
- Local deer management will continue to deliver and will be further developing its positive contributions to the rural economy. Involvement with deer management will be seen as an attractive and worthwhile occupation associated with high standards of skills and employment practice.
- Overall, wild deer will be viewed as a valued asset that is managed on a sustainable basis to produce a wide range of economic, social and environmental benefits both locally and in the wider public interest.

Scotland's Wild Deer: A National Approach (DCS, 2008)**In 20 years' time:**

1. There will be widespread understanding and achievement of 'sustainable deer management' – the conservation, control and use of all species of deer so as to contribute to:

A high quality, robust and adaptable environment, by

- valuing populations of wild deer as part of Scotland's natural heritage;
- minimising any adverse impacts of wild deer on Scotland's ecosystems and landscapes.

Sustainable economic development, by

- careful use of wild deer as a resource, contributing to successful rural businesses and communities;
- developing the skills, knowledge and employment opportunities of those involved in deer management;
- minimising any adverse impacts of wild deer and their management on other land uses.

Social well-being, by

- safeguarding public health and reducing safety risks associated with wild deer;
- facilitating the observation and understanding of wild deer by the public;
- promoting the enjoyment of wild venison as a high quality food product;
- integrating management of wild deer, access and recreation to enhance experiences and opportunities for all.

2. Effective mechanisms will be in place to:

- **assess the management interventions required to achieve the best combination of these outcomes in any area at a given time; and**
- **ensure that these interventions are carried out effectively, in good time and in accordance with best practice.**

Scotland's Wild Deer: A National Approach – Including 2015-2020 priorities (SNH, 2014)

We manage wild deer to achieve the best combination of benefits for the economy, environment, people and communities for now and for future generations.

By 2030:

There will be widespread understanding and achievement of sustainable deer management.

- Deer will be valued as part of Scotland's natural heritage, in balance with their habitats and will contribute to a **high quality, robust and adaptable environment**;
- Deer will be a resource for diverse **sustainable economic development** with adverse impacts on other land being minimised;
- Deer management will promote **social well-being** through enjoyment of the outdoors and healthy lifestyles.

Wild deer will be managed in an inclusive way with knowledge used to underpin all decisions.

ANNEX 11

Wild Deer: A National Approach - Indicators and Trends (2016)

The summary table of WDNA indicators and trends is taken from SNH (2016), Scotland's Wild Deer: A National Approach, Update on Deer Indicators, DSG/2016/05/02, revised 19/07/16.

INDICATOR	STATUS	TRENDS	COMMENTS
WDNA Priority: Collaborative & effective deer management planning & implementation			
1. The number of DMGs implementing an effective DMP as set out in the DMG self-assessment	Data being processed through the DMG self-assessment		See section on DMG self-assessment for more information.
2. The number of DMGs assessed as functioning effectively against the DMG Benchmark	✓	↑	
3. The percentage of people responding to the Scottish Nature Omnibus who have concerns about deer	✓	↓	The number of people with concerns about deer has decreased.
WDNA Challenge: Healthy ecosystems			
4. The number of deer species in the wild in Scotland (and their distribution)	✓	↔	The number of species of wild deer in Scotland has remained at 4. No additional non-native deer species have been officially recorded.
5. Percentage of designated features where the herbivore targets included in Site Condition Monitoring are being met	~	↔	Although the indicator is stable there is a small year on year increase in the percentage of herbivore targets included in Site Condition Monitoring being met.
6. Percentage of designated woodlands where the herbivore targets included in Site Condition Monitoring are being met	~	↔	Although the indicator is stable there is a small year on year increase in the percentage of herbivore targets included in Site Condition Monitoring being met.
7. Percentage of native woodlands that are in satisfactory condition	Unknown/ uncertain	Unknown/ uncertain	Baseline data See section on woodland impacts for further details.
WDNA Challenge: Economic and community development			
8. Number of wildlife crime offences relating to deer recorded by Police Scotland	~	↔	The number of recorded deer offences rose to a peak in 2011/12 and then fell back to its original 2009/10 level in 2013/14.
9. Number of FTE in employment in the deer sector	X	↓	The number of FTE in employment in the deer sector decreased between 2006 and 2014.

INDICATOR	STATUS	TRENDS	COMMENTS
10. Value of deer stalking to the Scottish Economy	✓	↑	The value of deer stalking increased between 2006 to 2014.
11. Number of deer related road traffic accidents	X	↑	The number of Deer Vehicle Collisions (DVC) has increased since 2008. This could be due to increases in traffic and/or number of deer.
WDNA Challenge: Training and deer welfare			
12 a) Number of people achieving a deer related qualification (National Certificate – Gamekeeping)	X	↓	The number of people achieving National Certificates in Gamekeeping each year has decreased since 2009.
12 b) Number of people achieving a deer related qualification (Higher National Certificate – Gamekeeping)	~	↓	The number of people achieving HNCs in Gamekeeping each year has shown a slight decrease since 2009.
12 c) Number of people achieving a deer related qualification (Deer Stalking Certificate 1)	✓	↑	The number of people with DSC1 has increased year on year since 2008.
13. Number of reported wild deer welfare incidents	X	↑	The number of wild deer welfare incidents has increased since 2010.

Key

Indicator	
✓	Assessed as positive
~	Assessed as stable
X	Assessed as negative

Trend	
↑	Trend is increasing
↔	Trend is remaining the same
↓	Trend is decreasing



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