



GLENELG

DEER MANAGEMENT PLAN 2016 - 2021



GLENELG DEER MANAGEMENT GROUP

June draft

DEER MANAGEMENT PLAN

2016 – 2021

Background Information

PREFACE

This deer management plan has been developed for the Glenelg Deer Management Group and is part funded by the group's members and Scottish Natural Heritage.

The plan will operate between 2016 and 2021 and should act as a baseline for effective deer management across all properties. It can be updated on a regular basis as required, and in response to agreed actions from the group members. It is recommended that annual reviews take place in order to ensure that the plan remains an effective working document, with a comprehensive review to take place in year five to bring the plan into line with accepted working practices.

The plan is developed from a draft prepared by Mr R Campbell, Cluanie Estate, that would have operated from 2012 - 2022.

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PART ONE – INTRODUCTION

Red deer are one of the most important mammals in the Highlands. They play a key role in its overall biodiversity and contribute substantially to the rural economy through commercial stalking, providing employment in areas of low economic output as well as generating income for local businesses through recreation and tourism. Effective management of red deer therefore requires careful consideration.

Glenelg Deer Management Group (GDMG) has operated successfully since 1990 with owners who are passionate about the natural resources under their stewardship, and as a group work closely with their neighbours to take account of differing objectives. The management of Highland estates however presents a number of unique challenges. These range from maintaining a healthy deer population across diverse habitats and multiple unfenced properties while managing the different environmental issues that impact the flora and fauna of the area to engaging with local and governmental stakeholders on Deer Management Plans.

This Deer Management Plan (DMP) has been produced in order to identify the common objectives for the two separate management units that cover GDMG's 42463 hectares. The largest unit covers just over 35100 hectares, and is comprised of Arnisdale, Eileanreach, Glenquoich, East Glenquoich, Kinlochourn, Glenshiel, Cluanie and Bunloyne estates. The smaller unit on Glenelg peninsula covers 7354 hectares including Druidaig estate and with Forest Enterprise (FE) and Scottish Ministers as the main land owners. Within this area there are four primary grazing committees - Scallasaig, Beolary Galder and Coulindoune that manage the crofting interests in the area. Additionally the National Trust at Kintail and Corriellair Estate are included in GDMG meetings and supply management data as part of that process.

The plan is intended to run from 2016 to 2021 and supersedes the previous agreement that began in 2012, was intended to run for ten years and did not include a number of land owners and managers in the Glenelg peninsula. It is part funded by Scottish Natural Heritage (SNH), the landowners on the eight primary management units and a number of the owners on the Glenelg peninsula that comprise GDMG. The plan will be reviewed annually and outlines the primary aims of each estate in terms of agricultural land use, conservation and the sustainable use of the landscape, whilst ensuring that there is appropriate engagement with the wider community.

Although Red deer are the primary species under this plan, the management of Roe and Sika deer also plays an important role in delivering sustainable land use. One of the most important tools for managing the resident deer population is a statistical model that has been designed by SNH and analyses data such as counts, cull, recruitment and mortality for deer populations. This is an accepted practice that allows for naturally occurring changes, and delivers a sustainably managed deer population for a given area.

Around 16% of the area covered by the GDMP is under forestry, both commercial and native, making it a valuable contributor to carbon sequestration in the area. These woodlands are included in the ongoing habitat management as they are also regarded as an important ecological asset for the resident bird, mammal, invertebrate and plant populations.

While a DMP is an essential tool in managing a number of important areas, it cannot be achieved without skilled and motivated staff. The plan places considerable importance on delivery of the *Best Practice Guidance* (BPG) from SNH. This standardised guidance

emphasizes *Continued Professional Development* (CPD) as a key component in delivering land and wildlife management in a more holistic fashion.

In 2013, the Scottish Government's *Rural Affairs, Climate Change and Environment Committee Enquiry* recommended that DMG's have an effective and environmentally responsible management plan in place by the end of 2016. Further recommendations stated that the work of DMG's should be open, transparent, inclusive and publicly accountable and that DMP's should be publicly available. This plan aims to incorporate these objectives more fully in a working plan and have a process in place that will continue to monitor and provide the opportunity to make amendments where necessary.

1. Purpose of Plan

The purpose of this Plan is to provide:-

- (a) A DMP that reflects the aspirations of the group members.
- (b) The group with a working plan that supports the operation of the group (*Appendix 1*).
- (c) A working constitution for GDMG (*Appendix 2*).
- (d) A working model for Deer population management (*Appendix 5*).
- (e) An easily accessible document that provides GDMG members and the public with appropriate information on areas, land cover etc (*Appendix 9*).
- (f) An effective process that identifies and delivers the fourteen relevant public interest actions (*PIA*) throughout the area (*Appendix 10*).
- (g) A framework that delivers on SNH best practice guidance.

2. Group area

GDMG for the purpose of this plan consists of two separate management units. The primary area extends to about 35109 hectares and is split into 8 major landholdings: - *Arnisdale, Eileanreach, Glenquoich, East Glenquoich, Kinlochourn, Glenshiel, Cluanie* and *Bunloyne Estates*. The Glenelg peninsula comprises an additional 7354 hectares, which includes *Druidraig Estate, Forest Enterprise* and *Scottish Ministers* as the main land owners. The remaining significant units within this area include Bernera farm, Corrary and land owned by the Burton Property Trust. Much of the land owned by Scottish Ministers and the Burton Property Trust is in crofting tenure and includes Scallasaig, Galder, Beolary & Coulindoune Common Grazings and associated crofting townships as well as Balvraid farm. The *National Trust* and *Corrielaire Estate* are also consulted on deer management due to shared deer populations.

Group boundaries are:-

- the unclassified road from near Invergarry to Kinlochourn in the south
- the A87 in the north, and the eastern edge of Bunloinn and East Glenquoich estates
- Kyle Rhea and Kinlochourn are the other main physical boundaries in the west and south west

The Red Deer herd across the DMG has two distinct populations. The smallest herd is hefted onto the Glenelg peninsula, while the majority of the Deer are hefted across the eight main estates. There are some movements on the north side of the Group between Glenshiel and Kintail/Glenelg peninsula and between Cluanie and Corrielaire, which is divided by the A87 Kyle of Lochalsh – Inverness Road.

3. Group Membership

A summary of the management objectives of the properties within the deer group, as well as size and percentage cover is shown in **Fig 1**. All are either subscribing members of the group, or have close associations with it.

Fig 1- Glenelg Members & Management Objectives

Property	MAIN OBJECTIVES	Size (ha)	% Cover
East Glenquoich Estate	Sporting estate with deer and woodland interests	4023	11.46
Kinlochhourn Estate	"	2638	7.51
Arnisdale Estate	Sporting estate with deer, fishing, holiday property lettings and some agriculture	3529	10.05
Eileanreach Estate	Sporting estate with deer, woodland, fishing and holiday property lettings and some agriculture	6192	17.64
Glenshiel Estate	"	5935	16.90
Glen Quoich Estate	Sporting estate with deer and cattle	6370	18.14
Bunloyne	Sporting estate with deer	2045	5.83
Cluanie forest	Sporting estate with deer	4377	12.47
		35109	100%
GLENELG PENINSULA			
Forest enterprise	Forestry	2668	36.28
Druidaig	Sporting estate	975	13.26
Benera	Farm	106	1.44
Corrory	Croft/Woodland	290	3.94
Scottish ministers/Crofting	Crofting interests	3315	45.08
Total		7354	100%
Combined Total		42463	

Information on the primary management arrangements for each estate has been collated through both questionnaires and/or face to face discussions with the relevant staff or owners. In addition the draft plan will be made available to a range of stakeholders in both the local community and appropriate agencies such as SNH. This helps to build a picture of all areas that can affect land management and will help to inform future planning objectives.

4. Member Descriptions

The following section gives a brief overview of the essential management information relating to each of the group members. The GDMG secretary has access to all stakeholders contact details and should be the first point of contact for those wishing to contact a group member. All contact details are noted in *Appendix 7* and will be circulated only to group members.

GLENELG DEER MANAGEMENT GROUP

Arnisdale Estate

Arnisdale is run as a sporting estate with deer, fishing, holiday lettings and agricultural interests. There is no commercial forestry aspirations for the estate at the moment but this will be reviewed on an ongoing basis. There are extensive areas of native woodland on the

estate with much of it being recognised as biologically diverse and important in the context of carbon storage.

There is a small herd of Highland cattle on the property and it is felt that this brings considerable benefits to the habitats by removing rank vegetation and encouraging the growth of seedlings from trees, dwarf shrubs, forbs and grasses. There are some agricultural improvements to the inbye land which are deemed essential to maintaining the quality of feed for the resident deer population. Additional feeding does take place for Red deer and this supports improved deer carcass weights and meat quality, and brings added value to the estate at the point of sale. Around 35 – 45 stags and a similar number of hinds are culled annually with the aim of delivering a 1:1 ratio in the population. No Roe are generally taken on the estate and any Sika deer are shot on sight. Carcass management facilities are up to SQWV standards and are accredited on an ongoing basis.

Habitat monitoring takes place every three years and is undertaken using the guiding principles from the SNH Best Practice Guidance (BPG) website.

Glenquoich Estate

Glenquoich is a sporting estate and deer forest that takes in some of Scotland's most spectacular mountains, plants and wildlife.

Consequently the site is extremely popular with the walking and mountaineering communities and the estate has made considerable efforts to accommodate them. Paths are continually maintained and workers are active in speaking to and informing the public on matters that affect habitats, deer and access.

The estate is run as primarily a sporting entity, with a target of around 30 Stags per annum and a small number of hinds taken with the aim of building up the breeding population. There is no Roe deer population of note, and only the occasional Sika deer has been observed which are targeted as a matter of course and any culls are supported by SQWV accredited facilities on site for carcass management.

Deer have been fed on a regular basis since the 1950's to maintain condition, with cattle cake, high energy blocks and silage being the primary inputs.

A herd of 40 Highland cows are maintained from June until November to manage grassland habitats, aid biodiversity and improve rough grasslands, but there have been no sheep on the estate since 1982 primarily for economic reasons.

There are plans in place to create forestry blocks that will in time provide shelter for the resident deer population while adding value to estate income in the future. A recent development has been the construction of hydro schemes which will become the prime source of income for the Estate and will ensure that there are sufficient resources for any improvements in the future. The hydro development has provided new access tracks which will aid access to remote areas and make it easier to bring out winter feed for Deer.

The habitats are assessed in line with BPG, although there are presently difficulties in identifying herbivore impacts using the current templates due to the habitat being predominantly grassland. SNH are aware of the issue but to date there has been no mutually agreed solution for habitat monitoring.

The primary issues surrounding estate management are weather related, including significant deer mortality and movement of deer by recreational walkers that impact key grazing areas. Changes will most likely be identified from these issues in the long term through habitat monitoring and land managers will continue to review the outcomes to see if any changes need to be implemented in their approach to land management.

Eileanreach Estate

Eileanreach is a sporting estate, with commercial forestry, agriculture (seasonal grazing of sheep and cattle) and holiday accommodation playing an important role in providing extra income. It is envisaged that some restocking of commercial forestry plantations will take place in the next five years, however it is not felt that this will impact future deer movements. In terms of sporting requirements there are around 20 to 30 stags taken each year with a further managed cull of hinds to ensure that overall quality of stock is maintained. Roe deer are also taken for sporting purposes with around six annually. Sika deer are present on the estate and are shot on sight when it is safe and appropriate to do so.

No feeding takes place on the estate as this can impact the organic status of the deer that are managed. Feeding sites also create opportunities for deer to congregate where they can damage fragile soil structures thereby creating ongoing environmental management issues. There is no other grazing stock on the Deer forest and consequently muirburn is not used as a management tool for grazing. The larder is up to SQWV standards.

Environmental monitoring is undertaken using BPG, currently every three years.

Glenshiel Estate

Glenshiel aims to run a sustainable rural estate with sporting opportunities, farming, fishing and accommodation. The vast majority of the hill ground is used to provide sporting stag and hind shooting, and deer are managed as a wild population with no feeding carried out. There are no longer any sheep kept on the property with the flock being removed over thirty years ago, 13 hill type cross cows are maintained to aid grazing diversity, and no muirburn is undertaken.

Fishing on the River Shiel also adds to the estate income, often combined with stalking and letting accommodation.

A considerable amount of woodland creation has taken place in recent years and there are no plans for any more significant plantings or fellings.

There are concerns around significant numbers of deer migrating off the estate on National Trust ground at Kintail and FE ground at Ratagan and not returning but it is hoped that this situation will be resolved in the future through both opening up of woodland areas and new management fences.

In terms of other deer species there are no significant populations of either Roe or Sika deer. Roe are shot on occasion, but Sika are regarded as a threat, and are shot on sight. Carcass management of culled deer is an important part of the income stream for the estate and the facilities are up to SQWV standards, although at the time of writing they have not been accredited.

Habitat monitoring on the estate is carried out as a matter of course every three years to BPG standards.

Kinlochhourn Estate

The estate is run as a sporting estate for family and friends with some woodland that is under long term management. The estate facilitates the large numbers of walkers to the area with a small campsite and is happy to work with recreational users to get the best out of the landscape. There have been some localised changes to deer hefts on the estate due to the increased footfall from long distance paths. This may well contribute to long term impacts on specific habitats but if this is the case then they will be recorded in the excellent ongoing habitat monitoring programme that is in operation.

It was noted that the present deer manager had collated considerable data over the last 33 years on culls, habitats, weather and deer numbers. The level of data acquired and its quality

is considerable and a condensed version could well provide the group with a template that is both user-friendly and robust.

In terms of other herbivores, there were 100 sheep on the estate prior to 2010 but there are no plans to re-introduce a flock. At present around twenty deer are fed at low level near the main estate property, but otherwise there is no policy of feeding deer in other areas.

Numbers of roe are managed occasionally but Sika deer are considered a threat and are shot on sight. The estate also has carcass management facilities that are up to and accredited to SQWV standards.

There are considerable movements of deer across the estate primarily as a result of weather which can drive deer from preferred grazing areas in times of poor conditions. Grazing availability is impacted by the considerable stands of bracken on the estate which are not managed at present due to the inaccessibility of these locations. Muirburn is currently undertaken to improve grazing away from areas that would benefit from reduced herbivore grazing pressures.

East Glenquoich Estate

East Glenquoich is run as a sporting estate with deer and woodland interests as well as to maintain employment in a remote location. It also harbours some of the oldest Caledonian pines in the world and is in fact home to the oldest Caledonian pine in Europe, believed to date back to 1458. The estate is under new ownership and is awaiting the update from the latest counts to inform any ongoing changes in its management policy, however it is anticipated that a sporting cull will continue to take place on both Stags and hinds.

There are small numbers of Roe which are culled occasionally and any Sika will be culled on sight. There are no larder facilities at present. The primary focus just now is to identify deer numbers across both the estate and the group, to work with fellow land managers and owners and to ensure that culls are in line with sustainable populations and there is continued employment as a result.

Habitat monitoring is not undertaken at present but in line with BPG it is an area that the estate will be actively looking at and identifying a way forward that is acceptable to all parties.

There are no other domesticated herbivores present, and at the moment no likelihood that any will be taken onto the estate for grazing.

There are no planned changes at the moment to landscape management in the form of planting or harvesting woodland blocks, and any changes will only take place in consultation with neighbouring estates and after receiving professional advice.

Given that the estate is under new ownership, there is going to be a period whereby all areas of management will come under scrutiny and other options to improve diversity may well be identified during this period.

Bunloyne estate

This is a small sporting estate with a relatively modest population of deer. It does have considerable woodland interests currently fenced off from resident deer populations. At present there is no available cull data or projections for this estate in terms of maintaining a sustainable population. We understand representations have been made to the land owner but at the time of this plan going to GDMG, no information was made available.

Going forwards, in order to maintain the integrity of this DMP the group will work with the landowner to build a clearer picture of the Bunloyne estate plan and how it can be integrated within the group more effectively.

Cluanie

Cluanie is a sporting estate and deer forest that takes in some of Scotland's most spectacular Munros and is home to a number of protected species on the local loch systems. Given its status, the site is extremely popular with the walking and mountaineering communities and the estate has continued to keep the public informed through appropriate signage on matters that affect habitats, deer and access.

A target of around 30 Stags per annum and a quantity of hinds are currently taken with the aim of building up the breeding population over the next 4-6 years. However, over the winter of 2014/15 all feeding was ceased on the estate and this resulted in the resident populations suffering significant mortality with the main losses being in the mature stag population. It is anticipated that it will take considerable efforts to improve the quality of the deer population locally through not only selective culls, but also through improved husbandry using appropriate feeding with cattle cake and high energy blocks.

There are also some losses due to road accidents on the A87, and data from accident statistics are fed into a national database.

There is no Roe deer population of note and only the occasional Sika deer has been observed which are targeted as a matter of course. Culls are supported by SQWV accredited facilities on site for carcass management.

There are no cattle on site and sheep were last managed in the early 1980's.

There are also plans in place to create small forestry blocks, which along with existing blocks, will in time provide shelter for the resident deer population while adding value to estate income in the future.

Habitats are continually assessed using BPG, and the proximity to *Natura* designated sites places added importance on maintaining this process.

Muirburn does take place on selected sites to improve herbivore grazing and aid habitat diversity.

The primary issues surrounding estate management are weather related which has had a considerable impact on deer mortality, and movement of deer by recreational walkers that impact key grazing areas. Changes will most likely be identified from these issues in the long term through habitat monitoring and land managers will continue to review the outcomes to see if any changes need to be implemented in their approach to land management.

GLENELG PENINSULA

Forest Enterprise

This property is managed in order to promote sustainable use of commercial and native woodlands. There is also an emphasis on access and the public recreation is encouraged. The management of deer is aimed at maintaining a population no greater than 5 – 8 per hundred hectares. This allows for both restocking and regeneration of native woodlands.

A new fence is being constructed between Druidaig and FE land and it is anticipated that this will make it easier to control the existing herbivore populations.

There is a management cull that also takes place on the Roe deer population of around 30 animals per year, with any Sika deer shot on sight (7 males in 2014).

The estate does have a larder facility and it is SQWV accredited. Habitat monitoring is undertaken as a matter of course on restocked areas and native woodland condition. Dung counts are also used as a way of identifying deer densities.

In terms of other management, there are no domesticated herbivores on any of the Forest enterprise properties and no muirburning takes place.

Druidaig

This estate is maintained as a deer forest having taken over from what was originally a hill sheep farm. However it became unviable to maintain sheep on the estate, so the remainder was sold and there are no plans at present to bring back stock. The attendant stalking now available on the property is an attractive addition for clients who also rent out Druidaig Lodge.

Around 10 stags are taken annually with a small maintenance cull undertaken on the hind population. In terms of other deer culled on this property at present there is no significant numbers of either Roe or Sika taken.

There are no larder facilities at present.

In terms of shelter for the existing herbivore populations, there is around 100 hectares close to Druidaig Lodge which acts as an excellent habitat for shelter and as a food source. New fencing on adjoining FE land may well impact the population on the estate. The count undertaken in 2016 and the Rut in September/October 2016 will be the first significant chance to understand if there is a changed dynamic taking place on the property following erection of the FE fencing.

Habitat monitoring does take place in line with BPG and this will also support the upcoming information available from deer counts and rut data.

There are also strong links with the local crofting community, and through this process, there are measures in place to ensure that the deer population does not negatively impact crofting. The estate also currently rents sporting rights on Beolary owned by Scottish Ministers, giving an extra 800 hectares of stalking land.

Beolary

The sporting rights on this estate are currently let to Druidaig estate, and the numbers of deer taken are noted in the Druidaig cull reports.

Bernera

This is a mixed farm, with sheep and cattle. Numbers of deer and associated control are unknown at the time of writing. The group will endeavor to get in touch with the owner to ascertain this information.

Corrory

This property is a mixed croft and woodland site and is wholly deer fenced off at present from the rest of the area.

Scottish Ministers

There are a number of different managers in this area. Objectives across this area include arable, stock and forestry as well as deer management. The majority of the hill ground between Glenmore river and the Eileanreach estate is owned by Scottish ministers. We understand that sporting rights were leased to the proprietors of Scallasaig lodge under a 99 year lease when the land was originally taken over by Government.

There have been no official counts taken in this area, and it will be an important part of this plan that information from counts is included in future planning. GDMG will be liaising with all stakeholders not currently in the DMG to identify solutions that will allow them to work within the framework of the plan.

Much of the land owned by Scottish Ministers and the Burton Property Trust is in crofting tenure and includes Scallasaig, Galder, Beolary & Coulindoune Common Grazings and associated crofting townships as well as Balvraid farm. Common Grazing committees will be invited to meetings and sent a draft of this plans for comment.

5. Designated Natura sites in the GDMG area

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

- *Site of Special Scientific Interest (SSSI)*
- *National Scenic Area (NSA)*
- *Wild land areas*
- *Special protection area (SPA)*
- *Special area of Conservation (SAC)*

Site status The present status of each site is shown in **Fig 2**, with site specific information in *Appendix 3*.

Fig 2 - Site of Special Scientific Interest

SSSI	Status	Property	Designated features (and last survey date)	Area (ha)
Allt cracaig coast	Unfavourable	Eileanreach	Moine – Lewisian gneisses and Moine supergroup 2002	43.4
Cosag Sallow Carr	Favourable maintained	“	Lichen assemblage 2008 - Wet woodland 2004	4.82
Eilean Chlamail - Camas nan Ceann	Favourable Maintained	“	Moine – metamorphosed Gneiss 2014	24.49
Coille Mhialairidh	Favourable Maintained	“	Upland oak woodland 2001	77.62
Rubha Camas na Cailinn	Favourable Maintained	“	Moine - Lewisian gneisses and Moine supergroup 2007	25.64
Beinn a' Chapuill	Favourable Maintained	“	Moine - Lewisian gneisses and Moine supergroup 2015	522.28
Druim Iosal	Favourable Maintained	“	Moine - Lewisian gneisses and Moine supergroup 2003	50.6
West Inverness-shire Lochs	Favourable Maintained	Bunloyne, East Genquoich, Cluanie	Black-throated (breeding) 2010 Common scoter (breeding) 2010	2967.52
Quoich Spillway	Favourable Maintained	East Glenquoich	Moine - meta-sedimentary Moine rocks 2006	5.52
Total				3721.89
SAC				
River Moriston	Unfavourable, No change	Bunloyne	Atlantic salmon 2011 Freshwater pearl mussel 2003	194.53
SPA				
West Inverness-shire Lochs -	Favourable Maintained	Bunloyne, East Genquoich, Cluanie	Black-throated diver (breeding) 2010 Common scoter (breeding) 2010	2967.52
NATIONAL SCENIC AREA				
Knoydart		Various	areas of outstanding scenic value in a national context	10,636
Kintail		“	“	3302
Wild land				
Moidart – Ardgour			Land felt to be remote, rugged and natural	22940
Total protected area (ha)				43761.94

Site of Special Scientific Interest (SSSI)

SSSIs represent the best of Scotland's natural heritage. They are 'special' for their plants, animals or habitats, their rocks or landforms, or a combination of these. SNH chooses sites carefully after detailed survey, and evaluation against scientific criteria. They can include freshwater and sea water down to the mean low water mark of spring tides, as well as land.

National Scenic Area (NSA)

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.

Wildland

The term *wild land* is a collective response used to describe Scotland's extensive areas of remote mountains moorlands and coastlines. It is a term that identifies the characteristics that are most commonly attributed to the Highlands, and makes this region stand out as an iconic landscape, making it essential that appropriate safeguards are in place. These areas are identified as nationally important in Scottish Planning Policy, but are not a statutory designation.

Special Protection Area (SPA)

SPA's are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

The smaller sites cover just a few hectares but these cliffs and lochs are critical for nesting seabirds and roosting geese and at the other end of the scale, the vast peatlands of Caithness and Sutherland and the Isle of Lewis provide a haven for important populations of many different species including birds of prey and waders

Special area of Conservation (SAC)

SAC's are those which have been given greater protection under the European legislation of The Habitat's Directive. They have been designated because of a possible threat to the special habitats or species which they contain and to provide increased protection to a variety of animals, plants and habitats of importance to biodiversity both on a national and international scale.

Part Two - OVERALL AIMS & OBJECTIVES

6. Long Term Vision

There is general support in GDMG for the code of practice 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 and management practices are carried out in accordance with BPG, which continue to evolve. This in turn informs long-term aims and aspirations of GDMG which are articulated in the following:

- Sustainable management of Deer populations for sporting purposes.
- Pro-active habitat management is seen as an essential tool in GDMG operations. It compliments sporting use by contributing to an improvement in deer condition, welfare and the overall quality of venison to the consumer.
- The delivery of effective deer management is an essential element in the management of properties, whilst providing a sustainable income and ultimately contributing to the ongoing economic stability of fragile rural communities.
- Deer, wildlife and habitat management is demonstrably seen to be a worthwhile occupation that can offer high standards of CPD for GDMG staff. In turn this will attract high calibre individuals willing to live and work in some of the most iconic estates in the Highlands.
- GDMG will continue to monitor current guidance from the Scottish Government, SNH and other governmental agencies on areas such as deer and habitat management. Changes to the DMP driven by regulatory change will be implemented as necessary, with other non-regulatory guidance taken forwards and discussed at the next six monthly meeting for potential inclusion in the ongoing DMP.
- A policy of collaboration and open discussion between land managers, local communities and relevant stakeholders on issues surrounding deer management is deemed essential to ensure the plan accurately reflects current views and opinions.

7. Strategic Objectives

There is within GDMG a strong ethos of collective management to achieve agreed objectives. Founded on a robust and informative communication process, standardised techniques are in place to ensure goals are met collectively. In order to set the objectives for the group, the following steps are followed:

- Promote the proper management of the GDMG area to ensure that a balance is struck between deer husbandry, habitat management and other land uses.
- Maintain the social and economic importance of deer and their management in the GDMG area.
- Promote the objectives and priorities of land owners in regard to deer roaming freely within the Group area.
- To produce and review a population model and cull targets that are based both on current scientific thinking and informed judgements of experienced land managers.
- To allow GDMG to conduct deer management activities on an independent footing, whilst cooperating with statutory bodies over deer management and habitat issues.
- Where appropriate, maintaining economic agricultural production.

- To market such activity and produce to best advantage through either a collaborative approach or through an external contractor such as Scottish Quality Wild Venison Ltd (SQWV).
- The Deer populations will be managed over the period of this plan (2016-2021) to bring local numbers into line with actual sporting and other aspirations in the DMG and to facilitate an overall grazing regime that will maintain favourable condition of designated sites. It is anticipated 5 yearly average cull population (based on the 18 year average) will be:

173 Stags 195 Hinds 47 Calves

- To ensure such resources, training and monitoring capacity required are made available to achieve the above objectives.
- To establish a thorough and robust set of working arrangements whereby public access provision can be managed within the group area, taking account of the current Scottish outdoor access code.
- To facilitate the implementation of a mechanism for dealing with any disputes.
- To maintain and improve local employment, be that specifically in deer management, or wildlife management and agricultural activity more generally within the area
- 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 seek to be pro-active in all their communications.

Part Three - MANAGEMENT POLICIES & INFORMATION

8. Deer management

Red Deer

GDMG's primary management objective is to maintain a stable Red deer population capable of sustaining around 213 sporting stags in balance with the habitat requirements of the area. In order to assess the level of population necessary to sustain this level of sporting cull, we as a Group have a deer count history (**Fig 3**) that goes back over twenty years. It was initially done annually, however is now to be done every three years as the Group population remains quite stable year on year. The DMG count was traditionally done on foot with the Deer Commission Scotland (DCS), however more recently the counts are completed by SNH through the use of helicopters.

Fig 3 – Historical count data

	1996	1998	1999	2002	2003	2005	2008	2012	2016
STAGS	1564	1640	2039	1318	1383	1429	1482	1254	1087
HINDS	3313	2684	3460	2636	2515	2812	3006	2509	2401
CALVES	1299	1118	1152	654	964	1009	957	808	709
TOTAL	6176	5442	6651	4608	4862	5250	4567	5445	4197
DENSITY - km²	17	15	18	13	13	14	15	13	11
Group completing count	DCS	DMG	DCS	DMG	DCS	DMG	DCS	DMG	DMG (Heli)

Current Count Data

GDMG has been running since October 1990 to promote the management of the red deer in the Group. The original group comprised 8 estates that also hold joint discussions with neighbouring estates, Forest enterprise and owners on the Glenelg peninsula, with meetings held twice annually. The existing group agreement provides for the collection of census, cull returns, deer road traffic accidents data and calving recruitment. Deer condition and loss or leakage of deer from the Group to neighbouring properties also plays a key role in managing local populations.

GDMG has developed a comprehensive understanding of deer populations since 1990, and is able to describe accurately both temporal and spatial variations in populations. The principal deer species present in the open range group area are Red Deer, with Roe deer occupying woodland margins and mainly confined to lower elevations, while Sika deer have a very small local population confined to woodland areas. The Red Deer herd is generally considered to be hefted with little immigration or emigration although there is some movements on the north side of the Group between Glenshiel and Kintail and between Cluanie and Corriellair which is divided by the A87 Kyle of Lochalsh – Inverness Road.

Deer cull numbers

Shown in **Figs 4a/b, 5a/b, & 6** is the latest data on deer culls for the primary estates within GDMG. This is the latest data drawn from estate statistics and has allowed for objective analysis of the information using a model agreed with SNH so that the DMP is able to function effectively for the group.

Members have agreed on the deer management records that will be kept by all members for sharing within 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 *Appendix 8*.

BPG on cull recording promotes a standardised approach to the process, making it easier to manage and collate information. In making sufficient resources available to carry out the culling programme outlined in this plan, GDMG members will also be able to effectively manage workloads and reduce stress on the Red deer population.

All culling operations are required to be conducted in line with BPG with priority given to spreading activity throughout the normal seasons using existing resources.

Fig 4a – Stag cull information

	STAGS								
YEAR	GLENSHEIL	CLUANIE	EAST QUOICH	GLENQUOICH	KINLOCHOURN	ARNISDALE	EILEANREACH	BUNLOYNE	Total
2010/11	32	30	5	31	15	40	36	4	193
2011/12	31	30	5	38	12	30	38	5	189
2012/13	18	30	5	35	13	32	36	5	174
2013/14	30	35	5	31	12	37	29	0	179
2014/15	30	43	5	27	13	40	30	2	190
2015/16	22	5	0	22	12	30	15	0	106
Average	27	29	4	31	13	35	31	3	

Fig 4b – Stag cull information

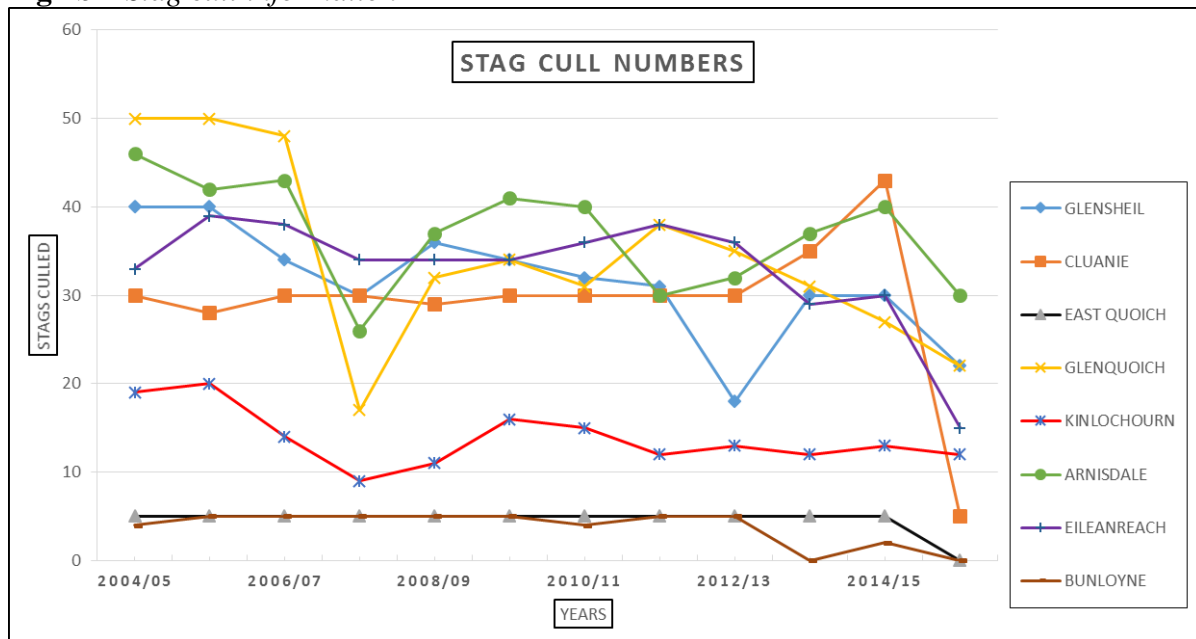


Fig 5a – Hind cull information

	HINDS								
YEAR	GLENSHEIL	CLUANIE	EAST QUOICH	GLENQUOICH	KINLOCHOURN	ARNISDALE	EILEANREACH	BUNLOYNE	Total
2010/11	66	27	15	15	14	55	41	N/A	233
2011/12	48	35	15	30	12	30	30	N/A	200
2012/13	36	35	15	35	15	40	33	N/A	209
2013/14	30	51	15	30	16	40	32	N/A	214
2014/15	37	30	15	24	10	35	33	2	186
2015/16	20	10	2	25	12	30	25	0	124
Average	40	31	13	27	13	38	32	1	

Fig 5b – Hind cull information

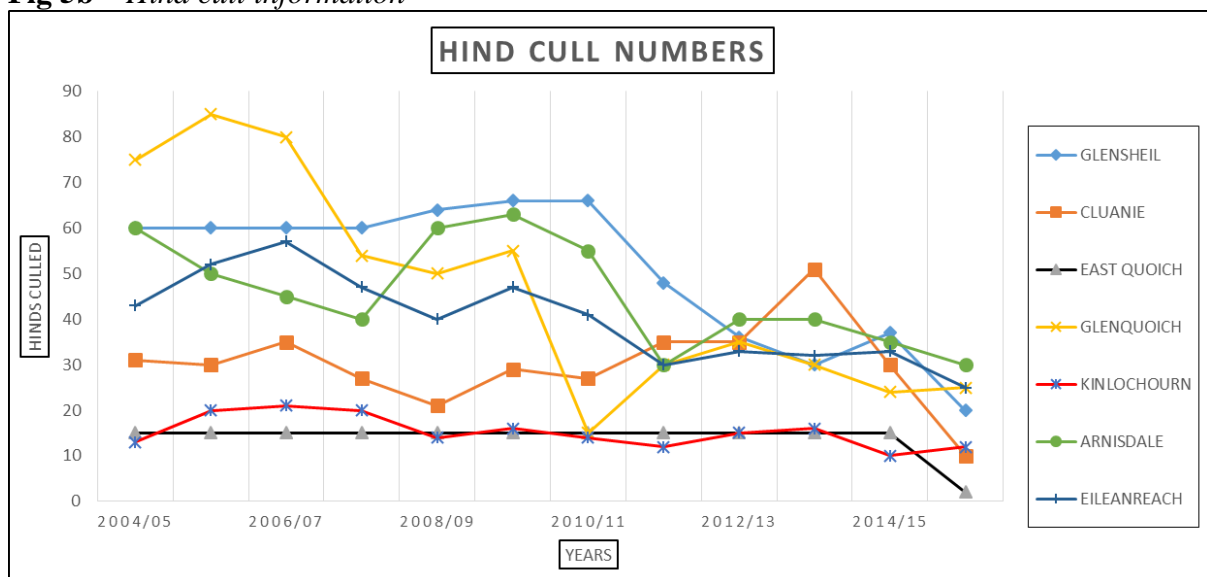


Fig 6 – Calves cull information

	CALVES								
YEAR	GLENSHEIL	CLUANIE	EAST QUOICH	GLENQUOICH	KINLOCHOURN	ARNISDALE	EILEANREACH	BUNLOYNE	Total
2010/11	28	7	5	19	0	12	3	N/A	74
2011/12	12	6	6	7	0	5	0	N/A	36
2012/13	13	6	2	22	1	7	2	N/A	53
2013/14	9	15	0	12	0	9	2	N/A	47
2014/15	3	15	2	10	2	6	4	0	42
2015/16	2	5	0	7	2	5	3	0	24
Average	11	9	3	13	1	7	2	0	

Fig 7 shows the calving recruitment rates for each estate and these rates will continue to be recorded as they allow the DMG to see how many calves are surviving and how many deer will be coming through into our deer population in years to come. For example as seen in 2011 recruitment was seen to be poor, so in 6yrs time it would be expected to see a lesser number of mature stags.

Fig 7 – Recruitment rates

	2011	2012	2013	2015	2016	Average
Glenshiel	18%	30%	38%	16%	25%	25%
Cluanie	29%	33%	45%	15%	28%	30%
East Quoich	29%	33%	45%	15%	N/A	31%
Glenquoich	15%	30%	41%	14.5%	28%	26%
Kinlochourn	15%	28%	33%	20%	27%	25%
Arnisdale	17%	30%	29%	20%	27%	25%
Eileanreach	23%	28%	29%	19%	26%	25%

Deer culls

Deer counts and what deer have been seen on the ground year on year e.g. lack of mature stags on the ground would reduce the cull, while the opposite would see an increase in the cull. Deer culls are discussed at our twice yearly meetings and all data recorded, each individual estate sets out their cull targets on:-

- The size of deer population or deer seen on their ground
- Weather conditions through the winter and summer
- Group hierarchy
- Estate management issues such as new deer fences/re-gen blocks
- Mature stags seen on ground
- Habitat condition

Group averages

Cull levels

- 5yr average for stags – 173, hinds - 195 and calves - 47
- 18yr average for stags – 213, hinds - 292 and calves - 88

Stag culls

- high of 257 in 1998/99 season
- low of 106 in 2015/16 season

Hind culls

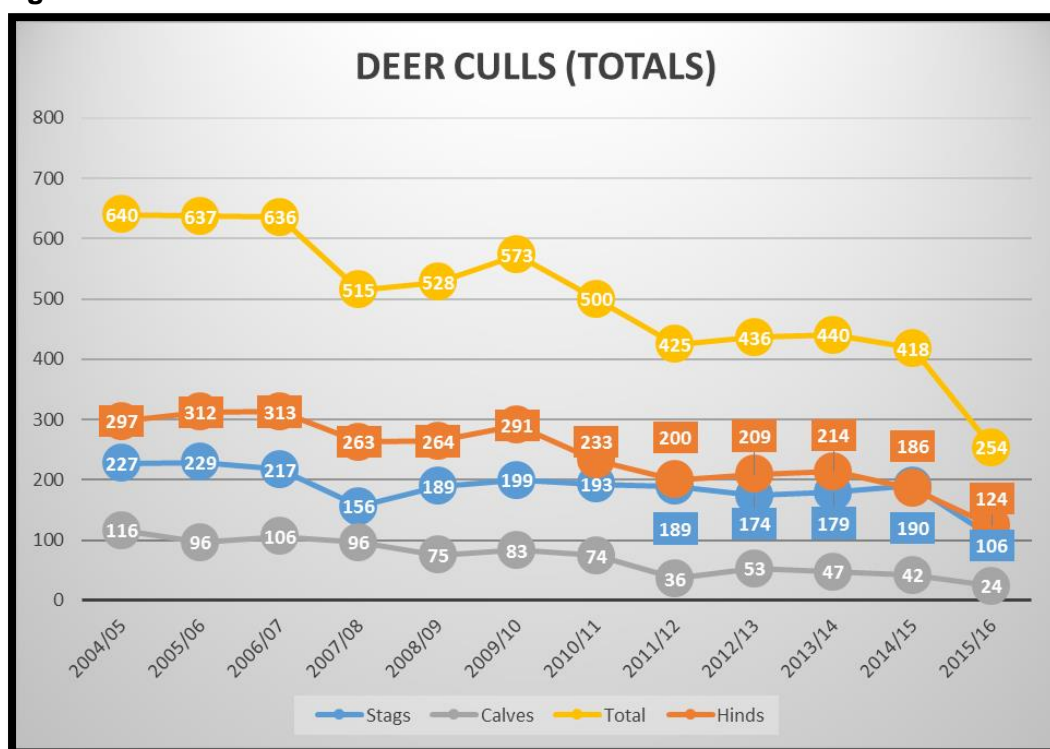
- high of 408 in 1999/00
- low of 124 in 2015/16

Calves culls

- high of 139 in 1999/00
- low of 24 in 2015/16

Fig 8 shows that there is a change in cull figures year on year, and this is due to a number of scenarios that are variable both in time and in location.

Fig 8 – Cull data



Supplementary/ diversionary Feeding

Some properties within the DMG feed deer in the winter months, usually with hay, silage, feed nuts and blocks. The rationale for feeding is to improve survival rates in poor winter conditions and to deliver higher carcass weights in culled animals as well as benefitting other deer management objectives on some estates. It can also reduce grazing impacts during winter on some habitats, promote animal health and help to give estate workers a good indicator of numbers and condition.

Members agree that they will inform the Group if they decide to undertake any such feeding in the period of this plan, or if any significant changes are made to current practice, as this can have significant impacts on the deer population. All deer feeding which takes place will comply with BPG.

Roe deer are native to Britain and an increase in woodland and forest planting in the 20th century has meant that roe deer are abundant today. Roe deer are common and widespread throughout Scotland and England preferring woodland and forest, when populations are at high densities they may also occupy fields. Roe deer are browsers that actively select different food types including herbs, brambles, ivy, heather, bilberry & coniferous/deciduous tree shoots. However, browsing of tree shoots and agricultural crops puts them in conflict with farmers and foresters due to economic damage. Whether in conflict or used as a resource, roe deer populations require careful management to maintain health and quality and to ensure a sustainable balance with their environment. Numbers in the GDMG area are difficult to quantify, but they do have a localised impact on some of the lower wooded areas. As such they are controlled on a site specific basis in order to minimise damage to native woodland areas.

Sika deer

This *invasive non-native species* (INNS) are widely distributed on the Scottish mainland with some 14,000 km² colonised by the species. The main centres of population are in Peebles-shire, Argyll, Inverness-shire, Ross and Cromarty and Sutherland, and all show dramatic recent expansion in range. There is little doubt that commercial conifer forestry is the preferred habitat of Sika in Scotland and has greatly assisted their expansion. In such forestry, Sika show high reproductive rates and can be very hard to cull. Some authors have estimated that there are about 10,000 individuals in Scotland but with the fact that 6000 Sika were shot in Scotland in 2006–2007 suggests that the population is substantially higher. This species has extremely limited impact due to a lack of suitable habitat in this area and they only appear to have a very small resident population.

At present there are no other deer species that have been noted within the GDMG, however ongoing management will take note of any species such as Muntjac deer and they will be dealt with accordingly.

9. Issues affecting deer management

Supplementary Deer Policies

Members will be encouraged to share information within the DMG on any out of season and night shooting authorisations. The vast majority of deer are culled in season but deer marauding on crofts in spring and the need to control Sika are important considerations in maintaining some flexibility within the group area.

Recruitment Rates

Recruitment rates are recorded at the May meeting every year. This is the number of calves surviving the winter and making it through to the grass coming through on the hill, usually done by each estate at the beginning of May. This is recognised as an important tool in accurate population modelling.

Changes in deer distribution

Seasonal patterns of vegetation and topographic landform use by deer are likely to be driven, at least partly, by food quality and quantity. The GDMG is a highly seasonal environment, dominated by short growing seasons and rapid changes in forage availability especially at higher elevations. Observations suggest that both male and female red deer tend to utilise sheltered areas and forests in winter, lowland grasslands in spring, and higher-altitude grasslands in summer and autumn. There is a shared distribution of male and female groups during the rut, but strong evidence of sexual segregation outside this period at all spatial scales. While patterns are dependent on seasonal variation, it is also highly variable given shelter, food availability, human interference and levels of impact on populations through culling.

Mortality/welfare

Members will monitor and report any significant levels of winter mortality or any significant health issues encountered as a matter of course. It is considered that mortality within the group is approx 2% for adults and 6% for calves in their first year. Recruitment is approx 15 - 35%, varying across the Group. These figures are used in the current population models for GDMG and one of the primary aims of this plan is to have in place measures that integrate sporting needs with appropriate welfare management to ensure that Deer are in as a good a condition as possible.

Deer Related Traffic Incidents

It is agreed by the group that they will keep records of any Deer vehicle collisions (DVC) 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. Data can be seen using information from SNH (Natural Spaces) overlaid onto google earth. Members may also wish to contribute to the national project collating DVC's which can be accessed at <http://www.deercollisions.co.uk>. Primary contact details at present is the keeper on Cluanie estate and next steps to better manage DVC's are noted in the attached working plan.

Deer Fences

Attaining an up to date picture of the status of deer fences should be a priority for the group. Almost all significant young woodland areas within the Group area are fenced off from deer, although many areas are retained as deer shelter, and a number of pole-stage plantations have been opened up for deer access in recent years.

All existing deer fences are included on the attached National Forest Inventory map, while new fences can be added to this map as and when they are erected. It will be important to update all relevant known information in order to better understand deer movements. Group members will take account of the *Joint Agency Fencing guidelines* issued by SNH and its partners in 2004.

Weather

Extreme weather conditions and bad winters can lead to poor condition of deer populations, and in the case of the winter of 2014/15 it has led to severe losses across many Highland areas. This in turn impacts and lowers the subsequent numbers of deer culled, however during more settled periods normal culls to deer population would resume.

Venison Marketing

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

Additionally joining the SQWV scheme will reinforce the quality image of Wild Scottish venison, which ties in with GDMG member's commitment to high standards beyond the larder door, right through to the sale of the carcass or its use locally.

Through adopting SQWV standards, this will enable estates to demonstrate an understanding of food hygiene laws to authorities, venison processors and retailers. This will in turn reduce inspection frequency from local authorities as they recognise SQWV members have high standards and represent low risk.

Advertising of sporting opportunities

Better advertising of sporting opportunities at both local and national levels would allow hotels and other businesses access to current opportunities within sporting estates. This in turn would allow them to source activities for guests at short notice. It also opens up opportunities for estates to diversify their portfolios and add value to their product, while giving visitors the opportunity to develop a deeper affinity for the area.

Economic costs

Most of the estates in the group are run as private units, catering only for family and friends. Where shooting is offered as a let, shooting and stalking providers make accommodation available, either on - site or in the local area. Current data taken from the latest PACEC report shows that typical shooting and stalking provider annual expenditure tended to be low, with 65% spending below £50K. On average, 34% of this expenditure is on staff costs, 10% was

on capital items, and 57% was on other operational expenses. Shooting and stalking providers said the average range of income is in the region of £51K per annum in 2012/13.

Additionally Just over a third of providers (38%) said shooting at their sites was self-supporting and broke even, while 12% said it was profitable and 22% said it was loss-making but financed by other activities.

Average costs vary on Deer stalking from £150 per hind to £500 for a Stag, with carcass values in the order of £60 to £180 once processed.

10. Landscape management

Landscape scale fires and muirburn

There have been no noteworthy fires in this area for a number of years. Muirburn (heather burning) is carried out in some areas to burn heather and rank grass in order to promote habitat regeneration for the benefit of a wide range of species. Birds, plants and herbivores all benefit from this practice to some degree. However it is carried out under strictly managed guidance and is not utilised in areas that are deemed to be at risk such as blanket bog.

Moorland / river basin management

Kintail Ridge provides a stunning backbone to the area, and by far the most widespread habitats to be found here are wet/dry heath land, montane vegetation and blanket bog. The marine influenced climate and diverse geology has created habitats that sustain indigenous species, such as *Euphrasia scottica* (Eyebright), *Gymnadenia conopsea* (Fragrant orchid) and *Viola palustris* (Alpine marsh violet), while the area is home to some of the iconic species that have characterised Scotland as a whole, such as Red deer and the golden eagle.

The extent of designated sites within the area of the DMG is relatively limited, with most in favourable condition. However appropriate management of these sites will be an area that the DMG will continue to collaborate closely with SNH and any other statutory bodies on. All habitats are managed in line with accepted grazing principles for uplands which are essential for maintaining biodiversity, river basin management principles and an acceptable balance for the sporting needs of the estate.

In GDMG there are a significant number of woodland re-generation and many more planted blocks which have been fenced, this cuts off winter ground to deer and can potentially negatively influence deer management until they are opened up for shelter. However since the 1960's there have been around 4000 sheep taken off the area of the DMG, allowing more forage for the deer.

Habitat assessment

Deer are dependent on the habitat as well as impacting on it. By measuring and recording the impacts of deer on habitat condition, it makes it easier to monitor whether land management objectives are being achieved. There are also public objectives associated with land, either through designated site status or areas where biodiversity is felt to be particularly important. Previously a rapid grazing and trampling assessment was carried out across the group in 2001. It identified the level of impacts on 291km² using vegetation types taken from the Land Cover Scotland 1988 data set (LCS 88). At that time the grazing was assessed to be:

- Light – 1%
- Light/moderate – 35%
- Moderate – 31%
- Moderate to heavy – 29%
- Heavy – 3%

At that time grazing by domestic herbivores and red deer accounted for 44% of the moderate to heavy, and heavy overall impact classes in the total area, compared to only 12% in the areas only grazed by deer. In the interim present deer numbers shown in **Fig 3** are around 20% less than the numbers counted in 1999.

Ongoing assessments have been carried out by group members in accordance with BPG and the latest data is noted in *Appendix 11*. All data will be shared at group meetings in order to identify any areas that are facing increased pressure, and steps will be taken to mitigate habitat impacts by implementing appropriate management processes such as alternate feeding sites, increased or selective culls. Land cover information (LCS88) is also noted in *Appendix 4*.

Domesticated stock grazing

- **Cattle** – A number of properties keep small herds of cattle, which are given access to the hill for summer and autumn grazing.
- **Sheep** - There are limited sheep stocks now on the open hill compared to pre 1970's when there was in excess of 4000 sheep on the hill.

Goats

There are a number of wild goats within the group area that have begun to impact habitats on a localised area. An action point of the group in year one will be to carry out a count of goat numbers on all estates with a resident population, and it is recommended that they are subject to a managed cull in line with maintaining these sites in *Good environmental Condition* (GEC), and this is included in the working plan shown in *Appendix 1*.

Mountain hares

This species are present in limited numbers and are subject to cyclical population movements. The impact of small herbivores on upland habitats remains unclear, but SNH advice is that white hares are likely to be of only limited periodic impact which is likely to be quite localised with a variable population. For the purpose of the plan we have therefore assumed that there is no adverse impact from hares.

Peat Cutting

Limited use is still made of peat cutting within the DMG area which may potentially increase again in some areas. However, this affects a very small proportion of the overall area, and its cultural significance is generally understood and accepted. It should be noted that the opportunities to cut peat are limited to crofters and individuals with historic rights to cut peat on areas that have been in use for generations.

Police cover

GDMG have always maintained an excellent working relationship with the Police force. This has ensured that rural crime in this area is virtually non-existent, and issues such as poaching levels are not seen as one of any real concern.

Offroad Vehicle use

Most owners utilise Argocats or other ATVs for access and carcass extraction and it is recognised that vehicular movements can have a damaging effect on ground vegetation and structure. Most estates have a network of maintained hill tracks that allow regular access to certain points, while limiting off track movements over the most frequently used journeys.

Furthermore, tracks are maintained to allow continued access without opening multiple tracks where sections become impassable.

11. Forestry

Forestry & Woodland Management

While the heaths and bogs are largely unsuited to tree growth (*LCS88 data – Appendix 4*), there is more suitable ground in the Straths, Glens and coastal areas where it is also proportionately much more valuable for crofting and agriculture, even although sites are generally very restricted. The native woods that occur in these areas tend to be on the more marginal land that is often found between the improved agricultural areas and the peatlands beyond.

As a consequence, native woodlands within the DMG area are limited in extent, occupying a modest proportion of the overall area. They tend to be somewhat fragmented and habitat connectivity can be poor. In some areas there has been localised regeneration during the past 20 years or so, presumably as a consequence of reducing sheep numbers over that time.

In general, the GDMG area is too far away from processing facilities, and when combined with a poor road network, extensive “commercial” forestry is unlikely to ever occupy a greater proportion of the land than it does at present. If anything, the current area covered by conifers is likely to decrease through restructuring with broadleaves, and the very extensive areas of peat will constrain woodland extension of any kind, except perhaps low density birch/ willow scrub.

Within the main GDMG there were 5882 hectares that were identified for planting under woodland grant schemes (WGS 1/2/3) which were set up in the 1990`s for the re-generation and planting of woodlands and forests in the UK. The plantations were fenced then planted, or left to regenerate and have been closely monitored over the years to prevent deer damage, i.e. repairing fences, damaged water gates or culling within the blocks when necessary. An additional 417 hectares was also identified and planted on the Glenelg peninsula under the same schemes.

Although these schemes had a financial reward which helped in the management of the estates, they also cut off a lot of wintering ground, which in the short term resulted in the deer moving to new pastures. This led to an increase in deer/vehicle collisions at first but has steadily reduced as the deer adjusted. In the long term these schemes will be of great benefit to the deer once the fences are taken down, giving them shelter and grazing. Many of these woodland grant scheme contracts will now have either finished or be close to the end, and it is up to each individual estate to assess if and/or when they will take their fences down to allow the deer back in. This depends heavily on individual estate management aspirations and can be discussed at the biannual meetings.

The national forest inventory (NFI) for both the main DMG area and Glenelg peninsula lists 6690ha of coverage for all woodlands (including WGS 1/2/3/) under information released in 2014. There is also within the group, around 800 hectares of natural woodlands. Looking towards the future the group will also review possibilities to increase native and productive woodlands under the various funding options available through *SRDP* such as *ECAF* and the *WOODLAND GRANT SCHEME*.

The woodland herbivore impacts noted in *Appendix 9* was published in 2014 and has identified a number of sites that are under high grazing pressure by deer. This can result in

suppressed regeneration, leading to reduced seedling density and delays in growth of the few remaining survivors, undermining the viability of woodland ecosystems. The group will look at the possibility of undertaking appropriate assessments in areas identified as at risk. The resulting data will then be used to improve management at specific sites through a range of agreed group measures.

- **Forest Enterprise** has commercial woodland on the western boundary of the group which is fenced off and fences checked regularly for leakage of deer from the open hill.
- **Bunloyne Estate** has commercial forestry on the eastern boundary of the group with fences getting checked regularly.
- **East Glenquoich** has an open commercial wood which allows deer shelter and is fenced off on the eastern boundary to stop deer moving east and out of the group and is also checked regularly.
- **Glenquoich estate** has a number of enclosed and open woodland areas which benefit the deer population.
- **Glenshiel Estate** has a number of woodlands on the northern boundary, most of which at present are still closed to deer.
- **Cluanie estate** has a small number of woodland plantations, but at present they are all closed to herbivores.
- **Arnisdale estate** has a number of enclosed and open woodland areas.
- **Eileanreach** has a considerable amount of commercial forestry and native woodland areas.
- **Glenelg Peninsula** has a large amount of mixed and commercial woodland.

The management priority for woodlands in the area will be to secure and improve the condition of designated and ancient woodlands, and to try and improve connectivity of these where possible. There is little scope or justification for very significant increases in woodland area, particularly if this was to remove some of the better land in the straths within the area. In terms of carbon sequestration, a focus on securing the heath lands within this particular GDMG area should be the primary goal, given the sheer dominance of this habitat within the area. Indeed, the heath land habitats here are a very significant proportion of those present within the country as a whole, and are nationally and internationally recognised as such.

12. Communications Policy

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

The communications policy is further addressed in *Operation of the group*, noted in *Appendix 6* and will be reviewed on a regular basis to take into account the needs of the DMG. The group can be contacted at present through Mr Michael Laing at Strutt and Parker (Perth office) on **01738 567892**.

13. Training Policy

GDMG 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 BPG and other relevant courses. Deer Management Qualifications (DMQ) exists to promote high standards in the humane management of wild deer. This objective is supported by the deer industry and is

achieved by providing candidates with the opportunity to demonstrate their knowledge and competence through Deer Stalking Certificates: DSC1 and DSC2 shown in **Fig 9**.

The DMQ Level 1 & 2 qualifications (including *Trained hunter status*) is increasingly held as the de facto industry standard for professional stalkers, which requires the identification, stalking, dispatching and larding of deer under supervision. For those expected to larder deer and prepare them for the human food chain, industry requirements are that they have attained Trained Hunter status. For those who achieved DMQ level 1 prior to 2006, trained hunter status was not part of the qualification, and a review may be required to assure staff status. All personnel taking 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.

All personnel within the area are encouraged to be proficient in First Aid, manual handling, ATV driving, maintenance and other tasks which are central to their job. GDMG will monitor the level of skills among staff in the group area, and undertake to facilitate any CPD that may be necessary to put right any deficiencies that are identified, and all estates will support their staff in attaining the agreed standards.

Group members are encouraged to bring forward any suggestions for suitable CPD that might be of relevance to the Group as a whole, or to ask for support in arranging training for their own 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 is regarded as an important function for the group to be able to undertake.

Fig 9 – Deer management specific qualifications

Property	DSC 1	DSC 2	Trained hunter	Fit and competent register
East Glenquoich Estate	1	1	1	1
Kinlochhourn Estate	1	1	1	1
Arnisdale Estate	2	2	1	1
Eileanreach Estate	1	1	1	1
Glenshiel Estate	2	2	2	2
Glen Quoich Estate	2	3	2	2
Bunloyne	n/a	n/a	n/a	n/a
Cluanie forest	1	1	1	
Druidaig	1	1	1	2
Forest enterprise	1	1	1	1

14. DMP review process

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 2018 if considered necessary, and a revised edition of the Plan will be actioned at that time.

Review process

The Group has a well-established system of bi-annual meetings, one in May and one in October. This level of management cooperation has been established for many years, and is used to discuss ongoing plans, delivery, population modelling, and habitat management.

This current plan has been designed to operate for a 5 year period, and includes annual targets in the DMP and the working document. It is envisaged that other than reactive measures to specific matters that may arise from time to time, the plan will be followed until the next interim review of actions in 2017.

Part Four - OPERATION OF THE GROUP

15. Deer management group operations

GDMG has been assessed against the DMG Benchmark document developed by the Association of Deer Management Groups (ADMG).

This analysis of present operations has defined the management processes in place which in turn has resulted in a series of recommended actions that will be undertaken in the lifetime of this plan.

Area & Boundaries

The 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, roads and the coastline all acting as migratory barriers. There is deer movement across the A87 Kyle of Lochalsh to Inverness road into both Kintail and Corriellair, and it is felt that channels of communication be kept open with the secretary's of the relevant DMG's in order to ensure that combined cull levels do not negatively impact numbers across all boundaries.

Action Points

1.1 Ensure that the population model is operating appropriately with regular reviews and next steps in place if necessary.

1.2 Discuss with relevant landowners timelines for fence line removal and review potential impacts on deer movements.

Membership

All of the significant land holdings within the GDMG area are members of the Deer Group, with an additional four properties who contribute data and communications to the Group, but who are not actual members. There are an additional number of properties on the Glenelg peninsula who do not at present participate in the group including 4 common grazing committees. Some of these areas, and individual crofters, account for the culling of an as yet unknown number of deer annually in protecting their crofts. There would be additional benefits to the deer group and also to the crofters by sharing information and initial soundings are that many of the owners, managers and crofters would be willing to do this. It is acknowledged that a new arrangement might not be straightforward to implement, but that perhaps some sort of associate membership status could be devised.

Action Points

2.1 Open dialogue with neighbouring properties in the Glenelg peninsula who could potentially be invited onto the DMG with a view to becoming members. This would be on a minimum subscription basis only.

2.2 In addition to neighbouring landowners, inviting local grazing committees to participate in discussions and their role in deer management would be beneficial to maintaining a healthy deer population across the GDMG.

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, with local councillors, SNH, National Trust, Corriclair estate and FE attending meetings, and the group also actively take forward business between meetings.

Action Points

3.1 Invite to meetings local stakeholders, community leaders, Police and Governmental agencies and those who have interests in the management of deer that are both professional and community oriented. The participation of these agencies and individuals in group meetings would support delivery of a more focussed plan as well as the fourteen public interest actions.

3.2 Meetings will be delivered under the structures outlined in the constitution.

3.3 Process to be agreed to manage issues between meetings.

Constitution & Finances

There is no existing constitution, but this has been addressed as part of this management planning process, and is included in *Appendix 2*. The Group 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 Ratify the draft constitution by autumn 2016 group meeting.

4.2 Group financial structures are to be agreed from those outlined in the constitution.

4.3 Identify ways of adding value to group assets through economic packages offered under support systems such as the Scottish regional development programme SRDP or the Environmental Co-operation Action Fund (ECAAF).

4.4 Group to agree on the level of cash reserves that are to be held as a minimum.

Deer Management Plan

This plan replaces the existing 2012 plan. 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 Review proposed GDMP and agree any changes at spring 2016 meeting.

5.2 GDMP to be subject to ongoing scrutiny and review in line with SNH BPG. Changes and next steps are to be achievable in set timeframes and agreed with all members.

5.3 Use of a five year population model which is derived from SNH BPG is to be subject to ongoing review with any changes made in line with accepted guidance from appropriate specialists.

5.4 Considerable information is in the public domain on woodland, habitat condition and habitat diversity. Maps are noted in appendix 9 and it is recommended that they are referred to when making changes to ongoing elements of the plan.

5.5 Sika deer are to be culled on sight as they pose a considerable threat to the genetic stability of the Red deer population. Roe deer to be managed in accordance with BPG and local population levels.

5.6 Steps to manage issues around the goat population, its impact on grazing, and subsequent damage to habitats are to include a count and a cull as it is felt that levels are unsustainable and impacting on wider habitats.

5.7 The group secretary is to manage next steps, time lines and individuals who are accountable in relation to the ongoing review of the DMP.

5.8 Develop contacts with community stakeholders, MSP's, local councillors, police and governmental agencies and invite to meetings as felt appropriate.

5.9 Record to be kept of all land management objectives within the group.

5.10 Develop contacts with community stakeholders, MSP's, local councillors, police and governmental agencies and invite to meetings as felt necessary.

Code of Practice on Deer Management

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

Action Points

6.1 The code of practice on deer management will be delivered through implementation of this plan, and members are to ensure that all parties adhere to defined practices.

6.2 Appropriate and proportional analysis of the DMP to define ongoing improvements in line with BPG.

6.3 Code of practice on deer management is included in the constitution and will underpin the DMP.

ADMG Principles of Collaboration

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

Action points

7.1 GDMG share a commitment to an economically sustainable, vibrant and thriving community that is in keeping with the character of the surroundings, and which enhances local landscapes.

7.2 The group accepts that there is a diversity of management objectives and respect each other's objectives.

7.3 GDMG commits to communicate openly with relevant stakeholders

7.4 There will be a commitment to identify mutually agreed next steps so that adjacent landowners may undertake reasonable changes in land use.

7.5 Where there are areas of disagreement, members will undertake collaborative working practices in order to achieve a resolution. Guidance is available in the constitution for situations that are in dispute.

Best Practice

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

Action points

8.1 BPG provides the baseline for assessments of the DMP, and will be referred to in order to inform any next steps from ongoing reviews.

8.2 The DMP and any amendments are to be in line with BPG.

Data and evidence gathering - Deer Counts

GDMG had traditionally counted in the spring of each year, but these counts were subsequently moved to every three years. This decision was based on analysis of historic cull data and indicated that existing population levels were relatively stable.

Estate foot counts will continue at the agreed three yearly intervals so that cull managers have the most accurate counts to work with and will be consolidated by helicopter counts as necessary.

It is essential that these counts are also informed by feedback from individual estates on the levels of deer on each site.

Population dynamics and resource use by Red deer in the post cull phase can lead to migrations between hefts that can affect individual habitats more than others, therefore it is important that annual recruitment counts are done to support triennial data.

Action Points

9.1 A helicopter count carried out in 2016 will help to establish a solid population baseline for the area. In recommending this approach it is envisaged that such a baseline should then provide an improved degree of confidence in the resultant population modelling carried out for the subsequent five year period.

9.2 Funding support from SRDP should be investigated in order to mitigate against the cost of future helicopter counts.

9.3 In order to deliver robust population modelling that reflects habitat condition and good deer husbandry it is recommended that triennial counts (supported by SRDP funding if applicable) take place.

9.4 Recruitment counting (late April/ early May) to be completed annually along with a basic mortality assessment to allow an assessment can be made of deer population and health, post winter.

9.5 Group to investigate ways to undertake herbivore impact surveys in woodland areas.

Data and evidence gathering – Culls

A broad population density of 14 deer per sq km (taken from latest count data) is likely to be suitable for a wide range of habitats within the DMG area, with the probable exception of native woodlands, for which site specific actions could be undertaken by individual estates as desired. There are some population fluctuations in the group driven by a number of factors such as habitat, climate and shelter availability.

The broad strategy going forwards will therefore be to set cull levels which ensure a stable population density across the area, this being required to ensure the socio- economic, sporting and venison production requirements of members.

Aspirational sporting requirements have been provided by Group members, and a five year/population model has been drawn up. From this, culls have been apportioned to each Deer Management Unit area. These population models and cull targets can be found in the Working Plan part of this document. In most cases, target culls are very similar to current levels, with a lesser cull being advised in some areas.

Action Points

10.1 Population models, actual and forecasted cull levels are to be updated yearly with recruitment and mortality data and amended as necessary.

10.2 Deer population density to be agreed that meets the needs of both sporting interest and the public interest outcomes.

Data and evidence gathering - Habitat Monitoring

All head gamekeepers have had experience and training in habitat monitoring, with Habitat Impact Assessments currently undertaken in a structured manner across the DMG area. Standardised habitat data has been collected from all properties, and alongside site condition monitoring of protected habitats by SNH surveyors, a much better picture should emerge over time of the GDMG area.

Action Points

11.1 Habitat monitoring to adhere to standards set out in BPG. Habitat assessment points are available from SNH and are to be carried out over an agreed timeframe.

11.2 Sufficient resources are to be in place over the period of the DMP for the purpose of delivering habitat monitoring.

11.3 Habitat monitoring data to be collated by group secretary in order to identify changes and trends at landscape scale.

11.4 GDMG through liaising with grazing committees and neighbouring properties will have an awareness of any changes in stock numbers, and in turn can amend the DMP accordingly.

Competence

The personnel involved in deer management within the GDMG area are qualified in a number of areas. The following primary qualifications are held:

- DMQ Level 1
- DMQ Level 2
- Trained hunter status (**NB** - Only included in DMQ 1, post 2006)
- Fit and competent persons

Action Point

12.1 DMG members will seek to ensure that DMQ Level 1 and Trained Hunter status are the minimum group standard, and promotion of DMQ level 2 for appropriate staff would be undertaken in order to promote continued professional development (CPD).

12.2 Staff are to be encouraged where appropriate to improve their training and qualifications at both vocational and academic level.

12.3 GDMG are to support small holders, crofters, neighbouring landowners and grazing committees to deliver deer culling that meets all appropriate industry standards.

12.4 Support will be sought from ADMG to deliver the DMP in areas where they can build on the experience and expertise of ADMG staff and advisors.

Training

An ongoing review of individual member training policies will ensure that CPD becomes an additional tool for retaining high quality staff, ensures that due diligence is in place and promotes good practice across the group.

Action Points

13.1 Staff should be encouraged to take up opportunities in gaining deer management qualifications, and be better informed on the definition of trained hunter status.

13.2 Help support ongoing awareness of BPG, its role in shaping areas such as DMP's, training and public relations.

13.3 Training needs analysis to be applied at appropriate intervals in order to identify site specific training required.

13.4 Habitat assessments are a fundamental tool in defining the status of land cover in the GDMG. Staff should be trained and able to describe techniques and processes as well as describe specific outcomes from this process.

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. 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 In the short term GDMG will review existing venison marketing arrangements and discuss collaborative processes that can add value to existing product.

14.2 In the long term Glenelg Deer Management Group will investigate working with ADMG to promote uptake of Scottish Quality Wild Venison standards (SQWV). These exist to maintain, develop and promote quality assurance standards throughout the whole venison industry.

Communications

A Communications strategy will involve making all relevant documents available through the ADMG website, including local stakeholders in notices and 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.

Local stakeholders, including grazing committees and community councils have been consulted on the development of this plan.

Action Point

15.1 A communications process has been outlined in the constitution and is to be used to promote ongoing business between meetings.

15.2 GDMG meeting minutes are to be communicated to relevant stakeholders and also submitted to the ADMG for inclusion in its communications to the general public.

15.3 This DMP will be made available to the general public via ADMG after the group have ratified it. The public will then have the opportunity to make representations on the plan and these can then be actioned as felt appropriate within an agreed timeframe.

15.4 Avenues of communication to the wider public to be investigated, including newsletters, open meetings and use of different online vehicles such as websites and social media accounts.

Part Five - PUBLIC INTEREST OUTCOMES

16. Managing public interest actions

GDMG 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.

ENVIRONMENT

Contribute to the delivery of designated features into favourable condition

Designated sites and features within the DMG are documented in *Appendix 3*. This includes an up to date account of their current status, and suggested actions through which a number of sites in unfavourable condition could be improved. Specific actions are laid out in the Working Plan at the back of this document.

Action points

*PIA 1.1 Manage the range of suggested actions noted in **Appendix 3** that have been taken from SNH site management statements.*

PIA 1.2 Provide appropriate resources over the period of this plan to monitor both designated sites and carry out continual habitat assessments across the wider areas.

Contribute to the Scottish Government woodland expansion target of 25% woodland cover.

There has been a considerable increase in woodland area within the main GDMG since 1991, with 5882 hectares being established under the various woodland schemes. This was in tandem with the Glenelg peninsula which also saw an addition 417 hectares planted in the same time period.

This woodland expansion amounts to 94 % of the woodland coverage in both areas today. The overall increase in terms of area is considerable, and it does appear to represent a large proportion of the land available for afforestation.

With the exception of planting to increase habitat connectivity, it is not considered that further planting within the GDMG is a significant priority within the period of this plan. Much of the suitable planting is restricted in extent and difficult to access therefore it is suggested that improved management of peatlands is the more important action within this area in terms of securing carbon sequestration.

The extent of heather moor (of indeterminate depth) for the main GDMG area including blanket bog and peatlands are noted in the latest land cover surveys at 26524ha or 75% of the overall habitat. If existing woodland at 5882 hectares is included, then that amounts to 33214ha or 92% if the GDMG area.

During the production of this plan, no other Group members outlined any plans for significant woodland creation schemes, although there is potential for achieving woodland expansion around a number of designated woodland sites through SRDP/ECAF.

Action points

*PIA 2.1 Habitat resources to be clarified through use of LCS 88 maps noted in **Appendix 9**.*

PIA 2.2 A review of existing potential woodland habitats would determine appropriate next steps with support from SRDP/ECAF for any future expansion.

PIA 2.3 Group to review habitat condition in woodlands, clarify appropriate levels of grazing and identify next steps to manage any potential herbivore impacts.

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

There are approximately 6299 hectares of woodland grant schemes within the GDMG area, covering around 17 % of the area of the DMP. The area under woodland in the DMP area is approximately 6690ha and includes both natural and planted woodlands. This amounts to around 16% coverage of the overall site according to figures released in 2014 by FCS. This is close to the national average of 18.5 %, but it should also be noted that large tracts of ground are unsuitable for planting. In addition the distance from markets and processing facilities, as well as the relatively poor roads infra-structure makes future commercial planting marginal at best.

The recent Native woodland Survey of Scotland details that the original group contains 1714 ha of native woodland. Around 90ha of woodland or 5.5% of natural woodland has been protected under Site of Special Scientific Interest (SSSI) guidance, with additional notes on site condition in *Appendix 3*. The herbivore impact levels have been noted in **Fig 10**, and they apply to all areas of native woodland.

Fig 10 – Herbivore levels in areas of native woodland

Impact level	Area (ha)
Low	611ha
Med	526ha
High	128ha
V/high	476ha

Approximately 65% of the overall 1741ha of native woodlands has been designated as in the lowest two categories, which exceeds the 60% of such woodlands which *Wild Deer - A National Approach* (WDNA) envisage being in such condition by 2020.

If the GDMG wanted to improve woodland habitats further within their own area, then this could be achieved through a reduction in herbivore impacts, reducing non-native or invasive species, or by increasing the canopy cover in some areas through fencing. There is a connection between canopy cover and herbivore impacts, in that low or medium impact areas allowed to regenerate will inevitably increase the canopy cover within the woodland.

There are around 604ha or 35% of woodland areas within the DMG where herbivore pressures are high or very high.

Action points

PIA 3.1 Review existing woodland sites using maps and identify any actions necessary that may encourage future regeneration.

PIA 3.2 Identify next steps to mitigate against herbivore impacts on open habitats that can be achieved through support mechanisms such as SRDP or ECAF.

PIA 3.3 Identify herbivore impacts on woodland areas within an agreed timeframe in order to identify whether further actions such as fencing, culling or diversionary feeding sites are required to promote woodland regeneration.

Monitor and manage deer impacts in the wider countryside (excluding agricultural land)

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 summary

of the habitat types found in the main Glenelg group area can be found in *Appendix 4*. The main habitats in the wider group are:

- 853 ha of blanket bog, representing 2% of the DMG area.
- 26524 ha of heather moorland, representing 62.18% of the DMG area.
- 2986 ha of grasslands, representing 7% of the DMG area.
- 6337 ha of montane landscape representing 14.85% of the DMG area.
- 1570 ha of Low scrub representing 3.68% of the DMG area.

It is likely that with the exception of native woodland and crofted farmland and adjacent hill areas, that a deer density of 14 per sq km will deliver favourable status to the majority of these habitats. There are also no notable areas of species rich type grasslands that would require a heavier stocking density. However because of habitat diversity, population dynamics and food sources, site specific deer density within the group can be several times the actual figure and it is likely that some areas may well experience temporary overexploitation. The coverage of protected sites within GDMG is insufficient to identify wider grazing impacts on habitats and cannot therefore act as a baseline for overall condition.

Habitat impact assessments are carried out within the group area on non - designated habitats, and this will be of considerable benefit to the ongoing management within GDMG. The data that has been amassed to date will provide a baseline for identifying impacts on habitats in the future, and given that it is carried out by trained estate staff it also adds to their overall knowledge of herbivore movements and preferred grazing sites.

Action Points

PIA 4.1 Habitat assessment points, and recommended processes are in place already and will continue to form the benchmark for habitat management in the DMG.

PIA 4.2 Habitat assessment data to be used to support identification of grazing levels and whether changes are required on a site specific basis.

Improve Scotland's ability to store carbon by maintaining or improving ecosystem health

Within the Group area there are approx 6690 hectares of woodland and over 26524 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.

Peatlands are a significant sink for atmospheric carbon which is an essential component in global climate regulation. They are also a source of greenhouse gases including carbon dioxide (CO²), methane (CH⁴) and nitrous oxide (N₂O).

The amount of carbon currently stored in global peatlands which only cover 3% of the world's land area equals approximately 75% of the total amount of atmospheric CO². And in the UK the carbon storage capacity of peatlands is the same as the forests of the UK, France and Germany combined.

Industrialisation of peatlands through agricultural and forestry developments results in the loss of carbon (CO²) back to the atmosphere primarily through site drainage schemes. In addition, fertilisation of peat soils results in significant emissions of N₂O which has a global warming potential 310 times higher than that of CO².

Overgrazing and burning also leads to loss of plants such as mosses and heathers and the subsequent damage to soil structures is set in motion when the surface starts to degrade.

This damage to the soil surface begins a process whereby the bog reverses the carbon capture process and then releases large amounts of CO². For these reasons, it is important to keep deer densities at a level that is sustainable, and to avoid burning deep peats and this represents the greatest opportunity to bring heavily impacted areas of peatlands into favourable condition

Given the weight of evidence for the protection of peatland areas, a DMP represents a significant opportunity to manage this finite resource and make a valuable contribution to Scotland's carbon storage capacity.

Action points

PIA 5.1 Carbon sensitive sites have been identified using the Land Cover Scotland (LCS88) map, and this document will continue to be referred to for any changes to land management.

PIA 5.2 Data from habitat assessments can be used at estate or group level according to any future agreements. This data will be used to support changes to land management that can positively influence carbon storage.

PIA 5.3 Peatlands restoration, while an important driver of carbon sequestration, will be reviewed in the context of ensuring that natural capital for all species is maintained, and financial support using SRDP funding pathways would be sought if it was felt that restoration is to be an appropriate next step.

PIA 5.4 GDMG will maintain the historical target deer density of 14 deer per sq km or less across the area. Any changes to this will be taken after consultations between GDMG and the appropriate agencies.

PIA 5.5 Muirburn will be used in a manner that meets existing regulations and in a way that is compatible with maintain local environments in good condition. It would be advised that any burning of deep peatland sites is detrimental to maintaining them in good condition and could lead to long term negative impacts on biodiversity.

PIA 5.6 Any decisions to review woodland generation in the GDMG area is to be taken with the appropriate advice from woodland specialists, and against a background of minimising any impacts on carbon storage and the river basins management.

Reduce or mitigate the risk of invasive non- native species (INNS)

A non- native species policy is included earlier in this plan. This includes a section on sika deer, which are considered to be a pest and culled on sight. Other species are to be managed in line with maintaining the habitats in good condition.

Action points

PIA 6.1 Existing collaborative estate policies are in place for the removal of any and all Sika through unrestricted cull practices. This policy will continue for the life of this plan.

PIA 6.2 Members are encouraged to collaborate on data relating to Sika deer, wild boar, Roe deer and goat numbers, and to manage as deemed appropriate.

PIA 6.3 The group is encouraged to discuss INNS data with SNH on a regular basis in order to provide a bigger picture in the region on species distribution.

PIA 6.4 The group are to review whether other INNS such as Rhododendron, Japanese knotgrass and freshwater/marine species are having any negative effects. Plans can then be affected to manage any further proliferation of identified INNS.

Protect landscapes and historic features from deer and deer management activity

There are over 100 sites listed as scheduled monuments in the GDMG area. Many of these are of significant archaeological or cultural importance. It is likely that for the majority of these that light grazing by deer and cattle will be beneficial in keeping back rank vegetation growth. At present, GDMG 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.

Action points

PIA 7.1 There are a number of Historic and Cultural Features locally, therefore GDMG are to discuss at open meetings with representatives of local communities and specialists if necessary any threats and opportunities to these sites.

PIA 7.2 Any developments such as changes in land management, construction or other impacts on the landscape that may impact Historic and Cultural Features are to be assessed against current legislation guidance.

ECONOMY

Optimise economic benefits of deer management in Scotland

The average cull of 193 stags, 250 hinds and 72 calves across the GDMG area provides an opportunity to bring an income into estates that otherwise would not be there, and would be difficult if not impossible to fulfill from other sources. 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 giving estates ample opportunity to maximise their incomes.

The majority of sporting estates consider their overall capital value to be related to the numbers of stags that can be culled. This is now becoming proportionately more important as income from fishing comes under pressure, and many in-hand sheep stocks have been cleared off the ground.

Within the GDMG area, there are currently eight full time jobs and an additional eight to ten part time roles that are all either fully or partially involved with deer management. In the latter situation, income from deer 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.

In terms of fisheries there are rivers and lochs that offer the opportunity to fish for Salmon and trout, however, generally this does not play a significant role in estate incomes.

Deer stalking is however generally understood to be the primary focus for guests and the experience for many of a “day on the hill” is just as important as it is for taking a stag.

General estate maintenance, forestry work, animal husbandry and habitat management take up the majority of staff time outwith the stalking seasons. As DMPs become more environmentally centred, habitat impact monitoring is becoming a key element in the day to day roles of estate staff. They are ideally placed to both contribute to ongoing habitat monitoring and identify quickly any overgrazing issues at a landscape scale and react accordingly.

The most significant opportunities for increasing the value of deer in the area probably relate to deer watching. The gradual drift of deer towards the periphery of the group and centres of population has been welcomed by many who run B&B's and other tourist related businesses.

Visitors generally welcome opportunities to see wildlife in and around where they are based, and marketed properly this could become a significant visitor attraction in the area.

It has been suggested in some areas that availability of sporting opportunities should be more readily available to local hotels and the GDMG could potentially play a role in that.

Action Points

PIA 8.1 Discuss with local representatives the potential benefits that Deer have on local communities, and how that can be maximised to support the economic spinoffs for local businesses.

PIA 8.2 Review ways forward to collaboratively manage sporting and accommodation opportunities across the group through use of, and reference to the PACEC (2014) survey.

PIA 8.3 Look at ways in which to add value to group product such as venison via improved marketing and branding.

PIA 8.4 Discuss ways to manage carcass handling in order to maximise the groups facilities and minimise the carbon footprint as much as possible given the limitations of local geography.

Minimise 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, 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.

While terms and conditions will vary across the group, the average cost of employing a staff member could well reach £40,000 per annum if housing, training and vehicle costs etc were included. This demonstrates a significant cost across the group, and 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. In addition 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.

On a number of properties, fishing lets are managed by the same staff, and this in tandem with Deer management can create spinoffs for the local community in terms of supporting local shops and hotels. There are also local companies offering recreational opportunities for visitors and the area is in itself an area of significant value to the outdoor enthusiast such as hill walkers and climbers.

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.

There is no accurate data reflecting the costs of managing individual businesses within GDMG, as this is regarded as business sensitive. However it should be noted that it is extremely difficult to identify specific costs relating solely to deer management and given that larger businesses and organizations often find it difficult to attribute overheads to

specific areas of interest, and it would not be realistic to expect small, highly integrated rural businesses to do so either.

Action Points

PIA 9.1 DMG to identify a process whereby capital investment in deer management and infrastructure can be quantified in a manner that is acceptable. Reference to PACEC approach on production of aggregated figures would be recommended.

PIA 9.2 Review areas where management changes are potentially going to have a negative economic impact on the DMG and formulate a way forward that will help to alleviate those changes.

PIA 9.3 The group are to identify potential benefits to members through building more formal arrangements on the working partnerships that already exist on an informal basis. This could be via engagement with a number of different stakeholders both governmental and non-governmental to look at Environmental Cooperation Action Fund (ECAAF) or SRDP support systems.

SOCIAL WELLBEING

Contribute to delivering higher standards of competence in deer management

A training policy and audit is provided earlier in this document which has identified the level of qualifications among the staff in the GDMG area. There is a need to both clarify understanding and provide training for individuals who wish to be included on the *Trained hunter* register. Given the remoteness and difficulties of negotiating local terrain it would be expected that a larger proportion of the deer management staff would be on this register.

Staff within the DMG area have a wide variety of other qualifications and certificates covering other aspects of their work. These include ATV, Argocat, First Aid, Chainsaw, digger, water bailiff, Health & safety, boat handling and VHF telemetry. 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 10.1 Review all staff training in regards to deer management so that within a reasonable timeframe to be set by GDMG, all relevant staff will be trained to at least DMQ Level 1 and Trained Hunter status as a minimum group standard. Promotion of DMQ level 2 for appropriate staff would be undertaken in order to promote CPD.

PIA 10.2 All members of GDMG to ensure that they have systems to keep training records up to date and to ensure employees are competent and comfortable in undertaking the core functions of their job.

PIA 10.3 All members of GDMG to ensure that they have a suitable and sufficient risk assessment to control physical hazards.

PIA 10.4 All members to actively encourage staff to participate in CPD in areas appropriate to their role.

Identify and promote opportunities contributing to public health and wellbeing benefits

Deer Vehicle Collisions (DVC) are regarded as not being a significant issue throughout most of the GDMG area with the exception of the A87 between Cluanie and Sheil Bridge. 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.

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 carcass 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) from North America, and appropriate guidance on this will require to be 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, and estates have adjusted their management / expectations accordingly. Highland Council access officers do not consider there to be any difficult situations from their perspective within the DMG.

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 already promote access and provide good information for the public.

Action Points

PIA 11.1 Group meetings are to be used to highlight any issues with Deer vehicle collisions and to look at ways in which this can be reduced or managed. At present Cluanie estate collates information and forwards it to SNH and the National Deer-Vehicle Collisions Project @ <http://deercollisions.co.uk/>.

PIA 11.2 All members are to have in place a policy of regular updates on issues that may impact staff, guest and public health. The primary issues are Chronic Wasting Disease (CWD) of Deer and Lyme's disease, but may include other health risks such as operating in poor weather conditions, walking in difficult terrain and the appropriate use and deployment of weaponry.

PIA 11.3 All staff aware of any agreed policies on escalations necessary in the case of notifiable diseases.

PIA 11.4 The group are to discuss any safety issues and impacts on deer welfare with the appropriate Highland council outdoor access officer.

PIA 11.5 All group members are asked to review any local access issues and to work with the public in order to minimise any conflicts through provision of better information on the Scottish outdoor Access Code. Signage, websites and the hill phones initiative are all suggested ways of engaging with the public.

PIA 11.6 Food safety and carcass handling to be managed in line with BPG and current legislative guidance.

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.

Grazing committees and local community councils will be added to circulation lists 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 the 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.

Action Point

PIA 12.1 Group to formalise communications with agreed stakeholders such as public agencies, community groups and nominated individuals.

PIA 12.2 Group to identify appropriate actions that have been driven by community concerns in relation to deer management.

PIA 12.3 Identify opportunities such as site visits to raise awareness of group activities with the wider public, community groups and recognised stakeholders.

WELFARE

Ensure Deer welfare is taken into account at individual animal and population level

Deer welfare is regarded as a high priority across the group and 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.

There have been significant losses on Cluanie estate due to no feeding taking place over the winter of 2014/15, however the present owners have reinstated a feeding policy and it is envisaged that the deer population will benefit from this accordingly.

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 is removing valuable winter shelter from some areas of the range, and this is likely to have an impact on local deer populations in some areas until these areas are opened up again. Some compensatory culling may be required on the back of this.

Training and levels of competence within the group are noted in previous sections.

Action Points

PIA 13.1 Review habitat status across the DMG (support may be available through SRDP) and identify ways in tandem with BPG to make best use of this data.

PIA 13.2 During culling operations, ensure reasonable care in line with BPG is maintained.

PIA 13.3 All members are to maintain appropriate records on the management of herbivores, communicate these to the group, and also to liaise with appropriate agencies so that steps are in place to ensure that animal husbandry is maintained.

PIA 13.4 The group is to work with land managers who are putting in place operations that may impact deer management and habitats, to ensure that steps are taken to mitigate any negative impacts.

COLLABORATION & EFFECTIVE DEER MANAGEMENT PLANNING & IMPLEMENTATION

Develop Mechanisms to manage deer

GDMG have 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. This plan which is expected to be endorsed in March 2016 plus associated documents, maps and minutes of meetings will be published on dedicated website space through the Association of Deer Management Groups website.

Action Points

PIA 14.1 The group are to publish the agreed version of the Glenelg Deer Management Plan in the spring of 2016 after review against the ADMG and PIA benchmarks.

PIA 14.2 Group secretary to assign roles and responsibilities with achievable timelines for any given changes or actions resulting from plan reviews.

PIA 14.3 Minutes from DMG meetings to be made publicly available through agreed channels.

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