Wild deer are a huge asset to Scotland – they play an important part in our rural economy, they are an integral part of Scotland’s biodiversity, and they provide us with healthy food and recreational opportunities. This new approach to wild deer management sets out ways to make the most of this asset, managing deer for the benefit of the nation, and at the same time ensuring that deer welfare is safeguarded.

Managing wild deer is challenging because of the need to balance the environmental, economic and deer welfare objectives of the Scottish nation with the objectives that private landowners have for forestry, agriculture, sporting and other forms of land use. This new approach seeks to address these challenges directly by setting out principles to guide and balance different interests, and bringing about a more inclusive approach to the management of all the deer species of Scotland.

I am aware that in itself this Strategy is only a starting point. Many interests have a role to play to achieve this vision of sustainable deer management in 20 years time. Successful delivery will rely on the collaborative effort of Government and the deer sector, as well as contributions from wider society. The collaboration between agencies and deer organisations in agreeing this new approach is an important first step, and I look forward to receiving regular reports on progress.

Michael Russell, MSP
Minister for Environment
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1: introduction

1.1 A Strategy for Wild Deer

Wild deer are an important element of Scotland’s biodiversity and ecology, an economic asset and valued as an iconic species. Present in woodlands, hill areas and increasingly on the edge of urban areas across much of Scotland, the different species of wild deer affect people and interact with land-uses in many different ways, creating both costs and benefits. The management of these species to meet a range of objectives requires careful planning at all levels – from strategic to operational.

At the strategic level the Deer Commission for Scotland (DCS) published the first long-term vision for wild deer in 2000, setting out a vision for the next 15-20 years. In 2001, DCS published a long-term strategy, setting out how it would work towards achieving the vision.

This new strategy, including a revised vision, replaces the 2000 and 2001 publications. Much has changed since the first vision and strategy. In particular, the public policy context has evolved significantly and deer management on the ground has also evolved. Recognising the need to approach deer management as an integral part of wider land-use, this strategy is the Scottish Government’s strategy for wild deer, setting out a common direction and framework for all relevant parts of government in relation to wild deer. It addresses all species of wild deer in Scotland and is relevant to all types of land ownership and deer management.

The strategy seeks to set out a vision, and the objectives and actions that are needed so that the management of wild deer benefits the environment, economy and people of Scotland.
1.2 Scotland’s Wild Deer Species:

**Red deer**

Britain’s largest native land mammal, red deer, are distributed across much of northern Scotland, Argyll, the Trossachs and Galloway. The red deer is perhaps the deer species most commonly thought of by the public, who recently voted it Scotland’s most iconic species.

The red deer range has expanded only slowly in the last decade. Changes in numbers and distribution may occur in response to changes in climate and the distribution of other livestock in upland areas in response to agricultural policy.

In order to conserve some red deer populations free from sika genes the Government has set up red deer refugia on some west coast islands.

Management challenges include the impacts of grazing, trampling and browsing by red deer, together with other grazers, which can have a significant influence on the condition of habitats and shaping of the landscape. They also pose a risk to road safety in some areas.

**Sika**

Asian in origin, sika were originally an ornamental species which escaped from deer parks during the late 19th and early 20th centuries and have now become established on mainland Scotland, occupying more than 40% of the red deer range. They are genetically closely related to red deer and hybrids occur.

Given the adaptability of sika, they have steadily expanded their range and are likely to continue to do so. This is likely to result in continued hybridisation with red deer.

Management challenges include their impacts on woodland where, even at relatively low densities, they can cause damage to trees of all age classes and ‘bark strip’ large areas of woodland. They also pose a risk to road safety in some areas.
Roe deer
Roe deer are the most widely distributed species of deer in Scotland, occurring in every 10 square kilometre with the exception of some islands.

Roe deer are increasing in many areas, often encouraged by the spread of suitable woodland habitats.

Increasingly, roe deer are found in and around urban areas, presenting new management challenges in relation to road safety, impacts on green spaces, ticks, and the welfare of the deer themselves.

Other management challenges include the effects of roe deer in woodlands and on agricultural land, where they can cause damage to trees and crops. The majority of reported road accidents concerning deer involve roe deer.

Fallow deer
Introduced from the Mediterranean to England, possibly during the 11th or 12th centuries, fallow deer have the most limited range of all four wild deer species in Scotland.

They occur in isolated populations in several areas, mostly around areas in which they were originally kept in captivity. Their range has not expanded significantly in recent times.

Management challenges include localised road safety issues and impacts on agriculture and woodland through grazing and browsing.

Further information on Scotland’s wild deer populations and their management is available at Annex 1 and on the Deer Commission for Scotland website – www.dcs.gov.uk
1.3 Developing the Strategy

Development of the strategy was led by the Deer Commission for Scotland, with knowledge and expertise to inform development of the strategy provided through two key groups:


- **An Advisory Group** comprising representatives from organisations with an interest in deer management.

A public consultation on the draft strategy took place between November 2007 and February 2008. A full report of the consultation and how it influenced the final strategy, as well as further background material for the strategy, the Strategic Environmental Assessment, and the Socio-Economic Assessment are available on the Deer Commission for Scotland website – [www.dcs.gov.uk](http://www.dcs.gov.uk)
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.
3 : key issues to address

To achieve the vision, a number of key issues need to be addressed. These are summarised in the table below. Addressing these key issues is the starting point for the set of objectives identified in Section 5.

<table>
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<th>Outcome</th>
<th>Issues to address</th>
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| **A high quality, robust and adaptable environment** | • Whilst the majority of features on sites designated for nature conservation reasons are in favourable condition, a further reduction in grazing and trampling by wild deer and other grazers is needed on a number of sites to help deliver government targets, and maintain them in favourable condition thereafter;  
• Climate change is likely to affect the distribution and level of deer populations. Adaptation to, and mitigation of, climate change is also likely to require deer management to contribute to wider land-use objectives;  
• Consistently identifying and including biodiversity and landscape objectives beyond designated sites in deer management planning and integrating these objectives with socio-economic objectives. |
| **Sustainable economic development** | • Adding value to the wild deer resource through activities and products;  
• Capturing the value of wild deer as an iconic asset to Scotland’s tourism economy;  
• Minimising the economic losses to other land-use objectives and costs attributable to wild deer;  
• Ensuring a strong skill base, ongoing professional development and sufficient capacity to manage wild deer. |
| **Social well-being** | • Safeguarding health and minimising safety risks for those working in deer management and the wider public;  
• Managing the impacts of wild deer in and around communities;  
• Broadening participation and enjoyment associated with wild deer;  
• Developing appreciation and understanding between those involved in deer management and those providing and participating in access and recreational activities to reduce conflict and enhance opportunities and experiences. |
| **Cross-cutting issues** | • Reconciling diversity in land ownership and management motivations and objectives, and addressing conflict that may arise between them;  
• Determining what sustainable deer management means in practice at a local level;  
• Ensuring high levels of deer welfare;  
• Increasing levels of knowledge and understanding among all involved in deer management and the wider public;  
• Using robust science and data to underpin management decisions. |
There is a wide range of objectives for which deer are managed, some of which will conflict in some places and at some times. These guiding principles set out ways of working which allow potential differences to be addressed. They set out a level of good practice which should guide all those involved in deer management planning and implementation.

Wild deer should be managed throughout their range in a way that –

1. integrates deer management and other land-use objectives.
   This means:
   • Identifying and articulating the range of integrated land-use objectives;
   • Building on the opportunities, and addressing the challenges, which deer represent in achieving other land-use objectives;
     – Recognising that the appropriate balance of the three outcomes (environment, sustainable economics, social well-being) will vary depending on local circumstances;
   • Engaging other land-use interests in resolving potential differences;
   • Encouraging mutual understanding, trust and collaboration between interest groups.

2. uses collaboration to achieve the management objectives.
   This means:
   • Identifying who else is needed to assist in achieving management objectives;
   • Sharing effort and resources to achieve objectives in the most effective way.
3. uses a geographical scale and timescale best suited to achieving the management objectives.

This means:

- Identifying the geographical scale at which objectives are most likely to be achieved, which may be different from individual landholding or even deer management group units;
- Identifying the appropriate timescales in which to achieve and integrate different objectives, bearing in mind that some timescales have a statutory force, eg the condition of features on sites designated for nature conservation reasons.

4. engages and communicates with all relevant interests.

This means:

- Identifying stakeholders relevant to local circumstances, including community interests;
- Actively considering the objectives of stakeholders;
- Providing opportunities for those stakeholders to inform management planning and be informed about deer management.

5. uses sound science and the best available evidence.

This means:

- Applying research and monitoring to inform management;
- Sharing and disseminating information among all relevant interests to develop a transparent and collective resource of information and understanding, including Best Practice Guides.

6. promotes deer welfare.

This means:

- Applying best practice in deer management at all times to ensure the welfare of deer is safeguarded.
This section sets out a series of objectives that together are needed to achieve the vision. The objectives are grouped under the following three broad outcomes derived from the vision, although in practice there are significant interactions across and between the outcomes and objectives.

Management of all species of wild deer will contribute to:

- **A high quality, robust and adaptable environment**
- **Sustainable economic development**
- **Social well-being**

### 5.1 Contributing to a high quality, robust and adaptable environment

The following objectives seek to ensure that Scotland continues to have populations of wild deer valued and managed as an integral part of its biodiversity.

#### a) Safeguard the welfare of all species of wild deer.

Deer welfare will be considered in all management interventions. It is important to engage the public in developing understanding of wild deer, their management and the associated responsibilities in relation to welfare.

#### b) Minimise further spread of non-native deer species in Scotland.

Sika are already established across many parts of mainland Scotland and are likely to continue to spread. Whilst some land managers view sika as an economic opportunity, most see them as a management challenge due to the significant damage that they cause in some areas to forestry. Hybridisation with red deer is known to occur in some areas. Where there is local agreement, their spread and the damage that they cause will be minimised through active management, particularly through the control of pioneering stags. In order to conserve some red deer populations as free from sika genes as possible, islands off the west coast of Scotland have been designated as red deer refugia and these will be monitored for presence of sika genes and their status maintained through statutory orders to prohibit introductions.

Fallow deer are well established in some parts of Scotland but their range is not currently expanding significantly. This situation might alter with changing climatic conditions or introductions and it is important to monitor the range and condition of populations of fallow deer.

Based on experience in England, the potential impacts of other non-native deer species on biodiversity and other land-uses in Scotland, in particular muntjac, would be strongly negative. It is important to take action to prevent the release and subsequent establishment of other non-native deer species in Scotland.

#### c) Secure the favourable condition of features in designated sites.

Identify where management of wild deer can contribute to securing the favourable condition of Scotland’s sites designated for nature conservation and landscape reasons and take action to establish and maintain appropriate levels of grazing. The management of wild deer
along with other grazers has a key role to play in meeting government targets.

d) Conserve and enhance biodiversity in the wider countryside.
Biodiversity objectives will be considered as an integral part of deer management planning across the wider countryside and deer will be considered as an integral element of biodiversity. The appropriate levels of grazing by deer (alongside livestock and other grazers) will be considered as part of the management of Scotland’s ecosystems. Opportunities will be taken to enhance the positive effects of deer on biodiversity and, where they contribute to the loss of biodiversity, action will be taken to reduce their impacts.

e) Maintain the integrity of natural processes.
Wild deer will be managed as a part of ecosystems, with their impacts on and role within water bodies and catchments, soil structure and habitats taken into consideration in management planning.

f) Help tackle and adapt to the effects of climate change.
The contribution of carbon-rich soils and vegetation cover, including woodland, to the storage and sequestration of carbon is significant. The grazing, trampling and browsing effects of wild deer (alongside livestock and other grazers) will be managed to maintain an appropriate vegetation cover. It is important to develop an improved understanding of the robustness of habitats, including soils and water courses, in the face of changing land-use, grazing and climate change.

g) Conserve and enhance the cultural and historic environment.
Deer management will contribute to the conservation of the cultural and historic environment, including landscape character, through managing grazing and trampling impacts.

5.2 Contributing to sustainable economic development
The following objectives seek to ensure that deer management contributes to successful rural businesses and the socio-economic development of communities.

a) Increase the economic opportunities associated with wild deer.
There is a range of opportunities to add value to deer-related products and activities, and to broaden the economic benefits associated with the deer resource. These include developing the markets for stalking, photography and wildlife watching and the development and appropriate branding of venison products. More broadly the value of wild deer to Scotland’s tourism industry will be better articulated and used.
b) Minimise economic costs attributable to wild deer.  
Although a potential asset in their own right, wild deer can cause significant economic loss to other land-use activities, particularly agriculture and forestry. Wild deer will be managed as part of an integrated approach to land use in order to minimise the negative impacts on other economic activities.

c) Develop the market and supply chain for venison.  
The value of venison as a high quality food will be promoted, and marketing initiatives will be supported by development of the supply chain, seeking to secure a supply of consistent and high quality venison.

d) Contribute to the social and economic development of communities.  
Deer management provides jobs in remote rural areas and those involved often make a significant contribution to the skills, knowledge and capacity of communities. The employment opportunities associated with deer will be further developed, both through positive management and through associated activities such as tourism. Engagement in deer management planning by local communities will be encouraged.

e) Ensure the skills and knowledge required to manage deer as an integral part of Scotland’s natural resources.  
Training and professional development is vital. Links between education and training providers and land managers will be further developed and a culture of continuing professional development will be promoted for all those involved in deer management.

5.3 Contributing to social well-being

The following objectives seek to contribute to social well-being by safeguarding health and safety associated with deer management, facilitating enjoyment of wild deer and the outdoors by the people of Scotland and managing their impacts on communities.

a) Increase participation in management and enjoyment of wild deer.  
Opportunities will be developed to broaden participation and enjoyment of wild deer, through encouraging new entrants into deer management and stalking, and enabling people to find out more about wild deer, enjoy seeing them and ultimately understand more about deer and their management.

b) Contribute to a safe and healthy environment for people.  
Road safety risks associated with deer populations and increasing traffic volumes and speed in both rural and urban environments require co-ordinated action between local communities, transport and deer management interests.
In common with all land-based activities, there are a range of health and safety risks associated with deer management which will be addressed through high standards of training, awareness and physical provision. Human disease risks, including those associated with ticks, will require monitoring and co-ordinated approaches to management and public awareness.

c) Manage the impacts of wild deer in and around communities. Wild deer are present in and around many rural communities and urban areas. The road safety risks and impacts of deer on green spaces, including public areas and gardens, will be actively managed through co-operation between community and land management interests.

d) Integrate opportunities for outdoor recreation. The opportunities for outdoor recreation will be encouraged. Responsible outdoor access will be encouraged through provision of accurate and up-to-date information on stalking activity and provision of information such as where wild deer are likely to be seen.

e) Promote venison as a healthy food. The benefits of venison as part of ‘healthy eating’ strategies will be promoted, supported by work on its supply and economic value.
This section sets out a series of key actions identified to make progress towards the objectives set out in Section 5. These actions are not exhaustive and should not preclude other action that will help contribute to the objectives. They should, however, be a focus for collective effort and resources in making progress towards the long-term vision for wild deer. These actions build on the significant work already carried out by all those involved in deer management.

The actions listed here are not ranked in any order of priority.

6.1 Contributing to a high quality, robust and adaptable environment

6.1.1 Conserve and enhance biodiversity in the wider countryside

- Develop effective ways to address and integrate deer management within an ecosystem-scale approach to landscape and biodiversity;
- Integrate biodiversity and ecosystem objectives and data into deer management planning;
- Contribute to the conservation of habitats and species on the UK and Scottish biodiversity action plan lists;
- Seek Orders under the Destructive Imported Animals Act to prohibit introductions, and to require actions which restrict the spread of sika to refugia islands and the movement of muntjac deer into Scotland;
- Minimise the further spread of sika on the mainland through active local management.
6.1.2 Achieve the favourable condition of Scotland’s most important nature conservation sites

- Actively manage grazing, browsing and trampling impacts of deer and other grazers on Sites of Special Scientific Interest and Natura Sites to achieve favourable condition;
- Integrate management action with other land-uses to achieve favourable condition;
- Seek the most effective management solutions (using the appropriate management area and timescale) to achieve long-term benefits for these designated sites.

6.1.3 Contribute to climate change mitigation and adaptation

- Protect woodlands, bogs and carbon-rich soils in order to enhance carbon storage;
- Facilitate establishment and maintenance of habitat networks in order to help biodiversity adapt to climate change;
- Research the impacts of climate change on wild deer and their habitats, and the effect that wild deer can have on mitigating the effects of climate change;
- Improve understanding of the robustness of habitats, including soils and water courses, in the face of changing land use, grazing by wild deer, and climate change.

6.2 Contributing to sustainable economic development

6.2.1 Enhance the economic benefits derived from wild deer

- Retain existing markets and develop new markets associated with wild deer, including stalking, wildlife watching, and other activities and deer products;
- Identify the most effective means to brand and market venison and venison products as a quality, sustainable food including identifying barriers and related issues;
- Seek to capture fairly the economic value of wild deer among those involved in deer management and utilise assistance available from public agencies;
- Seek to include venison as a healthy food within the Scottish Government’s Food Strategy.

6.2.2 Minimise costs to land-use objectives and rural development

- Actively manage wild deer to minimise losses to woodland establishment and growth, agriculture and other land-uses;
- Develop further the capacity to manage deer in woodlands cost effectively;
- Implement the Joint Agency Fencing Guidelines.
6.3 Contributing to social well-being

6.3.1 Increase opportunities and quality of experience for observing and enjoying wild deer

- Promote opportunities for effective engagement with local communities and businesses;
- Provide information to local communities and tourism businesses on wild deer and their management;
- Promote greater consideration between those exercising the rights to responsible access and those undertaking deer management;
- Seek effective collaboration between interests at a local level to engage local communities and businesses in deer management and as a forum to resolve differences.

6.3.2 Safeguard health and safety

- Demonstrate competence through high standards in food safety, operator safety and public safety;
- Raise awareness of road safety issues with regard to deer to reduce the risks of road traffic accidents involving wild deer;
- Co-ordinate action to minimise deer-related human disease risks.

6.4 Cross-cutting actions contributing to all objectives

6.4.1 Develop effective frameworks for sustainable deer management

- Promote widespread understanding of sustainable deer management in practice;
- Understand at a local level the costs and benefits delivered by deer management;
- Provide all relevant interests, including communities, with opportunities to engage in deer management planning;
- Develop understanding of the relative importance of different objectives to different stakeholders and establish mechanisms to address conflicts and enable the appropriate balance of the three outcomes (environment, sustainable economics and social well-being);
- Learn from other international models for managing wild deer in considering future approaches;
- Build on existing collaborative deer management arrangements at a local level to integrate deer management with other land-uses, interests and strategies;
- Promote effective local collaborative deer management arrangements where they do not currently exist;
- Review the role of Deer Management Groups and Deer Management Plans, including their role to deliver public objectives and engage with local community interests.
6.4.2 Safeguard the welfare of wild deer

- Agree a common understanding of deer welfare;
- Articulate the welfare responsibility associated with managing wild deer;
- Demonstrate competence though high standards in safeguarding welfare;
- Consider deer welfare in all management planning and activities affecting wild deer;
- Monitor disease risks and the effects of climate change on deer welfare.

6.4.3 Use sound science to underpin management decisions

- Establish a series of long-term monitoring sites to provide data to inform future management, including a better understanding of the impact of land use change and climate change on deer populations;
- Collate data from deer managers and processors more effectively and share data among relevant interests to be used in deer management;
- Empower land managers to use sound science to underpin the deer management planning process;
- Improve knowledge of, and develop guidance on, optimal grazing regimes and managing livestock in the presence of wild deer;
- Refine methods of measuring impacts of wild deer on habitats;
- Gather data on the socio-economic impacts on local communities and businesses associated with the management of wild deer.

6.4.4 Raise awareness and understanding of wild deer and their management

- Develop a greater understanding of public perceptions of wild deer;
- Encourage public agencies and authorities to increase public understanding of the need to manage wild deer, how they are managed, and to celebrate achievements in effective collaborative deer management;
- Engage with stakeholders to identify particular issues and solutions associated with roe deer including increasing awareness of management needs in and around urban areas;
- Increase awareness of the interactions of all species of wild deer with access and recreation in urban, woodland and open land settings;
- Use Best Practice Guides and Events as a means of raising awareness of deer management;
- Develop the potential of Deer Management Groups and other local collaborative deer management groups to help raise awareness of deer management and facilitate the participation and engagement of local communities.
7 : implementation

7.1 Implementation plans
Management of wild deer across Scotland is carried out by a wide range of organisations, businesses and individuals across the private, voluntary, public and community sectors – all of whom are vital in realising the long-term vision. Implementation of the strategy will rely on further development of the collaboration already established among and between land management interests and the Scottish Government.

The Deer Commission for Scotland (and any successor bodies) will co-ordinate action to implement this strategy through a series of implementation plans. The first implementation plan will be produced in 2009 with input and advice from stakeholders across the deer sector. Each Implementation plan will span three years and will identify detailed actions. These plans will appear on the DCS website.

7.2 Key tools for implementation
A range of tools are available to assist with implementing the strategy. These tools currently include:

Communication and engagement – Effective communication and engagement with relevant interests is fundamental to the successful delivery of the strategy. All those involved (public agencies, private, community and voluntary sectors) have a role to play in ensuring continued improvements in knowledge and understanding.

Advice and guidance – There is a range of existing advice and guidance to help guide the detailed implementation of this strategy, including the Best Practice Guides.

Financial support – Deer management is supported from a range of public and private sources. During 2007-13, most public financial support for deer management will be delivered through the Scottish Rural Development Programme.

Regulation – Government has powers of regulation to act as a backstop in safeguarding the public interest in deer management. Many of these are set out in the Deer (Scotland) Act 1996.

Publicly owned land – the Scottish Government owns large tracts of land in Scotland including the national forest estate, managed by Forestry Commission Scotland, as well as significant holdings managed by Scottish Natural Heritage. These should serve as exemplars of sustainable management, including appropriate deer management and research.
8 : monitoring, reporting and reviewing

8.1 Monitoring

Diagram: Strategy Implementation, Monitoring and Review Process

There are two strands to monitoring the strategy:

a) monitoring the delivery – the extent to which the objectives and actions of the strategy are achieved. Detailed actions will be set through successive implementation plans and reported annually;

b) monitoring the impacts – the effects that implementing the strategy has on the environment, the economy and society. A collection of indicators will build a picture of trends and progress and will be reported annually.
8.2 Indicators
The Deer Commission for Scotland will lead the development of a set of indicators to measure and report on progress against the vision. These indicators will reflect the trends in the state of the environment, economy and society as they relate to wild deer. They will be identified in parallel to developing the first implementation plan and where possible will link to existing national monitoring frameworks and sources of information to avoid duplication and ensure maximum value. The monitoring frameworks will be updated and amended as required following any annual or five-year review.

8.3 Review
The Strategy will be reviewed on a rolling five-year timetable, with the first review being due in 2014. It is anticipated that the vision and objectives should provide a relatively stable long-term context that will need to be updated every five years in response to changes in context. By contrast, the key actions are likely to be reviewed more fully at each five year review. In some cases, the issue may have been addressed and no longer be a priority, or other priorities may have emerged during the review period which need to be addressed in the next five-year period.

Where appropriate, if there are likely to be any significant changes made to the Strategy during the five-yearly review, these changes will undergo further Socio-Economic Assessment and Strategic Environmental Assessment (as required under the Environmental Assessment (Scotland) Act 2005).

8.4 Annual Reporting
The Deer Commission for Scotland (and any successor bodies) will lead the production of an annual progress report in delivering the strategy. This will be posted on their website.

While in some cases, changes to the state of the environment, economy or society are actively sought, there may also be unforeseen effects, and changes resulting from external influences which may require adjustments to deer management policy as a result. Implementation of the strategy will be responsive to these potential changes and any changes will be reported in the annual progress report.
glossary

**Appropriate Vegetation Cover:** the particular species type and species diversity which is required in any given area in order to achieve agreed habitat and management objectives.

**Biodiversity:** the variety of all living organisms.

**Browsing:** feeding on the woody parts of plants.

**Carbon Sequestration:** provision of absorption and long-term storage of carbon, e.g. in trees, vegetation and soils.

**Designated Nature Conservation Sites:** sites which have been designated by Government to protect their ‘special features’. These special features represent the most important parts of natural heritage.

**Ecology:** inter-relationships between animals, plants, land, water and air in an area.

**Ecosystems:** the non-living and living aspects of an environment functioning together.

**Favourable Condition:** objectives are set for each ‘special feature’. These objectives describe broad targets, e.g. population size (for species) or area covered by a particular plant species (for habitats) which need to be met for the feature to be defined as in ‘favourable condition’.

**Habitat Networks:** habitats which are linked together to create a wider, more sustainable and interconnected pattern of habitats.

**Landscape Character:** a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.

**Natura Sites:** protected areas established to protect habitats or species under the EU’s Birds Directive (Special Protection Areas or SPAs) and the Habitats Directive (Special Areas of Conservation or SACs).

**Natural Processes:** the inherent dynamics which characterise particular habitats (e.g. the role of colonising species within the process of woodland establishment).

**Range:** the limits of the geographical distribution of a species or group of deer, e.g. the open hill range of red deer.

**Refugia:** used in the context of ‘red deer refugia’, this refers to specific Scottish islands on which the aim is to maintain and protect the genetic integrity of the resident red deer populations through preventing the colonisation of other non-resident deer. Red deer refugia were established under the Wildlife and Countryside Act 1981 (variation of Schedule 9) Order 1999. This Act makes it an offence to release sika or their hybrids or deer of the Cervus genus on to specified Scottish islands.

**Sites of Special Scientific Interest (SSSIs):** a national suite of nature conservation sites protected as examples of the UK’s flora, fauna, geological or physiographical features.

**Social Well-being:** people’s quality of life. This could include access to social facilities and services, community cohesion, physical and mental well-being.

**Special Features:** specific flora or fauna which, because of their national or international importance, have led to a site being designated for their protection.
**Stakeholders:** individuals or their representative organisations that have responsibilities towards, and an interest in, the success of an activity or organisation.

**Strategic Environmental Assessment:** a statutory process to ensure that the significant potential environmental effects of plans, polices and programmes are identified, assessed, consulted on, mitigated and monitored.

**Sustainable Development:** development that enables all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations.

**Trampling:** to stand heavily on something causing damage.
Wild Deer in Scotland

There are four species of wild deer established in Scotland: roe deer, red deer, sika and fallow deer. A fifth species, muntjac, has been reported but has not been confirmed as being resident in Scotland. Roe deer and red deer are native species; they colonised Scotland naturally after the end of the last glaciation around 10,000 years ago and wild populations have survived in Scotland since then. Sika and fallow deer have both become established following introduction.

Red deer are the largest native land mammal in the UK and are found predominantly in the open hill range characteristic of much of upland Scotland, also using woodlands and plantations, particularly for shelter. Although red deer may be the most recognisable species to many, roe deer are in fact the most widely distributed species across Scotland. Roe deer are mainly woodland dwelling and are found throughout mainland Scotland, including around urban centres.
Sika and fallow deer have become established as a result of deliberate releases and escapes from deer parks. Fallow deer were introduced from the Mediterranean to England, possibly during the 11th or 12th centuries. They occur in Scotland mostly around areas in which they were originally kept in captivity. Sika deer were introduced from Japan into UK deer parks in the 19th century and the earliest records of their escape from captivity date from the 1920s. They are more widespread than fallow, with populations spreading in the south, west and north of Scotland.

With no natural predators in Scotland (since the extinction of the wolf), wild deer populations tend to increase and are therefore managed by man, principally because of their interaction with other land-use and management objectives as a result of grazing, browsing and trampling.

The total population of wild deer in Scotland is not known, but counts are made at a more local scale in order that numbers can be managed according to the impact that they have. In practice this means that deer numbers need to be reduced in some areas in order to reduce the impacts of grazing, trampling or browsing, to allow management objectives to be achieved. At a national scale it is clear that roe, red and sika populations have risen significantly in recent decades. Indications suggest that this trend is continuing; the numbers and distribution of roe deer are expanding, red deer populations are increasing in their distribution and sika deer continue to expand their range. Fallow deer numbers appear to remain steady in isolated populations.

The legal framework for wild deer management derives from Scots law, under which deer are regarded as a common resource in that they belong to no-one until they are killed or captured. The right to shoot deer generally goes with the ownership or occupation of land. This is a different model from many other European countries and reflects the wider structure of rights over land and natural resources in Scotland. Deer management is carried out by a range of land managers on estates, farms and crofts and through recreational stalking.

These deer management activities, including stalking, currently support several thousand jobs in Scotland. Taking into account related goods and services, this activity makes a significant contribution to the rural economy, often in areas where employment and economic opportunity is relatively limited. A survey carried out by the Association of Deer Management Groups and published in 2006 suggested that deer management in Scotland supports the equivalent of 2,520 full-time jobs each year. The annual value of this to the Scottish economy, taking into account related goods and services, was estimated as £105 million for 2005.

**Managing Wild Deer**

Wild deer are managed to meet a wide range of objectives. These include a range of what are often termed ‘public objectives’ (collectively the ‘public interest’) and a range of what are often termed ‘private objectives’, referring to the legitimate aims of individual land managers, organisations or businesses which are of value to themselves.
In practice, most enterprises pursue both ‘private’ and ‘public’ objectives together in their management objectives. Both within and between the ‘public’ and ‘private’ labels there are likely to be some objectives that are potentially conflicting and some which are complementary.

The interaction of wild deer with other land-use or management objectives is one of the key drivers of their management. For example, wild deer can have a significant impact on woodland establishment, agricultural production, habitat condition and road safety. In order to help deliver objectives such as woodland establishment or biodiversity conservation, the numbers of wild deer are therefore managed either at an individual or population level in relation to the impacts they have. There are guidelines, for example the Joint Agency Fencing Guidelines, which can aid these decision-making processes.

Management objectives are part of a complex decision-making process and will respond to changes in the wider environmental, economic and social context. The key factors likely to affect the objectives of deer management in the future include:

**Economic circumstances** – as deer management is often only one aspect of multi-faceted rural businesses, broader economic trends will affect land management decisions, both those directly relating to deer and those relating to other land-uses with which deer interact. Levels of personal wealth, patterns of land ownership, market trends and the fiscal regime will all have an effect on investment in land management and in determining management objectives.

**Legislative/policy change** – changes in legislation, either specifically to wild deer legislation or broader legislation that affects the way natural resources are managed, for example further land or agricultural reform, nature conservation legislation or new approaches to developing a low carbon economy, may occur. For example, the implementation of key current strategies and policies, in particular the Scottish Forest Strategy (target of achieving 25% woodland cover), reforms to the Common Agricultural Policy and a Landscape Policy Framework, being developed by SNH, are also likely to have an impact on future deer management. Government is likely to continually seek to adjust the balance between objectives in pursuing the public interest. Changes may also be introduced as a result of further legislation in an EU context.

**Climate change** – changes in the climate and resulting landscape change may well affect the behaviour and health of deer populations over time, and, therefore, their management. Responses to climate change are also likely to lead to more focus on ecosystem and landscape scale management of natural resources and affect the broader rural economy of which deer management is part, as carbon efficiency becomes a driver.

**Tourism markets** – deer management in many places is closely linked with sport tourism, and increasingly broad tourism opportunities associated with the deer resource are being identified, with red deer in particular increasingly recognised as an iconic species. This aspect of deer management, as it relates to all species, is dependent on both Scottish and foreign markets which are in turn influenced by broader world tourism trends and competition, and is vulnerable to the changes that affect the tourism economy over time.
Other land-use change – deer management is closely linked with other land-uses including forestry and upland farming. As the objectives and management approaches of other land-uses change, so there is likely to be an effect on wild deer and their management. For example, the potential removal of sheep from some upland areas may lead to changes in the grazing patterns and numbers of wild deer in some places, to which deer management will need to respond. A multi-use approach to forestry, including woodland expansion for climate adaptation and mitigation, and the use of land for biomass production will also influence deer management.

Public perceptions – the public perceptions of the value of deer and natural habitats, the need to manage a wild population, animal welfare expectations and attitudes to shooting and land management are all likely to have a significant effect on how the resource is managed, both directly and through the influence of public perception on public policy.

Disease – disease could be a significant factor of change for deer management in the future. For example the outbreaks of Foot and Mouth in 2007 limited the size of stalking parties and restricted the movement of deer carcasses from larders. The implications of disease on wild deer populations and the role that wild deer may have in the spread of diseases to other animals is likely to have an impact on the way that deer are managed in the future.