

East Loch Ericht DMG



Deer Management Plan

May 2016 - April 2026



East Loch Ericht DMG

Website: elocherichtdmg.deer-management.co.uk

CONTENTS

Section		Page No.
	EXECUTIVE SUMMARY	3
1.	BACKGROUND AND TERMS OF REFERENCE	4
1.1	Introduction	4
1.2	Ownership structure	5
1.3	Timescales	5
1.4	Ownership objectives	5
1.5	General Policy Statement	6
2.	AUDIT	8
2.1	Designations	8
2.2	Habitat information	8
2.2.1	Recent Repeat Surveys	9
2.2.2	Site Condition Monitoring survey, Drumochter Hills SAC, July and August 2013	9
2.2.3	Repeat Herbivore Impact Assessment if the Drumochter Hills SAC and Coire Bhachdaidh SSSI, July and August 2013	10
2.2.4	Rapid Assessment of Grazing and Trampling Impacts and Comparison with Baseline Survey of 2004, May to July 2014	11
2.3	Biodiversity priorities	13
2.4	Deer information	13
2.5	Agriculture and Other herbivores	16
2.6	Forestry & Woodland	16
2.7	Land management impacts	17
2.8	Public Access	18
2.9	Social and economic information	19
2.10	Public Interest	20
3.	OBJECTIVES OF THE PLAN	21
3.1	Ownership Objectives	21
3.2	Ideal objectives	21
3.3	Constraints and limiting factors	21
3.4	Desired and achievable objectives	23
4.	THE OPERATIONAL PLAN	24
4.1	The Management Plan	24
4.1.1	Deer - target population	24
4.1.2	Deer - Proposed culls to achieve target population	25
4.2	Habitats and species	27
4.3	Woodland	28
4.4	Economics	29
4.5	Public Interest	29
5.	ACTIONS REQUIRED TO DELIVER THE PLAN	30
6.	MONITORING	31

6.1	Habitat impacts	31
6.2	Deer populations	31
6.3	Usage by other herbivores	31
6.4	Deer culls	31
6.5	Social and economic benefits	32
6.6	Public Interest	32
7.	REVIEW	33
	References	33
	Appendices	
	Appendix 1 Plan of Property Boundaries	
	Appendix 2 Plan of Main Land Cover Types	
	Appendix 3 Plan of Designations	
	Appendix 4a Plan of Drumochter Hills HIA Summary Findings	
	Appendix 4b Plan of Coire Bhachdaidh HIA Summary Findings	
	Appendix 5a Plan of ELEDMG Grazing & Trampling Assessment 2014 Summary Findings	
	Appendix 5b Plan of ELEDMG Grazing & Trampling Assessment 2014 Changes with 2004 Survey	
	Appendix 5c Photos of survey lots from ELEDMG Grazing & Trampling Assessment 2014	
	Appendix 6 Woodland Inventory	
	Appendix 7 Deer Fence Inventory	
	Appendix 8 Plan of Deer Management Objectives	
	Appendix 9 Population Model 2016-2021	
	Appendix 10 Action Plan	

East Loch Ericht Deer Management Group

Deer Management Plan 2016 - 2026

EXECUTIVE SUMMARY

The East Loch Ericht Deer Management Group (the Group) covers about 36,000 hectares on the Perthshire/Inverness-shire boundary of which about 29,000 hectares are open red deer range.

The area includes a number of important statutory designations and a core objective of this plan is management of these habitats and species into more favourable condition.

This plan runs for the period 1st April 2016 – 31 March 2026. There will be an interim review in 2021.

The Group is committed to managing designated habitats to ensure 'unfavourable recovering due to management' status.

The Group is committed to best practice in deer management. As part of this commitment the Group is continually monitoring the interaction between deer and habitat to ensure a balanced approach.

Over the last ten years the Group has gradually reduced the open range deer population by around 1,000 animals. Management aims to continue a gradual population reduction and the Group considers a winter population of around 15/km² to be around a sustainable density.

There has been an active programme of woodland expansion in the Group area over the last 20 years. Deer management will ensure this resource is maintained and expanded where suitable opportunities are identified.

The Group is committed to monitoring habitat responses and will undertake a re-survey of a previous Grazing and Trampling Impact Assessment in 2024 in conjunction with other repeat surveys that will be carried out by Scottish Natural Heritage (SNH).

Some areas of land within the overall boundary not previously included in deer management plans (mainly enclosed forestry) have now been included, although where these are fenced off from open range, are not included in population modelling.

This plan was issued for consultation in February 2016. Revisions following the consultation process were incorporated and the plan was formally adopted at the Group meeting on 6th May 2016.

1. BACKGROUND AND TERMS OF REFERENCE

1.1 Introduction

The East Loch Ericht Deer Management Group (the Group) covers a gross area of approximately 35,800 hectares (88,400 acres) in Perthshire and Inverness-shire. The area primarily comprises upland terrain lying between 180m and 991m above sea level characterised by undulating moorland rising to high mountains with plateau moorland and corries to the north and west. Much of the inbye land is fenced off from hill deer to allow agricultural or woodland land uses with an open (unfenced) deer range of around 29,000 hectares.

The Group area is clearly delineated by Loch Ericht to the west, Loch Rannoch and Loch Tummel to the south and the A9 transport corridor to the east and is broadly triangular in shape. A plan showing the Group and property boundaries is shown in Appendix 1.

The Group was formed in 1970 and has met regularly twice yearly to discuss management, arrange counts and agree cull targets in an organised fashion, recorded in formal Minutes. The first written deer management plan was in 2005. This is the third formal plan and addresses national developments in deer management strategy and seeks to engage a wider interest group than the previous plans.

The Group area includes a number of important montane and upland habitats and species protected under statutory designations. The most notable of these include the Corrie Bhachdaidh Site of Special Scientific Interest (SSSI) and the Drumochter Hills Special Area of Conservation (SAC), Special Protection Area (SPA) and SSSI. Approximately 4,300ha of the northern part of the Group area lies in the Cairngorms National Park (CNP).

The area has mixed weather patterns influenced by both the drier eastern and wetter western weather systems. Annual rainfall is in excess of 1250mm per annum (50") increasing with altitude and towards the west of the range to over 2000mm (80"). Local rainfall data gathered by one of the Group members on the east of the range shows a trend in increased annual average rainfall over the last eight year period. This monitoring also shows the spring as the driest period and the late Autumn (Oct – Dec) as the wettest, and also the quarter with the greatest measurable increase in average rainfall.

Vegetation across the Group area is well documented through various surveys and is dominated by heather moorland, becoming wetter towards the west. There are also large tracts of blanket bog characterised by cotton-grass, bog-mosses and heather moor often broken with peat hags. At higher elevations the vegetation comprises montane heaths and summit heaths (Nolan *et al*, 2005).

1.2 Ownership structure

The area is split into nine estates, one farm and several commercial forest blocks.

Table 1: Ownership Structure and Main Interests

Property	Area (Ha)	Main interests
North Drumochter	3,859	grouse, deer and agriculture
Dalnaspidal	4,348	grouse, deer, agriculture and conservation
Corrievarkie	2,195	deer
Talladh a Bheithe	4,300	deer, grouse, woodland and farming
Craiganour	8,575	deer, woodland, agriculture and conservation
Dunalastair	4,454	deer, game, agriculture and woodland
Auchleeks	3,118	deer, grouse and woodland
Blairfettie	635	agriculture
Atholl	2,200	deer and woodland
Garbruach	536	deer and grouse
FCS Talladh a Bheithe	1,248	woodland
Auchleeks Woodlands	359	Woodland
Total	35,827	

Loch Errochty Forest (186ha) lies within the Group area and is not an active member of the Group. The open range includes Loch Garry, Loch Errochty and Loch Con as well as various small lochans.

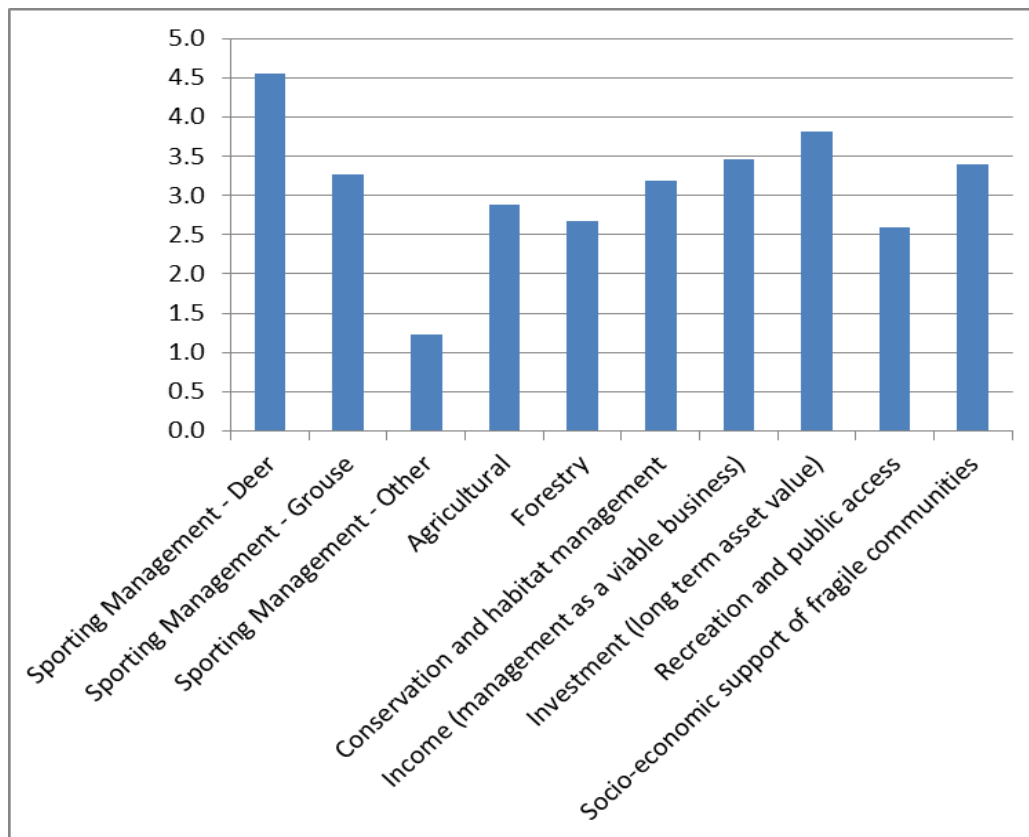
1.3 Timescales

The plan has been written to cover a ten year period commencing in April 2016 to March 2026, with a mid-plan review in March 2021.

1.4 Ownership objectives

Owners of land within the Group have varying ownership objectives including sporting management, commercial and native woodland management, agriculture, conservation and habitat management, tourism, etc. These objectives are summarised as follows in the chart below;

Chart 1: Ownership Objectives



Ownership objectives were scored from the following scale: 0 = Not at all important 1 = very low importance 2 = low importance 3 = important 4 = very important 5 = key importance

1.5 General Policy Statement

This plan seeks to set out the deer management framework necessary to ensure that the ownership objectives of maintaining viable estate businesses are compatible with the requirement to bring designated features into 'assured management' and to improve the general habitat condition across the wider Group area.

A key priority of the new deer management plan is delivery of sustainable deer management in the public interest. The framework document for this is [Scotland's Wild Deer - A National Approach](#) (WDNA) revised in 2014, published May 2015. The plan must clearly demonstrate adoption of the management requirements of WDNA and mechanisms for delivery and monitoring. The mechanisms are set out in the [Code of Practice for Deer Management](#) and [Best Practice Guidance](#)

Specifically the plan will address the SNH guidance on delivering public interest based on the following points identified in the RACCE Review;

Environment

1. *Contribute to the delivery of designated sites into Favourable Condition.*
2. *Contribute to the Scottish Government woodland expansion target of 25% woodland cover.*
3. *Manage deer to retain existing native woodland cover and improve woodland condition in the medium to long term.*
4. *Monitor and manage deer impacts in the wider countryside.*
5. *Improve Scotland's ability to store carbon.*
6. *Reduce or mitigate the risk of establishment of non-native species.*
7. *Protect landscapes and historic features from deer and deer management activity.*

Economy

1. *Optimise economic benefits of Deer Management in Scotland.*
2. *Minimise the economic cost of deer.*

Social Wellbeing

1. *Contribute to delivering high standards of competence in deer management.*
2. *Identify and promote opportunities contributing to public health and wellbeing benefits.*
3. *Ensure effective communication on deer management issues.*

Welfare

1. *Ensure deer welfare is taken fully into account at individual animal and population level.*

Collaboration & Effective Deer Management Planning & Implementation

1. *Develop effective mechanisms to manage deer.*

In particular, the plan aims to;

- Promote the proper management of designated sites within the Group area to ensure 'unfavourable recovering due to management' status as a minimum.
- Monitor deer and their effect on the wider habitat of the Group area and take action where necessary to follow best practice.
- Maintain the social and economic importance of deer and their management in the Group area.
- Promote the objectives and priorities of land owners in regard to deer ranging freely within the group area.
- To produce an annual population model and cull targets.
- To allow the group to conduct deer management activities on an independent footing, whilst co-operating with statutory bodies over deer management and habitat issues.
- Improve interaction with the local community and members of the public.

2. AUDIT

For the purposes of deer management planning the open range area is treated as a single management unit. Deer fenced enclosures (primarily for forest management purposes) provide secondary management units for woodland deer. It is appropriate to identify the open range as a single management unit due to the relatively small geographical area within which there are no restrictions to deer movements, bordered by the physical barriers of Loch Rannoch, Loch Ericht and the A9 transport corridor.

2.1 Designations

The Group area includes a number of conservation and other designations:

- Parts of North Drumochter, Dalnaspidal and Atholl lie the Cairngorms National Park covering an area of around 4,300 hectares.
- The Drumochter Hills SSSI, designated in 1985 for montane and vascular plants and breeding birds.
- The Drumochter Hills SAC, designated in 2005 upland and montane habitats and rock formations.
- The Drumochter Hills Special Protection Area (SPA), designated in 1997 for Dotterel and Merlin.
- The Corrie Bhachdaidh SSSI, designated in 1983 for upland and vascular plants and breeding birds.
- The River Tay SAC, designated in 2005 for riverine and aquatic habitats and species.
- The Beinn a' Chuallaich SSSI, designated in 1983 for vascular and upland plant assemblages.
- The Loch Con SSSI, designated in 1983 for vascular plants and breeding birds.
- The Meall Dailchealach SSSI, designated in 1990 for geological features.
- The Loch Rannoch and Glen Lyon National Scenic Area, designated in 1980.
- Most of the western part of the Group range is identified as Wild Land and forms part of area 14 Rannoch-Nevis-Mamores-Alder.

The SAC and SPA interests are Natura designations under a European Union Directive and the UK Government has an obligation to ensure these features are in favourable or unfavourable recovering status.

A plan showing the primary designations is shown in Appendix 3.

2.2 Habitat information

The Group area comprises a complex mix of habitats including large areas of heathland, mire, montane and woodland habitats. A plan showing the primary habitat types based on the EUNIS (EUropean Nature Information System) Land Cover Scotland data is shown in Appendix 2, which highlights the complex mosaic of habitats.

More site specific habitat information has been collected by the Group and Government agencies for some time. Baseline audits were undertaken by SNH in 2003 and 2004 concentrating on the Drumochter Hills and Coire Bhachdaidh designated sites and by Macaulay Land Use Research Institute (MLURI) for the Group in 2004 over the wider deer management group area.

The Site Condition Monitoring (SCM) undertaken in 2003/4 identified various Natura features as being in unfavourable condition. In response to these findings in the SCM process Habitat Impact Assessments (HIA) were commissioned for the Drumochter Hills SAC in 2007, carried out by Nicky Dayton and the

Coire Bhachdaidh SSSI by Alastair Headley in 2008. SCM is a rolling programme of assessment against quality standards of the state of designated features.

SCM compares a feature (habitat type or species) with a set of quality standards. These standards describe the condition that we expect will allow the feature to continue in a sustainable state. HIA is used to arrive at an assessment of the current observable impacts of land management practices on a habitat.

Repeat SCM and HIA surveys were undertaken by SNH in 2013 and a repeat of the MLURI survey was undertaken by the James Hutton Institute [previously MLURI] in 2014.

In terms of habitat information, this plan considers the 2013/14 survey data and assesses the habitat response/trends that have occurred over the time period between the baseline audits and recent surveys, essentially a decade.

2.2.1 Recent Repeat Surveys

The specific surveys are therefore;

- a. Strath Caulaidh (2013) Site Condition Monitoring survey of selected features within the Drumochter Hills SAC.
- b. Strath Caulaidh (2013) Repeat Herbivore Impact Assessment of the Drumochter Hills SAC and Coire Bhachdaidh SSSI.
- c. James Hutton Institute (2014) Rapid Assessment of Grazing and Trampling Impacts, East Loch Ericht Deer Management Group Area 2014 and Comparison with Baseline Survey of 2004.

2.2.2 Site Condition Monitoring survey, Drumochter Hills SAC, July and August 2013

The SCM survey was carried out by Strath Caulaidh Ltd under contract to SNH and covered the whole Drumochter Hills designated area, both east and west of the A9. Only west of the A9 is of relevance in the context of this plan. The SCM assessed five key habitats with summary outcomes as follows;

Table 2: SCM Summary Findings 2013

Habitat	Within ELEDMG	Result
Montane acid grassland	All passed	Favourable-recovered
Montane willow scrub	Over 50% passed	Unfavourable-declining
Plants in crevices	Nearly all indicators passed	Unfavourable-no change
Tall herb communities	Nearly all indicators passed	Unfavourable-recovering
Species-rich grassland	Nearly all indicators passed	Unfavourable-no change

Within the Group area results were largely positive, with the primary area of concern being in Montane Willow Scrub where the extent and condition of the habitat type is in decline. In context however this is a very restricted habitat type with limited distribution in the Group area occurring in just six locations on Dalnaspidal Estate where deer management plans are already addressing population levels as part of a wider habitat restoration project.

The SCM analysis suggests the designated habitats are generally stable, but have not recovered sufficiently to reach favourable condition.

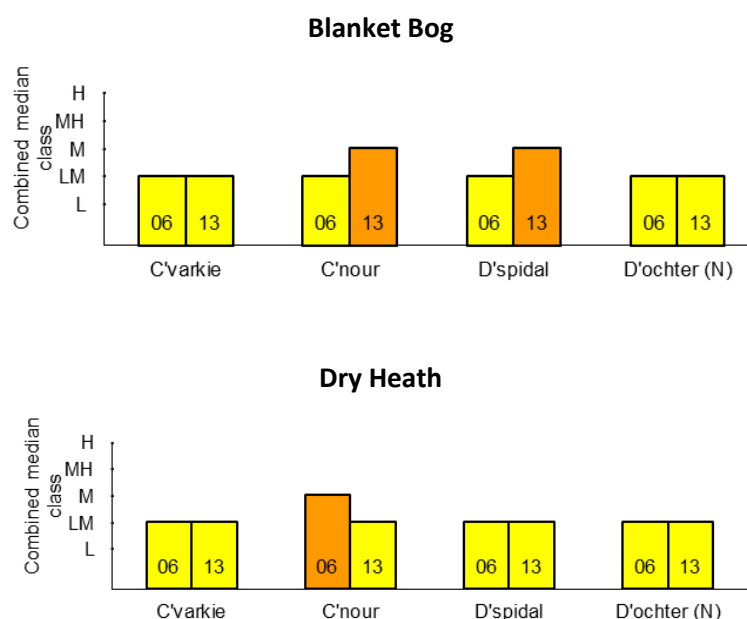
2.2.3 Repeat Herbivore Impact Assessment of the Drumochter Hills SAC and Coire Bhachdaidh SSSI, July and August 2013

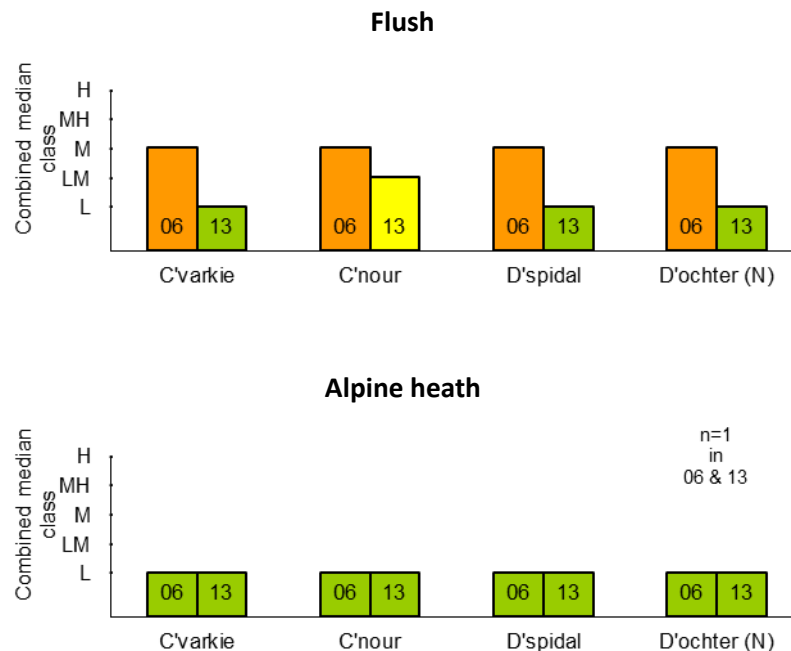
A repeat HIA of the Drumochter Hills SAC and the Coire Bhachdaidh SSSI was commissioned in 2013 by SNH, also carried out by Strath Caulaidh Ltd. The assessment looked at four key habitat types; blanket bog, dry heath, flushes and Alpine heath. In addition a fifth habitat, species rich grassland, was assessed for Coire Bhachdaidh SSSI. The Drumochter Hills assessment compared findings with a previous survey in 2006 and the Coire Bhachdaidh with a previous survey in 2008.

The HIA summary findings for the Drumochter Hills SAC were that grazing and trampling impacts were generally 'low' or 'low-moderate' although the survey found varying patterns of impacts by habitat with blanket bog having higher impact levels at 'moderate' on two properties. A plan taken from the survey showing the summary findings is shown in Appendix 4a.

The summary findings are;

Chart 2: Drumochter Hills HIA Summary Findings 2013





Source: Strath Caulaidh (2013) Repeat Herbivore Impact Assessment of the Drumochter Hills SAC and Coire Bhachdaidh SSSI

Comparison with 2006 data suggests impacts on blanket bog have worsened slightly on Craiganour and Dalnaspidal. Impacts on dry heath and flushes have improved and impact on Alpine heath has remained static at 'low'. This interpretation suggests that blanket bog remains one habitat type where specific action is required. Evidence of 'heather offtake' [grazing pressure leading to a gradual loss of heather/deterioration in heather quality] was identified as locally significant, even in plots that were recorded as low-moderate, and is an indicator of locally higher herbivore occupancy rates. Heather offtake is significant as heather provides a high proportion of the winter diet of open range Red deer.

Findings for the Coire Bhachdaidh SSSI were low apart from on blanket bog (low-moderate, moderate) and dry heath (low moderate). The 2008 survey concluded that the overall levels of herbivore impact were low and unlikely to be contributing towards the small size and number of populations that make up the vascular plant assemblage, and the repeat survey suggests little change since the previous survey. A plan taken from the survey showing the summary findings is shown in Appendix 4b.

2.2.4 Rapid Assessment of Grazing and Trampling Impacts and Comparison with Baseline Survey of 2004, May to July 2014

A repeat assessment of grazing and trampling impacts was undertaken in 2014 by the James Hutton Institute to compare with a baseline survey undertaken in 2004. This survey covers the whole Group area and is not restricted to designated sites with the intention of monitoring impacts independently of the designated site process and over a measured period of 10 years.

The survey results showed a broadly similar distribution of impacts than recorded in the 2004 survey with the most frequently occurring impacts being low-moderate and moderate. A summary map of the overall impacts recorded in the 2014 survey is contained in Appendix 5a. The 2014 summary findings are shown graphic form in Chart 3 below, with Chart 4 showing the comparison with 2004;

Chart 3: Recorded Group-wide Impact Assessments, 2014

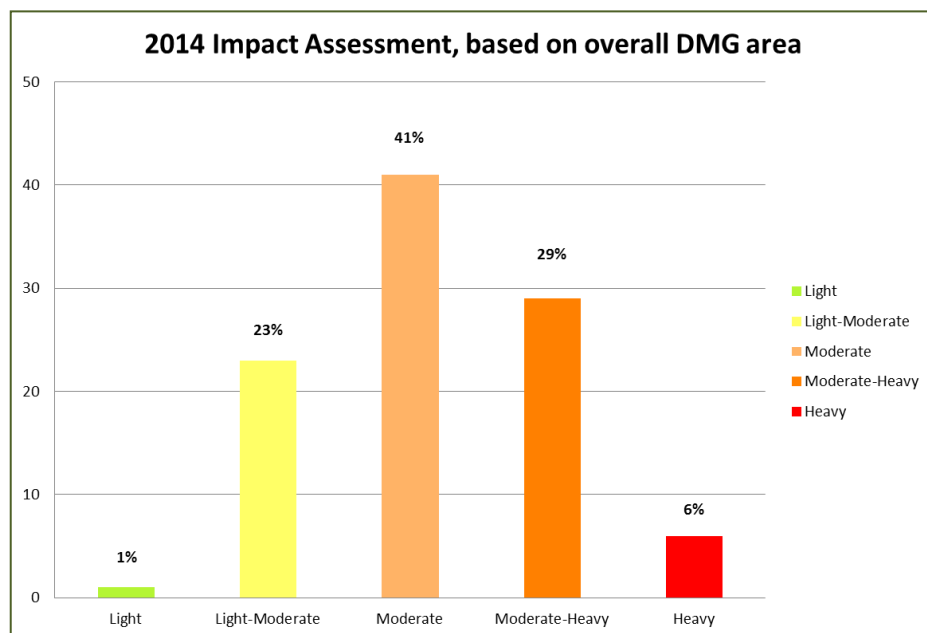
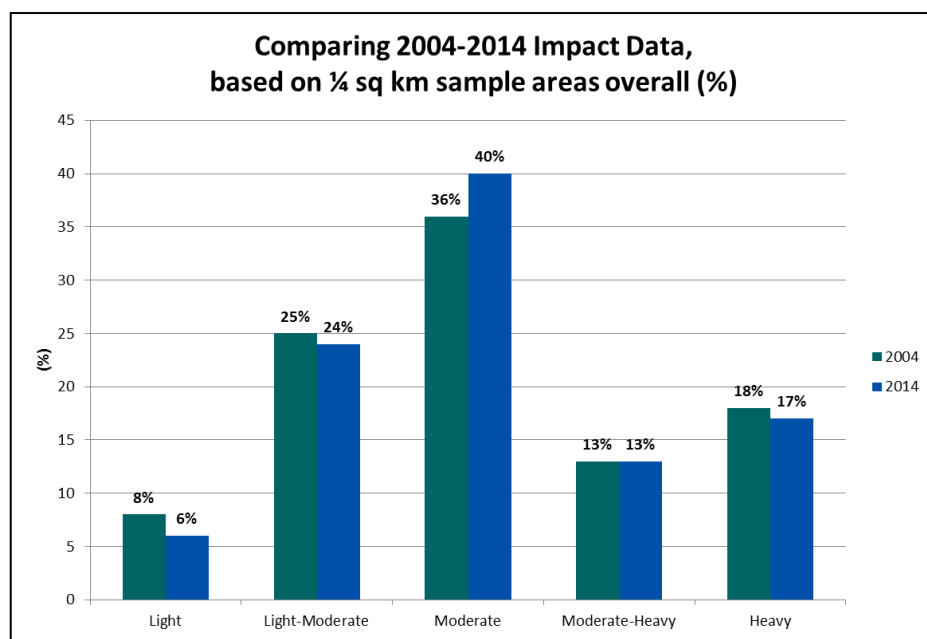


Chart 4: Group-wide Impact Assessment Comparison 2004-2014



Source: James Hutton Institute (2014) Rapid Assessment of Grazing and Trampling Impacts

To enable a more objective trend analysis the research team allocated sample squares with a numerical score allowing calculation of a Cumulative Impact Load. This shows an overall increase in cumulative impacts of 2.3% with increases on Dalnaspidal (+17%), Dunalastair (+11%), Atholl (+11%) and Corrievarkie (+7%) and with decreases on Blairfettie (-22%), Craiganour (-8% and -6% [hill ground was split into two areas]) and Talladh-a-Bheith (-6%). The other estates were largely unchanged.

Photographs taken from sample plot sites are shown in Appendix 5c.

Dalnaspidal Estate started a habitat recovery programme in 2012 as part of a change in management objectives favouring grouse over deer. Unsubstantiated evidence suggests a favourable habitat response is already noticeable on previously heavily impacted moorland habitats.

The survey showed moderate-heavily impacted areas on parts of the lower hill margins of Craiganour and Dunalastair where both livestock and deer occupy land as winter range. The interface between deer and agricultural use is a common area of difficulty and it may not be possible to alleviate impacts on all these sites, especially where winter feeding is practiced. These areas include the Beinn a' Chuallaich SSSI at the southeast of the Group area although SCM surveys have recorded 'Favourable Maintained' and 'Unfavourable Recovering' status on this site which represents a degree of improvement measured against baseline surveys. Deer regularly occupy the western part of the Beinn a' Chuallaich SSSI and the estate routinely stalk this area to ensure a balance of numbers and habitat. Sheep numbers have been reduced in this area over the last decade.

2.3 Biodiversity priorities

The Group has a number of priorities for habitat management that vary in accordance with individual land use objectives that can be summarised as;

- (a) Ensuring designated sites are in at least 'unfavourable recovering due to management' status.
- (b) Promoting long term sustainable management of the moorland and other habitats in the Group area.
- (c) Ensuring a viable, healthy population of deer capable of sustaining all land use interests.
- (d) Maintaining, enhancing or expanding the native woodland cover in the Group area.

2.4 Deer information

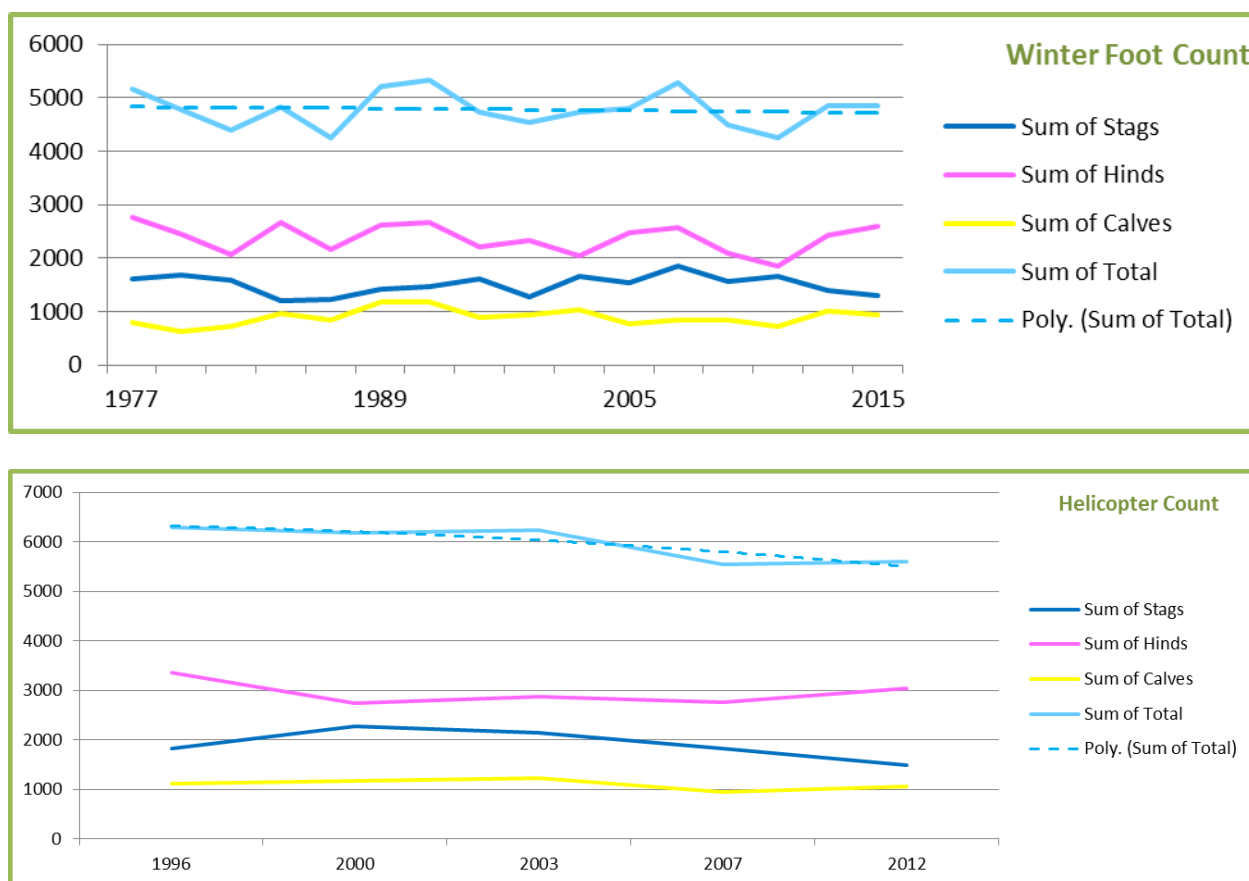
The ELEDMG was formed to promote the management of the common deer resource located in the triangle formed between Loch Ericht, Loch Rannoch and A9 Trunk road. The Group currently comprises 12 members and meets twice yearly. Part of the ongoing remit of the Group has been to collate census and cull information over the management area and to collaborate in setting cull targets and carrying out population census work. The Group has functioned cohesively since this time and has amassed a considerable amount of data over a 40 year period.

The principal deer species present are Red deer. Roe deer occupy woodlands and hill margins but are mainly confined to lower elevations and Sika deer are occasionally sighted. As part of a policy to avoid interbreeding with native Red deer Sika are shot on sight [with due regard to seasons]. The open range Red deer herd is generally considered to be intransient with little immigration or emigration due to the obvious physical barriers of Lochs Rannoch and Ericht. Historically it was considered that deer do not

readily cross the A9 corridor and whilst this is still considered to be the case, there is anecdotal evidence that some movement is occurring, especially amongst male deer.

Open range deer census information is documented below, with foot count data graphed from 1977 and helicopter count data since 1996. Data has been cleaned to remove any counts undertaken at a different time of year to avoid any anomalies caused by summer v winter populations, etc. Foot count data shows a degree of fluctuation year on year that can be explained by logistical difficulties completing the count, but this is recognised within the deer industry and we believe the counts to be within accepted tolerances.

Chart 5: Historic Deer Count Information



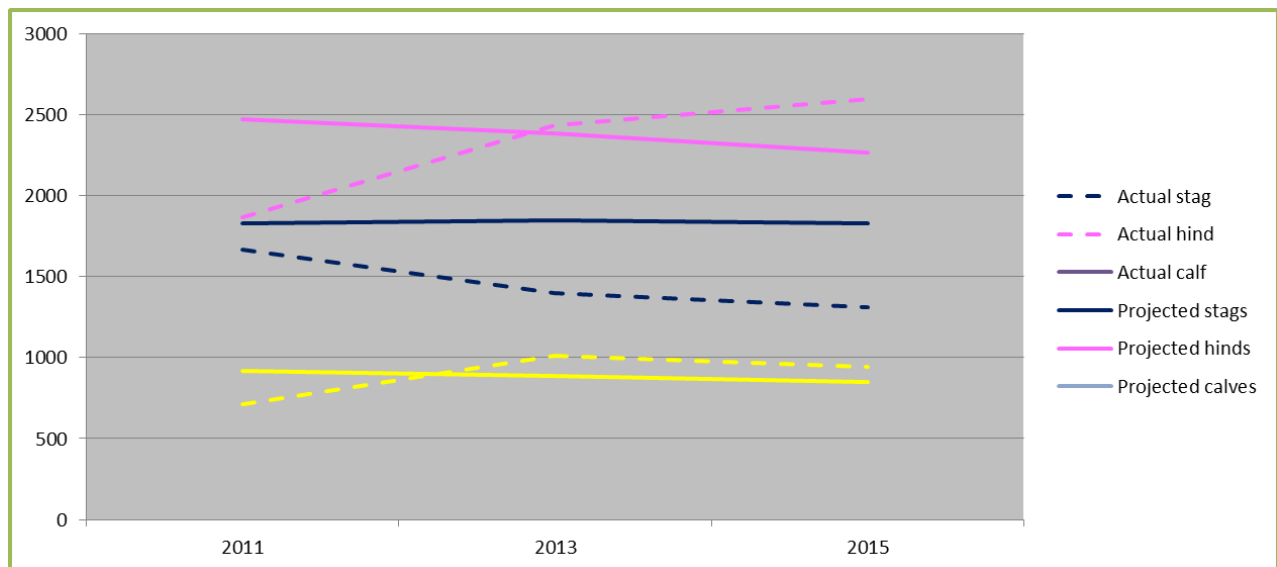
The foot count data suggests the overall winter deer population has remained relatively constant over a 35 year period [the dashed blue trendline] with only a gentle downward slope on the line over the last 15 years.

The helicopter data suggests a higher overall population, but a more pronounced downward trend in the total numbers. There is a high degree of correlation in the trend lines in both foot and helicopter counts giving us confidence that irrespective of the actual population, the direction of travel is accurate.

In the last plan the target cull figures were set to bring down the population in line with an overall policy of reducing the total deer population to alleviate pressure on habitat. The graphs above show that this

objective was achieved with an overall reduction of around 3.4/km² since 2005. Comparison with the modelled population and the actual counted population does however show that this was not achieved in a balanced way, with the reduction skewed in favour of stags, but a net gain in total hind numbers. Chart 6 shows the modelled target winter populations of stags, hinds and calves in the last plan (solid lines), compared to actual counted populations (dashed lines) and there is a clear divergence between the planned and actual lines for both hind and stags. Stag numbers have decreased much more than planned, whilst hinds have actually risen and not fallen.

Chart 6: Population Model Assessment v Deer Counts



The data therefore points to a significant imbalance in the stag:hind ratio together with an obvious reduction in the number of stags counted. Visual evidence from estate staff also suggests the stag herd includes a high proportion of younger animals suggesting there may have been over exploitation or loss of mature stags over recent years. It is likely that the drop in stag numbers is not solely due to shooting pressure, but also some emigration of deer into lower lying areas and forestry plantations.

Distribution patterns are typical of open range deer with summer and winter territories, however recent visual evidence suggests some much larger hind herds are being observed, possibly due to smaller herds amalgamating.

Deer are generally excluded from woodland and farmland by fencing. Major native woodland establishment programmes took place to the south and east of the group area during the 1990s for which some compensatory culling was undertaken. Small areas of non-commercial woodland are available as deer shelter throughout the range identified on the Woodland Inventory plan in Appendix 6. Winter feeding of deer has reduced over the period of the last deer management plan and is much less prevalent than 10 years ago.

Cull targets set in the previous plans have proved to be largely optimistic, however, the targets were designed to be dynamic and were reviewed bi-annually at group meetings taking account of count data and unplanned events, for instance mortality caused by the deep and persistent snow cover of 2010/11 or the unseasonably late spring in 2015.

Generally speaking, revised cull figures set at meetings have been achieved in almost every occasion and incorporated into the model on a rolling basis. Measured over the 11 years the Group has been actively population modelling the overall cull level is approximately 10% behind plan targets.

2.5 Agriculture and Other herbivores

Other herbivores grazing over the Group area include domestic livestock and White Hares. The latter species are present in limited numbers and are subject to cyclical population movements. The impact of small herbivores on upland habitats remains unclear, but SNH advice is that White Hares are likely to be of only limited periodic impact that it is likely to be quite localised and at times of high population cycles (perscon Burrow, 2010). For the purpose of the plan we have therefore assumed that there is no adverse impact from hares, which are deemed a species of conservation importance in their own right.

Sheep grazing is an important land use in the Group area, either for agriculture or as part of a management plan on properties managed for grouse. Sheep numbers have fluctuated over the last five years and are currently around 6,000, reported as up to 7,000 in the last plan. The reduction in overall average flock size is due to the winding up of a farming tenancy at Auchleeks in November 2015 with 800 ewes removed from the Loch Con hirsle. These sheep are not being replaced for various, including environmental, reasons and it is hoped that areas previously used as winter feeding for sheep will now provide additional resource for deer. Furthermore sheep have been removed from the hill area at Talladh-a-Bheithe to reduce grazing pressure on the SSSI and 250-200 sheep are now away wintered from Dalnaspidal to reduce winter grazing pressure. Cattle numbers are around 120 (all age classes) and again have remained quite stable. Farming is generally in hand.

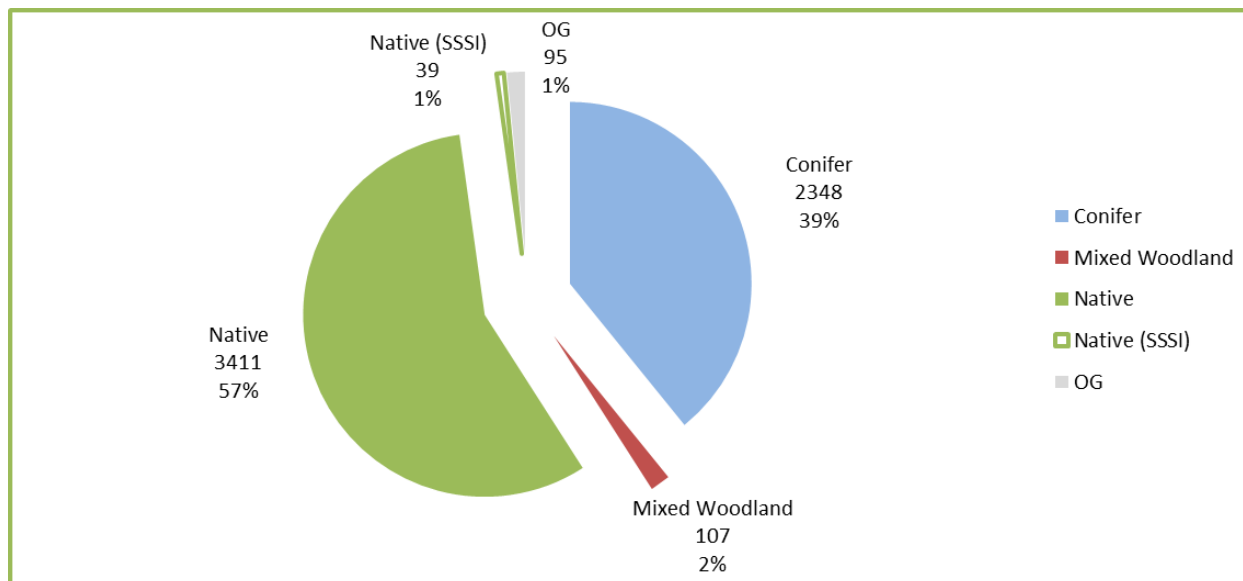
Traditional upland sheep management techniques are applied throughout the Group area, with stock actively shepherded 'up the hill' in the summer months when youngstock are at foot. Sheep are routinely treated for tick and are considered to be an important tool for dealing with this parasite. There is significant variation between summer and winter numbers utilising the open range area and due to the remoteness and vegetation types within the designated sites it is likely that sheep are infrequent users.

Sheep are fed within the Group area, but feeding stations are well away from designated areas, and tend to have been used historically. Cattle are not present on the designated areas. Where they are present on the open range cattle provide positive benefit by actively eating rank vegetation.

2.6 Forestry & Woodland

As a change to previous deer plans forestry and woodland areas are specifically included in this plan. The Group area already has considerable areas of plantation forestry, new native woodland and older existing native woodland. A full audit of the woodland resource has not been undertaken but using GIS data from the National Forest Inventory (open source, FCS) we have been able to map the approximate woodland resource and attribute a broad area (hectares) classification as follows;

Chart 7: Woodland Inventory



Source: National Forest Inventory Open Source Data

The total area recorded as woodland is around 6,000 hectares or 17% of the gross Group area, which compares favourably to the national average of 17% woodland cover for the whole of Scotland. A plan of the desktop woodland inventory is shown in Appendix 6.

Within the total, conifer woodland includes a large FCS holding at Talladh a Bheithe/Aulich Hill and a number of both privately and estate owned woods, including four privately held investment woodlands. Timber production is an objective in the commercially managed blocks and successful replanting requires both deer fencing and active management of resident woodland deer. Consultation with FCS and Fountains Forestry (Loch Errochty Forest) confirms the intention to maintain perimeter deer fences to exclude hill deer and manage the resident forest deer populations separately. Several large low quality conifer woods are used for deer shelter providing an important resource in bad weather.

Some clearfelling is currently underway at Talladh-a-Bheithe with replanting proposed for 2017/18 with a mixture of commercial conifers and native broadleaves.

Since 1990 there has been significant planting and regeneration of native woodlands throughout much of the south and east of the Group range, with more limited planting or woodland enclosure to the north which is characterised by more montane habitat. Analysis suggests over 3,000ha of native woodland has been planted or enclosed since 1990 which represents over 8% of the gross land area. These areas are coloured yellow in the Woodland Inventory plan in Appendix 6.

2.7 Land management impacts

Within the group traditional upland management techniques are implemented that can have a localised impact on habitat condition. The most obvious are muir/heather burning, supplementary feeding of deer and domestic livestock, motorised access (primarily for deer carcass extraction) and fencing.

Heather burning is practiced by those properties with grouse shooting interests, namely North Drumochter, Dalnaspidal, Craiganour, Dunalastair, Auchleeks and Garbruach. Burning is an important management tool for regenerating rank heather and promoting a diverse age structure important to Red Grouse and some moorland raptors and breeding birds. Burning is carried out in accordance with the Muirburn Code, within season and in a responsible fashion.

Supplementary feeding of deer and livestock concentrates populations onto discrete sites at times of the year when vegetation and soil structures are susceptible to damage. Group members follow best practice by limiting feeding stations to less sensitive or 'sacrificial' areas where a degree of ground damage can be tolerated without risk to vulnerable habitats. No feeding is carried out in designated or sensitive areas.

Deer and grouse management play a dominate role in the Group area. All ownerships utilise Argocats or other ATVs for access and carcass extraction and it is recognised that vehicular movements can have a damaging affect on ground vegetation and structure. Most properties have a network of maintained hill roads that allow regular access to launch points thus limiting off track movements over the most frequently used journeys. Furthermore, primary 'feeder' tracks are used and maintained forming the link between formal hill roads and the open hill areas. The Group members maintain these feeder routes to allow continued access without opening 'multiple' tracks where a section becomes impassable, through drainage, construction of bridging structures or use of stabilising mats. Drivers are also encouraged to avoid open peat hags and flushed bogs where possible. Tracking damage is not considered significant in the group area and best practice will be advocated during the plan period.

There is approximately 140km of deer fencing within the Group area, shown on the fencing plan in Appendix 7. Most fencing is associated with woodland establishment or protecting more valuable inbye fields. The condition of fences varies enormously from new to almost totally dilapidated. Changes in deer occupancy and movement patterns are often associated with new fencing and there is some evidence of deer tracks forming along fence lines where traditional movement routes have been blocked.

2.8 Public Access

The degree of public access varies across the Group area. High mountain access generally occurs in the north and west which is made attractive by the presence of five Munros and some important ridge walks around the Drumochter Hills. The Munros are Beinn Udlamain, Geaul-charn, A'Mharconaich, Sgairneach Mhor and Meall a Chaorainn. Other recognised peaks are Beinn Mholach, the Boar of Badenoch, the Sow of Atholl, Stob an Aonaich Mhoir and Beinn a' Chuallaich.

There is one registered Right of Way from Loch Rannoch to Loch Garry as well as a number of Core Paths although these are not frequently used. There is also general access on tracks and paths nearer to settlements and local features of interest.

Research within the Group did not provide definitive data on disturbance to deer management, but generally reported that access was not problematic, with a small number of stalks disturbed every year. Access users are generally found to be courteous and responsive to guidance.

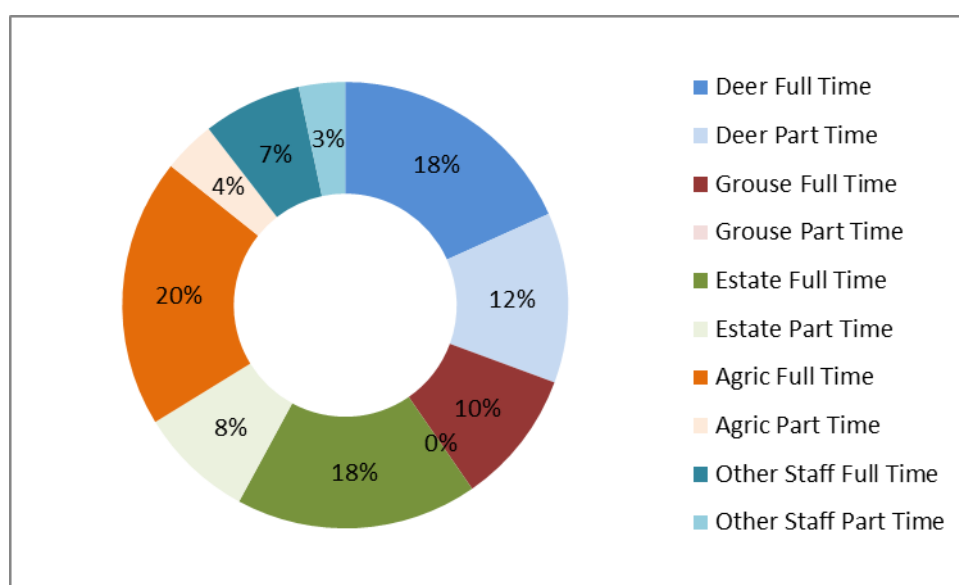
2.9 Social and economic information

Employment patterns within the Group are dominated by traditional estate land uses. A total of 45 Full Time Equivalent (FTE) employees are recorded as working in the Group. Game management remains the biggest single sector with 19 FTE jobs or 40%, although within this sector resources devoted to grouse management have increased significantly with 4.5 FTE jobs now primarily related to grouse shooting. As a percentage the importance of game management remains broadly unchanged with the previous analysis.

Agriculture provides 10 FTE positions (24%) which represents a similar level of resource, but a reduction in percentage terms as other roles have expanded, especially in the estate staff sector (house keepers, gardeners, handymen, etc) which now provide 16 FTE roles or 36% of employment. Much of this employment is ancillary to the game management expenditure and is involved in provision of accommodation, etc for shooting guests. Beaters on driven grouse shoots have not been included in this assessment.

In relative terms the provision of 45 FTE positions is of significant benefit to the area and wider community.

Chart 8: Full Time Equivalent Jobs within the Deer Group Area



2.10 Public Interest

In 2014 a benchmark assessment of Deer Management Groups was undertaken by SNH to offer guidance to Ministers on the extent and quality of collaborative deer management and to introduce a new measure of management in the 'public interest'.

The criteria assessed are set out in section 1.5. The DMG Benchmark Assessment rated the Group's performance against pre-determined criteria on a traffic light system;

Green = delivery is good, in line with objective
Amber = delivery is partial/variable in quality
Red = not delivering objective

To provide objective analysis to the traffic light system we applied a score (3 = green; 2 = amber; 1 = red) to the two components of the assessment as follows;

Table 3: DMG Assessment 2014

Assessment	Maximum available score	Achieved Score
DMG Benchmark (operational effectiveness)	135	Score = 130 96%
Public interest	210	Score = 174 83%

Based on this analysis the Group is high scoring on both measures, but there is scope to improve on delivery on public interest criteria.

Public Interest

The Group area occupies a remote and sparsely populated area of the central Highlands. There are village settlements at Kinloch Rannoch and Dalwhinnie and hamlets at Struan and Killichonan, all of which are on the periphery of the Group area. Most housing occupies the periphery making the primary open hill red deer area almost void of inhabited dwellings. There are no public roads running through the core of the Group area with the main A9 corridor forming the eastern boundary and the B846/847 forming the southern boundary.

Kinloch Rannoch is considered a tourism centre and includes the large MacDonald Hotels complex. Most visitors are on general leisure or watersports based holidays.

The Group invites the Rannoch and Tummel and Blair Atholl and Struan Community Councils to meetings and they are included in the circulation of minutes. Rannoch and Tummel is currently not sitting due to lack of representatives.

The Group is a subscribing member of the Highland Perthshire Communities Partnership.

The Group has one seat on the Cairngorms Deer Advisory Board, but because of the physical boundary of the A9 corridor are not involved in deer management planning for the area.

The Group publishes basic information about its function, composition and key contacts on the Association of Deer Management Groups website at <http://elocherichtdmg.deer-management.co.uk>

3. OBJECTIVES OF THE PLAN

3.1 Ownership Objectives

Through the baseline questionnaire (August 2015) landowners in the Group area ranked deer management as the primary landuse/management objective. Asset value and profitability also scored 'very important' with habitat management and socio-economic factors 'important'. Management for grouse has increased in importance compared with previous plans. Agriculture and forestry are of relatively low importance to the Group as a whole, but of high importance on certain properties demonstrating the complexity of landuse across the area. At Group level there is a strong desire to maintain open range habitats in good condition whilst managing designated habitats towards favourable or recovering habitat condition through the continuance of viable deer and grouse based sporting operations.

3.2 Ideal objectives

Within the Group there remains a high degree of commonality of management objectives. The specific common objectives of this plan relative to the Group as a whole are:-

- Monitor deer and their effect on the habitat of the Group area.
- Promote the proper management of designated sites within the Group area to ensure favourable or recovering condition.
- Maintain the social and economic importance of deer and their management in the Group area, in particular maintaining employment in otherwise fragile rural communities.
- Promote the objectives and priorities of land owners in regard to deer ranging freely within the group area.
- To produce an annual population model and cull targets.
- To allow the Group to conduct deer management activities on an independent footing, whilst co-operating with statutory bodies over deer management and habitat issues.
- Where appropriate maintaining economic agricultural production.
- Manage a diverse woodland resource and identify and exploit opportunities for woodland creation and improvement.
- Actively engage the wider community in the deer management activities of the local community.

3.3 Constraints and limiting factors

The Group have identified the following constraints that have an impact on deer management activity;

Table 4: SWOT Analysis

<u>Strengths</u> Consensus amongst members Past record in collaborative management	<u>Weaknesses</u> Difficulty in accurately counting deer population Cost of deer management Community Councils (lack of)
<u>Opportunities</u> Tourism	<u>Threats</u> Habitat sensitivity Climate change Changing priorities (political and management)

- Counting – successful deer counting requires good weather conditions (ideally even snow cover), proper coordination and resourcing and experienced staff. The Group has carried out regular ground counts since the 1970s and DCS/SNH helicopter counts have been undertaken on six occasions. The counts have been well organised but can be challenging, with uneven snow conditions (and especially patchy snow cover and broken ground) being one of the most common constraints. Chart 5 highlights the complexity of counting through the fluctuations in the recorded population and variances between ground and helicopter counting. We are satisfied however that we can measure the population within a tolerance of +/- 10%.
- Cost – analysis of financial data gathered from members shows an annual income attributable to deer management (all sources) of around £235,000 at Group level, but an annual cost for the provision of deer management of around £230,000. This means in practical terms deer management across the Group generates significant revenues but negligible profit. To ensure the Group can continue to deliver the highest standards in deer management it is essential to maintain a viable, healthy red deer population capable of generating sufficient income from sporting lets and venison sales to meet costs of providing the service. There is currently only limited cost to the public purse in delivering deer management incurred in SCM/HIA assessment and deer census.
- Consensus and changing priorities – although the Group has largely similar objectives, there is an increase in the importance of grouse management in the northern half of the Group area and a greater reliance on deer management in the southern half. This gives rise to potentially different target population densities over relatively small geographical locations. This process can be adequately managed through the collaborative process.
- Climate – the effect of extreme weather patterns on habitats cannot be ignored. Scotland like much of the UK, has experienced unpredictable and often extreme weather patterns over the last decade including extremes of wet, snow, dry, etc. This has led to greater unpredictability of deer movements including changes to summering and wintering patterns and indeed the potential for habitats to encounter differing levels of impact than would be considered normal, for instance making the habitats wetter and softer. The extent to which these factors do or do not have bearing on habitats is important, as these influences are wholly outwith management control.
- Access – public access is a potential constraint on delivering deer management activity, but is not significant at East Loch Ericht and can be satisfactorily managed.
- Habitat Sensitivity - there is an imbalance between the level of pressure various habitats can sustain without detriment. Some habitats occur at such small areas/extent/frequency or are sufficiently vulnerable that, other than complete exclusion or almost total reduction of grazing and trampling pressure, favourable responses will not be achieved. To compound this, other habitats require certain levels of grazing pressure to ensure continuance. This need for balance is a constraint to deciding on appropriate actions.
- Community Councils – the representative bodies in the area are short of members and at the time of writing Rannoch and Tummel CC is not sitting, leading to practical difficulties in engaging with these bodies.

3.4 Desired and achievable objectives

The Group's desired and achievable objectives are;

- To manage habitat across the Group to benefit existing land uses and provide public benefit through achieving a minimum of 'unfavourable recovering due to management' status or ideally better for designated habitats,
- To maintain current levels of employment within the Group area,
- To achieve best practice in collaborative deer management underpinned by a Red deer population capable of sustaining a sporting stag cull of 350 stags,
- To carry out deer management in an open and transparent way engaging with local stakeholders and interested parties.

Recent deer management policy has delivered a consistent and controlled approach to deer census, setting cull targets and implementation. This management has led to a gradual reduction of the overall deer population, and the objective is to continue this to ensure designated habitats are in favourable condition.

As part of the gradual reduction in overall numbers it is a key aim to achieve a target sex ratio of open hill red deer of 1 stag to 1.25 hinds within a 10 year period. The current ratio is 1:1.7 and it is felt that concentrating on hind culling would deliver habitat and deer welfare benefits, but still maintain a core herd of stags capable of delivering economic objectives.

4. THE OPERATIONAL PLAN

4.1 The Management Plan

This section looks at the detailed deer management plan. Sub-sections deal with specific elements/objectives in green shaded boxes and the blue shaded boxes at the end of each section detail which parts of the DMG Assessment are being addressed.

4.1.1 Deer – target population

OBJECTIVE - the objective over the next ten year period is;

- (a) To continue an overall reduction in the total population to see if an improvement in habitat condition is observed,
- (b) To identify areas of excessive deer density and adjust culling priorities to address these,
- (c) To maintain sporting deer stalking at an economic level.

Over the last 10 years the deer population has reduced by about 1,000 head or 3.4/km².

The Group's primary deer management objective is to balance open range Red deer numbers with available habitat. Over the last decade it has been a management objective to gradually reduce the overall deer population. Although count data is at best indicative, it is clear overall numbers have fallen over the last ten years to a current summer density of around 5,900 (20.3/km²). In 2005 the corresponding figure was 6,900 (23.8/km²) so over the net open range area we have seen a reduction of 3.4/km² on a decade of planned management. Over this period the assessed habitat response has been largely neutral, with no significant improvement or noticeable degradation.

To ensure deer management remains on an economic footing the ideal objective is to cull around 350 sporting stags each season. Based on the traditional sporting cull assumption of 1/6 of the stag herd, 350 stags would require a summer stag population of around 2,100. In 2015 the estimated summer population was 1,730, about 350 – 370 beasts light. Against this the summer 2015 hind population was modelled at 2,990, a ratio of 1:1.7 stags to hinds. We consider this sex ratio to be too high, and feel a more appropriate ratio would be 1:1.25 stags to hinds.

Based on a target stag population of 2,100 the required summer hind population at a sex ratio of 1:1.25 would be 2,625 hinds, against a current estimate of just under 3,000. This means that based on population modelling we can assume that it is possible to reach an aspirational stag target capable of sustainably meeting sporting objectives and still continue to reduce the overall Red deer herd by approximately 300 - 400 or > 1/km².

Within the deer range there are areas that are seasonally occupied by large numbers of deer, increasing the effective deer density over relatively small areas. This tends to be larger Groups of hinds and wintering stags. As a secondary objective the Group will try to target larger groups of hinds in an attempt to break these into smaller parcels which will have less localised grazing and trampling impact on habitat. Smaller groups should also assist stag dispersal during the rut. One causal factor of this large herding may be the predictability of stalking patterns, using similar approaches, extraction routes, timings, etc (J.P.G.M. Crooms *et al*, 2013) allowing deer to identify areas of sanctuary and develop flight and special responses than can lead to accumulations of animals in areas of less disturbance. Directly

targeting these large herds in the same manner may exacerbate and not alleviate the problem so stalking techniques will assess who is best placed to address particular groups of deer, which may then require a degree of across boundary collaboration to achieve the desired outcome.

The model is based on counted deer populations, target culls and assumed birth and mortality rates to predict annual population changes. The calving index is set at 38%, with adult and juvenile mortality factored in at 2% and 6% respectively, giving a net recruitment rate of 30%. This has been tested through repeat recruitment counts in May each year which show net average recruitment at 30% for the period 2010 to 2015.

As deer census and population estimation can never be truly accurate, as a basic underlying rule the Group will act to ensure that the population does not rise above current levels through population modelling, annual counting and adjustment of cull targets.

OUTCOME - Further reduction of the overall deer population contributes to;

- (a) the delivery of Designated Sites in Favourable Condition,
- (b) Retention of existing native woodland cover and improvement in woodland condition,
- (c) Managing deer impacts in the wider countryside,
- (d) Protect landscapes from deer and deer management activity,
- (e) Ensuring deer welfare is taken into account at population level.

Maintaining sporting stalking at an economic level contributes to;

- (a) Optimising the economic benefits of deer management in Scotland,
- (b) Minimising the economic cost of deer.

4.1.2 Deer - Proposed culls to achieve target population

OBJECTIVE – to set realistic cull targets that are reviewed annually in line with ongoing census and deer management operations

For over 30 years the Group has set annual stag and hind cull targets. Under recent deer management plans the Group has prepared indicative models to look at the effect of different culling scenarios.

The Group currently has an imbalance between stags and hinds, so there is scope to offset lower stag culls with higher hind culls and still achieve a net reduction in deer numbers over the plan period.

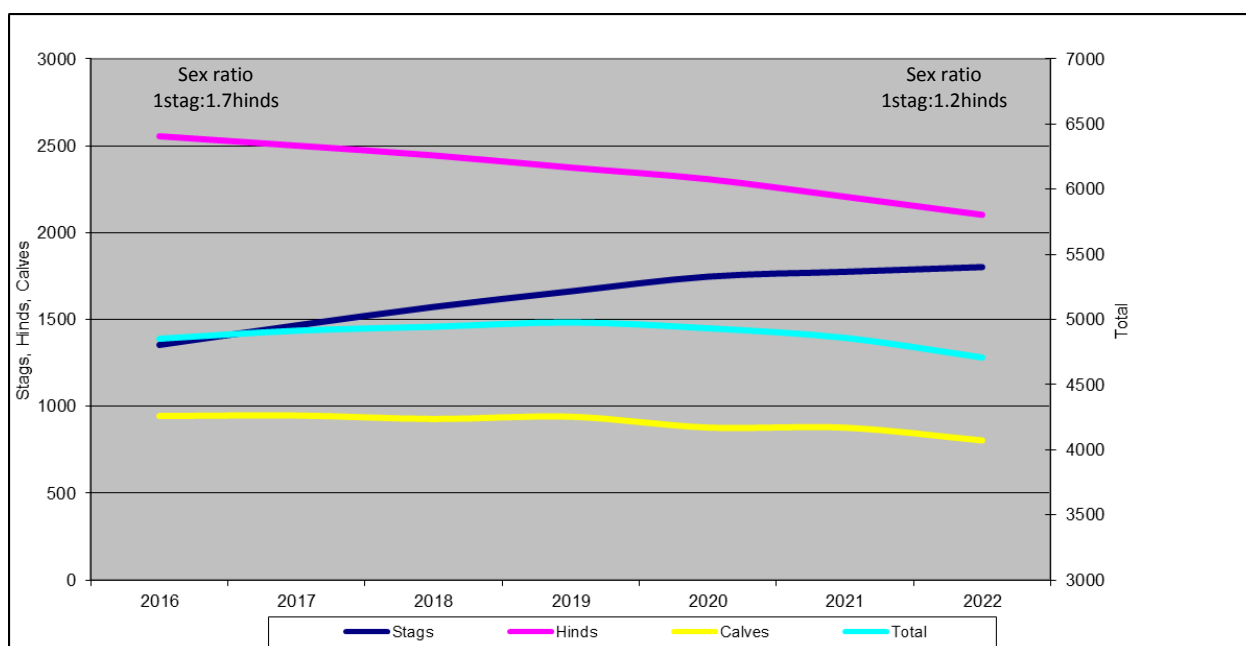
The effects of higher and lower culls have been assessed as part of the sensitivity analysis and a balanced cull plan aimed at maintaining an overall population reduction and rebalancing the sex ratio is set out below;

Table 5: Target Deer Culls (Open range red deer) 2016-2021

Year	Stags	Hinds	Calves	Total
2016	330	475	143	948
2017	335	480	144	959
2018	340	485	146	971
2019	350	490	147	987
2020	375	495	149	1019
Period	1730	2425	729	4884

A full copy of the population model for 2016 – 2021 is shown in Appendix 9. Chart 9 below is an extract showing the expected population response to the cull plan.

Chart 9: Expected winter population response 2016-2021



The total line reads off the right axis, individual stag, hind and calf lines read off the left axis. The five year targets are to offer broad guidance. Culling levels have to be reactive and dynamic and the figures will remain open to annual discussion and agreement. The population model includes a facility to input actual count data and rebase the projection from that point, enabling members of the Group to model the effects of various cull targets, etc. The model above was last rebased for count data in February 2015.

The target culls exclude woodland deer which are still actively managed by all estates with forestry interests and in the larger commercial forest blocks. In most instances there is no particular cull plan for woodland deer with shooting pressure based broadly on observations throughout the year, or the level of damage to trees, etc. Woodland deer culls will be recorded over the plan period during which

members will operate to their individual woodland deer management plans. Damage to native or commercial trees will be monitored by members who will then adjust cull plans accordingly.

OUTCOME – the proposed cull plan contributes to;

- (a) Developing effective mechanisms for managing deer,
- (b) Manage deer to retain existing native woodland cover and improve woodland condition in the medium to long term.

4.2 Habitats and species

OBJECTIVE – the deer management plan aims to;

- (a) Ensure designated sites are under an assured management regime,
- (b) Identify habitat ‘hotspots’ across the Group area and take steps to improve,
- (c) Ensure there is no loss of native woodland across the Group area,
- (d) Identify areas for the creation or improvement of native woodland habitat.

To achieve as a minimum ‘unfavourable recovering due to management’ status for the designated sites and localised habitat improvement in other areas of the Group range identified as having moderate-heavy or heavy impacts.

The desirable range of impacts varies between designated habitats. On Drumochter Hills SAC, Low to Moderate to Low impacts are suitable for the Alpine and subalpine heaths, blanket bog, wet and dry heaths, montane acid grasslands and tall herbs; with willows, plants in crevices and screes requiring impacts towards the Low end of the range.

A small proportion of samples in the Moderate range may help to maintain species and structural diversity of the flushes.

For the species-rich grassland with mat-grass, impacts in the range from Moderate to Low to Moderate to High are required to promote favourable condition. It is important that there is some variation in impacts at a local scale within this range. However, these habitats are relatively limited in extent within the SAC and will tend to be preferentially browsed.

Specific actions include;

- Maintaining deer culls on and immediately around the Drumochter Hills SAC. This area has already seen more intensive culling at North Drumochter and Dalnaspidal with observed reductions in deer occupancy. This should include a proportion of early summer (July/August) stags where possible to create disturbance, moving deer off the designated sites thus reducing occupancy.
- Maintaining deer culls on and immediately around the Beinn a’ Chuallaich SSSI.
- Craiganour will continue to ensure culling in the ‘corries’ area is favoured over potentially easier deer at lower ranges.
- Talladh-a-Bheithe plans to take a higher proportion of their cull from the Coire Bhachdaidh SSSI area. Sheep have also been removed from the open range area and are now only grazed below the deer fence, further reducing grazing pressure on the SSSI.

- Corrievarkie has increased cull targets for the next five years to address deer occupancy around the designated sites.
- Increased impacts were noted on Blanket Bog on both Dalnaspidal and Craiganour but cull plans are already in place and being implemented on both properties to address this.

OUTCOME –the proposed plan contributes to;

- (a) Monitor and manage deer impacts in the wider countryside,
- (b) Contribute to the delivery of designated sites into Favourable Condition,
- (c) Improve Scotland’s ability to store carbon.

4.3 Woodland

OBJECTIVE – the deer management plan aims to;

- (a) Ensure there is no loss of native woodland across the Group area,
- (b) Identify areas for the creation or improvement of native woodland habitat.

Part of the plan process is to identify how the Group is contributing to Scotland’s woodland creation targets. Based on analysis of the woodland resource in section 2.6 the Group area now has 17% woodland cover which compares favourably to the national average with over 8% expansion in woodland cover over the last 25 year period. Although there is scope for further woodland creation, many of the obvious or easily managed potential sites have now been utilised and larger scale schemes are increasingly unlikely. The Group has however contributed significantly to woodland expansion over recent years and whilst new opportunities will continue to be identified it is not considered to be a management priority. Woodland management and expansion will be discussed at autumn Group meetings as a permanent agenda item.

As part of a management review Auchleeks Estate will extend a small area of woodland at Loch Errochty as part of a felling and replanting proposal. The current woodland comprises 7ha of mixed conifer and the aim is to double the area when replanting with a mix of conifers and native broadleaves.

Talladh-a-Bheithe estate is enclosing small blocks of scattered veteran birch woodland along the steep face over Loch Ericht. In 2016 it is proposed to form two regeneration enclosures, with the potential for further blocks if the exercise is successful. This will help perpetuate the birch woodland in this location.

Dunalastair Estate is considering further native woodland enclosures and is currently identifying suitable sites on the estate.

OUTCOME –the proposed plan contributes to;

- (a) Monitor and manage deer impacts in the wider countryside,
- (b) Contribute to the Scottish Government woodland expansion target of 25% woodland cover,
- (c) Manage deer to retain existing native woodland cover and improve woodland condition in the medium to long term,
- (d) Improve Scotland’s ability to store carbon.

4.4 Economics

OBJECTIVE – the deer management plan aims to;
(a) Maintain a long-term sustainable stag cull of 350 beasts

Specific economic targets are not set at Group level and are sensitive to the business interests of individual management units. Most owners rank income from let stalking and venison as important in maintaining a viable business and therefore in subsidising the costs of management which is of benefit to the public interest as it funds deer management measures.

Continuation of a high level of sporting management is therefore desirable as this allows continuity of management without impact on public finances. This is quantified as a sustainable sporting cull of 350 stags per annum. It is recognised that this is not achievable with the current stag herd.

OUTCOME –the proposed plan contributes to;
(a) Optimise economic benefits of Deer Management in Scotland,
(b) Minimise the economic cost of deer,
(c) Ensure deer welfare is taken fully into account at individual animal and population level.

4.5 Public Interest

OBJECTIVE – the deer management plan aims to;
(a) Widen the membership base of the Group,
(b) Broaden stakeholder engagement,
(c) Set up a Group website.

Actions undertaken or which will be undertaken during the life of the plan include;

- The Group has already extended its membership to include the Forestry Commission holding at Talladh a Bheithe.
- The Group have established communications with the private sector forest owner at Loch Errochty Forest and will liaise over fencing issues. The forest is and will remain entirely deer fenced so is not becoming a full member.
- The Group has established a dedicated website with user defined content where the deer management plan will be published, along with minutes of meetings. The web address is <http://elocherichtdmg.deer-management.co.uk>.
- The Group already passes minutes to Blair Atholl and Struan CC and will continue to engage with this and other local Community Councils as and when they are established.
- The Group has developed a 'training log' recording training and certification on a property by property basis. All stalkers should have or be working towards DSC2. Training needs will be discussed as a permanent agenda item at the spring Group meeting.

OUTCOME –the proposed plan contributes to;
(a) Develop effective mechanisms to manage deer,
(b) Ensure effective communication on deer management issues,
(c) Contribute to delivering high standards of competence in deer management,
(d) Identify and promote opportunities contributing to public health and wellbeing benefits.

5. ACTIONS REQUIRED TO DELIVER THE PLAN

Measures and staffing levels are already in place to meet the plan objectives. The specific actions and targets required to deliver the plan are set out in Table 6 below;

Table 6: Action Plan (extract years 1 & 2)

			Plan Period 1			
			2016		2017	
Plan Ref.	Item	Frequency	Spring Summer	Autumn Winter	Spring Summer	Autumn Winter
All	Approve and adopt plan		06-May-16			
All	Duration	10 years				
All	Plan Period 1	5 years				
All	Interim review & Plan Period 2	5 years				
All	DMG Meetings	Biannual	May	October	May	October
4.1.2	Review model & cull targets	Biannual	May	October	May	October
6.2	Deer count	Annual		Winter		Winter
4.1.1	Target Deer Population (total)	10 years	6003	4853	6045	4914
	Designated sites - ongoing review	Ongoing				
4.4	Habitat Monitoring	Scheduled				
4.4	Grazing & Trampling Impact re-survey	Scheduled				
4.3	Identify Areas for Woodland Creation	Annual				
	Training & CPD - training needs analysis	Annual				
4.5	Maintain Website	Ongoing				
6	Other Monitoring - develop new methods for monitoring and review	Annual				

	Scheduled task
	Completed task
	Missed task

A copy of the full action plan is located in Appendix 10. This is a dynamic document which will be updated following each Group meeting.

6. MONITORING

6.1 Habitat impacts

The Group is interested in monitoring habitat impact over measurable timescales. The following resurveys are proposed the plan period;

Table 7: Proposed Monitoring Schedule

Feature	Survey	Proposal
Whole Group range	Rapid Assessment of Grazing and Trampling Impacts	2024
Drumochter Hills SAC	SCM/HIA	2018-2020
Coire Bhachdaidh SSSI	SCM/HIA	2018-2020
Dalnaspidal	Rapid Assessment of Grazing and Trampling Impacts	2017/18

The results of this monitoring will feed information on habitat into the management process, which will be continually reviewed at the biannual group meetings to account for updated information.

6.2 Deer populations

The Group has been undertaking deer census work within the Group area since its inception, with detailed records back to 1977.

As part of the plan process the Group will continue to undertake annual winter total population counts and spring recruitment counts and has a nominated coordinator to facilitate this process.

In addition SNH are proposing to restart the rotational counting programme as previously carried out by DCS prior to the focus on sites for assessment. If this is implemented then an SNH lead count (probably by helicopter) is likely to fall in 2017/18.

6.3 Usage by other herbivores

Changes to current farming practices will be discussed at bi-annual Group meetings.

6.4 Deer culls

Deer cull information will continue to be collected and analysed by the Group at bi-annual Group meetings.

6.5 Social and economic benefits

These are not specifically recorded other than in the number of Full Time Equivalent jobs supported which is easily monitored.

6.6 Public Interest

The new website will have a feedback facility. Minutes of meetings will be posted onto the website.

Any proposed alterations to the plan at the mid-term review stage in 2021 will be subject to consultation.

7. REVIEW

The Group has a well-established system of bi-annual meetings, one in May and one in October. Amongst the main functions of the Group are collation of deer information, setting annual cull targets, review of deer and habitat management interactions and when necessary dispute resolution. This level of management action has been established for over 40 years and during the previous plans, this framework was also used to discuss plan delivery, population modelling, and habitat management.

This current plan is for ten year period and includes annual targets and monitoring requirements. It is envisaged that other than reactive measures to specific matters that may arise from time to time, the plan will be followed until the mid-plan review in 2021.

James Adamson MRICS
Secretary, East Loch Ericht Deer Management Group

References

Strath Caulaidh Ltd (2013) Site Condition Monitoring survey of selected features within the Drumochter Hills SAC.

Strath Caulaidh Ltd (2013) Repeat Herbivore Impact Assessment if the Drumochter Hills SAC and Coire Bhachdaidh SSSI.

Nolan A. J., Malcolm A. and McKeen M. (2005). Rapid Assessment of Grazing and Trampling Impacts on Upland Habitats for the East Loch Ericht Deer Management Group Area. The Macaulay Institute.

James Hutton Institute (2014) Rapid Assessment of Grazing and Trampling Impacts, East Loch Ericht Deer Management Group Area 2014 and Comparison with Baseline Survey of 2004.

National Forest Inventory (2015). Forestry Commission.

Hope, I. Perscon(s) on various related matters.

Dayton, N. (2007) An assessment and evaluation of herbivore impacts on the designated upland habitats within the Drumochter Hills Special Area of Conservation. Scottish Natural Heritage, Commissioned Report No. R06AC208.

Headley, A. (2008) An assessment of herbivore impacts on the notified features within the Coire Bhachdaidh Site of Special Scientific Interest.

J.P.G.M. Cromsigt *et al* (2013): Hunting for fear: innovating management of human–wildlife conflicts. Journal of Applied Ecology.

Appendices

Appendix 1	Plan of Property Boundaries
Appendix 2	Plan of Main Land Cover Types
Appendix 3	Plan of Designations
Appendix 4a	Plan of Drumochter Hills HIA Summary Findings

Appendix 4b	Plan of Coire Bhachdaidh HIA Summary Findings
Appendix 5a	Plan of ELEDMG Grazing & Trampling Assessment 2014 Summary Findings
Appendix 5b	Plan of ELEDMG Grazing & Trampling Assessment 2014 Changes with 2004 Survey
Appendix 5c	Photos of survey lots form ELEDMG Grazing & Trampling Assessment 2014
Appendix 6	Woodland Inventory
Appendix 7	Deer Fence Inventory
Appendix 8	Plan of Deer Management Objectives
Appendix 9	Population Model 2016-2021

Appendix 1 Plan of Property Boundaries

Appendix 2 Plan of Main Land Cover Types

Appendix 3 Plan of Designations

Appendix 4a Plan of Drumochter Hills HIA Summary Findings

Appendix 4b Plan of Coire Bhachdaidh HIA Summary Findings

Appendix 5a Plan of ELEDMG Grazing & Trampling Assessment 2014 Summary Findings

Appendix 5b Plan of ELEDMG Grazing & Trampling Assessment 2014 Changes with 2004 Survey

Appendix 5c Photos of survey lots form ELEDMG Grazing & Trampling Assessment 2014

Appendix 6 Woodland Inventory

Appendix 7 Deer Fence Inventory

Appendix 8 Plan of Deer Management Objectives

Appendix 9 Population Model 2016-2021

Appendix 10 Action Plan