# KNOYDART DEER MANAGEMENT GROUP

# **AUGUST 2016 DRAFT**

# DEER MANAGEMENT PLAN 2016 – 2025

**Background Information** 

# **PREFACE**

This Deer Management Plan has been developed for the Knoydart Deer Management Group (KDMG). The Plan is funded both by the deer group and by Scottish Natural Heritage, it runs from 2016 until 2025 and has been formally endorsed by all the Members of the Group. It has been designed to be readily updated as needs arise and will be reviewed on a six-monthly basis or as required, with a systematic review taking place at the end of the first five year period in 2020.

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# Part One - INTRODUCTION

#### 1. Purpose of Plan

The purpose of this Plan is to provide:-

- (a) an agreed statement of the shared views of the Members of the Group about the management of wild deer in the area covered by the Group;
- (b) an agreed set of the actions to try and ensure that deer management in the area is in line with those shared views;
- (c) an agreed set of actions that will identify and deliver relevant public interest and benefits throughout the area
- (d) an agreed pattern of arrangements to try and ensure that the actions are implemented and their effectiveness monitored.
- (e) a document that acts as a ready source of information for both members and the general public alike, clarifying points of contact, and setting out how communications can best be received and addressed.

An important function of this plan will be to define the working relationship and lines of communications required with the West Knoydart Deer Management Group (WKDMG) which lies directly to the west. It is widely recognized that there is an overlap in deer populations between the two groups. Reference is made to WKDMG as appropriate, but they have endorsed their own separate deer management plan, which incorporates shared reporting requirements with this Group. A full consultation has been undertaken with their members and office bearers.

# 2. Group Area

The Knoydart Deer Management Group (KDMG) covers 63,995 ha or nearly 160,000 acres (1. KDMG Location Map). It lies to the north of Spean Bridge in Lochaber, and to the west of Loch Lochy and Invergarry. It occupies much of the Knoydart peninsula, with the west part of the peninsula being covered by the West Knoydart DMG. (1a. West Knoydart Location Map) It has 9 current subscribing members. It is not part of any other local association, and operates under its own constitution. (See Appendix 1, KDMG Constitution) The group subscribes to the Association of Deer Management Groups (ADMG).

The broad boundaries of the area are:

- in the east: Loch Lochy up to Invergarry
- in the north: a line following Loch Garry, Loch Quoich and through Loch Hourn to Barrisdale Bay,
- in the west: a line south along estate boundaries to Loch Nevis, cutting off the west part of Knoydart, then back westwards around the coast to Mallaig and then Morar
- in the south: from Morar along Loch Morar and Loch Arkaig back to Loch Lochy

There are very few settlements within the area, although Mallaig is a key west coast port. The area is renowned for its remoteness, with much of the DMG only being accessed by boat or ferry. There are no main roads within the area.

The boundaries of the Group are considered to be well defined, and while there is some interaction of deer with adjacent ground, notably in West Knoydart, the DMG area is widely recognized as a coherent entity.

Other neighbouring Deer Management Groups are the West Lochaber DMG to the south, the Glenelg DMG to the north and the Monadhliaths DMG to the east.

# 3. Group Membership

There are a range of main management objectives within the group area, summarized on **4. KDMG Management Objectives Map**:

- Six properties covering 38, 882 ha or 60 % of the area are primarily involved in deer management and would consider this to be their most important objective, although modest numbers of livestock are also to be found on these properties, and there is also a considerable area of private commercial forestry as well.
- One property covering 3971 ha or 6% of the area is managed for both deer and sheep production.
- One property covering 5277 ha or 8% of the area is managed for a mixture of woodland and natural heritage considerations, but which is also crofted and carries a significant number of sheep. Deer management is carried out, but numbers are very low, and they are not a significant objective.
- The remaining area, covering 26% of the DMG, is managed by Forest Enterprise. This woodland area has twin objectives of commercial forestry and extensive native pinewoods, but there is also a considerable area of open ground within their overall boundaries. Deer management is a very significant management consideration within which is a very large block of excellent habitat for them.

The following table gives a summary of the management objectives of the properties within the deer group. All are full subscribing members of the group. The properties can be located at **2. KDMG Members Map**.

Table 1 Knoydart DMG Members & Management Objectives

Property	Main Objectives	Size(ha)
Achnacarry North	Deer/sporting/wildlife tourism/	
	Renewable energy	10,552
Barisdale	Deer/conservation/tourism	7218
Camusrory	Deer/ sporting	3270
Forest Enterprise	Forest Management	15,864
Glen Dessary	Deer/forestry	5942
Glen Kingie	Deer	6553
Glen Kingie Forest Ltd*	Deer	477
Kilchoan	Deer/ sporting	5347
Nevis Estate	Conservation/ crafting	5277
North Morar Deer Forest	Sheep/ deer	3971

Total area covered: 63.995 ha

In addition, there are two small owner occupied farms within the area, totalling approx 190 ha, neither of which cull any significant number of deer. They are Invergarry Home Farm

<sup>\*</sup> Reporting member only.

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and Kilfinnan Farm. There is a wooded area within Kilchoan Estate boundaries called Bromasaig (Harry's Hut). Deer management is undertaken by Kilchoan as required.

In terms of land area, there are five main members within the neighbouring West Knoydart DMG.

# Table 1a West Knoydart DMG Members & Management Objectives

Property	Main Objectives	Size (ha)
Airor	Crofting/ grazing	428
John Muir Trust	Range/woodland management	1240
Knoydart Foundation	Deer/woodlands/conservation	6793
Inverguseran Farm	Sheep/ deer	1018
Sgamadail	Crofting/ grazing	582
	Total:	10,061 ha

A wider range of holdings and organizations are members of the West Knoydart DMG. The full list of WKDMG members with an interest in deer management are:

Airor Common Grazings Committee, Airor School House, Bhraomisaig, Cnoc Gorm, Croulin, Doune, Glaschoille, Inverguserein Farm, John Muit Trust, Knoydart Forest Trust, Knoydart Foundation, Li, Rheigh Dharraich, Sandaig, Torr na Insche.

# **3a.** Member Descriptions

The following section gives a brief overview of the essential management information relating to each of the group members.

Contact details are given in a separate **Appendix 2, Knoydart Contact List**, which is confidential to group members only. Contact details for this group are given later in the document.

#### **Achnacarry North**

Achnacarry management priorities include Red Deer, productive wild trout fishing on Loch Arkaig, commercial forestry, very significant recent investment in renewable energy (Hydro) and wildlife tourism. In common with much of the North West Highlands there was a large sheep stock on the property for many, many years. Significant reductions took place during the 1970s and 1980s. A small sheep stock continued until relatively recently. In recent years suckler cows have been grazed on some of the lower slopes during the summer. Deer stalking is undertaken by Achnacarry Sporting who also undertake deer management on a significant level within the larger area including Achnacarry South which lies within the adjacent West Lochaber DMG. In addition to the deer management Achnacarry Sporting have developed, during recent years, important extra business through wildlife tourism. Clients/visitors tend to be relatively high net worth individuals from Mainland Europe or North America. Their objective is to see, and usually photograph, the icons of Scottish Highland wildlife. At Achnacarry this includes Golden Eagle, Sea Eagle, Black Game and most importantly of all wild Red Deer.

http://www.achnacarrycountry.co.uk/

#### Barisdale

Barisdale is the most remote and inaccessible area of Knoydart, it can only be reached by boat or foot for 6 miles down Loch Hourn It is managed primarily as a deer forest along with tourism and long term woodland and SSSI restoration. A very small number of sheep are also kept and a 30KW hydro may be considered in the future. The pinewood remnants in Glen Barisdale are a particular feature of the property, and a campsite, bothy and letting accommodation is provided for long distance walkers, trekking, and climbing Munros in Knoydart.

Barisdale Estate should maintain a viable deer forest with a sustainable sporting income. This will support local employment and the local economy. Any shortfall in the number of deer available for cull will impact on Estate revenue. SNH supports this objective in line with the Wild Deer Strategy.

The SSSI as a whole should move towards favourable condition due to the programme of enclosures. Currently it is in unfavourable condition. The objectives for the SSSI are given in the Forest Plan and are also available on the SNH website2:

- The condition of the field layer in the unenclosed areas should not deteriorate. Clearly the loss of forage and shelter will concentrate deer towards the unenclosed woodland and the aim is to prevent any deterioration.
- Deer welfare should not be compromised due to the loss of forage and shelter arising from the programme of enclosures. All management will be carried out in accordance with the Code of Practice on Deer Management3 and all Deer Best Practice Guidance. <a href="http://www.barisdale.com/">http://www.barisdale.com/</a>

#### **Camusrory**

Camusrory is managed primarily as a deer forest. There have been no sheep on the property for many decades. A modest burning programme is implemented annually, and the estate undertakes habitat monitoring, particularly on the blanket bog habitats which dominate the lower ground.

#### **Forest Enterprise**

The National Forest Estate at Invergarry is noted for its extensive pinewoods and wider native woodlands, and they represent one of the largest expanses of such habitat in the Highlands. There has been a particular focus on restoration of such habitats in recent years by removing non-native conifers from the core pinewood areas. There are a couple of small designated sites within the property, and it is important to keep these in favourable condition.

The commercial conifer crops are very productive, and the trees in this area are important to the viability of the various wood processing facilities in Fort William.

Within the ownership boundary is a high proportion of open ground habitat. It is planned to plant over 800 hectares of this in the coming five to ten years or so.

Hydro schemes have been developed within the area in recent years.

Deer management within this large area of mixed trees and open habitat is crucially important, with several hundred animals having to be culled annually to maintain an overall steady population. Forest Enterprise are the single largest member of the Knoydart DMG, and account for more deer than any other property.

https://consult.scotland.gov.uk/forestry-commission-scotland/district-strategic-

 $\frac{plans/supporting\_documents/Lochaber \%20\%20 District \%20 Strategic \%20 Plan \%20\%20 DRA}{FT.pdf}$ 

#### **Glen Dessary**

Glen Dessary is managed primarily for its deer stalking, but there are also related sporting activities involving wild boar and loch & river fishing. The estate are interested in developing natural renewable energy potential, particularly small and medium hydro schemes.

There is a significant area of coniferous forestry on the property, and this will be a significant management consideration over the next 10 years or so.

Modest agricultural activity is being developed with a small herd of cattle, within the constraints of the difficult soils and climate. There are no sheep on the property.

Finally, the estate look to promote and develop tourism potential more generally, and welcome a considerable number of walkers to the property. http://www.glen-dessary.com/

#### Kilchoan

Deer management is the principal activity on the estate, bringing in fifty percent of income, but let property and fishing are also important. The let property is mostly for hill walkers and other tourists, and a lot of families stay on the estate when in Knoydart. Located within a short distance from the pier at Inverie, Kichoan is well situated to do this.

There are no sheep on the property, although Kilchoan was evidently the centre of a very significant sheep farm some decades ago. A small herd of cattle are kept for habitat management purposes. The estate have approx 60 ha of mature conifer woodlands, as well as extensive native woodland areas. It is planned to undertake some significant areas of woodland creation within the upcoming ten year period. A woodland area called Bromasaig lies within Kilchoan boundaries, and Kilchoan carry out deer management in this area as required.

http://www.kilchoan-knoydart.com/

#### **Kingie Estate**

Kingie is managed primarily for sporting purposes, particularly deer, but a lodge and cottage are also rented out for additional income as well.

There are no livestock on the property, and this has been the case for 30 years or so.

There is a significant area of coniferous forestry on the property, but the quality of this is very variable and in the short to medium term, the primary use of this will be as shelter and habitat. A large native woodland scheme was planted in 2011. http://www.ihbrown.com/kingie/

# **Glen Kingie Forest Ltd**

This area is managed primarily for deer stalking, with no plans for woodland operations in the period of this plan. Deer expectations are modest. The property should be considered as a reporting member of the group only.

#### **Nevis Estate**

Nevis Estate is managed primarily for woodland regeneration and other habitat management purposes. Deer numbers are managed to control numbers, but the density is very low, and they have no sporting value as such. The development of property is important to the owner, who has also invested heavily in a range of local community facilities.

The ground is mostly crofted, and 7-800 sheep are grazed there.

The Nevis Estate is effectively on a peninsula by itself, and fenced woodland schemes effectively cut it off from the rest of the DMG area. It can therefore be considered to be separate from the main group.

#### **North Morar Deer Forest**

North Morar is primarily a sheep farm, and efforts are currently being made to develop and increase the numbers of sheep on the property.

Deer are important, and they are managed both for their own welfare, and for sporting purposes. Preserving the amenity and capital value of the property are also important.

Within the West Knoydart DMG area, three properties account for the majority of deer management activity, although all of the members listed previously are equal members of the Group.

#### **Knoydart Foundation**

At 6793 ha, the Knoydart Foundation occupies 68% of the Group area. The property is home to a population of 150 people, and is community owned and managed. About half of the population live in the village of Inverie. There is a separate Forest Trust, and a range of other community projects and activities, including their own hydro electric scheme. Deer management is a crucial management activity. While income is derived from this, from both venison, letting and accommodation, the main objective is "conservation gain", managing habitats so that they are in good and improving condition, and capable of supplying a sustainable amount of venison and other products. In terms of numbers of deer culled, the Knoydart Foundation are second only to Forest Enterprise across the 2 X DMG areas within Knoydart. A large proportion of venison is processed and sold through the village shop.

Woodland creation schemes are important within the property, and more are planned within the near future. Management of established and mature plantations is also important, with the forestry around Inverie supplying firewood and sawn timber for a range of uses within the village.

There are few livestock on the KF ground, sheep having been taken off in the 1960's, although 1613 ha is leased as grazing to Inverguseran Farm. KF also own half of the Airor Crofts and grazing.

The village of Inverie has a pub and tea room as well as a visitor centre, and is a popular and busy attraction for tourists coming across from Mallaig. The Knoydart Foundation provide a ranger service, and invest considerably in upgrading paths and other infra structure on the

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peninsula. In short, the Knoydart Foundation runs a well diversified and self contained operation that is important to a considerable number of people, and deer management is a very important part of the whole.

http://www.knoydart-foundation.com/

#### **John Muir Trust**

The Li & Coire Dhorcail property was the first to be purchased by the John Muir Trust. It is managed as a wild place, with objectives to promote natural ground vegetation within the main corrie as well as woodland expansion on the lower ground. This has involved a considerable area of planting over a 30 year period, but regeneration has also arisen outwith this area in the past ten years or so, and the Trust are keen to secure this via appropriate deer control. The property can only be accessed by boat from Glenelg. Deer control and maintenance of the younger woodland areas are the primary management considerations at present.

http://www.johnmuirtrust.org/trust-land/knoydart

#### **Inverguserein Farm**

This is managed primarily as a sheep farm, and is indeed the biggest sheep operation now within the Knoydart area. Deer management is a secondary but important activity as well. A considerable number of woodland creation schemes have been undertaken over 20 years or so, and these are now showing good results.

# **3b. Reporting Units** (For most properties, these refer to entire estate as before)

For the purposes of this Plan, most properties within the area will be asked to report their counts and culls on the basis of their full property. The only exception to this is Forest Enterprise who will report on 5 X deer management units; The Garry Pinewoods, Poulary, Garygulach, North Laggan & Clunes and the North Loch Arkaig blocks.

In this plan, all count and cull information will be reported at the Deer Management Unit level. (Tables 2-3 & 3. KDMG Reporting Units Map.)

Table 2: Knoydart DMG Deer Management Units (area figures are approximate)

Management Unit	Extent (ha)	Priority	Deer Management
1. FE Garry Pinewoods	7875	Forestry	FE
2. FE Poulary	1437	Deer control	Achnacarry Sporting
3. FE Garygulach	2262	Deer	Achnacarry Sporting
4. FE North Laggan & Clunes	4746	Forestry	FE
5. FE North Loch Arkaig Blocks	559	Forestry	FE
6. Achnacarry North	10,552	Deer/ sporting	Achnacarry Sporting
7. Glen Kingie Forest Ltd	477	Deer	Owner
8. Kingie Estate	6553	Deer	Kingie Estate
9. Glen Dessary	5942	Sporting	Glen Dessary
10. North Morar Deer Forest	3971	Sheep/ deer	North Morar
11. Nevis Estate	5277	Conservation	Nevis Estate

Knoydart Deer Management Group		Ba	ckground Information
12. Barisdale	7218	Deer	Barisdale
13. Camusrory	3270	Deer	Camusrory
14. Kilchoan	5347	Deer/ sporting	Kilchoan
15. Invergarry Home Farm**	65	Agriculture	Owner
16. Kilfinnan Farm**	123	Agriculture	Owner

<sup>\*</sup> These 2 X small owner occupied farms do not cull any significant number of deer.

# 4. Deer information required & culling operations

The data on deer counts and culls supplied by Members to KDMG has always been based on their overall land holdings. Members agree, however, that for the purposes of implementing this Plan they will report counts and culls and set cull targets at the Management Unit scale (see above). This will allow a better analysis of the information provided in and around those areas of differing management objectives.

Members will agree on the deer management records that will be kept by all Members for sharing with the Group, including count and cull data, and the format in which these sets of data will be presented. The agreed formats are included in <a href="Appendix 4">Appendix 4</a>, <a href="KDMG Deer Cull">KDMG Deer Cull</a> Information.

Recommended cull record sheets are appended to this document.

All KDMG members agree to make sufficient resources available to carry out the culling programme outlined in this plan.

All culling operations will be conducted in a low-key manner, and priority always given to spreading activity throughout the normal seasons using existing resources.

#### 5. THE DESIGNATED SITES IN THE KNOYDART DMG AREA

Within the DMG area there are three different types of designation:

Sites of Special Scientific Interest (SSSI) Special Protection Area (SPA) National Scenic Area (NSA)

There are no Special Areas of Conservation (SACs), Ramsar wetland sites, National Nature Reserves (NNRs) or National Parks in the area.

In addition, 53,583 ha or 72% of the 2 X DMG area has recently been classified as "Wild Land Areas", along with significant areas in adjacent deer management groups. While it is not yet clear how such a classification will work in practice beyond the obvious constraint of windfarms, it may well have important implications for fencing or woodland creation schemes, and therefore have a bearing on deer management in future. Essentially, the only areas not classified as "wild land" are the areas of conifers planted by Forest Enterprise, and the peninsula areas around Mallaig and Inverie where the majority of the houses are.

# Site of Special Scientific Interest (SSSI)

Sites of Special Scientific Interest (SSSI) represent the best of Scotland's natural heritage. They are 'special' for their plants, animals or habitats, their rocks or landforms, or a

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combination of such natural features. Together, they form a network of the best examples of natural features throughout Scotland, and support a wider network across Great Britain and the European Union.

Scottish Natural Heritage chooses sites after detailed survey and evaluation against published scientific criteria. SSSIs can include freshwater, and sea water down to the mean low water mark of spring tides, as well as land. At 31 March 2008, there were 1,456 SSSI's, covering a total area of 1,036,000 hectares or 12.9% of Scotland.

SNH designates SSSIs to protect the best of our natural heritage by making sure that decision-makers, managers of land and their advisors, as well as the planning authorities and other public bodies, are aware of them when considering changes in land-use or other activities which might affect them.

The Nature Conservation (Scotland) Act 2004 provides the legislative framework around which all SSSI sites are administered.

# **Special Protection Area (SPA)**

A Special Protection Area (SPA) is an area of land, water or sea which has been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within the European Union.

Together with SACs, Special Protection Areas are designated under the European Wild Birds Directive which forms the NATURA 2000 network of sites. A number of SPAs include areas notified as SSSIs and the additional SPA designation affords these areas enhanced protection.

The SSSI & SPA designations can be located on 7. Knoydart Designated sites Map.

#### **National Scenic Area**

National Scenic Areas are Scotland's only national landscape designation. They are those areas of land considered of national significance on the basis of their outstanding scenic interest which must be conserved as part of the country's natural heritage. They have been selected for their characteristic features of scenery comprising a mixture of richly diverse landscapes including prominent landforms, coastline, sea and freshwater lochs, rivers, woodlands and moorlands.

There are currently 40 NSA's in Scotland, covering a total land area of 1,020,500 ha and a marine area of 357,900 ha.

In the 2 X Knoydart DMG areas, 28, 633 ha or 39% of the area lies within the Knoydart National Scenic area. The area covered by scenic areas and the new wild land classification can be seen on **8**. **Knoydarts Landscape Map** 

Within the Knoydart Deer Management Group there are only five SSSI sites, covering a total of 12 designated features. Of these, only three are relevant to deer, and all three are in Unfavourable condition. They are all within one site, the Glen Barisdale SSSI, a native pinewood.

While there are pinewood habitats, mixed upland ash and bryophyte features at the Loch Morar and Garry Falls sites, deer cannot access these areas, and the threats to these habitats arise from non- native tree species, especially planted non- native conifers, and also invasive rhododendrons.

The Glen Barisdale SSSI is therefore the only designated site with any relevance to this plan, and all 3 X designated features there are currently in an Unfavourable Declining condition. All the other designated features outwith the sites mentioned above are in Favourable condition.

The 2 X West Inverness-shire lochs SSSI sites also carry the SPA designation, and these features are all in Favourable condition.

A full account of all these sites, their current status and what properties are involved is given in **Appendix 3**, **Knoydart Designated Sites**. In addition, **Appendix 6**, **Monitoring of Designated Features**, summarizes the likely contribution of deer to these sites, and details when they were last monitored.

# Part Two - OVERALL AIMS & OBJECTIVES

# 6. Long Term Vision

Members support the long term vision for deer populations and their management as laid out in *Scotland's Wild Deer – A National Approach*. Members also fully support the *Code of Practice on Deer Management*, and all work is carried out in accordance with *Best Practice Guides*, which continue to evolve.

- Deer populations will be managed sustainably so that their management is fully integrated with all local land uses and land use objectives.
- Such management will ensure high standards of deer welfare and public safety, and play a constructive role in the long term stewardship of local habitats.
- Local deer management will continue to deliver and further develop its positive contributions to the rural economy. Deer management and wildlife management more generally within the Group will be seen as an attractive and worthwhile occupation associated with high standards of skills and employment practice.

#### 7. Strategic Objectives

The main objectives for the Group's deer management during the period of this Plan, are as follows, in all cases adhering to Best Practice Guidelines:-

- (i) To safeguard and promote deer welfare within the Knoydart DMG area
- (ii) To achieve an appropriate balance between deer and their habitat, and between deer and other land uses, to minimize unacceptable damage to agricultural, forestry or sporting interests, and to maintain and improve the condition of the natural heritage.
- (iii) Within the constraint of (ii) and the necessary management culls associated with this, to fulfil the annual sporting and venison production objectives of individual Members.
- (iv) To market such activity and produce to best advantage.

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- (v) Without prejudice to (ii), to roughly maintain the overall size of the herd over the period of this plan, 2016-20, to bring local numbers in to line with actual sporting and other aspirations in that area, and to facilitate an overall grazing regime that will gradually improve the overall condition of designated sites. Numbers will be maintained at this level, subject to ongoing reviews of group objectives and regular habitat condition monitoring.
- (vi) To ensure such resources, training and monitoring capacity that is required are made available to achieve the above objectives.
- (vii)To establish a thorough and robust set of working arrangements whereby access provision can be managed within the group area, taking account of current guidelines and industry initiatives.
- (viii) To facilitate the implementation of any other deer-related management agreements within the group area, and to provide a mechanism for dealing with any disputes.
- (ix) Where appropriate, to provide site specific management advice or information.
- (x) To ensure full participation from throughout the area in the deer management group.
- (xi) To maintain and improve local employment, be that specifically in deer management, or wildlife management and agricultural activity more generally within the area.
- (xii)To sure that an effective system of communication is in place for the internal purpose of members, for the wider community of the area and for external agencies and other interested parties. The Group will be pro-active in all their communications.

# Part Three - MANAGEMENT POLICIES & INFORMATION

#### 8. Red Deer

# **Red Deer Population**

Although there have been counts almost every year in Knoydart for 20 years or so, and West Knoydart count consistently every spring, there have only been four good counts during that period where almost everyone has counted. These counts were: a DCS count in 1996, Group counts in 2006 & 2012, and an SNH helicopter count in November 2014. This latter count has the complication that it was carried out in November, with the other counts all carried out in the spring. It is however the most accurate data on current red deer populations within the area, and will be the basis of most calculations going forwards.

	DCS	Group		Nov
STAGS	1996	2006	2012	2014
Achnacarry }	753	584	545	436
Garrygulach }	5	31	42	280
Barisdale	417	236	175	100
			not	
Camusrory	112	142	counted	67
Glen Dessary	221	192	210*	168
Kilchoan	337	256	346	231
Kingie	209	180	138	107
Knoydart	909	382	461	295
Li & Coire Dhorcail			37	13
Nevis			29	36
North Laggan	190	111		FE*
North Morar	136	171	206	177
Other				109
Total	3289	2285	1979	2019

The above data suggests the stag numbers looking broadly stable in the last three counts, with a fall of about 1000 animals since 1996. However, the 2012 count missed out the Laggan part of FE ground, Camusrory did not count, and only part of Barisdale counted, so it likely that more stags were present in 2012 than depicted here. The change of timing should not affect the 2014 data as that is after the season ended. The above figures should be treated with some caution due to the different areas counted and also the methods of counting employed. Many group members consider that stag numbers have fallen considerably in recent years.

For the hind count, below, the numbers again look broadly similar for the last three counts. The caveats above apply, in addition to the fact that the hind season will still have been in progress in November 2014.

The figures suggest that the hind population has fallen by approx 1500 since 1996, and the total red deer population by about 3000 overall in the last 20 years.

	DCS	Group		Nov
HINDS	1996	2006	2012	2014
Achnacarry }	845	595	823	630
Garrygulach }	39	113	242	487
Barisdale	836	430	337	192
			not	
Camusrory	391	289	counted	167
Glen Dessary	412	301	309*	248
Kilchoan	663	407	712	582
Kingie	491	522	501	474
Knoydart	796	383	398	335
Li & Coire Dhorcail			48	28
Nevis			83	99
North Laggan	273	175		FE*
North Morar	416	391	382	240
Other				104
Total	5162	3606	3526	3586
Total Group	10505	7186	6687	7095

# Current Count Data

The most recent count data came from a helicopter count in November 2014, as detailed above.

West Knoydart DMG undertake a foot count every spring in conjunction with Kilchoan Estate, and their spring 2015 count data is included here for comparison. This data excludes the Forest Enterprise ground east of their strategic deer fence.

November 2014	Stags	Hinds	Calves	Total Red Deer	Area (ha)	Density/ 100 ha
*Knoydart	1455	2832	1194	5481	50392	10.88
West	395	422	127	944	9200**	10.3
*Knoydart						
West	571	523	181	1275	9200	13.9
Knoydart						
2015 foot						
count						

<sup>\*</sup> Helicopter count.

Deer densities across the 2 X Groups are very similar. The West Knoydart foot count however showed a much higher population in April than the previous November. The difference of 1275- 944 = 331 animals is in addition to the West Knoydart cull of 185 animals after the helicopter count, giving a discrepancy of 516 animals. It is virtually impossible for the helicopter to have missed such a number of animals. This difference must lie, in large part, to a net migration of deer from higher to lower ground, east to west, over the course of the winter.

<sup>\*\*</sup> Area is reduced by the area of fenced planting schemes in West Knoydart.

**Background Information** 

Kilchoan showed a similar net increase of nearly 150 hinds and calves over the period, allowing for their winter cull, although a considerable drop in stag numbers.

These figures suggest an intimate link between the 2 X Groups in terms of overall deer population.

Below is a summary of the 2014 helicopter count for Knoydart DMG by individual property. There is a wide range of densities, from 3-20 deer per 100 hectares. This summary does not include the area of Forest Enterprise ground to the east of the strategic deer fence.

Property	Stags	Hinds	Calves	Total	Area (ha)	Density/ sq km
Achnacarry North	436	630	250	1316	10552	12.47
FE Glengarry (pt,)	111	155	74	340	2262	15.03
Glen Dessary	168	248	111	527	5942	8.87
Kingie	107	474	199	780	6553	11.90
North Morar	177	240	115	532	3971	13.40
Barrisdale/ Glenq	122	237	100	459	7218	6.36
Camusrory	67	167	69	303	3270	9.27
Kilchoan	231	582	236	1049	5347	19.62
Nevis Estate	36	99	40	175	5277	3.32
Total:	1455	2832	1194	5481	50392	10.88

This is the summary for West Knoydart. The area figures include the area of woodland schemes, hence the overall density given is slightly lower.

Property	Stags	Hinds	Calves	Total	Area (ha)	Density/ sq km
Airor	2	0	0	2	428	0.47
Knoydart	295	335	102	732	6793	10.78
Inverguserain	32	40	11	83	1018	8.15
Li & Coire Dhorcail	13	28	9	50	1240	4.03
Sgamadail	46	19	5	70	582	12.03
Unknown	7	0	0	7	81	8.64
Total:	395	422	127	944	10142	9.31

The average deer densities of 9.31 & 10.88 per 100 hectares is likely to be sympathetic to a variety of habitat types across the DMG areas, with the probable exceptions of blanket bog and native woodlands. These will be discussed later.

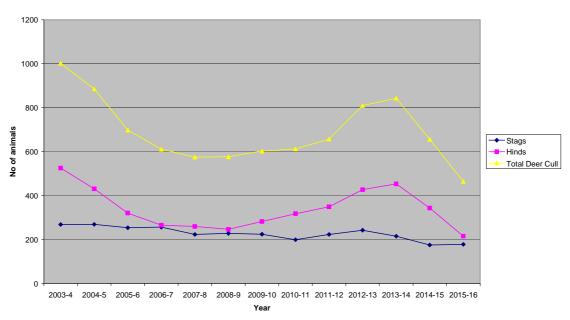
# Red Deer Cull Data

The following table outlines the Knoydart DMG red deer cull since the 2003-4 season. It excludes most of the Forest Enterprise cull data, which is presented later in this section, except for the Garrygulach area which is open and contiguous to the neighbouring hill area on Achnacarry.

Year	Stags	Hinds	Calves	Total Deer
				Cull
2015-16	178	215	71	464
2014-15	175	343	138	656
2013-14	215	453	175	843
2012-13	242	427	140	809
2011-12	223	349	85	657
2010-11	199	317	96	612
2009-10	224	282	96	602
2008-9	228	246	102	576
2007-8	223	259	93	575
2006-7	256	265	89	610
2005-6	253	320	125	698
2004-5	269	430	186	885
2003-4	268	525	209	1002

A graph of these culls is shown below. The culls fall sharply from 2003-4 to around 600 animals total for six years, before climbing back to c 800 animals in 2013-14. Numbers have fallen away sharply in the last  $2\,\mathrm{X}$  years.

Knoydart Red deer Culls 2003- 2016



Stag Cull Data

						Ave	Average	
					2215/12			2003-
STAGS	2011/12	2012/13	2013/14	2014/15	2015/16	5 Year	Period	8
Achnacarry }	59	66	52	50	54	56	56	58
Garrygulach }	0					0	7	11
Barisdale	22	29	27	14	10	20	22	26
Camusrory	15	18	11	15	16	15	20	29
Glen Dessary	34	35	35	18	23	29	30	30
Kilchoan	30	33	32	32	32	32	33	34
Kingie	28	22	18	9	16	19	24	30
Nevis	5	5	10	5	5	6	10	18
North Morar	30	34	30	32	22	30	31	32
Total Stags	223	242	215	175	178	207	227	254

An important issue and perception within the group is that stag numbers have been falling in recent years and estates have had to reduce their stag expectation accordingly.

The data above shows that between 2003-4 and 2015-16, the 5-year average of the stag cull has fallen from 254 animals to 207 animals, a reduction of 47 animals or c 19%. However, the 5-year average figure does hide the 2014/15 & 2015/16 figures which at 175 & 178 animals respectively are considerable less, down 79 animals or 30% on the 5 year average. An important concern within the group is that this trend will now continue for a number of years unless some sort of mitigation can be achieved.

The hind cull (below), is much more stable over the same period, although it has fallen away in the last 2 X years, especially in 2015-16. This has been in response to very poor calf survival in the previous very wet winter, and the suggestion that the group as a whole had been driving down their hind population too quickly.

						Average		0000
HINDS	2011/12	2012/13	2013/14	2014/15	2015/16	5 Year	Period	2003- 8
Achnacarry }	74	101	96	95	70	87	79	77
Garrygulach }						0	9	0
Barisdale	22	30	30	5	3	18	29	50
Camusrory	25	30	25	25	7	22	26	31
Glen Dessary	76	62	61	48	19	53	50	56
Kilchoan	60	94	134	90	77	91	63	52
Kingie	52	57	44	50	16	44	49	55
Nevis	12	10	16	8	5	9	12	12
North Morar	28	43	47	30	18	33	34	34
<b>Total Hinds</b>	349	427	453	351	215	357	341	360

# Forest Enterprise Deer Cull Data.

The following table shows all FE culls since 1998-99. There is a wide variation in culls

#### **Background Information**

between years, although numbers appear to generally be on an upwards trajectory, and by far the highest cull was in 2013-14. Woodland operations within the area now require a much lower density of animals, and the increased culls will reflect that. In recent years, the nos of stags and hinds are broadly similar. This suggests that the animals being culled are mostly from a resident population, and stags are not getting access to the area from outwith the fences. The calf to hind ratio appears to be very low for a woodland population of deer, typically less than 50%, and often less than 40%. FE culls usually tend to have a much higher proportion of calves. It is not known why this area is different.

With current priorities within the FE woodland area in Knoydart, it is anticipated that this relatively high level of red deer culling with continue, and woodland creation and restocking commitments will inevitably push down the deer density within the area.

Year	Stags	Hinds	Calves	<b>Total Deer</b>
				Cull
2015-16	210	185	86	481
2014-15	158	145	64	367
2013-14	229	215	137	581
2012-13	198	146	46	390
2011-12	141	129	31	301
2010-11	142	97	33	272
2009-10	193	125	39	357
2008-9	228	71	45	344
2007-8	179	112	47	338
2006-7	158	75	37	270
2005-6	114	94	32	240
2004-5	49	40	13	102
2003-4	95	124	44	263
2002-3	123	131	52	306
2001-2	96	116	38	250
2000-1	44	34	16	94
1999-2000	62	61	34	157
1998-99	100	92	46	238

#### Red Deer Management Issues

The following factors have been identified as issues relating to red deer management within the group area, some of which relate to running of the deer management group:

# Relationship/ Communications with West Knoydart DMG

There are 2 X deer management groups on the Knoydart peninsula: this Knoydart DMG, and the West Knoydart DMG. The split arose because of differing management objectives, with the perceived prominence of community/ woodland/ nature conservation objectives in the west, and more traditional sporting estates in the Knoydart Group itself focused on achieving income from deer. In reality, the picture is more nuanced than this, with deer related income being especially valuable to the community in and around Inverie on West Knoydart, and the more extensive and valuable native & ancient woodlands actually being in the Knoydart group, and a range of regenerating woodlands around the shoreline of that area.

The deer densities within the two areas are actually very similar.

The West Knoydart Group works very well as a self contained unit, and shares information with the Knoydart Group, and works especially well with Kilchoan Estate in counts and habitat monitoring as well as the sharing of larder space when required. However, it has long been the perception of those in the Knoydart Group that there is a drift in deer populations towards West Knoydart in the winter months, and that the culls that take place there in effect drain deer from their range. The West Knoydart area is generally felt to be more fertile and kinder to deer than the higher Knoydart hills which can be very rugged and unforgiving in winter.

The main question for this plan has been to consider whether the 2 X areas are intimately linked or not and, if so, what level of co-operation between the two groups is required?

Commentary and recommendations on this is given later in this document in the operational assessment section. It is the strong opinion of the West Knoydart Group that the two areas should remain separate, but that Kilchoan, Barisdale & Camusrory are more naturally aligned with them then the rest of the Knoydart Group.

This issue, and implications that arise from it, is the single most important question within the DMG.

#### *Unstable/declining deer population*

Stag numbers in the Knoydart DMG have been declining for a number of years, to the point where sporting requirements can no longer be achieved. Several properties are able to cull less than half of their requirements. Connected to the above issue, it is the perception of many in the Knoydart Group that a disproportionate stag cull is taken in the West Group, and this is driving down numbers further east.

On top of this, it is clear that wet/ cold winters can cause very considerable mortality within the Group, especially among calves, to the point where recruitment can be less than twenty percent. However, the helicopter count of November 2014 suggested that calf survival at that point was 42 percent, much higher than many other groups. The potential for very rapid population expansion is therefore evident, unless nature intervenes over winter time. This potential for high recruitment, but delivery of very low levels in some years makes population forecasting and management very difficult, with the peaks and troughs seemingly higher and lower than many other areas. In recent years, wet winter weather and very late springs have been particularly harsh in Knoydart, and this is contributing to a decline in the deer population.

# Lack of winter shelter

The West Knoydart group area is relatively fertile and sheltered, and has been the traditional wintering area for deer on Knoydart in the past, although most of the woodland area is relatively young planting, and is still enclosed. Some plantations have been opened up in recent years. To the eastern end of the group, there is a very extensive tract of Forest Enterprise Group, but this is now fenced off from the open ground range. The Achnacarry ground bordering it is relatively well sheltered. Between these two ends of the groups, the high hill ground is bleak and infertile, and there are few opportunities for deer to find shelter. There are very extensive woodland blocks on Glen Dessary, Kingie and an area of private forestry, and the native pinewoods on Barisdale provide some shelter as well, but these areas are compact and concentrated around the periphery of the main area.

Perhaps more important than this lack of shelter is the rather one-dimensional nature of the hill vegetation. Hill pastures are heavily dominated by grasses, and there is a superabundance of feed for 3 months of the summer, and then very little in the winter. Heather cover is very poor, and therefore, does not exist to any great extent as a winter food supply. A better heather- grass balance would diversify the feeding available across more of the year. Lower deer numbers *may* help to correct this, but that would require much lower populations to be retained and for a considerable number of years.

There is a willingness among several group members to plant more woodland areas, but much of this middle area of the group is very marginal for tree planting, and it is likely that any schemes implemented there would not thrive very well. In addition, the isolated situation of Knoydart would mean that forest operations would be disproportionately expensive. There is also the additional risk in that choosing suitable ground, that the better areas of hill grazing would be selected, putting further pressure on the deer population. For these reasons, additional planting within the middle part of Knoydart could only be very modest, and unlikely to be on such a scale that it would create a material benefit to the deer populations there in the future.

# Pinewood management/commercial forestry

The Glengarry pinewoods, all within the national Forest Estate, are among the most extensive in Scotland, and re- instatement of these has been taking place via removal of non- native species and natural regeneration over many years now. These woods are among the most valuable in the Group area. Within the same overall area, commercial conifer crops are very productive, and a key component of the Lochaber woods that sustain the Fort William mills.

FE are planning to plant 815 ha of new native woodlands within their property in the next 5-10 years.

Woodland management within wider Group boundary

There are three main woodlands blocks in the wider group outwith the FE area, all dominated by conifers.

There are extensive conifer stands in Kingie estate, but they are very variable in quality and partly stagnated in some areas, and justifying any future harvesting operation would be very difficult. They are likely to remain as they are for the duration of this plan, and will provide shelter for deer during that period, although the ground vegetation between trees is not particularly attractive for them.

To the east of this block is an area of private forestry which is also open to deer. This area is better stocked, and partly blown in places, and the urgency to fell and replant it is probably greater. It is not known what the long term plans for this woodland are.

There are approx 600 ha of conifer plantations on Glen Dessary estate. These have been blowing in recent years, and some extensive clear felling has taken place which will have to be restocked. The remaining area is off a similar age, although a proportion of it is stagnated in wet ground and is relatively stable and can be retained without intervention for the foreseeable future.

These woodlands are genuinely productive, and will need to be felled and restocked, beginning in the period of this plan. That will be a very extensive operation, and felling

#### **Background Information**

coupes will need to be carefully designed. It is likely that a proportion of the area will be restocked with native broadleaves, and this may then provide for a more balanced and stable woodland area in the future, with the broadleaves creating a better woodland environment for deer, and bringing more nutrients to the surface.

The problem will be that deer use these woods for shelter at the moment, and felling and restocking them will remove access to this shelter, and have knock-on effects for the deer population in the immediate area. With much of the area of a similar age, it is not likely than some areas can be left for another 15-20 years until replanted crops have regrown, although the areas of checked spruce trees do provide some shelter than will likely be able to stand throughout this period.

An additional pressure may arise if removing the woodland cover displaces wild boar from the area. It is likely that a significant reduction cull will be required.

# Designated Sites

There is only one site within the Group which is relevant to deer, which is the Glen Barisdale SSSI, a native pinewood site. A series of regeneration enclosures are currently being devised between the owners, SNH and Forestry Commission Scotland, and it appears that this will be taken forwards soon within a Rural Development Programme application. (Implemented Spring 2016).

There are no large upland designated sites within the Group, and while there are some smaller woodland sites, the pressures come from non-native tree species and rhododendrons, not deer.

# *Uncertainty about best feeding regimes*

Six of the nine Group members feed at least a small proportion of their deer, especially stags, with some members making this a priority management consideration from December right through to May, often involving large quantities of nuts, beets or licks. In general. Knoydart is too remote to justify feeding hay or silage, although one member does do this.

The properties that feed do consider it to be advantageous, keeping some of their better stags closer to home, helping them through the winter, and making them more accessible when the summer season begins. Queries have arisen from some members about what the best feeding policy might be, and whether it is counter productive or not. Can the feed be replaced by shelter, or via targeted management of habitat? The issue arises because, as already suggested, vegetation within much of the group is heavily dominated by grasses which are only palatable for very short period of the year.

#### Wild Boar

Wild boar escaped from an enclosure on Glen Dessary in 2006, and have since spread to the east within the Group, and also in to the neighbouring West Lochaber Group and beyond. They appear to be able to survive in the wild very well, and have no problem in breeding under those conditions. Some Group members see them as a valuable sporting resource and utilize them as such. Others see them as a nuisance, and there have been some problems with lambs being killed in the area. They are particularly well spread within the Forest Enterprise ground. The make-up of these animals suggests that some escaped feral pigs have inter bred with the wild boars. So, it is not the case that they have all arisen from the same source.

**Background Information** 

Those in the Group who do not have them are mixed in their views. Some are very much against. Others are cautiously welcoming of them. The main concern is with the wild boars destroying deer fences and letting deer in to new woodland plantings, although it is understood that this is a potential problem which is easy enough to manage once you realize that wild boar are present.

The Scottish Government have yet to clarify the exact legal status of these animals. Those who are familiar with them think that they are now too well established to be removed completely, and that the current situation will have to be managed.

Group members are culling 15-20 wild boar a year, and others will be getting culled in other areas.

There is a consensus among Group members that the deer group should act as a forum for discussing matters relating to wild boar, and that they are included as an Agenda item at all subsequent meetings, so that cull numbers and spread can be discussed.

# **Other Deer Species**

# Sika Deer

There are small numbers of Sika deer present within the DMG, mostly dispersing males, and a number of properties cull an occasional animal. The notable exception to this is at Morar on Nevis Estate, where a population of up to 60 animals is present within an area of privately owned forestry. The surrounding estate cull approx 8 hinds a year, and it is considered that the population is contained there. It is very likely that occasional Sika deer swim to the peninsula from both North and South.

The following table reflects the sika deer culls within the FE property on Knoydart since 1998-99. There has been an obvious increase in numbers over the period, with occasional stags in some years now being replaced with greater numbers of stags and hinds in every year. This suggests that a resident population is beginning to emerge and a focus on containing this will have to be maintained.

FE Sika Deer Culls

Year	Stags	Hinds	Calves	<b>Total Deer</b>
				Cull
2015-16	12	4	2	18
2014-15	9	4	3	16
2013-14	3	1		4
2012-13	10	2	1	13
2011-12	4	1		5
2010-11	5	1		6
2009-10	8	1	1	10
2008-9	7	1		8
2007-8	3	1	1	5
2006-7	3	2		5
2005-6	5			5
2004-5		1		1
2003-4	1			1
2002-3				
2001-2	2			2
2000-1	1			1
1999-2000		1		1
1998-99	2			2

#### Roe Deer Population

Roe deer are not a significant consideration within the DMG area, with only FE Glen Garry culling any number of animals. They are present in small numbers within the woodland area around Inverie in West Knoydart, and around Morar and Mallaig in small numbers. In the greater part of the Group, hill conditions are too hostile for them.

The FE data below shows that roe deer culls have been very stable over the period shown, with an increase in does and kids, and a fairly uniform roe buck cull.

FE Roe Deer Culls

Year	Bucks	Does	Kids	Total Deer	
				Cull	
2015-16	27	32	13	72	
2014-15	21	22	10	53	
2013-14	20	14	15	49	
2012-13	19	17	15	51	
2011-12	25	19	11	55	
2010-11	16	17	18	51	
2009-10	32	22	16	70	
2008-9	21	20	12	53	
2007-8	27	29	13	69	
2006-7	20	24	13	57	
2005-6	13	16	10	39	
2004-5	12	8	1	21	
2003-4	18	18	2	38	
2002-3	19	17	6	42	
2001-2	13	22	4	39	
2000-1	13	16	3	32	
1999-2000	18	16	9	43	
1998-99	20	16	9	45	

#### Roe Deer Management Issues

There are not considered to be any significant roe deer management issues within the group area at present.

#### 9. Moorland Management

While some muirburn is undertaken within limited parts of the group, usually to burn off white grass, there is relatively little active moorland management as such. There are no red grouse within the DMG area at any sort of utilizable level.

Malicious fires are considered to be a problem around Morar, causing damage to woodland regeneration, and sometimes threatening property.

# 10. Hill Sheep & Cattle Management

Sheep are only kept within two properties in Knoydart DMG, and within one on West Knoydart, with just over 2000 animals in total, split roughly equally between these 3 X properties. There has been little reduction in numbers over the past 20 years or so, with the majority of areas clearing sheep before the 1990's. In some cases, sheep were cleared in the

**Background Information** 

1960's. It is reported that up to 9000 sheep or more were kept in the western half of the peninsula up until that point. The sheep are not impacting on any designated sites, and it is not considered that their impacts are significant, although small numbers of wild, stray sheep do interfere with stalking on other estates. The 3 X areas with sheep are likely to retain current numbers, with one property suggesting a modest increase.

By far the greater part of the 2 X DMG areas carry no sheep at all.

The distribution of the above areas can be seen on <u>5. Knoydart Sheep & Parish</u> Boundaries MAP.

#### **Discussion & Context**

As outlined above, there have been few changes to sheep numbers over 20 - 30 years or more, so any adjustments in deer numbers will have already happened. One member is looking to have a modest increase in sheep numbers. It is possible that in future, more people in West Knoydart may look to keep small numbers of animals.

At the moment, sheep numbers look to be very stable.

Changes at a parish level, which each cover a much wider area than just Knoydart, give a misleading picture over the period concerned. The 50-60% reductions in numbers at a parish level since 1994 do not reflect the situation within Knoydart itself, with only a loss of a few hundred animals over that period. The most recent significant reductions where 5-6000 ewes from North Achnacarry and Glen Dessary in about 1990.

#### **Cattle**

There are 3 X small herds of hill cattle kept within the area, with c 80 cows kept overall. Two of these herds are kept primarily for habitat management purposes, and their numbers are likely to increase.

Cattle are a very useful management tool in such a grassy environment, but the isolated nature of the Group does make it difficult to bring in extra feeding for them as required.

# 11. Forestry & Woodland Management

As previously noted, Forest Enterprise manage a very extensive tract of both commercial conifers and pinewoods/ native woodlands at the east of the Group area. In terms of both production and conservation, this is very significant at a local level.

There are 600-800 ha of conifers planted on Glen Dessary Estate, and the management of this area, mostly productive conifers, will be a key consideration within the DMG over the next 5-10 years.

There are two other extensive tracts of conifers on Kingie Estate and neighbouring private forestry. These areas are very patchy in their stocking rates, and it is likely that timber would have to increase very significantly in value before it became economically viable to fell and replant these areas. In the meantime, they are useful for deer shelter, but this situation cannot remain indefinitely without some management intervention. Kingie is likely to remain stable over a 5-10 year period. The area of private forestry may be more urgent to intervene with and begin felling.

Within the West Knoydart Group, the area of conifers around Inverie is well managed and, importantly, the scale of woodlands there seems to be in keeping with the needs of the

settlement. Conifer woods are also present further out towards the hill.

There is a very significant level of woodland creation that has taken place within the West Knoydart area within the last 20 years or so, with almost 1000 ha in the last 20 years, and a further 189 ha in the years before that. This is a considerable proportion of the DMG area that has been planted. A much lesser area of woodland creation has taken place in the Knoydart Group in the last 20 years, but there was 650 ha in the few years before that. Woodland creation statistics are analysed more later in this document.

Otherwise, there is a relatively modest proportion of native woodlands throughout the DMG areas, mainly around the periphery of the Group. The Glen Barisdale SSSI pinewood is the area of highest conservation value.

# 12. Supplementary Deer Policies

# **SNH** Authorisations

Members will be encouraged to share information within the Sub-Group on any out of season and night shooting authorizations, over some or all of the land where they carry out the deer control.

The use of Out of Season authorizations in Li & Coire Dhorcail in West Knoydart is a particular issue with those further east, as they are used to account for very significant numbers of stags. This is an issue that needs to be resolved between the 2 X Groups, although the necessary cull information itself is always forthcoming.

#### Winter Mortality

Members will monitor and report any significant levels of winter mortality to the Sub-Group, or any significant health issues encountered. It is considered that mortality within the group is approx 2% for adults and 6% for calves in their first year, but this can increase very significantly in wet winters or after very late springs. Recruitment is approx 30 - 36%, varying across the Group, although this can be much less after poor weather. Interestingly, the 2014 helicopter count suggested a calving rate of 42% across the 2 X DMG area, and 44% in this Knoydart Group, so recruitment/mortality/ calving % can be very variable here, much more so than in many other groups. These figures are used in the current population models for the DMG. The 2014 helicopter count figures are obviously before winter mortality.

It is critical for this DMG that recruitment counts are carried out thoroughly on an annual basis in late April/ early May each year.

# **Deer Related Traffic Incidents**

It is agreed by the Members that they will keep records of any collisions between deer and cars or other vehicles in their area together with relevant information (eg. location, species of deer, fate of deer, damage to vehicle, human injuries), while also recording dead deer in their annual cull returns and where appropriate, larder sheets. Members may also wish to contribute to the national project collating RTA reports which can be accessed at <a href="http://www.deercollisions.co.uk">http://www.deercollisions.co.uk</a>

In practice, there are only 2 X short stretches of tarred road within the DMG area, to the south of Mallaig, and to the west of Invergarry. Deer casualties on these areas of road are typically less than one each year, and usually involve roe deer.

#### Deer Fences

There are very few fences within the main part of the DMG, with the obvious exception of the strategic deer fence separating out the FE Glen Garry ground from the hill areas to the west of there.

Elsewhere, new plantings tend to be fenced, and on West Knoydart, the woodland area around Inverie is fenced.

It is planned to fence woodland enclosures within the Glen Barisdale SSSI area. Any large scale felling and restocking at Glen Dessary will require to be fenced.

Group members will take account of the Joint Agency Fencing guidelines. http://www.snh.gov.uk/land-and-sea/managing-wildlife/managing-deer/sites/fencing/

The wild boar resident within the area do create a particular threat to deer fences, but it is understood that that this is something that can be managed.

# Supplementary/ diversionary Feeding

Five properties within the DMG feed deer extensively in the winter months, usually with potatoes or root crops, but also with hay or silage/ haylage on occasion. If often depends on what is actually available. Feedblocks are also used widely. In a number of cases, it is just a small number of animals that actually benefit from this. The rationale for feeding is partly to see deer through difficult weather, but partly to keep them away from other properties who might shoot them, and to provide for some stags closer to home in the early part of the summer stag season.

Members currently feeding deer are:

Achnacarry Glen Dessary Kilchoan North Morar Camusrory

Barisdale use feed blocks to try and keep deer out of the SSSI, and off neighbouring ground.

Members agree that they will inform the Group if any significant changes are made to current practice. All deer feeding which takes place will comply with industry Best Practice guidance.

# **Venison Marketing**

Larder provision within the group is generally good, but local co-operation to ensure appropriate capacity takes places at a number of locations within the area.

Group members share a commitment to high standards beyond the larder door, right through to the sale of the carcase or else its use locally. Several group members are members of the venison quality assurance scheme (SQWV) and other Members will be encouraged to attain the standards required. As a matter of general principle, members also support the local consumption of locally shot, high quality venison. A wide range of game dealers and processors are used by group members, with no one organization having a dominant role.

**Background Information** 

Within West Knoydart, a significant proportion of the overall cull is sold through the local shop.

#### 13. Non- native Species Policy

At present, as well as the native red and roe deer, there are known to be sika deer within the DMG boundary, in fairly significant numbers around Morar, although only passing through elsewhere. There are also wild boar within the Group, which will be accounted for in this section as well.

There are no fallow deer within the Group area, and there are no known plans to introduce any.

#### Sika Deer

Sika deer are present around Morar, with several dozen animals living in and around a private conifer plantation. Elsewhere in the group, occasional animals pass through, mostly dispersing males.

The group policy on sika deer will therefore be to try and confine them in the area around Morar, but to prevent their establishment elsewhere. Stalkers are therefore asked to remove all sika animals as and when opportunities arise.

There is no suggestion yet that sika deer are breeding with red deer in this area.

# Other non- native species

Sightings of any other deer species, notably muntjac, will be reported immediately to both the deer group and to Scottish Natural Heritage, and efforts made to remove such animals.

There are wild goats within the area, principally in West Knoydart, with a cull of 10-12 animals a year being taken to maintain a steady but small population.

The wild boar population has unintentionally arisen within the area. It is now well established, treated as a resource as some, as a pest by others. Their precise legal status has not been clarified by the Scottish Government, and some of the animals within the eastern part of the group are likely to have arisen from a variety of sources.

The DMG agree to include all matters relating to wild boar in their meetings, and to have separate agenda item relating to them.

# **14.** Communications Policy

The Knoydart DMG is committed to the transparent communication of all relevant information to its members, to government agencies and to the public more widely, with the caveat that some sensitive data will be distributed to group members only.

The primary source of information about the Group will be on their own dedicated website, on which all information relevant to the group can be located. This will include the deer management plan and associated maps, a constitution, minutes of group meetings, and population models.

The link for this website is: http://knoydartdmg.deer-management.co.uk

It can also be accessed through the Association of Deer Management Groups (ADMG) website at: http://www.deer-management.co.uk/dmgs/deer-management-groups/deer-

All enquiries to the Group should be made through the Group Secretary via email, or if necessary, via phone to the Group Chairman. Their contact details are:

# **Knoydart Deer Management Group**

Group Secretary: Chairman, below, currently undertakes this function.

#### Chairman

Sir Patrick Grant

Sirpatrickgrant@dalvey.com Tel: Phone no. required.

The contact details for individual properties will not be available as a matter of course through the Deer Group or website, although the Secretary can put you in touch with the relevant people if appropriate to do so. No cull information on individual properties will be made available outwith the membership of the Group.

Every effort will be made to deal with non-emergency issues within 10 days. More pressing issues will be dealt with promptly if appropriate.

For more long established or strategic issues, it may be appropriate for the issue to be brought up at a deer management group meeting, which take place at six monthly intervals. The Chairman may recommend this to you. The spring meeting will be an open meeting to which anyone is entitled to attend. Items for inclusion on the Agenda for such meetings must be submitted to the Group Chairman three weeks in advance of the meeting, otherwise they can be taken up under "Any Other Competent Business". Any item that is not deemed appropriate for discussion on the Agenda will be addressed in some other, appropriate fashion. Please respect the judgement of the Chairman if his view is that, in the first instance, an issue should be dealt with outside a formal group meeting. This may be because of time pressures, or the nature of the issue at hand.

All local Community Councils and other relevant interests will be made aware of meetings in advance, and invited to contribute to the agenda for these. Local input on the continuing evolution of the group Deer Management Plan is welcomed and encouraged. Email contacts and addresses for local community councils are included in Appendix 2. These details are not being made public through the website, but are available on request to Group members and community interests as required.

Any queries about the running of the DMG can be addressed to Scottish Natural Heritage, at any of the contact points listed here below:

# **Scottish Natural Heritage Contact**

Graeme Taylor, Scottish Natural Heritage, Great Glen House, Leachkin Rd, Inverness, IV3 8NW, Phone: (01463) 725 000 Email: <a href="mailto:graeme.taylor@snh.gov.uk">graeme.taylor@snh.gov.uk</a> Holly. Deary@snh.gov.uk, and is also partly seconded to the Association of Deer Management Groups (ADMG), leading on collaborative deer management across the country

For more general deer enquiries: wildlifeops@snh.gov.uk

Knoydart DMG will seek to respond to any requests from media sources or the local public for information, and individual members may arrange, from time to time, appropriate open days and information events if these are requested or deemed to be useful.

Knoydart DMG welcomes comment on all matters either directly or indirectly associated with deer management within the Knoydart area.

#### 15. Training Policy

Knoydart DMG encourage and facilitate the attainment of all qualifications and training necessary for the delivery of effective deer management within their area of operation, and support continuing professional development through the adoption of Best Practice Guidance and other relevant courses .

The recognized and recommended industry standard for culling deer is that all those personnel involved in deer management should attain level of Deer Management Qualification (DMQ) Level 1 or equivalent.

As at November 2015, 16 of the 18 personnel involved in deer management in the Knoydart area have obtained this qualification, extending to 20 of the 22 personnel in the 2 X DMG area.

The DMQ Level 2 qualification is increasingly held as the de facto industry standard for professional stalkers, which requires the identification, stalking, dispatching and lardering of deer under supervision.

At November 2015, 14 of the 18 personnel involved in deer management in the Knoydart area held the DMQ Level 2 qualification, extending to 17 of the 22 in the wider 2 X DMG area.

For those expected to larder deer and prepare them for the human food chain, industry requirements are that they have attained Trained Hunter status. This is the equivalent of any DMQ course passed after 2006, or an upgraded version of DMQ1 passed before that time. At November 2015, 12 of the 18 personnel involved in deer management within with NWS area had trained hunter status, extending to 16 of the 22 in the 2 X DMG area. In practice in this DMG, those without this status tend to be working under the supervision of those who do.

All personnel requiring to take deer under special authorizations must be on the SNH "Fit & Competent" register. The requirement for this is to hold the DMQ Level 2 qualification, or DMQ Level 1 plus two references.

At November 2015, 9 personnel in the Knoydart area required to take deer under authorization, and were on the Fit & Competent register, extending to 12 in the wider 2 X DMG area. This low number reflects the fact that the vast majority of deer within the area are culled in season and during daylight hours.

All personnel within the area are encouraged to be proficient in First Aid, manual handling, ATV driving and maintenance and other tasks which are central to their job. Knoydart DMG

#### **Background Information**

will monitor the level of skills among staff in the DMG area, and undertake to facilitate any such courses or training that may be necessary to put right any deficiencies that are identified. All estates will support their staff in attaining the agreed standards.

Group members are encouraged to bring forward any suggestions for suitable training that might be of relevance to the Group as a whole, or to ask for support in arranging training for their staff. The most relevant training going forwards is likely to be in relation to habitat surveying and monitoring work. While many group members are already capable of doing this, others will require some structured training, and the management of such activity across the area will be an important function for the group to be able to undertake.

#### 16. Reviewing the Plan

This Plan provides an agreed framework for a co-ordinated and co-operative approach to deer management in the area. The actual implementation of the Plan will be decided on an ongoing basis at the Group's spring and autumn meetings, with scope for the Membership to adjust and adapt the Plan to meet changing circumstances. This Plan, with its attendant maps and databases will be circulated along with the Agenda to all group members prior to meetings, any changes actioned, and the revised plan included with the minutes of that meeting, or at a suitable time thereafter. Group members are therefore encouraged to report all changes in contact details, personnel or management practices that might be relevant to the group, or any potential upcoming projects that might affect deer management within the area, even if such proposals are still at a planning stage.

The population models and maps will be updated on an annual basis as required, with the former adjusted so that it is always looking five years ahead.

The Members agree that there will be a more systematic review of the Plan and its provisions during autumn 2020 and thereafter, 2025, and, if considered necessary, the production of a revised edition of the Plan will be actioned at these points.

# Part Four - OPERATION OF THE GROUP

Knoydart DMG has been assessed against the DMG Benchmark document developed by the Association for Deer Management Groups. In this section of the plan, an account is given of how the Group currently meets the recommended operating criteria and, where appropriate, correcting or amending actions are listed.

#### Area & Boundaries

With the exception of its relationship with the West Knoydart Group, the other boundaries of the group are considered to be appropriate and secure to significant deer movements from elsewhere, with a number of significant lochs, deer fences and, of course, the coastline all helping this process. Although there will be some movement between the Group and West Lochaber to the south, KDMG is considered to be a coherent deer management group. The location of the group is shown on the **1. KDMG Location map**.

The biggest issue facing the Group is its relationship with the West Knoydart Group, and making sure that appropriate reporting and communications are in place. Population modelling very strongly suggests that the West Knoydart area is too small, and it is in fact intimately connected with the main Knoydart Group.

There are three alternative arrangements which, from a deer management perspective, are more practical than the current arrangements.

One is to treat all of Knoydart as one Deer Management Group, but from a local political perspective, this is unlikely to be workable.

The second is for Kilchoan, Camusrory and Barisdale to join the West Knoydart Group, making this Knoydart Group that bit smaller. There would still need to be communications between the two, and it is still likely that the Knoydart Group will still be a net producer of stags, and West Knoydart a net culler of stags. Population models will need to be coordinated.

The third is to maintain the current 2 X Groups, but for Barisdale, Kilchoan and Camusrory to share a population model with the current West Knoydart Group. Such an arrangement would require staff from these 3 X estates to attend at least one West Knoydart meeting a year. The 2 X population models would still need to be co-ordinated.

On balance, it is recommended that this latter option is most appropriate for the 2 x Knoydart groups, although external oversight of arrangements will almost certainly be required in the short term until new arrangements have had time to settle in.

# Action Point

- 1.1 The 2 x Knoydart DMGs should be restructured so that Kilchoan, Camusrory and Barisdale operate a shared population model with the West Knoydart Group. The exact structure and relation ship between the 2 X Groups and an appropriate level of external oversight to be agreed by April 2016.
- 1.2 Population models across the 2 x Groups require to be co-ordinated, and carried out on the same basis.

#### **Membership**

Almost all of the significant land holdings within the KDMG area are members of the Deer Group, and engagement at meetings and through this planning process has been good.

There are two exceptions to this. One is the area of private forestry that lies between Kingie Estate and the Forest Enterprise ground. The owner has been approached about joining the group, and has asked to e considered as a reporting member only. The second is the woodland block behind Morar Lodge. Although the area is small, this wood is the focus for a small but significant resident population of Sika deer, and it would be preferable for the Group if they were to engage with other deer managers in the area. The owner has been approached, but has not yet chosen to engage with the Group. Nevis estate cull deer on their behalf, so pro-active management is at least undertaken, and it is not believed that there are any significant issues there.

# Action Point

- 2.1 Before the end of 2016, look to recruit the above mentioned landholdings as members of the Group. It is likely that most will be paying a minimum subscription only. Should they choose not to join the Group, they should be encouraged to report deer cull information, and can be added to the email distribution list.
- 2.2 Add these properties to the SNH list to receive statutory returns.

#### **Meetings**

The group already meet twice a year, and a number of steering group meetings took place to help deliver this plan. Attendance at meetings is generally good. SNH & FE attend meetings, and group have demonstrated an ability to take forwards business between meetings.

It has been suggested that a failure not to distribute essential information in advance of meetings has led to them being unfocused, with valuable time at meetings being used up in gathering information, sometimes not always in a coherent or uniform manner. Group members have not had time to consider information before the meetings, and news that is first declared at meetings has led to frictions and misunderstandings. This has probably been a contributing factor to the break-up of the Group in the past, with the West Knoydart properties choosing to leave.

There should therefore be a stronger emphasis on how the meetings are structured and run.

Wider community interests should be made aware of meeting dates, and given the opportunity to contribute to Agendas although, in practice, there are virtually no settlements or houses within the boundaries of the DMG other than Mallaig and Morar.

# Action Points

- 3.1 As above, look to encourage wider community participation, including invitations to community councils and grazing committees to attend meetings from this spring onwards. All such groups to be given the opportunity to contribute to the agenda of meetings.
- 3.2 Cull data and other relevant information to be forwarded to Group 2 weeks ahead of meetings to properly inform discussion at the meeting itself.

#### **Background Information**

3.3 The Chairman currently acts as secretary as well, and minutes the meetings. It is strongly recommended that the Group take on a separate secretary so that meetings can be directed more effectively and these functions shared, and population models updated between meetings as appropriate. A number of other functions will be required, including updating the website, and answering any enquiries to the Group.

#### **Constitution & Finances**

There is no existing constitution, but this has been addressed as part of this management planning process.

The Group do not have a dedicated bank account, and they do not produce an annual budget, nor do they have significant cash reserves to act as a buffer, or to help with cash flow.

#### **Action Points**

- 4.1 A constitution to be adopted at Spring 2016 group meeting.
- 4.2 A Group bank account to be set up before January 2016. This has been actioned.
- 4.3 The group will produce annual budgets, and look to increase member subscription rates so that a buffer can be built up in bank account. A realistic aim would be to have the equivalent of one year's subscription to ADMG in reserve at all times. A budget will be drawn up for the spring 2016 meeting.

# **Deer Management Plan**

This Plan replaces a previous one that was drawn up in 2011. A Steering Group that has included group members and SNH have ensured that all the relevant elements of an approved plan are in place, and it is planned to endorse the plan at the spring 2016 group meeting. A full range of local interests have been consulted on deer management issues within the area, including grazing committees, community councils and the local authority.

# **Action Points**

- 5.1 Endorse DMP at spring 2016 meeting following consultation on the draft plan over the winter period.
- 5.2 Ensure a system of communications is in place whereby local interests have access to the plan, and can input to future development of it. To achieve this, the Plan will be published on a dedicated DMG website. The ethos behind this plan is that it will be regularly updated, perhaps twice a year, and therefore it is impracticable to circulate hard copies of the plan.

# **Code of Practice on Deer Management**

The code has been endorsed in both this plan and in the constitution of the Group. The terms of the Code will be delivered through implementation of this plan, and the Code will guide all actions taken by the group and by individual members.

#### Action Points

- 6.1 Ensure adherence to code at all times, both by the Group, and by individual members.
- 6.2 At all subsequent meetings, group members will have the opportunity to raise any issues relating to deer welfare issues or other problems that they are aware about within

#### **Background Information**

the Group. In all cases, members are encouraged to bring the issue up with those responsible in the first instance, or to seek the advice of the Group Chairman.

# **ADMG Principles of Collaboration**

The ADMG principles of collaboration are accepted and endorsed by the Group and by individual members, namely:

- We acknowledge what we have in common, namely a shared commitment to a sustainable and economically viable Scottish countryside.
- We make a commitment to work together to achieve that.
- We accept that we have a diversity of management objectives and respect each other's objectives.
- We undertake to communicate openly with all relevant parties.
- We commit to negotiate and, where necessary, compromise, in order to accommodate the reasonable land management requirements of neighbours.
- Where there are areas of disagreement we undertake to work together to resolve them.

These principles are also referenced in the Knoydart DMG constitution.

# **Wild Deer Best Practice Guidance**

All deer management within the group area will be carried out in accordance with Best Practice guidance, and group members will input to this process and seek to influence it as it continues to evolve.

# **Data & Evidence gathering- Deer Counts**

KDMG have a very good helicopter count dataset from November 2014, which has been used as the basis for population models. The data is recent, and the quality of the count was generally held to be very good.

The West Knoydart Group undertake a footcount in the spring of each year, and are able to do that largely as a result of the large number of people available to them in Inverie. The terrain in the main part of Knoydart would make an accurate foot count very difficult, and count information from the past is very patchy.

Given that good count information is available from 2014, it is recommended that priority is given to getting good recruitment count data each spring, and that should be sufficient to inform the population model going forwards in 2016.

Should Camusrory, Kilchoan and Barisdale join West Knoydart in sharing a population model, it is recommended that they adopt the same counting regime as that group in 2016.

The remaining Knoydart DMG properties should look to devise a suitable count protocol and routes for 2017 onwards. Given the terrain in this part of the Group, personnel from elsewhere will almost certainly be required to help with such a foot count.

#### **Background Information**

Forest Enterprise manage the only significant woodland holding across the group area, and make use of dung counting when setting their cull levels within the fenced area.

## Action Points

- 9.1 Group members need to carry out thorough and consistent recruitment counts on an annual basis to inform the population model. Such counts should take place in the final week of April/first week of May, and the recruitment % is the no. of calves expressed as a proportion of the no. of hinds, two years or older.
- 9.2 The Group should continue to receive and take account of West Knoydart DMG count data.
- 9.3 It is recommended that Barisdale and Camusrory count at the same time as West Knoydart, who already involve Kilchoan Estate in their count, and that this should commence from spring 2016 onwards.
- 9.4 A regular count schedule and protocol needs to be devised for the remaining properties within the Knoydart DMG, to be implemented from spring 2017 onwards.

# **Data & Evidence Gathering- Culls**

There is an issue within the Group of cull data not being collected on a consistent basis, and not being collated and distributed to members well in advance of meetings.

## Action Point

- 10.1 Update the population models and target culls on an annual basis, using recruitment and mortality data collected, as well as actual culls from the previous year.
- 10.2 All cull data to be collated at end of season promptly, and forwarded to all members well in advance of spring meeting.

# **Data & Evidence Gathering- Habitat Monitoring**

Many group members have had experience and training in habitat monitoring, but coverage is not uniform, confidence is low in some cases, and Habitat Impact Assessments are not currently undertaken in a structured manner across the DMG area.

A number of properties have requested assistance with or training in habitat monitoring. One property already uses independent consultants to assess habitat on their behalf.

Habitat monitoring on West Knoydart and Kilchoan is very good, conducted on a consistent basis, and is done in line with Best Practice guidance.

## Action Points

- 11.1 A schedule of habitat and designated site monitoring will be devised in conjunction with SNH during early 2016, and will be included in the Working Plan part of this document. This will include appropriate habitat targets for the Group.
- 11.2 The DMG will co-operate with government agencies and provide or access sufficient resources to ensure that this programme is implemented over the ten year period of this plan.
- 11.3 Updated sheep information will be attained from group members for 2020 and 2025, in line with the data gathered on a five-year basis since 1995.
- 11.4 The DMG will liaise with grazing committees on an ongoing basis so that they are

#### **Background Information**

aware of any significant changes in sheep numbers or hill usage at a more local level. The relevant committees are only present within Glen Nevis Estate.

# Competence

Of the 18 personnel involved in deer management within the KDMG area, the following qualifications are held:

DMQ Level 1: 16 DMQ Level 2 14

9 personnel hold trained hunter status, and 12 personnel are on the SNH "Fit and Competent" register. Note: in this latter case, personnel only need to be on the register if they are applying to cull deer under authorization at night or out of season. A number of stalkers within the group do not apply for such authorizations, and therefore do not require to be on the register.

Office bearers from the DMG have attended courses ran by the Association of Deer Management Groups in relation to operation and leadership within local groups.

## Action Point

- 12.1 DMG members will seek to ensure that DMQ Level 1 and Trained Hunter status are delivered as the now accepted industry standard within the area, and encouragement will be given to professional stalkers to achieve DMQ level 2.
- 12.2 Training or support in higher level qualifications will be encouraged where that is appropriate.
- 12.3 Training and support will also be sought from ADMG where that is required to help with running of the Deer Management group.

# **Training**

A Training Policy is included earlier in this document.

# Action Points

- 13.1 Promote and facilitate the uptake of appropriate deer management qualifications.
- 13.2 Be aware of the ongoing development of Best Practice Guidance and any new techniques or standards that arise from that.
- 13.3 Review training needs on an annual basis.

## **Venison Marketing**

While the quality of deer larders across the DMG is generally good, the uptake of the Scottish Quality Wild Venison (SQWV) scheme is mixed within the area, although five of the nine members now carry this status. The perceived bureaucracy surrounding this seems to be more of a limiting factor than poor facilities or training as such.

Group members use a number of outlets for their venison, with a proportion of the total cull being processed or sold locally.

Action Points

14.1 The DMG will work with ADMG to promote uptake of SQWV within the area.

14.2 In the medium term, beyond the settling in period for this Plan, the DMG will explore options to market venison from the area in a more collaborative manner.

## **Communications**

A Communications policy is included in an earlier section of this document.

The annual communications strategy will involve making all relevant documents available through a dedicated DMG website and also the ADMG website, including the opportunity to contribute to the Agenda of meetings, holding one open meeting a year, answering all requests for information from the media and arranging open days and demonstration events where these are appropriate.

A number of stalkers write regular articles in the local press.

All local stakeholders, including community councils have been consulted on the development of this plan. See <u>6. KDMG Community Councils Map.</u>

# Action Point

15.1 Implement the communications strategy as agreed, and ensure a mechanism is in place for dealing with business and issues between meetings.

# Part Five - PUBLIC INTEREST OUTCOMES

Knoydart DMG has been assessed against the DMG Delivery of Public Interest document developed by Scottish Natural Heritage and the Association for Deer Management Groups. In this section of the plan, an account is given of how the Group currently delivers public benefit and, where appropriate, correcting actions are listed.

# **Develop Mechanisms to manage deer**

KDMG has completed both the Benchmark and Public Interest assessments.

A series of actions have been identified to be taken forward in a Working Plan, and roles for implementing this have been assigned.

A forward looking deer management plan is in the process of development, and is expected to be endorsed in spring 2016. The plan plus associated documents, maps and minutes of meetings will be published on a dedicated DMG website space <a href="http://knoydartdmg.deer-management.co.uk">http://knoydartdmg.deer-management.co.uk</a> and also through the Association of Deer Management Groups website. See here: <a href="http://www.deer-management.co.uk/dmgs/deer-management-groups/deer-management-groups/deer-management-group-map/knoydart-dmg/">http://www.deer-management-groups/deer-management-groups/deer-management-groups/deer-management-group-map/knoydart-dmg/</a>

## **Action Points**

PIA 1.1 Publish and endorse the new Knoydart Deer Management Plan in spring 2016.

PIA 1.2 Re-assess the Group against both the Benchmark and the Public Interest criteria once DMP has been endorsed, and then annually thereafter.

PIA 1.3 Review the Working Plan on an annual basis and minute progress and changes.

## **Delivering Designated Features in to Favourable condition**

Designated sites and features within the DMG are documented with <u>Appendix 3, KDMG</u> <u>Designated Sites</u>. This includes an up to date account of their current status, and suggested actions through which a number of sites in Unfavourable condition can be brought forward in to assured management status.

Specific actions will be laid out in the Working Plan at the back of this document.

#### <u>Action</u>

PIA 2.1 Implement actions outlined in Working Plan re: designated sites, in particular those relating to the Glen Barisdale SSSI.

PIA 2.2 Also in Working Plan, implement the series of actions required to monitor designated sites over the ten year period of this plan.

# Manage Deer to retain existing Native Woodland cover and improve woodland condition in the medium to long term.

There are approx 6865 hectares of woodland within the Knoydart DMG area, covering 11 % of the area of the Group (National Forestry Inventory, NFI). This is low compared to the national average of c 18.5 %, but it reflects the very large tracts of ground that is unsuitable for planting, and the distance from markets and processing facilities, as well as the relatively poor roads infra-structure. The 6865 ha includes all recently planted woodland, and is concentrated very heavily within the National Forest Estate towards the east of the DMG, although three private properties have a significant area of conifer woodlands, native remnants are scattered throughout, and the Glen Barisdale SSSI is a nationally important pinewood.

Of this area, 1961 hectares or 29 % is composed of native or nearly native woodland (NFI), a figure which is slightly lower than that provided by the Native Woodlands Survey of Scotland (NWSS), which gives 2150 ha.

Of the total woodland area, 2190 hectares or 32% is under an agreed management regime through an SRDP Forest Plan or Management Plan since 2008. There were only 44.5 hectares under an SFGS management plan from 2003-7. Given the high proportion of woods in this area within FE ownership, and the fact that much of the woodland area is still fairly young, this is a high level of woodland under active management.

Only 4.6 ha has been under a felling licence 2012-14, and only 4 ha from 1998-2011. (Woodlands covered by a Forest Plan do not require a separate felling licence).

Of the total native woodland area of 2150 ha (NWSS), the following herbivore impact levels are currently given:

Low: 46 ha or 2%

Medium: 1357 ha or 63% High: 329 ha or 15% Very High: 417 ha or 19%

65% of native woodlands therefore show low or medium herbivore impact levels, although a very high proportion of this area is within the FE boundaries. These areas are shown on **10. Knowdart Herbivore Impacts Map.** 

Of this 2150 ha, only 241 or 11% had a canopy of less than 50%, and only 337 ha or 16% had non-native species more than 10% of area. Almost all of this area lies within the FE boundary, and is subject to ongoing and gradual restoration back to pinewood or native woodland more generally. Such restoration is a particular focus within the FE Glengarry area.

88 ha or 4% of the native woodland area has invasive species covering more than 10% of their area, and this mostly consists of rhododendrons. Of this, approx 20 ha have 90-100% cover. While outwith the immediate scope of this plan, these areas of invasive rhododendrons clearly constitute a threat to the wider woodland resource in the medium to longer term. The areas concerned are relatively modest, although much of it is fairly

inaccessible, growing alongside the lochs, on islands, and the steep sides of watercourses.

For the 1462 ha of woodland that are outwith designated sites, have more than 90% native species, 50% canopy and less than 10% invasives, the following herbivore impacts are given:

Low: 10 ha or 1%

Medium: 1003 ha or 69% High: 174 ha or 12% Very High: 275 ha or 19%

Therefore, 70% of these woods that are otherwise in "satisfactory condition" outwith designated sites show low or medium herbivore impacts. This is in comparison to the 60% of such woodlands which Wild Deer- A National Approach (WDNA) envisage being in such condition by 2020.

There are a couple of obvious options for moving a higher proportion in to satisfactory condition during the period of this plan.

Firstly, the ongoing FE restoration programme, gradually removing conifers from native woodland sites, will ensure this area increases as much of that is at low or medium herbivore pressure already.

Secondly, Kilchoan Estate are currently looking at woodland creation options on their property, and have scope to include existing native woodland within such plans, reducing or eliminating herbivore impacts and achieving regeneration on these areas at the same time.

Finally, Camusrory Estate have sought initial advice on how to manage the significant native woodland remnant on their property.

Beyond this, most of the rest of the native woodland resource is extremely scattered, with few obvious clusters to target. It is apparent that many of the native woodland remnants on and around the shorelines are regenerating, particularly where the ground is reasonably steep. Extensive regeneration does exist around Loch Nevis Estate, and along the south side of Loch Hourn.

Management of the Glen Barisdale SSSI is currently being taken forwards, with a number of woodland enclosures being developed in conjunction with SNH and Forestry Commission. These are likely to be taken forwards in an application in early 2016.

It is worth noting that part of the Loch Hourn native pinewood area is already enclosed on John Muir Trust land to the west, and the pinewood fragments along the south side of Loch Hourn are regenerating freely, with both current cohorts of regeneration and 25-30 year old trees both in evidence. Such regeneration is not all confined to steep ground, suggesting that this part of the range has not been used much by deer in the recent past. Very high levels of regeneration have occurred outside fences on the north side of Loch Hourn as well. It is suggested that removal of sheep has opened up new wintering grounds for deer, and the trees have taken advantage of that to seed and get some fresh regeneration away. The efforts to regenerate the main Barisdale remnants should therefore be seen in this wider context.

# West Knoydart

For comparison, this summary of the woodland area on West Knoydart is given:

There are approx 1251 hectares of woodland within the West Knoydart DMG area, covering 12 % of the area of the Group (National Forestry Inventory, NFI). This is just slightly more than the main Knoydart Group. This is low compared to the national average of c 18.5 %, but again, it reflects the very large tracts of ground that is unsuitable for planting, and the distance from markets and processing facilities, as well as the relatively poor roads infrastructure. Interestingly, there were only 520 ha of woodland within the area in 1988, so more than half of the current woodland is recently planted. The 1251 ha includes all recently planted woodland, and is well scattered around the DMG, especially around the periphery of the Group.

Of this area, 276 hectares or 22 % is composed of native or nearly native woodland (NFI), a figure which is slightly lower than that provided by the Native Woodlands Survey of Scotland (NWSS), which gives 300 ha.

Of the total woodland area, there are no hectares under an agreed management regime through an SRDP Forest Plan or Management Plan since 2008, although 599 ha where subject to active management under SFGS, and much of this will be ongoing. Again, this represents a high proportion of the woodland area under active management. The woodland area around Inverie is particularly well managed.

Of the total native woodland area of 300 ha (NWSS), the following herbivore impact levels are currently given:

Low: 145 ha or 48% Medium: 111 ha or 37% High: 41 ha or 14% Very High: 3 ha or 1%

85% of native woodlands therefore show low or medium herbivore impact levels, although a very high proportion of this area is within fencelines and therefore outwith the current deer range. These areas are shown on **10a. West Knoydart Herbivore Impacts Map.** 

Of this 300 ha, only 12 ha or 4% had a canopy of less than 50%, and only 24 ha or 8% had non-native species more than 10% of area.

Only 6 ha or 2% of the native woodland area has invasive species covering more than 10% of their area, and this mostly consists of rhododendrons. For all of this, the cover is less than 20%. While outwith the immediate scope of this plan, these areas of invasive rhododendrons do constitute a threat to the wider woodland resource in the medium to longer term. The areas concerned are relatively modest, and should be addressed as part of wider woodland management activities.

For the 264 ha of woodland that have more than 90% native species, 50% canopy and less than 10% invasives, the following herbivore impacts are given:

Low: 134 ha or 51% Medium: 86 ha or 33% High: 40 ha or 15% Very High: 2 ha or 1%

There are no woodlands on West Knoydart on designated sites.

Therefore, 84% of these woods that are otherwise in "satisfactory condition" outwith designated sites show low or medium herbivore impacts. This is in comparison to the 60% of such woodlands which Wild Deer- A National Approach (WDNA) envisage being in such condition by 2020. However, as previously noted, a high proportion of these woods are relatively young and still within deer fences.

## <u>Actions</u>

PIA 3.1 FE to continue their programme of gradual restoration of native woodland sites, reducing the proportion of non- native trees species, and dealing with invasive rhododendrons where applicable.

PIA 3.2 Kilchoan Estate to consider including existing native woodland remnants in their plans to take forward some woodland creation on their property.

PIA 3.3 Camusrory Estate to consider taking forward management of the native woodland remnants on their property.

PIA 3.4 Barisdale to take forward their RDC application which seeks to create enclosures and return the site to favourable condition. An important component of this will be to ensure an appropriate deer browsing pressure on ground vegetation outwith the enclosures.

# Demonstrate DMG contribution to woodland expansion target

There has been a modest increase in woodland area within the DMG over the past 20 years or so, with 110 hectares being established under the Scottish Rural Development Programme (SRDP) since 2008, 49 hectares being established under the Scottish Forestry Grant Scheme (SFGS) since 2003, and 190 hectares being established under the Woodland Grant Scheme (WGS) since 1994. See **9. Knoydart Woodland Creation Map**. Beyond this, 649 ha of woodlands were created under WGS1 & 2 schemes prior to 1994.

This woodland expansion amounts to 998 hectares in total, or 15 % of the woodland area today, which includes the extensive FE area. Although the overall increase in terms of area is modest, the proportional increase has therefore been very significant over thirty years or so, especially as a proportion of the woodland on private ground. Of the most recently planted woodland under SRDP, 100 % consisted of native woodland planting. There has been no planting of any other type.

Looking ahead, the private owners within the Group have suggested that they could plant up to 410 ha of new native woodland within the period of this plan. In principle, a much greater area could have been contemplated if a larger area of plantable ground had been available. Much of the DMG area in the centre of the Group is very marginal for tree planting.

In addition, Forest Enterprise have an ambitious plan to plant 815 ha of new native woodland within the strategic deer fence, and this will be a major management consideration for them over the next 10 years or so.

The total potential planting area within the DMG is therefore 1225 ha, actually much greater than has been planted in the last 30 years, and three times what has been planted in the last 20 years.

# West Knoydart Comparison.

There has been a very significant increase in woodland area within the West Knoydart DMG over the past 20 years or so, with 431 hectares being established under the Scottish Rural Development Programme (SRDP) since 2008, 25 hectares being established under the Scottish Forestry Grant Scheme (SFGS) since 2003, and 480 hectares being established under the Woodland Grant Scheme (WGS) since 1994. See <u>9a. West Knoydart Woodland Creation Map</u>. Beyond this, 189 ha of woodlands were created under WGS1 & 2 schemes prior to 1994.

This woodland expansion amounts to 1125 hectares in total, or 90 % of the woodland area today. This is clearly a very significant level of planting in recent times, and reflects the ethos that is present within the community on Knoydart. Of the most recently planted woodland under SRDP, almost 100 % consisted of native woodland planting. There were 4 hectares of natural regeneration achieved.

Looking ahead, discussions have suggested that there is scope for planting another 220 ha or so in the next 5- 10 years within the West Knoydart DMG.

# Actions

PIA 4.1 FE to implement their 815 ha of new native planting within the period of this plan.

PIA 4.2 Private owners on Knoydart to take forwards applications for approx 410 ha of new planting.

PIA 4.3 West Knoydart to develop further planting proposals, potentially up to 220 ha of new planting.

PIA 4.4 All to ensure that recently planted woodland areas become properly established.

# Monitor and manage deer impacts in the wider countryside

Outwith the designated sites within the DMG area, it is considered that there are the following areas of a range of broad habitat types, taken from the LCS88 dataset. A full summary of the habitat types can be found in the Excel spreadsheet: <a href="Appendix 8: KDMG">Appendix 8: KDMG</a> Broad Habitat Data. This is a particularly good set of data for this area, with no hectares obscured by cloud across the whole area. However, the data is now over 25 years old.

The main habitats in the wider DMG area are:

2623 ha of blanket bog, covering 2% of the DMG.

38,321 ha of heather moorland, covering 59% of the DMG.

1074 ha of wet heather moorland, covering 2% of the DMG.

212 ha of improved pasture, covering only a very small % of the DMG. This is a very small area of good farmland within such a large area, and is clearly a limiting factor for agriculture locally.

5147 ha of smooth grasslands, representing 8% of the DMG area.

8443 ha of woodland, occupying approx 13% of the DMG. This is actually lower than the current woodland cover, despite the relatively high level of planting over the last 30 years or so. Find out why this is.

Finally, there is about 7179 ha of high montane vegetation within the DMG, covering approx 11% of the area.

# West Knoydart Comparison

The main habitats in the West Knoydart DMG area are:

404 ha of blanket bog, covering 4% of the DMG.

4380 ha of heather moorland, covering 42% of the DMG.

1826 ha of wet heather moorland, covering 18% of the DMG.

85 ha of improved pasture, covering only 1% of the DMG. As with the main Knoydart Group, this is a very small area of good farmland within such a large area, and is clearly a limiting factor for agriculture locally.

2268 ha of smooth grasslands, representing 22% of the DMG area.

520 ha of woodland, occupying approx 5% of the DMG. There has been a very significant increase in this area since 1988.

Finally, there is about 788 ha of high montane vegetation within the DMG, covering approx 8% of the area.

Overall, the broad suite of habitats within each DMG is very similar, albeit West Knoydart has a slightly more balanced mixture of habitats.

It is likely that with the exception of native woodland remnants and blanket bogs, that the current density of deer of 10-11 per 100 ha will be broadly suitable for much of the area. Indeed, habitat survey work suggests low and medium impacts at the vast majority of sites, including for blanket bog, which at 2% in Knoydart and 4% on West Knoydart, actually comprises a very small proportion of the whole, much less so than many other groups.

The priority going forwards will be to implement habitat monitoring over a wider area on a structured basis, to get a better idea what proportion of habitats within the DMG are in good condition.

## Action Point

PIA 5.1 An agreed monitoring programme for these habitats will be devised during the early part of 2016, to be endorsed and included in this plan by April 2016.

# Improve Scotland's ability to store carbon

Within the Group area there are approx 6865 hectares of woodland and 2623 hectares of peatlands. A proportion of the wet heather moorland within the Group may eventually evolve to peat as well, and will certainly make some contribution to carbon capture.

It has already been noted that a high proportion of the native woodlands within the Group are in satisfactory condition, and that this will be increased during the period of this plan via gradual restoration of sites within the National Forest Estate, and by targeted enclosure of existing remnants.

There is scope for creating up to 1225 ha of new woodlands within the period of this plan.

The 2623 ha of peatlands are, at 2% of the area, a relatively small proportion of the DMG. The limited habitat surveys that have been done suggests that the majority of this is in favourable condition, and while the current densities of 10-12 per 100 ha would normally be too high for such sites, there is little evidence for this impacting on the current resource. However, a more widespread and structured monitoring programme needs to be put in place to check the condition of the peatlands over the DMG as a whole, and to monitor these over a period of time.

To date, no requests have been made to the Group to contribute to River Basin Management Planning within the DMG area

# <u>Actions</u>

- PIA 6.1 Maintain approx the current deer density across the DMG unless habitat monitoring suggests that a change is required.
- PIA 6.2 Implement the woodland creation and native woodland restoration schemes mentioned previously
- PIA 6.3 Discourage any burning that might impact on peatland sites.
- PIA 6.4 Contribute to River Basin Management Planning as appropriate when requests to do so are forthcoming.
- PIA 6.5 Implement a wider programme of habitat monitoring across the DMG area to achieve a more accurate assessment of the current status of a range of habitats. This should then establish what condition existing peatlands in particular are in, and whether any remedial action is required to deal with these.
- PIA 6.6 Consider taking any priority peatland sites forwards under the Peatlands Action programme, if applicable.

## Reduce or mitigate the risk of invasive, non- native species

A non- native deer policy is included earlier in this plan. This includes a section on sika deer, which are considered to be an asset to one property within the DMG.

While not invasive as such, wild boar are present within the DMG, and are regarded as an asset by some members, and would be welcomed, albeit cautiously, by some others where they to appear on their property. There is no suggestion within the Group as a whole that they should be eradicated. However, the Group will include matters relating to wild boar in the Agenda of all future meetings, including reporting nos culled.

## Action

PIA 7.1 Cull spreading sika deer throughout the Group area, especially in the woodland areas in the east of the DMG.

PIA 7.2 It is likely that a small resident population of sika will remain near Morar. Efforts will be made to ensure that this population of animals are kept within their current boundaries as far as possible.

PIA 7.3 All Group members to be vigilant for Sika deer swimming to the DMG area from either the north or the south.

PIA 7.4 Include Wild Boar on the Agenda of all future DMG meetings.

## **Protection of Historic and Cultural Features**

There are likely to be many hundreds of sites throughout the DMG area that have archaeological or cultural importance. It is likely that for the majority of these that light grazing by deer and sheep will be beneficial in keeping back rank vegetation growth. At present, the DMG are not aware of any cultural sites that are being negatively impacted by grazing. A greater threat to such features will be woodland creation projects that do not ensure adequate buffer zones around such features, or other development projects.

# Actions

PIA 8.1 The DMG will maintain communication with the local community and look to address any issues that are identified with regards to sites of cultural interest and herbivore grazing.

PIA 8.2 As required by Forestry Commission, all potential woodland creation projects, including natural regeneration schemes, will be assessed by the applicants for any negative impacts on cultural or archaeological sites.

## Delivering higher standards of competence in deer management

A training policy and audit is provided earlier in this document.

Of the 18 personnel who are involved in deer management, 16 have DMQ Level 1, 14 have DMQ Level 2, and 12 have trained hunter status. Nine personnel are on the Fit & Competent register, but this is a reflection of the low number of deer culled out of season or at night by estate staff.

Staff within the DMG area have a wide variety of other qualifications and certificates

#### **Background Information**

covering other aspects of their work. These include ATV, Argocat, First Aid, Chainsaw, digger, water bailiff, Health & safety and boat handling. Higher deer management qualifications are also held, and one stalker is an accredited witness for DMQ Level 2. There does appear to be quite a strong ethos of training and staff improvement across many of the properties within the DMG.

## Action Point

PIA 9.1 Continue to monitor qualifications held by estate staff, and promote a culture of continued professional training more widely.

# **Contribute to Public Health and wellbeing**

Deer Vehicle Collisions are regarded as not being a significant issue throughout most of the DMG area, simply because of the lack of roads. The only exception is the main road between Morar and Mallaig, where typically less than one deer per year are involved in collisions. Since 2000, a small number of collisions have also taken place to the west of Invergarry. There has been no feedback from the community at either of these sites. A Group stalker at Morar monitors and reports any incidences there.

Food safety and meat hygiene is best maintained through appropriate training and facilities, and a high proportion of personnel within the Group have Trained Hunter status. All properties operate their larder facilities to Best Practice standards, and five Group members carry the SQWV status.

The Trained Hunter training allows personnel to be able to identify any notifiable diseases in deer found in the area. It is not thought that any such problems have been identified in recent years. In any incidences that do occur, the carcase will be held back from the food chain and a veterinary surgeon asked to inspect.

Members are aware of the threat of Chronic Wasting Disease (CWD) in deer being imported from North America, and ADMG and BDS guidance on this has been circulated to the Group.

All members are reminded to be aware of the risk of tick borne diseases, especially Lyme's Disease, and to communicate such risks to guests and members of the public who might frequent their land through suitable channels.

There are relatively few access/ deer conflicts within the Group area, with Group members maintaining footpaths and providing bothy accommodation and camp sites. Several members of the Group are in the Glenelg Mountain rescue, typically being called out 15-20 times a year on Knoydart. One property is also called out regularly to deal with boating accidents or capsizes on Loch Morar.

It is considered that access management is not a priority consideration for the majority of group members, and no particular action points are associated with this at the moment.

A number of Group members promote access and provide good information for the public.

The hills on West Knoydart are especially popular with walkers, with visitors coming by boat to Inverie, staying over night, and walking the local hills, or crossing the peninsula to the north side. The Knoydart Foundation run a very effective ranger/ guiding service, and Kilchoan Estate have a number of cottages for rent. Inverie is a well equipped starting point

## **Background Information**

for many walkers. B & B accommodation at Kinloch Hourn is another essential part of the overall infra structure needed to allow visitors to access the Knoydart peninsula. Barisdale Estate maintain a bothy and camping ground which allows for a mid-way stop-over for people walking from Kinloch Hourn to Inverie. This has got considerable strategic importance within the area. North Morar Estate also maintain an important mountain bothy.

## **Action Points**

PIA 10.1 Maintain communication with local Community Councils re: DVCs and look to implement any mitigation which may be deemed helpful in reducing local risk, particularly around Morar. Information on accidents should be sent to <a href="www.deercollisions.co.uk">www.deercollisions.co.uk</a>

PIA 10.2 Remind DMG members on an annual basis about the dangers of Chronic Wasting Disease (CWD) and individual members to ensure safety precautions are taken by anyone who has had recent contact with deer or habitats in North America.

PIA 10.3 DMG to highlight the risks of ticks and Lyme's Disease to their guests and the public more generally through all appropriate channels.

PIA10.4 Group members and DMG to all promote a positive and welcoming message to all those visiting the area throughout the year.

## Maximize Economic benefits associated with deer

Allowing that a proportion of the stag cull is a management cull only, it is estimated that the direct sporting value of the stag cull in the Knoydart DMG area is approx £95,000 annually.

Up to two thirds of the hind cull is likely to be taken with sporting guests, the value of which might be £30,000 annually.

In both cases, extra value will be obtained from a number of estates through letting of accommodation and other ancillary services, and this can reasonably be expected to be equivalent to the letting fees outlined above. In total therefore, the sporting value of deer stalking in the area is likely to amount to approx £250,000.

Based on a cull of 330 stags, 340 hinds and 120 calves (approx 2014-15 cull, including FE), it is estimated that the total value of venison produced within the group area is approx £90,000 annually. This does not take account of the fact that a number of properties market a proportion of their venison directly within the area, and a number of small game/ fish dealers operate in close proximity to the group.

For West Knoydart, the likely value of the let stag cull will be approx £32,000, with the letting of hinds worth up to £15,000. With a similar value likely to be placed on ancillary services, the letting value of deer here is likely to be in the region of £90,000, with an additional value of approx £42,000 for venison.

The total direct economic value of deer management within the Knoydart area is therefore likely to be in the region of £472,000 annually, this before any economic multipliers are considered. The majority of sporting estates will also consider their overall capital value to be related to the numbers of stags that can be culled.

Wild boar, fishing, ranger guided walks and sailing and letting property are other valuable sources of income within the area.

Within the 2 x Knoydart DMG areas, there are currently 22 full time jobs that are either fully or partially involved with deer management. In the latter situation, income from deer

## **Background Information**

management often allows the position as a whole to remain viable. This figure does not include extra seasonal ghillies that are taken on for the main sporting season, or support staff dealing with accommodation, bookings or other necessary support services. The most significant other interest is management of fisheries, and for a number of employees, this forms the greater part of their job. People will come to Inverie for a wide walking holiday, or to go sailing. Deer are often important in this situation as a fall back option, and from the perspective that these enterprises, stalking and accommodation are often closely integrated in to an overall package. Wild boar are becoming increasingly a part of that overall mix. The opportunity to have the chance to stalk can often be important to the overall package, whether a deer is actually taken up or not.

Livestock management, general estate work, forestry and rangering are other important activities for those also involved with management of deer. Habitat impact monitoring is also becoming a key and integral part of the remit of many employees in the area.

A number of properties within the group who do not obtain any sporting value from deer management will regard such activity as an overall net cost to their own management objectives, and would no doubt readily forego any income derived from deer management. This cost will however largely be expressed in terms of wages spent in the local area.

# Opportunities to add value to deer management

There already is a significant level of added value for deer management within the 2 x DMG area. The Knoydart Foundation already sell a very significant proportion of their venison through shops in the village. Stalking is generally well integrated with accommodation and other activities, and towards the east of the Knoydart Group, wild boar and fishing are included in wider stalking packages as appropriate.

# Action Points

PIA 11.1 Increase awareness of the value of deer in and around areas of population, to emphasize the point that deer in these areas provide positive outcomes as well as some negative ones.

PIA 11.2 Investigate the possibility for a local means of advertising sporting opportunities within the area, during the first 2-3 years of this plan, initially through the new dedicated website for Knoydart DMG.

## Larder/ infra- structure sharing

There already is good use made of shared larders within the DMG, and the quality of larders in general is very good, although not all are quality assured.

## Action Point

PIA 11.3 Maintain larder standards across the 2 X DMG area.

## Minimize the economic costs of deer management

For virtually all of the properties within the DMG area, deer management is just one of many activities that they are involved in, and the costs of employing staff, maintaining houses and estate infra-structure will be spread across a number of different enterprises or interests, with staff undertaking different activities at different times of year. The proportions of time spent on different activities, including deer management, will vary between properties. No-one spends all of their time on deer. Indeed, few, if any, spend most of their time on deer, but the overall infra-structure of staff, housing, roads and equipment

must be maintained to allow deer management to be undertaken and to be effective.

There is no accurate data reflecting the costs of providing this within the DMG, nor should we anticipate that properties would try and differentiate out their costs relating solely to deer management in this way. Many larger businesses and organizations struggle to attribute their overheads in any significant manner between enterprises or areas of interest, and it would not be realistic to expect small, highly integrated rural businesses to do so.

At a 2 X DMG level, there are 22 personnel directly involved in deer management as a key part of their job. Terms and conditions will vary, but if an average cost of employing a staff member of £40,000 is used (to include vehicle costs etc), then a broad brush cost of £880,000 could be attributed to maintaining the very basic infra structure of staff and equipment within the area, necessary for allowing deer management to be delivered to a satisfactory level. In addition to this, in any one year, there will be very significant investment in upgrading buildings or facilities, to be used in conjunction with deer management or for other activities.

The cost of maintaining staff within the area is likely to be greater than income brought in from deer alone (£880,000 vs £450,000, see above), but this does not account for income from other sources. The broad figures do not allow for economic multipliers within the local economy, and having a resident and reliable point of contact in these properties helps with overall maintenance and security and therefore protects the capital value of the properties as assets.

Almost all of the members of the DMG will regard the cost of employment and maintaining infra-structure as the necessary price that has to be paid to manage these properties, and that income from deer is an important part of the funding equation that allows these people in particular to remain. With other sources of income, a number will certainly be running as profitable businesses. Others will accept a net annual cost as being necessary to maintain or improve their overall asset.

Within the 2 X DMG group members, there are two properties where deer management would be regarded as more of a cost than an opportunity, but even here, the distinctions may not be clear cut.

Forest Enterprise maintain full time staff, and extensive perimeter deer fences must be maintained against deer. There will be a considerable net cost to doing this, but Glengarry Forest also provides a recreational asset that is not replicated anywhere else in this part of Lochaber, and it would be accepted that there is no other way of maintaining this, and that deer are a natural part of a forest ecosystem and need to be managed. Having a ranger on site allows a number of other activities to be promoted and maintained. It would be questionable if such a position would be maintained or justified if deer management input was not required.

John Muir Trust do receive some income from letting some deer stalking to the Knoydart Foundation, but management objectives focus largely on control of numbers. However, deer are considered an integral part of the overall ecology, and the need for management is acknowledged and respected. An employee to manage the property is likely to be retained anyway. Deer stalking is a good way to see the ground, and the important habitats local to them are generally in favourable or recovering condition.

## **Action Points**

PIA 12.1 DMG to assess the current PACEC survey in to the value/ costs of deer management and extract information from KDMG in order to inform more fully the above narrative. Complete and adapt if necessary by spring 2017.

## Ensure effective communication in deer management issues

The Deer Management Plan, minutes of meetings and other relevant information is being made available on the ADMG website at <a href="http://www.deer-management.co.uk/dmgs/deer-management-groups/deer-management-group-map/knoydart-dmg/">http://www.deer-management.co.uk/dmgs/deer-management-groups/deer-management-group-map/knoydart-dmg/</a>

and through the Group's own dedicated website at <a href="http://knoydartdmg.deer-management.co.uk">http://knoydartdmg.deer-management.co.uk</a> .

Local community councils to be added to circulation list as appropriate, and one meeting per year to become an open meeting. These local groups will all be notified of meetings in advance and given the opportunity of contributing to Agenda.

Existing opportunities for community involvement and education include school visits, guided walks and youth club outings. A number of deer group members provide good interpretation facilities on their properties, and Highland Council, SNH and a variety of local initiatives provide good access and interpretation of local features of cultural or historic value, or of key local landscapes or habitats. More widely, a number of estates provide bothy or camping accommodation for walkers wanting to cross the peninsula, and several estate stalkers are members of the local mountain rescue. There are good opportunities to use the local notice boards and newsletters in Inverie, and a number of stalkers write articles for the local Press about their activities, including management of deer.

The Knoydart Foundation will provide an opportunity for any locals who wish to go stalking, and many participate in deer counts and in habitat surveying. Achnacarry Sporting provide landrover safaris, and there are regular guided walks and visiting parties who use the Forest Enterprise ground.

All the local B & Bs, holiday cottages and pubs carry a good level of information about the local area and its wildlife, including deer.

# Action Point

PIA 13.1 Take forwards those actions outlined in the Communications Policy/ Working Plan by spring 2016

# Ensure Deer welfare at individual and population level

It is not thought that there are any issues relating to deer welfare at the moment, although a number of people have highlighted the high mortality that can occur among calves after wet winters or late springs, such as happened in 2015. Some woodland areas have been planted in the past to try and mitigate against this, but the isolated nature of the area and the very marginal soils for tree planting make this difficult to expand upon now going forwards, except at a fairly modest level. Good use has been made of tree planting grants in West Knoydart, although the conditions are much kinder there, and the trees seem to do very well.

In the absence of obvious opportunities to create extensive areas of new native woodland, one option for improving deer welfare in wetter winters is to reduce the overall deer herd to

#### Background Information

improve the annual increment put on by heather, in order to encourage a more diversified food supply in the winter months. Currently, Knoydart is highly dominated by grassy habitats, which are of very limited winter feeding value. The population models will therefore look to carry the minimum deer densities required to allow for current objectives.

Significant nos of deer do appear to drift towards the west during the course of the winter to find more sheltered conditions, and it is important to accept this as part of their natural response to what can be very difficult conditions on the higher properties in the central part of the DMG.

A number of properties feed deer in the winter months to protect vulnerable animals and to keep them in locations where they can be readily monitored. More widely, achieving a deer density that allows habitats to move in to favourable condition is likely to produce a more versatile and resilient natural food supply throughout the year, and reduce the need for artificial feeding.

The restocking and fencing of felled conifer plantations will remove valuable winter shelter from some areas of the range, and this is likely to have an impact on local deer populations in some areas. Some compensatory culling may be required on the back of this. This may also affect available habitat for wild boar within the area.

Training and levels of competence within the Group are generally very good.

# **Action Points**

PIA 14.1 Focus on bringing natural habitats in to favourable condition status, as measured by targets agreed with SNH, and maintain the minimum deer densities required to meet owner's objectives.

PIA 14.2 Liaise locally on significant woodland management operations where these affect shelter for deer.

PIA 14.3 Collect deer information within the Group as per agreed recommendations. This will provide animal- specific data which can be monitored and compared to identify potential welfare issues within the area.

PIA 14.4 Avoid any increase in hind numbers in the middle sections of the group.

PIA 14.5 Carry out greater analysis of information to better elaborate on the suggested movement between the Knoydart Group and the West Knoydart Group.