JOINT AGENCY STATEMENT & GUIDANCE ON DEER FENCING

adopted by

DCS, FCS, SNH, SEERAD
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1 Summary

This document seeks to promote best practice and assist both private individuals and public sector agencies in deciding whether to fund and/or permit deer fencing.

Deer fencing can serve a useful purpose for controlling deer, helping to achieve environmental objectives and preventing deer causing a public hazard.

- The full range of options for controlling deer should be considered taking into account effectiveness for purpose and possible impacts on public safety, deer welfare, biodiversity, landscape, cultural heritage and recreation.
- Where fencing is considered appropriate, fences should be designed to minimise their impact on these interests.
- Fencing should be seen as part of a wider programme of deer management and fences should not be left erected for longer than necessary .
- Anyone erecting a deer fence should consider the possible impacts on the wider deer range and particularly adjacent properties and local communities.
- Deer dependent on the fenced off area should be culled.
- Agency decisions on deer fencing will be guided by these principles.
- Approval or financial support for fencing will be dependent on adverse impacts being mitigated.

2 Introduction

In Scotland there is a history of using deer fencing as a tool to manage deer densities and movements. Deer fencing has been particularly successful in protecting public safety and in enabling significant habitat changes to be achieved within a relatively short time, enabling different land management objectives to co-exist in close proximity, whether within or between landholdings.

The purpose of a deer fence is to produce some form of benefit whether in terms of managing grazing or reducing the threat to public safety, benefits which might also be delivered through culling. The construction of a deer fence can, however, have unintentional impacts on other interests including deer welfare, public safety, biodiversity, landscape, cultural heritage and access .

This document seeks to promote best practice and assist both private individuals and public sector agencies in deciding whether to fund and/or permit deer fencing. It presents a policy statement on deer fencing and sets a process for identifying, assessing and mitigating the possible impacts on public interests which can be adversely affected by deer fences. This statement has been endorsed by SE Ministers and will be subject to review as appropriate.

Technical guidance is being prepared which will advise on the implementation of this policy.

3 Policy Statement

Deer fencing, when properly planned for, constructed and maintained, can be an effective way of controlling deer to allow different land-uses to co-exist in close proximity and to protect public safety.

Consideration must be given to the full range of options for achieving appropriate deer densities before deciding on whether or not to approve or financially support the use of deer fences. Decisions on whether to cull or fence should take account of objectives, costs and the pros and cons of each method. Where deer fencing is considered an appropriate approach, the process for identifying, assessing and mitigating any adverse effects, as set out in the following guidance, is to be followed. In circumstances, where it is not possible to satisfactorily mitigate adverse effects, approval or financial support should not be given. Otherwise, the final decision must be based on cost-effective long- term solutions, including the cost of fence removal. Deer dependent on the fenced off area should be culled.

In areas where fences will affect deer movements between land ownerships, the parties involved will need to reach agreement on the use of fencing or alternative methods. The basis of the collaboration should be that those who derive the benefit pay the costs.

Decision by all parties in regard to fencing proposals should be objective, rational and transparent and follow Best Practice Guidance.

4 Using the guidance

This guidance aims to assist with decisions over whether to approve and/or financially support the erection of deer fences in situations where fencing is considered more appropriate than culling for achieving required deer densities.

It sets out a process for identifying, assessing and mitigating the negative impacts deer fences can have on the following 5 areas of public interest.

- Public Safety (Section 5)
- Deer Welfare (Section 6)
- Biodiversity (Section 7)
- Landscape and cultural heritage (Section 8)
- Access (Section 9)

For each subject area 'high' negative impacts are identified and mitigation measures are suggested on how best to remove or reduce the high impact. Reference should be made to more detailed guidance (which, as at March 2004, the Agencies are working jointly to develop) on each of these areas to determine best practice. The principle to be followed is that deer fences should not be constructed in areas where, despite mitigation measures, they are likely to have 'high negative impacts' on public interests.

The assessment of the relative social, environmental and financial costs and benefits of appropriately designed fencing is necessary especially when public funds are involved. This guidance identifies the key variables that need to be taken into account.

- Socio economics (Section 10)

There may be circumstances where no public funds are involved but approvals are required in relation to Environmental Impact Assessment, planning permission or Appropriate Assessments (on *Natura* sites).

If fencing is planned in relation to forestry then the manager should approach FC Scotland at an early stage to ensure that the proposals are compatible with Grant Aid requirements, Forestry regulation and the possible need for EIAs.

4.1 Decision making

Using the guidance identify whether there are any 'high' impact implications associated with the proposed fence.

If there are 'high' negative impacts then explore methods of mitigation to reduce these following best practice, including specifications for different types of fencing (further guidance on fence design is under development as at March 2004), as appropriate.

Based on the design of a fence that has been 'mitigated' consider whether deer control or deer fencing is the most cost effective option. As fences must not remain erected for longer than necessary, this should include the costs of dismantling and removal.

Where the scale or nature of a fence is likely to affect local communities or interested parties, those communities or individuals should be consulted.

Account should be taken of social, environmental and financial implications, in particular where public funds are being used. If a fence is funded privately, provided all legal requirements have been met, then the owner may wish to adopt a solution which best suits his or her own needs, following best practice where appropriate.

5 Public Safety

5.1 Understanding the impact of a deer fence

Road traffic accidents (RTAs) involving deer directly or indirectly are a Public Safety issue as is the presence of deer on airfields. Collisions with the larger species, red deer in particular, can cause injury to the driver and motorcyclists are especially vulnerable to impact by any species. Drivers taking avoiding action, irrespective of the size of the deer, can endanger their own safety and that of other road users.

Fences can confuse deer that are accustomed to crossing a road, trapping them against the road and increasing the likelihood of a deer-vehicle encounter. Fences can also force many deer to cross a road in localised areas again increasing the likelihood of a deer-vehicle encounter.

While time of day, time of year and driver experience are factors in RTA's involving deer, risks to public/road safety and the severity of accidents increase in line with traffic volume and speed,. As a consequence, the assessment of any road safety risk associated with a new fence will need to take into account both the characteristics of the road being assessed and seasonal patterns of deer cross movement.

5.2 Establishing a baseline

On roads with a high or medium risk, an assessment of the current position is essential to allow the increased risk to public safety associated with fencing to be measured. Base-line information may need to be collected from the areas where a new fence is proposed. This could include:

- Time of year and day most deer cross road
- Location and number of deer deaths from vehicles
- Location and number of deer-related accidents
- Location and number of deer within 200m of the road at different times of year and day
- Road type, average speed, traffic volume and driver awareness
- Locations where herding species of deer (red, fallow and sika) cross at certain times of year to gain access to food and shelter.
- home ranges of deer that might straddle the road and where and when they cross

5.3 High negative impact issues

- Fences that channel/funnel deer to cross a road at locations of poor visibility, i.e. . at low radius bends, blind summits or adjacent to tall ground cover or other restrictions to visibility
- Parallel fences close to both sides of a road which create a corridor from which the deer have difficulty escaping.

- A fence on one side of the road running closely parallel to the road.
- Fences that are poorly maintained.

5.4 Mitigation required to reduce negative impacts

- Parallel fences close to both sides of a road must form part of a closed circuit system i.e. using a physical barrier such as a cattle grid on the road. In this scenario a commitment to regular inspection and maintenance of the fence will be required as any deer entry to the system will result in continuous deer-vehicle encounters until such time as an accident occurs or the deer is caught / culled.
- Fencing on one side of the road where deer are used to crossing may require those deer to be culled.
- Fencing must ensure that deer are not channelled/funnelled to cross roads where visibility is restricted by bends, crests, tall ground cover on and behind verges etc.
- Fences must be planned and constructed in such a way so as not to interfere with existing sight lines. Junction visibility splays and widened verges on horizontal curves are examples of engineering measures that provide adequate stopping sight distance in accordance with the speed of traffic using the route. Intrusion into these must be avoided. Further information on minimum available sight distance to the end of a new fence may be sought from DCS or the road authority. Any new fencing, which runs parallel to a road, will require a specific maintenance regime to be put in place to control the height of vegetation between the fence and the road edge to ensure adequate visibility on either side of road. The road authority should be consulted during planning.
- The approaches to all existing, new and planned future deer crossing points of roads must be equipped with warning signs complying with The Traffic Signs Regulations and General Directions

6 Deer Welfare

6.1 Understanding the negative impacts of a deer fence

Fences that prevent access to or enclose areas of ground that deer rely on for forage or shelter may increase the risk of winter mortality through starvation and exposure.

6.2 Establishing a baseline

Information on the numbers and movement of deer that rely on the area, from which they are to be excluded, is desirable. This knowledge includes both seasonal movement and response to different weather conditions to ensure that there is an understanding of when the area is of most importance to deer. Direct counts during critical periods combined with dung counts can be used to provide an estimate of the number of deer utilising the area. When fences are constructed , preventing deer from gaining access to areas that they rely on for forage and shelter, these assessments should be prepared by a party approved by DCS. Where the area being excluded is less than 50 ha, DCS involvement may not be required. DCS advice should be sought to clarify this.

Key information for establishing the baseline includes:

- Defining worst case scenarios
- Estimate of the number of deer using the area, to be fenced out of the deer range, taking account of seasonal usage.
- Comparison of the latest count information with historical data.

6.3 High impact issues

- Removing land from deer or restricting deer access without culling the deer that rely on the area during some part of the year for food and shelter.
- Culling 'additional' deer from the population without targeting those that rely on the area being fenced off.

6.4 Mitigation required to reduce impact

- Culling should follow Best Practice and target deer that rely on the area that is being removed.
- Providing access to alternative grazing and shelter, may reduce the level of compensatory cull required without compromising deer welfare. This approach will require detailed knowledge of deer movement and availability of alternative shelter.
- All mitigation should be accompanied by monitoring and responsive management action

7 Biodiversity

7.1 Understanding the negative impacts of a deer fence

Deer fencing can change grazing and trampling pressure (either increasing or decreasing) on areas either side of the fence. This is of particular concern when the biodiversity interests affected have been formally recognised at the international and national through:

- Special Areas of Conservation (SACs)
- Special Protection Areas (SPAs)
- Sites of Special Scientific Interest (SSSIs)
- Biodiversity Action Plans (BAPs) and Ramsar sites

The value of many sites is linked to an appropriate level of grazing and browsing. Increased grazing and trampling can cause loss of habitats and erosion while reduced grazing pressure can result in a build up of dead and decaying vegetation and increase tree regeneration to the detriment of other habitats. Deer fencing can be a cause of bird deaths due to collision.

7.2 Establishing a baseline

Deer population data and information relating to grazing and trampling pressure are essential in establishing a baseline of current impacts. These impacts should be assessed through determining both numbers and the movements of deer within the area, which if excluded, could increase deer densities out-with the proposed fence line.

Baseline data will need to be prepared by a party approved by DCS on both habitats within designated sites and species including woodland grouse likely to be affected as a result of the deer fence being erected.

7.3 High negative impact issues

- Fencing close to known woodland grouse lek sites
- Fencing in areas identified as core woodland grouse zones by Forestry Commission Scotland.
- Fencing that causes or is likely to cause damage to designated sites or other important habitats for example SAC, SPA, SSSIs and Biodiversity Action Plans (BAP) habitats through increased or decreased grazing or trampling pressure.

7.4 Mitigation required to reduce negative impacts

- Only in exceptional circumstances erect deer fencing within 1km of a lek site (eg overriding public interest – in these cases, fencing should be marked to prevent collisions)
- Deer fencing within core woodland grouse zones may be possible subject to careful sighting and appropriate specification. Such a proposal will need to draw on local information and expertise, including advice from the Capercaillie Project Officer, Forestry Commission Guidance Note 11 - Deer and Fencing, SNH, FC technical booklet on Specifications for Alternatives to Conventional Deer Fencing, RSPB and the Game Conservancy Trust.

- Deer displaced by fencing onto designated sites where they are likely to cause damage will need to be culled.
- A Deer Management Plan based on habitat targets for the designated site should be prepared in collaboration with neighbours as required.
- A licence may be required if fencing is likely to disturb other protected species such as otter, wildcat and badger.

8 Landscape and cultural heritage

8.1 Understanding the negative impact of a deer fence

Scotland's landscape wildland features and cultural heritage can be adversely affected by linear features and unnatural vegetation patches within fenced enclosures. The presence of particularly important landscapes will be indicated by designations such as:

- National Park,
- National Scenic Area (NSA)
- Scheduled Ancient Monuments (SAMs)
- Historic landscapes listed in the (non-statutory) Inventory of Historic Gardens and Designed Landscapes
- Area of Great Landscape Value (AGLV) and other regional and local landscape designations incorporated in statutory development plans

Deer fencing can detract from the visual quality of the countryside, especially when fences run parallel to roadsides and recreational routes or visually impact on skylines.

Deer fencing can detract for the sense of wildness that can be experienced in Scotland especially in remote locations with few human artefacts.

Deer fencing can impact on the historic environment by cutting across existing boundaries, and archaeological sites as well as affecting relict archaeological landscapes, designed landscapes and the landscape setting of individual features.

8.2 Establishing a baseline

SNH **Landscape Character Assessments** highlight the sensitivity of particular landscapes to the introduction of new features such as deer fences and the associated vegetation change. These effects will be of most significance where these landscape qualities are strongly developed, and in locations that are highly visible from major roads, popular hills or other viewpoints.

The **National Monuments Record of Scotland** (NMRS) and the relevant local authority Sites and Monuments Record (SMR), identifies cultural heritage features known to be present in the area to be fenced and define the limits of any likely archaeological sensitivity. HS can provide information on **scheduled (protected) sites**.

The **Historic Land-use Assessment (HLA)** identifies historic land-use patterns and field boundaries, and major relict historic landscapes which may be affected by the erection of deer fences and associated grazing patterns. **The Inventory of Historic Gardens and Designed Landscapes** identifies important landscapes and key landscape features which may also be affected.

8.3 High impact issues

- Areas of high scenic value with high visitor appeal.

- Fencing that detracts from the landscape that brings visitors to the area for example frequently visited hills, popular low-level walks, viewpoints and wild land.
- Fencing that detracts from the integrity or setting of cultural heritage, scheduled ancient monuments, other archaeological sites or historic landscape features.

8.4 Mitigation required to reduce impact

- Use fencing materials and select fence lines which take account of landscape impacts. SNH area staff should be contacted to discuss mitigation options.
- Fences should be located so as to have minimal landscape or cultural heritage impacts by relating closely to landforms and existing landscape features and avoiding archaeological sites and linear features.

- Where fencing might affect the site or setting of a Scheduled Ancient Monument, HS must be consulted in advance. HS and SNH should be consulted on potential impacts within Inventory Landscapes.

The *Forestry Commission's Forest Landscape Design Guidelines* (FC 1994) and *Lowland Landscape Design Guidelines* (1991) and SNH's Landscape Character Assessments offer further guidance to reduce the visual effects of different adjacent grazing regimes in the landscape.

9 Access

9.1 Understanding the impact of a deer fence

Deer fencing, because of its height compared with stock fencing, can be a significant barrier to access. The public have general right of responsible access and, in erecting fences, land managers must make adequate provision for public access.

9.2 Establishing a baseline

In planning a fence, it is important to establish current levels of access for that particular site.

Indications of levels of use through the area can be obtained from owners, occupiers, the Local Authority, SNH staff , DMGs and NGOs such as Mountaineering Council of Scotland and the Ramblers Association.

9.3 High impact issues

Fencing that significantly restricts access.

9.4 Mitigation to reduce impact

An appropriate means of getting through or across fences should be provided taking into account the type and number of users. The location of access points should be clearly marked and where appropriate interpretation provided to explain why deer fences are necessary, and to indicate when they might be removed.

Further information available from the Scottish Outdoor Access Code and the **Countryside Access Designs guidance.**

10 Socio Economics

10.1 Understanding the impact of a deer fence

Deer fencing and deer control are expensive. The social and economic consequences of different options, both in the long- and short-term, need to be considered.

Changes in deer numbers can affect the revenue of estates and have a knock-on consequence for employment. The material and labour costs associated with erecting a fence and the commitment to maintain and remove it are considerable.

Changes in habitat and deer management on one landholding can have significant effects on neighbours and local communities. In this regard a collaborative approach to deer management that recognises the legitimate rights and objectives of all landowners and affected communities is to be encouraged. The basis of the collaborative approach should be that those who derive the benefit pay the costs and that all relevant interests have been given a realistic opportunity to make their views known.

Deer fencing can allow different land use objectives to be maintained in close proximity. In constructing a fence there should be a careful cost-benefit analysis to establish the most cost-effective way of delivering the land use objectives, especially if public funds are used. If a fence is funded privately, provided all legal requirements have been met, then the owner may wish to adopt a solution which best suits his or her own needs, following best practice where appropriate.

10.2 Establishing a baseline

If the proposal affects deer that range over more than one landholding, a collaborative approach that recognises that those who derive the benefit pay the costs, should be encouraged strongly.

Key socio-economic variables to be considered are detailed in the table below. The data required to inform the analysis should be collected by a party approved by DCS, directly from records and accounts of owners and independent quotations from contractors. When cost-benefit analyses for different approaches are similar, consideration should be given to which approaches contributes most in the long term to local social and economic stability. Solutions that result in money circulating in the local economy should be given preference.

Table of key socio-economic variables

	Current position	Fencing	Deer control
Economics			
		Cost of fence materials	
		Cost of construction	
		Cost of fence removal	
	Running costs (total and per deer culled)	Running costs (total and per deer culled)	Running costs (total and per deer culled)
	Income (venison sales and sporting income)	Income (venison sales and sporting income)	Income (venison sales and sporting income)
Employment			
	Man days related to deer control	Man days to construct fence. Man days to maintain and remove fence. Man days to control deer inside fence	Man days to control deer at lower density

11 References and Further reading

In addition to the references listed below, further information may be obtained from local DCS, SNH and RSPB field staff and from the Forest Research Agency (Alice Holt) on fencing, and from HS, the National Monuments Record of Scotland (NMRS) and the relevant local authority Sites and Monuments Record on cultural heritage features.

Andrew, M, and Baines, D (1997). The impact of deer fences on woodland grouse and other forest birds. Report to SNH, Millennium Forest for Scotland Trust and RSPB. Game Conservancy Trust, Newtonmore.

Moss, R. and Picozzi, N. (1994) Management of Forests for Capercaillie in Scotland Forestry Commission Bulletin 113. HMSO, London.

Petty, S.J. (1995) Assessment of Fence Collisions by Grouse Species in Scotland. Research Information Note 264. Forestry Commission, Edinburgh.

Forestry Commission (1992) Lowland Landscape Design Guidelines

Forestry Commission (1994) Forest Landscape Design Guidelines

Forestry Commission (Scotland) Deer and Fencing. Guidance Note 11

FC/RSPB (interim best guidance note) Alternative Deer Fences in Core Capercaillie and Black grouse habitats

Historic Land-Use Assessment, Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS), Edinburgh.

The Inventory of Historic Gardens and Designed Landscapes, Scottish Natural Heritage/Historic Scotland, Battleby/Edinburgh.

Landscape Character Assessments, Scottish Natural Heritage, Battleby.

Natural Heritage Management – Countryside Access Design Guide 2002, Scottish Natural Heritage, Battleby

Scottish Outdoor Access Code

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options

The Joint Agency Statement on Deer Fencing was published in June 2004 and represents a policy collaboration between the Deer Commission Scotland, Scottish Natural Heritage, Forestry Commission Scotland and the Scottish Government.

Deer fencing, when properly planned for, constructed and maintained, can be an effective way of controlling deer to allow different land-uses to co-exist in close proximity and to protect public safety.

For the purpose of this guidance, a deer fence is defined as a fence of at least 1.8 metres high made with wooden or metal posts to which line wires and/or wire mesh is attached. It is recognised that any fence, including rabbit and stock fences, may have direct affects on wild deer and the wider environment. The Agencies plan to keep under review the need to prepare deer-related guidance inclusive of all fencing types and specifications.

The Joint Statement seeks to promote best practice and to assist both private individuals and public sector agencies in deciding whether to approve and/or financially support deer fencing in situations where fencing is considered more appropriate than culling for achieving required deer densities. It sets out a process for identifying, assessing and mitigating the negative impacts deer fences can have on a number of areas of public interest. The Statement identified high-impact issues in six subject areas and suggested mitigation measures for them:

- public/road safety;
- deer welfare;
- biodiversity;
- landscape and historic environment;
- access; and,
- socio economics.

The Joint Statement sets out clearly the risks and impacts that must be addressed before deer fencing can be approved for public funding. If a fence is funded privately, provided all legal requirements have been met, then the owner may wish to adopt a solution which best suits his/her own needs, following best practice where appropriate Any ‘High Impacts’ identified by the Joint Statement will require more detailed assessment by the agencies responsible.

This detailed practical guidance is intended to support the *Joint Agency Statement on Deer Fencing* by aiding agency staff and land managers to address any ‘high impacts’ identified and provide advice on monitoring and potential mitigation.

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
Public Safety Road Traffic Accidents (RTAs) involving deer directly or indirectly are a public safety issue. Collisions with the larger species, red deer in particular, can cause injury to the driver and motorcyclists are vulnerable to impact by any species. Fences can confuse deer that are accustomed to crossing a public road, trapping them on the road and increasing the likelihood of a deer-vehicle collision. Fences can also force many deer to cross a public road in localised areas again increasing the likelihood of a deer-vehicle collision. The assessment of any public road safety risk associated with a new fence will need to take into account both the characteristics of the road being assessed and seasonal patterns of deer cross movement. For any further information, contact DCS.			
Parallel Fencing.	Impact that parallel fencing on one side of the road could have on deer movement.	**Fence lines in close proximity to public roads can increase the risk of collisions with vehicles and are likely to be considered High Impact.**	Any new parallel fencing will require a specific maintenance regime to be put in place to control the height of vegetation between the fence and the road edge to ensure adequate visibility on either side of road. As part of the fencing proposal the approaches to all existing, new and planned future deer crossing points of roads must be equipped with warning signs complying with The Traffic Signs Regulations and General Directions. Fencing on one side of the road where deer are used to crossing may require those deer to be culled. Fencing must ensure that deer are not channelled/funnelled to cross roads where visibility is restricted by bends, crests, tall ground cover on and behind verges etc.

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
Creation of corridor	Impact of parallel fences close to both sides of a road from which the deer have difficulty escaping.	**Parallel fences where deer have access into a corridor will often lead to a high risk of deer/vehicle collision and are considered High Impact.**	Parallel fences close to both sides of a road must form part of a closed circuit system i.e. using a physical barrier such as a cattle grid on the road. In this scenario a commitment to regular inspection and maintenance of the fence will be required as any deer entry to the system will result in continuous risk of deer vehicle collisions until such time as an accident occurs or the deer is caught / culled.
Poorly maintained fences	Impact of poorly maintained roadside fencing	**Poorly maintained roadside fences can allow deer access to a carriageway and are considered High Impact.**	Removal or repair of porous fencing Commitment to annual inspection and maintenance to prevent fence deterioration.
Reducing driver visibility	Impact of Fences on existing sight lines.	The driver's ability to view deer in close proximity to the roadside is critical to allow for appropriate reaction to the potential threat. Fences must be sited and constructed in such a way so as not to interfere with existing sight lines. **Fences that reduce roadside visibility will increase the risk of deer / vehicle collisions and are considered High Impact.**	Junction visibility splays and widened verges on horizontal curves are examples of engineering measures that provide adequate stopping sight distance in accordance with the speed of traffic using the route. Intrusion into these must be avoided. Further information on minimum available sight distance to the end of a new fence can be sought from DCS or the road authority. The road authority should be consulted during planning. Any new fencing which runs parallel to the road will require a specific maintenance regime to be put in place to control the height of vegetation between the fence and the road edge to ensure adequate visibility on either side of road. The road authority should be consulted during planning

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
Deer Welfare The erection of a fence preventing access to or enclosing areas of ground that deer rely on for forage or shelter may increase the risk of winter mortality through starvation and exposure. Information on the numbers and movement of deer that rely on the area, from which they are to be excluded, is desirable. This knowledge includes both seasonal movement and response to different weather conditions to ensure that there is an understanding of when the area is of most importance to deer.			
Removal of Forage and shelter	Impact of removing land from deer or restricting deer access without culling the deer that rely on the area during some part of the year for food and shelter.	Fences that prevent access to or enclose areas of ground that deer rely on for forage or shelter may increase the risk of winter mortality. **Increased mortality of deer through starvation and / or exposure is considered High Impact.**	A compensatory cull may be required to compensate for the loss of forage and shelter. Providing access to alternative grazing and shelter may reduce the level of compensatory cull required without compromising deer welfare. This approach will require detailed knowledge of deer movement and availability of alternative shelter.*
Displacement of deer	Impact of Culling 'additional' deer from the population without targeting those that rely on the area being fenced off.	**Increased mortality of deer through starvation and / or exposure is considered High Impact.**	Culling should follow Best Practice and target deer that rely on the area that is being removed.*

*All mitigation should be accompanied by monitoring and responsive management action

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
Biodiversity The reduction in deer impacts brought about by fencing can have positive effects on biodiversity. However, the Joint Statement recognises that it can also have negative effects as well. These can be direct – such as where the fence itself creates problems for populations of woodland grouse through bird-strike mortality. They can also be indirect, where the consequences of the fence lead to a change in deer impact – such as a reduction in grazing pressure (which can adversely affect some important plant communities). The Joint Statement describes these potential negative 'High Impacts' as: • Fencing close to known woodland grouse lek sites • Fencing in areas identified as core woodland grouse zones by Forestry Commission Scotland. • Fencing that causes, or is likely to cause, damage to designated sites or other important habitats for example SAC, SPA, SSSIs and UK Biodiversity Action Plan (BAP) habitats through increased or decreased grazing or trampling pressure. This also include European Protected Species (EPS) which occur outwith designated sites – in the case of fencing issues this relates principally to otters, wild cats and bats.			
Bird-strike	Proposal located in any of the FCS core woodland grouse zones or within 3km of any known woodland grouse lek sites	**Increased likelihood of bird-strike (woodland grouse) is considered High Impact** If the proposal meets any of the screening criteria, FCS Guidance note 11 (Deer and Fencing) will apply in the assessment of the proposal.	Fence re-siting, fence marking and alternative fence designs may mitigate the negative 'High Impacts' where risk of bird-strike is fairly low.
Displacement	The fence line significantly obstructs traditional deer movement (advice from DCS should be sought)	**Damaging impacts on any designated site or UK BAP Priority Habitat will be considered High impact**	Re-siting of the fence, compensatory cull, design of downfalls or other access for deer through the fenced area.
EPS	Disturbance of European Protected Species	**The felling or disturbance of large old trees which could be bat roosts, or fencing in likely otter holts or wild cat dens is considered High impact**	Fence designs which will avoid any significant impacts on EPS e.g. design of water crossings to avoid any otter entanglement hazard; avoiding the need to fell large old trees.

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
Lack of grazing	The fence will reduce grazing on an SAC, SPA, SSSI or an area which contains significant amounts of UK BAP Priority Habitats. *'Significant' in this case will mean different amounts depending on the habitat involved. Reference should be made to the reasons for a site's designation as this should highlight the special features requiring protection. For example upland calcareous grassland is typically present in very small patches, so the 'significant' area would be small – whereas for upland heathland the equivalent might be very large.*	**A reduction of grazing that would prevent a special features or features of a SAC, SPA, SSSI from achieving favourable condition over the anticipated life of the fence is considered High Impact.** In the wider countryside, where UK BAP Priority habitats are present, the assessment will focus on targets in the Action Plans and includes: • Native pine woodlands • Upland mixed ashwoods, oakwoods, birchwoods, heathland and calcareous grasslands • Wet woodlands • Purple moor-grass & rush pastures • Lowland calcareous grasslands, dry acid grassland, heathland, meadows & wood pasture/parkland	Monitoring of the site will demonstrate when negative effects are beginning to occur. The need to mitigate a lack of grazing may not be immediate. For example a relatively poor and infertile pinewood may be able to withstand a decade without grazing before negative effects start to appear. On the other hand a lack of grazing can be damaging on fertile calcareous grasslands after only 2-4 years. Mitigation for lack of grazing by deer may be possible through replacement grazing by some other suitable herbivore for part or all of the year. It could include cattle, sheep, or a population of deer kept at an appropriate density. On some sites mechanical means – swiping or scarification might also compensate for a lack of grazing, at least in the short term. On sites where fire is an integral part of the natural disturbances, controlled burning may also be an appropriate replacement for deer grazing.

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
Access and Recreation The basis of any consideration of access and fencing is the Scottish Outdoor Access Code (SOAC) approved by the Scottish Parliament in 2004. The Joint Statement notes separately that: ***The public have general right of responsible access and, in erecting fences, land managers must make adequate provision for public access.*** Thus the 'High Impacts' of fences on access are the obstruction of paths or tracks, and the erection of fences in open country without adequate crossing points. This latter point is clearly dependent on the location and use of the area to be fenced, and thus agencies will require applicants to include in their application a statement or plan describing how these requirements will be met. The nature of the access points will need to consider the likely use and type of access undertaken by the public.			
Obstruction of public access	The criterion to be assessed is simply whether the proposal meets the SOAC standard, taking into account local use and circumstances.	**A Fencing proposal without an acceptable access plan is considered High Impact**	Design of the fence using gates, stiles, river crossings that do not obstruct passage on water, and appropriate signage to indicate the location of the nearest gate in open country situations. Where appropriate local or user consultation.

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options

Landscape (April 2010)

The erection of a deer fence can potentially have both visual impacts on people who view the structure, and landscape impacts on the character of the local landscape. The exclusion of grazing animals from within an enclosure can result in the development of contrasting vegetation patterns within and outside the fenced area. This contrast has the potential to emphasize the visual impact of the fence-line and have a perceptible effect on the recognised landscape character of the local area.

For all deer fence proposals, an assessment of potential landscape and visual impacts is required. This is an integral part of the overall project design process through which mitigation measures can be determined and possible interconnected benefits identified (for example, through re-routeing a fence line or joining separate exclosures to improve landscape impacts there may also be improved habitat linkages and reduced costs). The level of detail in the assessment should be fit for purpose and will depend on the sensitivity and/or complexity of the proposal. A brief assessment, sufficiently recorded to adequately inform the development of the woodland scheme, may be all that is required for straightforward proposals, but for highly complex and sensitive proposals a detailed, fully recorded assessment, informed by specialist advice[1] is more likely to be required. Whatever the level of assessment, this should follow a systematic approach to identifying any key sensitivities, their potential impacts and the scope for mitigating them; this should include consideration of the **Screening Criteria**, **Likely Mitigation Options** and **Factors assessed as High Impact** summarised within this table. It should be borne in mind that during an assessment any adverse landscape impacts of a deer fence should be balanced against the potential longer term environmental/landscape benefits of the project as a whole.

Changes to landscape character	A proposed fence in a landscape character type sensitive to this kind of development. Key characteristics of such landscapes include: • large scale landscape; • openness and sense of exposure; • simple/ undifferentiated vegetation cover, or rock formations and outcrops; • steep slopes or flat ground (rather than undulating ground or landform edges); • lack of, or few, existing built elements or;	After assessment of the **Screening criteria** and incorporation of appropriate **Mitigation options** in the design, high impacts could potentially occur where the proposed fence: • becomes a key characteristic of the landscape; • contrasts to the existing characteristics of the landscape; • changes the intrinsic landscape character of the area, including its openness, sense of exposure and simplicity of land cover; • contrasts to the lie of the land and seems incongruous as a built element; • reduces the sense of wildness of the landscape.	Review the appropriate LCA[2] for the local area (and, where available, HLA[3]) and consider the design of the fence line to: • Avoid siting fences across open and exposed areas, instead routeing fence lines along concave breaks of slope, crossing ridges through low points. • Create an exclosure outline that relates to the scale and shape of the landform (e.g. avoiding small isolated blocks in large scale moorland areas), and follows edges/divisions of vegetation pattern (allowing 'natural' woodland margins to expand over time).

[1] Refer to the 'Guidelines for Landscape and Visual Impact Assessment' The Landscape Institute and Institute of Environmental Management and Assessment (Spon Press, 2002)
[2] Landscape Character Assessments (LCA) by SNH available to view and download from their web-site SNH Publications: http://www.snh.org.uk/pubs/default.asp
[3] Historic Land-use Assessment (HLA) by HS/RCAHMS available to review on the HLAMAP web-site: http://jura.rcahms.gov.uk/HLA/start.jsp

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
	• sense of 'wildness' (see also screening criteria for 'Landscape and scenic value of designated landscapes and wild land' section below).		• In areas more dominated by a distinct pattern of land-use and/or field enclosure (such as stone walls or clusters of buildings) route the fence to follow these defining elements. • Manage grazing to prevent significant contrasts of vegetation developing between the inside and outside of the exclosure, and trampling along fence lines. • Avoid running fencelines across steep slopes, particularly perpendicular to the contours.
Visual resource, including visibility, key views and visual composition	*A proposed fence within a visually sensitive landscape that would be:* • visible from an extensive area; • seen in key views, including: ▪ from within or from the edge of settlements; ▪ from a public road or footpath; ▪ from popular viewpoints; or ▪ from areas popular for recreation, such as along the coast, loch-sides or watercourses; ▪ within an area of visual composition that contains few visual elements or has an indistinct arrangement of elements.	After assessment of the **Screening Criteria** and incorporation of appropriate **Mitigation Options** in the design, high impacts could potentially occur where: ▪ the fence is prominent and/or forms a distinctive focal feature or; ▪ where the fence has a dominating or defining influence on views, including where it contrasts to the characteristic arrangement of visual elements within views.	Assessment of predicted visual impacts may be informed by visualisations, such as computer-generated wireline diagrams. Potential mitigation measures (not all will be appropriate for all landscapes) include: • Route the fence within or near the edge of woodland; • Locate the fence away from key viewpoints and routes providing sequential views (roads and footpaths); • Route the fence within depressions and off skylines so that it is backclothed within key views; • Route the fence along distinct linear features (such as the concave break of slope or an existing hedgerow) and avoid areas that do not contain existing linear features; • Select a visually less prominent design of fence (for example, using horizontal wires rather than netting for the upper half), or

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
			route and design the fence to extend along existing boundary walls or hedges; • Avoid visibility of multiple fence-lines within a local area (same or mixed type of fence), including parallel lines; • Route the fence to avoid key sightlines from sensitive viewpoints.
Landscape and scenic value of designated landscapes and wild land	**Designated landscapes** A proposed fence within an area designated for its landscape and scenic value, including: • National Park (NP); • National Scenic Area (NSA); • local landscape designation included within development plans (now described as Local Landscape Areas in the 2010 Scottish Planning Policy). Or, a proposed fence within a non-designated area, but of recognised value (eg popular for visitors/local recreation) including areas with the potential for recreation (such as parks, hill tops, historic monuments and loch-sides).	For any area of recognised value, after assessment of the **Screening Criteria** and incorporation of appropriate **Mitigation Options** in the design , high impacts could potentially occur if the fence has significant adverse impacts on the special character or qualities of the landscape, or how these are experienced (for example, obstructing or detracting from views to existing focal features or landmarks). Specifically, within a National Park or National Scenic Area (in line with Scottish Planning Policy, paragraphs 137-138, February 2010) high impacts would occur where the integrity of the area or qualities for which it has been designated would be adversely affected.	Mitigation measures should specifically address landscape and visual impacts that would affect the qualities for which these areas are valued. ▪ Avoidance; for example, omitting or re-routeing a fence so that it is not within or visible from the area of recognised landscape and scenic value. ▪ Modifying the route and/or design of the fence so that, while it may be visible from the area of recognised landscape and scenic value, it does not affect the special qualities for which it is valued.
	Wild land A proposed fence within or visible from an area of wildness (see also 'Changes to landscape character' section above), including within Search Areas for Wild	High impacts would occur where the proposed fence would 'adversely affect' and not 'safeguard' the wild land quality of an area, including its margins. High impacts could potentially occur where a proposed fence:	It is difficult to mitigate the impacts of fences on areas of wildness/wild land if they are visible, although the overall magnitude of adverse impact may be reduced, eg by: ▪ Locating a fence so that it has only local

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
	Land as part of SNH Policy Statement 'Wildness in Scotland's Countryside'[4] or areas identified by Local Authorities. Guidance on assessing impacts on wildness is provided in the SNH Policy Statement and Interim Guidance Note 'Assessing the Impacts on Wild Land'.	▪ would result in noticeable change to the interior of a wild land area; ▪ would result in considerable change to an area visited by people for the experience of its wildness qualities; ▪ would result in a significant loss, or extensive change, to a marginal area with wildness qualities; or ▪ in addition to existing detracting features/ built elements, would have noticeable cumulative effects on an area of wildness qualities.	impacts at the margins of an area with wildness qualities; ▪ Replacing an existing fence with a new fence to a sensitive design may have less adverse impacts. ▪ A fence creates a very large exclosure which allows the establishment/repair of native vegetation over a wide extent and natural range that appears 'wild' and, on assessment of relative benefit, has greater positive impacts than the negative impacts of the fence itself.

[4] 'Wildness in Scotland's Countryside' SNH Policy Statement (July 2002) available to view and download from SNH web-site: http://www.snh.org.uk/strategy/pd02c.asp

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
Historic Environment A deer fence can have a potential impact on the historic environment, and specifically the setting of ancient monuments and the integrity of archaeological sites along the chosen fence line. Changing grazing patterns can also have an adverse effect on or damage cultural heritage features.			
Archaeological sites and cultural heritage features	Fencing that detracts from the integrity or setting of cultural heritage, Scheduled Monuments, other archaeological sites or historic landscape features.	**Fence line proposed within 100m of a:** • **site in the Inventory of Gardens and Designed Landscapes** • **Scheduled Monument** • **curtilage of a listed building** • **other formally recognised and significant historic sites and/or cultural landscapes** **and / or will detract significantly from:** • **the setting of archaeological and historic sites and features** • **a significant cultural landscape (e.g. battlefield site, area of prehistoric field systems, or post-medieval clearance settlements)** **Trigger for detailed assessment:** Fence line proposed within or near to any of the above features will require consultation with the appropriate authority for determination of the need for a detailed assessment. N.B. fence line proposals that are considered likely to have an adverse affect on Scheduled Monuments are unlikely to be approved.	If triggered for detailed assessment, mitigation measures will be determined from that appraisal. If a detailed assessment is not triggered, then to minimise its impact the fence line should be positioned to: • avoid Scheduled Monuments, other archaeological and historic sites and features • Conserve the integrity of their setting and allow inter-visibility of demonstrably linked, significant archaeological and historic sites.
For information and advice on scheduled monuments, consult Historic Scotland; for all other sites, consult the relevant local authority (Sites and Monuments Record). Information on the location of cultural heritage sites and monuments can also be found at www.pastmap.org.uk For a project requiring a detailed assessment reference should be made to ***'Guidelines for Landscape and Visual Impact Assessment (Second Edition)*** *(see* **Landscape** *above).*			

Impact type	Screening criteria	Factors assessed as High Impact	Likely Mitigation options
Socio-economic Factors Increased public involvement in preparing development plans is a key priority for Scottish Ministers (Scottish Planning Policy 15: Planning for Rural Development). The public and particularly communities, have an increasing wish to be engaged in and to influence developments which have a significant effect on their area. Significant developments should not happen 'out of the blue' but rather they should be well planned and sensitive to local circumstances. There will be clear overlap with other categories – in particular access and road safety			
Engagement with local communities, businesses and neighbouring land owners/managers.	Poor or non-existent engagement mechanisms	**Proposals which will impact negatively and significantly on communities, business viability, employment and neighbouring land owners/managers without their knowledge will be regarded as potentially high impact.**	Engagement should involve recognition of local issues and sensitivities including: local businesses, employment, loss of traditional skills, current or potential deer damage to residential property, significant impacts on recognised tourist corridors and issues of road safety. • Early community liaison & communication in place • Early, collaborative approach to deer management planning. • Clear simple statements of plans and timescales. • Assessment of costs and benefits where such information is available. • Consideration of local sourcing of supplies and labour.

Checklist

This form is designed to provide an initial check on the issues that need to be addressed when considering a specific fencing proposal. Using this checklist, it is possible to identify whether there are 'high' impact implications associated with a proposed fence. If any of the tick boxes are marked 'Yes', then a detailed assessment of that aspect will be required before appropriate mitigation is considered, as outlined in accompanying guidance.

Public Safety	YES	NO
Will the proposed fence, or a combination of the proposed fence and topography increase the likelihood of deer being funnelled onto public transport routes?		
NOTES		
Will the proposed fence run parallel to public transport routes for more than 50 m?		
NOTES		
Will the proposed fence impact on existing driver sight lines?		
NOTES		

Deer Welfare	YES	NO
Will the proposed fence require deer to be culled to prevent any welfare issue from arising?		
NOTES		

Biodiversity	YES	NO
Is the proposed fence within any of the FCS core woodland zones?		
NOTES		
Is the proposed fence within 3km of any known woodland grouse lek sites?		
NOTES		
Will the proposed fence line affect a designated site (SAC, SPA or SSSI) or UK BAP Priority Habitats? Is it on a designated site or will it impact on how deer use a site?		
NOTES		

Access and Recreation	YES	NO
Is there an acceptable access plan accompany the fencing proposal?		
NOTES		

Landscape and historic environment	YES	NO
Is the fencing proposal out of keeping with the landscape character e.g. in prominence, location or scale?		
NOTES		
Can the fence line be viewed from publicly accessible vantage points such as settlement edge, roads, recognised footpaths or recognised viewpoints?		
NOTES		
Will the fencing proposal affect the integrity of an area designated for its landscape qualities or the integrity of undesignated areas of land with wild land qualities?		
NOTES		
Is the fence line proposed within or near to a: Site in the Inventory of Gardens and Designed Landscapes, Scheduled Monument or the curtilage of a listed building,		
NOTES		