



Scope of this policy

1. This policy covers the Scottish Wildlife Trust's views on the management of all species of wild deer in Scotland. This policy supports Scottish Wildlife Trust's broader vision for a network of healthy and resilient ecosystems¹ across Scotland where wild deer can be part of flourishing, ecologically functional living landscapes.

Policy Statement

Overview

2. Scottish Wildlife Trust believes that whilst light grazing by wild deer is generally beneficial to natural heritage, uncontrolled and excessive grazing by deer is currently one of the most significant threats to the health, natural functioning and connectivity of ecosystems in Scotland, particularly in parts of the uplands. Scottish Wildlife Trust therefore supports a range of deer management measures which aim to stabilise deer numbers at ecologically acceptable and sustainable levels which would be well below current levels in many areas.

Overgrazing

3. To allow regeneration and maintenance of plant diversity, research has shown that deer densities should be no greater than about 4-7 deer km⁻².² However, even 4 km⁻² may be too high in some areas and target deer populations should be linked to clearly defined ecological outcomes, as the same deer density in different areas or catchments may have substantially different impacts on natural heritage.
4. Whilst this policy is concerned with the effects of overgrazing by deer, the Scottish Wildlife Trust acknowledges that in some instances sheep can have a greater impact than deer on upland habitats in Scotland³. This is partly due to sheep having a reduced range compared to deer and also because they are generally herded in areas that are convenient for land managers. However, a reduction in sheep- stocking densities with the subsequent risk of abandonment is becoming a concern⁴ in some areas of Scotland. Where sheep numbers are reduced, deer can move in with negative impacts, particularly on heather-dominated habitats. In the future this may well place a greater imperative on the control of deer numbers⁵.
5. Scottish Wildlife Trust believes that wild deer (often in conjunction with sheep), have a significant influence on the vegetation dynamics, composition and physical structure of many of

¹ Scottish Wildlife Trust. (2011). *Our Nature Our Future, Taking Action 2012 to 2017*.

² GILL, R. M. A. (1992). *A review of damage by mammals in north temperate forests.3. Impact on trees and forests*. Forestry 65, Pages 363–388.

³ Welch, D., Hartley, S.E. & Buse, A. (1996) Grazing Pressure is the Principal Influence on British Upland Vegetation. ITE Annual Report 1995–96, p.27.

⁴ Thomson, S., Morgan-Davies, C., Holland, J.P., Waterhouse, T. (2011) *Response From the Hills: Business as Usual or A Turning point? An update of "Retreat from the Hills"*. Edinburgh: SAC Rural Policy Centre.

⁵ Albon, S.D., Brewer, M.J., O'Brien, S., Nolan, A.J. & Cope, D. (2007) Quantifying the grazing impacts associated with different herbivores on rangelands. *Journal of Applied Ecology*, 44:1176–1187.

Scotland's priority habitat types⁶. Scottish Wildlife Trust believes the most significant of these are:

- suppression of tree and shrub regeneration⁷
 - eradication of tall herb communities⁸
 - conversion of moss heath and dwarf-shrub heath towards grassland composition⁹
 - locally severe physical poaching of mires, fens and flushes¹⁰
 - loss of species' diversity in the ground layer of many habitats including woodland and species rich grassland^{11,12}
 - increased rates of soil erosion, particularly on blanket mires¹³
 - damage to trees from browsing and bark stripping¹³
 - loss of woodland grouse through deer fence strikes¹⁴
 - habitat compartmentalisation and fragmentation resulting from the erection of deer enclosures¹⁵
 - Increased runoff rates, decreased water quality and increased downstream flooding risk¹³
6. As well as improving Scotland's priority habitats Scottish Wildlife Trust believes that a reduction in deer could help restore ecosystem health, function and resilience in the face of climate change¹⁰. For example reducing trampling can help maintain the quality of blanket bog and prevent it from becoming a net source of carbon emissions.¹⁶ An improvement in ecosystem services would benefit Scotland's economy and help in the mitigation of and adaptation to, climate change. As an example, a reduction in deer numbers in the uplands would allow scrub and woodland to regenerate, which increases the ability of this part of the catchment to slow down water movement thereby reducing the likelihood of flooding downstream¹³.

Deer numbers

7. Scottish Wildlife Trust notes that red deer populations in Scotland have stayed at the same high level for a considerable time – around 300 000¹⁷. As official comprehensive annual deer counts are no longer carried out the exact numbers of deer are unknown.
8. Scottish Wildlife Trust believes that annual counts should resume. Availability of good scientific data is paramount to making informed management decisions and funding, particularly through the Scottish Rural Development Programme, should be made available to support this. The Cairngorms and Speyside deer management region is a good example of an area where accurate deer counts have helped to set informed targets¹⁸.

⁶ See <http://incc.defra.gov.uk/page-5705> for a list of priority habitats in Scotland

⁷ Palmer, S.C.F., Hester, A.J., Elston, D.A., Gordon, I.J. & Hartley, S.E. (2003). *The perils of having tasty neighbours: Grazing impacts of large herbivores at vegetation boundaries*. *Ecology*, 84: 2877–2890.

⁸ Mitchell, B., Staines, B. W., Welch, D. (1977) *Ecology of red deer: a research review relevant to their management in Scotland*. Cambridge, Institute of Terrestrial Ecology.

⁹ Burt, T. P., Thompson, D. B., Warburton, J. (2002), *The British Uplands Dynamics of Change*. Joint Nature Conservation Committee. Peterborough. UK .

¹⁰ Scottish Natural Heritage (2010) *Managing Scotland's Deer: Our New Role*. SNH Battelby.

¹¹ GILL, R. M. A. (1992). *A review of damage by mammals in north temperate forests*.3. *Impact on trees and forests*. *Forestry* 65, 363–388.

¹² Cote, S D., Rooney, T P., Tremblay, J., Dussault, C., Waller, D M. (2004) *Ecological impacts of deer overabundance*. *Annual Review of Ecology, Evolution, and Systematics* 35:1, 113-147

¹³ Burt, T. P., Thompson, D. B., Warburton, J. (2002), *The British Uplands Dynamics of Change*. Joint Nature Conservation Committee. Peterborough. UK .

¹⁴ Baines, D. & Summers, R.W. (1997). *Assessment of bird collisions with deer fences in Scottish forests*. *J. Appl. Ecol.* 34: 941-948.

¹⁵ Scottish Executive., (2006). *The Scottish Forestry Strategy*. Forestry Commission Scotland. Silvan House. Edinburgh

¹⁶ Cummins, R., Donnelly, D., Nolan, A., Towers, W., Chapman, S., Grieve, I. and Birnie, R. (2011). *Peat erosion and the management of peatland habitats*. Available from http://www.snh.org.uk/pdfs/publications/commissioned_reports/410.pdf . Last accessed 21/08/2012

¹⁷ Hunt, J.F. (2003). *Impacts of Wild Deer in Scotland – How Fares the Public Interest?* Report for WWF Scotland and RSPB Scotland.

¹⁸ Scottish Natural Heritage. (2009). *Scotland's National Nature Reserves: The story of Invereshie and Inshriach NNR*.

9. Roe deer numbers have risen significantly and are likely to continue to rise unless there is a strong policy lead from the Scottish Government and its agencies to bring numbers down to ecologically acceptable levels.
10. Scottish Wildlife Trust is concerned about the impact that the spread of exotic deer and indigenous/exotic hybrids is having on biodiversity through herbivory and the physical alteration and destruction of habitats. The Trust is also concerned about the impacts on native deer populations through competition, predation and genetic pollution. Scottish Wildlife Trust supports timely, effective and practical actions to limit further spread in Scotland of Sika and also Muntjac deer¹⁹ and believes the keeping of Sika and Muntjac deer in enclosures should be prohibited because of the ease with which they can potentially escape.
11. Scottish Wildlife Trust believes that, historically, an important driver for the continued rise in wild deer populations is the absence of large predators. We support further research into the viability of large carnivore reintroductions into the Highlands, particularly the Eurasian lynx, as a cost effective management tool²⁰.

Deer control

12. The Deer Commission for Scotland and Scottish Natural Heritage (SNH) were merged in 2010. SNH now has the functions and powers set out within the Deer (Scotland) Act 1996 and part 3 of the act as amended by the Wildlife and Natural Environment (Scotland) Act 2011 (WANE Act)²¹. SNH has the duty to secure the conservation and sustainable management of deer in Scotland, and to keep their welfare under review. Sections 7, 8 and 9 of the Deer (Scotland) Act allow SNH to put in place control agreements and schemes and if necessary recover costs from the landowner. Scottish Wildlife Trust believes that these powers should be rigorously enforced to reduce deer numbers.
13. The Scottish Wildlife Trust believes SNH's Code of Practice on Deer Management should be placed on a statutory footing to help achieve sustainable deer management.
14. Scottish Wildlife Trust believes that the ecosystems approach²² should be fully embedded into Deer Management. Scottish Wildlife Trust advocates the use of geographic management units²³ that make sense ecologically, but are also practicable enough to enable landowners to work together effectively. Each Deer Management Plan should contain a programme of management together with *explicit ecological outcomes*.
15. Scottish Wildlife Trust believes that when Scotland moves towards a more sustainable model of deer management, in which deer numbers are reduced to ecologically acceptable levels in a given area the use of deer enclosures will become unnecessary. Currently we accept that in order to protect some natural heritage features, deer fencing may have to be used. If fencing is used, measures should be taken to mitigate the effects on the limitation of movement of other species.
16. Scottish Wildlife Trust does not support the winter feeding of deer. In most cases the need to supply supplementary feed suggests that the number of deer is above the carrying capacity of the area.

¹⁹ Anecdotal evidence suggests that Muntjac are moving into South West Scotland

²⁰ For more information refer to the Scottish Wildlife Trust's Reintroduction, translocation and introduction of species

²¹ For more information please refer to: Scottish Natural Heritage (2010) *Managing Scotland's Deer: Our New Role*. SNH Battelby.

²² Please refer to: Hughes, J & Brooks, S. (2009). *Living Landscapes: towards ecosystem based conservation in Scotland*. Scottish Wildlife Trust. Edinburgh and *Getting the best from our land - A land use strategy for Scotland -*

<http://www.scotland.gov.uk/Topics/Environment/Countryside/Landusestrategy>

²³ As advocated in SNH's Code of Practice on Deer Management.

17. Scottish Wildlife Trust supports a professional qualification for stalkers that tests understanding of ecology and other wider issues relating to deer management. Scottish Wildlife Trust supports the best practice guides produced by Scotland's deer sector, SNH and the Forestry Commission²⁴ to ensure the humane taking of deer and recommends these guides are kept under regular review.
18. There are several examples of deer management which have the goal of habitat restoration and allowing natural vegetation patterns to return. The deer control programme at Mar Lodge Estate has seen considerable advances in regeneration in some areas of the estate and a return to favourable condition of the open hill habitats²⁵.

Information on deer

19. Scottish Wildlife Trust accepts that the subject of deer management can be an emotive one and believes that, by making scientific evidence more readily available more people will recognise the need for co-ordinated, humane deer management.
20. Scottish Wildlife Trust believes that as deer are a public resource, information on deer management such as cull and count data should be publicly available.
21. Scottish Wildlife Trust supports continued funding for research into deer ecology, particularly relating to deer as vectors for tick borne disease and deer impacts on ecosystem health.

Socio-economic considerations

22. Scottish Wildlife Trust acknowledges that deer have an important socio-economic role to play in rural areas. We believe that reducing and maintaining deer numbers across much of Scotland could actually improve the quality and challenge of the stalking experience in what will become an increasingly more attractive, wildlife-rich landscape.
23. We believe there is scope to develop European approaches to deer stalking in some areas of Scotland which could open up hunting to a broader cross section of society. The Scandinavian or Nordic model is one example where deer control is open to all and where stalking is viewed as a sustainable way of using a living resource²⁶.
24. Scottish Wildlife Trust also supports the development of new revenue streams associated with deer including adding value to venison through innovative marketing and deer watching for tourists (commonly known as 'deer safaris').
25. Scottish Wildlife Trust believes that as deer are a public resource, public money should be used to help bring deer numbers down to achieve ecological outcomes that improve ecosystem health and function.

Scottish Wildlife Trust Reserves

26. As a commitment to the principles outlined in this Policy, Scottish Wildlife Trust will undertake the following measures, where deer management is a critical issues on reserves:

²⁴ For more information please refer to <http://www.bestpracticeguides.org.uk/Default.aspx>

²⁵ For more information please see: Mar Lodge Independent Review Panel. (2011). *Report for the Board of the National Trust for Scotland into the Management of Deer, Woodland and Moorland at Mar Lodge Estate*. National Trust for Scotland.

²⁶ Lecocq, Yves. (2003). *A European Perspective on Deer Management*. Federation of Associations for Hunting and Conservation of the European Union. English Nature Report 548.

- a. Scottish Wildlife Trust will promote the appreciation and enjoyment of deer by the public, and their use in education
- b. Scottish Wildlife Trust will endeavour to maintain deer populations at a level which promotes the natural functioning and health of the ecosystems of the reserve
- c. Scottish Wildlife Trust will adopt the ecosystems approach and work proactively with neighbouring landowners and local communities to deliver effective deer management at the landscape scale

Links to other Scottish Wildlife Trust policies

27. This policy should be read in conjunction with the following Scottish Wildlife Trust policies:

- Reintroduction, translocation and introduction of species
- Killing Wild Animals
- Forestry and Woodland
- Non-native invasive species
- Policy Futures 1: Living Landscapes
- Policy Futures 3: Climate Connections

Annex 1

Wild deer in Scotland

1. Native wild deer are an important part of the montane, moorland and woodland ecosystems of Scotland²⁷. Due to the hunting of wolves and lynx to extinction by humans, deer no longer have any natural predators and in many parts of the Scottish uplands red deer, in particular, are present at densities that impact negatively on habitat biodiversity. At high deer densities, ecosystems can be severely damaged²⁸ and this damage by deer can be exacerbated by the presence of other grazing wild and domestic herbivores such as hares, rabbits and sheep²⁹.
2. There are four species of deer in Scotland: native species are red deer (*Cervus elaphus*) and roe deer (*Capreolus capreolus*); introduced species are Sika (*Cervus nippon*) and fallow deer (*Dama dama*)³⁰.
3. Non-native deer are generally considered detrimental to land management interests and hybrids are a threat to the genetic purity of red deer²⁸. Under Scots law, wild deer are considered a common resource, belonging to no one until they are killed or captured. The right to shoot or live capture wild deer generally accompanies the ownership or occupation of the land³¹.
4. Red deer, Britain's largest native land mammal, is distributed across much of Scotland's Northern Highlands and has existed in Scotland for at least the last 12,000 years. However, red deer have expanded their range over the last 30 years.³²
5. Roe deer are the most widely distributed species of deer in Scotland³⁰. Given that they mostly occupy woodland habitats, assessing numbers is difficult. Estimates put the Scottish roe deer population at around 200,000-400,000 animals. As an elusive, solitary woodland animal, this species is particularly difficult to control³³. Grazing and browsing by roe deer can bring them into conflict with commercial foresters and garden owners near to woodland areas. Direct management is by sport stalking and culling. Indirect management is through fencing and individual tree guards.
6. Asian in origin, Sika were introduced as an ornamental species. Sika are present in significant parts of the red deer range. Sika and red deer are genetically closely related and this overlap of range has led to hybridisation amongst both deer species. Sika are both robust and elusive, and control is often difficult³⁴.
7. Fallow deer occur in isolated populations in several areas of Scotland. Numbers of fallow are not considered to exceed 8,000³⁵.
8. It is thought that Muntjac deer may also be present in Scotland, although very little formal data is available. Muntjac deer are known to be very destructive of woodland ground flora and once they become established in an area, eradication is very difficult. The main threat of them

²⁷ Scottish Natural Heritage. (2010). *Scotland's Deer*. Available from <http://www.snh.gov.uk/about-scotlands-nature/species/mammals/land-mammals/deer/>. Last accessed 7 August 2012.

²⁸ UK National Ecosystem Assessment (2011) *The UK National Ecosystem Assessment: Report*. Chapter 5 Mountains, Moorlands and Heaths. P144. (United Nations Environment Programme-World Conservation Monitoring Centre, Cambridge, UK).

²⁹ Welch, D., Hartley, S.E. & Buse, A. (1996) *Grazing Pressure is the Principle Influence on British Upland Vegetation*. ITE Annual Report 1995-96, p.27.

³⁰ For more detailed information on deer ecology refer to http://www.bestpracticeguides.org.uk/ecology_red.aspx

³¹ Scottish Natural Heritage (2010) *Managing Scotland's Deer: Our New Role*. SNH Battleby.

³² Scottish Natural Heritage. (2010). *Scotland's Deer*. Available from <http://www.snh.gov.uk/about-scotlands-nature/species/mammals/land-mammals/deer/>. Last accessed 7 August 2012.

³³ Harris, S., Morris, P., Wray, S. & Yalden, D.W. (1995). *A Review of British Mammals: Population Estimates and Conservation Status of British Mammals Other than Cetaceans*. Joint Nature Conservation Committee, Peterborough

³⁴ Scottish Government (2008) *Scotland's Wild Deer – A National Approach*. SNH Battleby

³⁵ Deer Commission Scotland. (2000). *Wild Deer in Scotland – A long term vision*. DCS, Knowsley, Inverness

gaining a foothold arises from the possibility of captive animals escaping. As this species is particularly adept at finding a way out of an enclosure³⁶, the only safeguard is to carefully regulate the keeping of this species.

Sporting estates

9. Privately owned sporting estates make up the majority of the land-use within the uplands and are traditionally valued in part by their annual sporting take of red deer. This often encourages the retention of deer populations above that which the land can support in ecological terms, in order to boost the capital value. Deer often provide an important source of income to estate owners, and some direct and indirect employment in remote areas. Income is derived from the sale of venison and the letting of stalking rights for sport or for trophies.³⁷ On some estates deer, in particular red deer stags, are provided with discretionary woodland shelter and supplementary feeding over some of the winter period. Mineral supplements may also be supplied to hinds prior to calving.

³⁶Chapman, N., Harris, S. and Stanford, A. (1994) *Reeves' Muntjac Muntiacus reevesi in Britain: their history, spread, habitat selection and the role of human intervention in accelerating their dispersal*. Mammal Review vol24, pages 113 - 160.

³⁷ UK National Ecosystem Assessment (2011) *The UK National Ecosystem Assessment: Report*. Chapter 5 Mountains, Moorlands and Heaths. P144. (United Nations Environment Programme-World Conservation Monitoring Centre, Cambridge, UK).