The Mull Deer Management Plan 2015 -2020

This page is intentionally blank

Mull Deer Management Plan Executive Summary

EXECUTIVE SUMMARY

Deer are regarded as a natural resource and as such all those who manage them have a 'responsibility' as set out in the <u>Code of Practice on Deer Management</u>. In most circumstances this responsibility is not a legal obligation but is a moral and social one. The concept of responsible deer management focuses on:

- managing deer as a resource sustainably
- minimising negative deer impacts on the public interest
- safeguarding deer welfare

Mull Deer Management group currently has 23 Members the entire island with a total area of 88,170 ha. Historically, The Group has operated mainly in the South. However, with the increasing focus on deer management, both the Northern half of Mull including the sites operated and managed by FCS, are included.

The overall purpose of this Plan is to provide:

- An agreed statement of the shared views of the Members of the Group about the management of wild deer in the area covered by the Group
- An agreed set of actions to try and ensure that deer management in the area is in line with those shared views
- An agreed pattern of arrangements to try and ensure that the actions are implemented and their effectiveness monitored

The Mull Deer Management Plan consists of four parts:

Part 1: Background Information This section contains background information about the DMG.

Part 2: Deer Management and the Public Interest: Sets out the Public Interest relating to Deer Management in the Mull Deer Management Group area and any actions required by the Group to deliver it. This plan will run from 2015 to 2020.

Part 3: Group Operation: Contains all the information about the Operation and Functioning of the Group (2015 - 2020) as well as contact information for Group Members.

Part 4: The Working Plan: Provides a summary of Group actions.

Group Chairman: Angus Cheape

Group Secretary: Timothy Laing

Mull Deer Management Plan

Part 1: Background Information

Background Information

Area & Boundaries

The Isle of Mull is the largest of the Inner Hebrides and comprises 874 sq. Kms. From a deer management perspective, there is a natural delineation between the Northern half and the Southern half. The division between North Mull and South Mull falls along a line from Salen to Ulva Ferry. A map of the Island and its Estates is at the Appendices. This division is significant, in that little data exists for the Northern sub area, as it has not been systematically counted by land owners or SNH. Reasonable assumptions have been made therefore about deer numbers and their habitat in the Northern sub area. 2019 will see the first whole Island Helicopter count by SNH.

The Mull Deer Management Group (MDMG) area is just over 58,000 hectares in South Mull and a further 30,000 hectares in North Mull. South Mull is largely mountainous open hill with disparate forestry blocks, while the North is predominantly lower ground with extensive forestry and agriculture. This division of land types between North and South is the reason for greater detailed knowledge of deer and their numbers in South Mull and is also the area where deer predominate.

The Red Deer Population

As an island, Mull has a closed and well managed deer population which exists over most of the island. A DCS helicopter count took place in 2003, 2007 and 2011 on the South Mull area only, and this has provided the most up to date information on deer numbers (see Table 1 below). There is however, no reason to believe that the variation in deer numbers is not mirrored in the North Group area in line with that in the South. The count total in 2007 in the South Area was 6,764 red deer. This total does not include deer resident in Forestry Commission plantations or other significant wooded areas, which, because of their size and nature were not walked out on count days. In addition, unlike previous counts, the 2007 count took place in December. It did not therefore allow for the closing months of the hind stalking season and also any winter mortality.

A further count took place in 2011 under favourable conditions and the number of deer had decreased from 2011 to under 6,000, also in advance of the full hind cull and winter mortality. More importantly, the average density of deer across the area was 10.5 deer/km². This is considered to be well under the SNH recommended density.

In addition to the above, and using predictive models and historical cull data, it is assumed that there are approximately a further 1,800 deer in the Northern Area, subdivided into 471 stags and 1,408 hinds. The density and recruitment rates are assumed to be in keeping with the rest of the Island.

In March 2015, the total number of deer, excluding calves, is estimated to be: 2579 Stags 5128 Hinds Total: 7707

Table 1: Helicopter Counts (hind, stag and calf figures for 2003 and 2007 have been estimated using the unclassified count information)

								Density	
Counts	Stags	Unclass	Total	Stags	Hinds	Calves	Total	(per km2)	Area (ha)
2003	1588	4053	5641	1993	2806	842	5641	10.00	
2007	1392	5372	6764	1929	3719	1116	6764	11.99	
2011	1508		5907	1508	3120	1279	5907	10.47	56432
Whole									
Island									
Estimate				2579	5128		7707	8.7	88,170

Changes in deer numbers

From the last two counts in the South:

- The number of stags has increased by 8% from 2007 to 2011
- The number of hinds and calves has decreased by 19% from 2007 to 2011
- The total number of deer has decreased by 13% from 2007 to 2011.

In addition to general deer movement, stag movements have been increasingly reported on lower ground, and it is possible therefore that this is due to other effects than total population alone. Until 2011, there was a popular opinion that the population within the MDMG area was growing and that culling levels were not keeping up with the levels of recruitment. The 2003 and 2007 counts indicated an increase in the total population of 1,123 or 20% in 4 years. Unusually, there had been a disproportionate increase between the sexes. The stag population actually declined with the hind population increasing by 32%. That the total number of deer has increased cannot be looked at in isolation, particularly considering the decline in overall sheep numbers in the same area. Increasing deer numbers may well be occupying territory left vacant by decreasing sheep numbers.

Until 2007, there was therefore evidence to show that culling levels were not adequate, and that in addition, culling levels had not reflected the actual numbers of the different sexes on the ground. Since 1957, the earliest reliable records, overall stag numbers have risen from 926 to 1,327 a 44% increase. Hind numbers on the other hand have risen from 1,481 to 4,778, a 222% increase. In 1993 DCS reported predicted optimum hind numbers for South Mull to be 2,800, although this needs to be modified in the light of decreasing sheep numbers. Increasingly however, deer numbers cannot be looked at from a purely agricultural or sporting point of view, as other factors namely, the designation of sites as ecological priorities and forestry interests, play an increasingly important role in deer management. In addition, an increased reporting of stags straying into low ground grazing requires to be investigated.

There is significant evidence to show that where stag populations are heavily outnumbered by hinds, there are visible effects*:

- A decrease in the number of stag calves surviving
- Increased emigration by stags to neighbouring areas not normally occupied by stags
- A decrease in recruitment rates

(T Clutton- Brock "Sex differences and optimal deer management")

It is interesting to note that despite the increase in the total population, recruitment rates do not seem to have dropped substantially below the figure of 38% recorded in 1957.

It is therefore possible that the overall deer population is sustainable from a purely agricultural perspective.

Current Count Data

Although all estates are encouraged to count their deer every year, this is currently achieved by only a minority of estates making accurate deer monitoring difficult.

Red Deer Cull Data

The following table outlines the approximate MDMG cull since the 2007-8 season. The deer cull in 2013-2014 has been the highest in recent times.

Year	Total Deer Culled
2013-14	1,419
2012-13	1,390
2011-12	1,149
2010-11	1,203
2009-10	895
2008-09	1,129
2007-08	1,012

Deer Management Issues

Winter Mortality

Members will monitor and report any significant levels of winter mortality to the Sub Group, or any significant health issues encountered. It is considered that mortality within the group is approximately 20% for stag calves, 20% for hind calves, and varies between 2% and 10% for stags and 2% and 8% for hinds. These figures are used in the current population models for MDMG, but will be varied

depending on the location and practical experience. Abnormally severe winter mortality has for instance been reported for the winter/spring 2011/2012.

Deer Fences

The Plan assumes that the state of deer fences remains constant. That is to say that most of the deer fences including the fence that mainly divides North and South Mull remain at their current state of porosity. Members are encouraged to report any changes in fencing policies, particularly those which will affect the free movement of deer between estates.

Natural Heritage and Biodiversity Interests

Designated sites

The Mull area is very heavily designated, containing a number of high profile sites of national importance (see Appendix 2). The exact area amounts to approximately 11240.64 ha. They include large upland sites, broadleaved woodlands as well as meadows, water habitats and geological sites. Deer management is potentially relevant to many of these. This issue is the single biggest natural heritage management consideration within MDMG.

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

- Sites of Special Scientific Interest (SSSI)
- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)

Sites of Special Scientific Interest (SSSI)

Sites of Special Scientific Interest (SSSI) represent the best of Scotland's natural heritage. They are 'special' for their plants, animals or habitats, their rocks or landforms, or a combination of such natural features. Together, they form a network of the best examples of natural features throughout Scotland, and support a wider network across Great Britain and the European Union. Scottish Natural Heritage chooses sites after detailed survey and evaluation against published scientific criteria. SSSIs can include freshwater, and seawater down to the mean low water mark of spring tides, as well as land. At 1 February 2014, there were 1,425 SSSIs covering just under 1,020,000 hectares or 12.7% of Scotland. SNH designates SSSIs to protect the best of our natural heritage by making sure that decision makers, managers of land and their advisors, as well as the planning authorities and other public bodies, are aware of them when considering changes in land-use or other activities which might affect them. The Nature Conservation (Scotland) Act 2004 provides the legislative framework around which all SSSI sites are administered.

Special Areas of Conservation (SACs) are areas designated under the European Directive commonly known as the 'Habitats' Directive. Together with Special Protection Areas, which are designated under the Wild Birds Directive for wild birds and their habitats, SACs form the Natura 2000 network of sites. Most SACs on land or freshwater in Scotland are also underpinned by notification as Sites of Special Scientific Interest (SSSIs). The additional SAC designation is recognition that some or all of the wildlife and habitats are particularly valued in a European context. Six of the significant SSSIs on Mull are also SACs and/or SPAs.

National Nature Reserves (NNR)

The first National Nature Reserves were designated 50 years ago, and at that time they were the cornerstone of nature conservation policy, safeguarding sites of national conservation importance as well as providing interpretative material and allowing the public to enjoy these sites. All NNRs are now designated as SSSIs to strengthen their protection. There are currently 65 National Nature Reserves in Scotland although there are currently none on the Isle of Mull. Although there are estates listing Designated Sites, for the purpose of this plan, only those which are directly affected by agriculture and deer management are being considered. This excludes sites which are listed primarily for their rock formations, and concentrates on those with rare flora and fauna which require special attention. The details of the key Designated Sites on Mull are listed with maps at the Appendices along with their current condition.

The Role of The Deer Management Group in Designated Site Management

The DMG recognises the importance of Designated in the wider public interest, and will continue to play an important part in site condition monitoring. Members of the DMG whose land has a Designated Site will continue to work with SNH in maintaining the condition of sites or bringing unfavourable sites back into a favourable condition.

Administration

Scottish Natural Heritage (SNH) are responsible for the administration of designated sites. The Designated Sites are administered from the SNH Office in Oban and there are 115 sites administered by Scottish Natural Heritage, Cameron House, Albany Street, Oban.

Full List of All Designated Features on Mull

Name	Area (ha)	Reporting	Feature	Site	Condition	Agreement	Herbivore Impacts
		Category		Visit			
Ardmeanach SAC		Supralittoral	Vegetated sea	2009	Unfavourable	None	N/A
	374.79	rock (Coast)	cliffs		Recovering		
Ardmeanach SAC			Tall herb	2006	Unfavourable	SRDP	Yes
	374.79	Inland rock	communities		recovering		
Ardmeanach SAC			Species-rich	2006		SRDP	Yes
		Calcareous	grassland with				
		grassland	mat-grass in		Unfavourable		
	374.79	(Upland)	upland areas		recovering		
Ardmeanach SSSI		Quaternary		2012		None	N/A
		geology and	Quaternary of		Favourable		
	3257.51	geomorphology	Scotland		Maintained		
Ardmeanach SSSI			Cenomanian -	2012	Favourable	None	N/A
	3257.51	Stratigraphy	Maastrichtian		Maintained		
Ardmeanach SSSI			Slender Scotch	2010		None	N/A
		Other	burnet moth		Favourable		
	3257.51	invertebrates	(Zygaena loti)		Maintained		
Ardmeanach SSSI		Supralittoral		2009	Unfavourable	None	N/A
	3257.51	rock (Coast)	Maritime cliff		Recovering		
Ardmeanach SSSI			Vascular plant		Favourable	None	Yes
	3257.51	Vascular plants	assemblage	2008	Maintained		
Ardmeanach SSSI		Calcareous	Subalpine				
		grassland	calcareous		Unfavourable		
	3257.51	(Upland)	grassland	2006	Recovering	SRDP	Yes
Ardmeanach SSSI		Montane	Montane		Unfavourable		
	3257.51	habitats	assemblage	2006	Recovering	SRDP	Yes
Ardmeanach SSSI		Igneous			Favourable		
	3257.51	petrology	Tertiary Igneous	2004	Maintained	None	N/A
Ardmeanach SSSI			Hettangian,				
			Sinemurian,		Favourable		
	3257.51	Stratigraphy	Pliensbachian	2004	Maintained	None	N/A

Ardura - Auchnacraig SSSI	1783.83	Butterflies	Marsh fritillary (Euphydryas aurinia)	2006	Favourable Recovered	None	N/A
Ardura Auchaaraia CCCI	1/05.05	Littoral	auriiia)	2006	Recovered	None	IN/A
Ardura - Auchnacraig SSSI					Farrarmable		
	4702.02	sediment	C 11 1	2002	Favourable		A1/A
	1783.83	(Coast)	Saltmarsh	2003	Maintained	None	N/A
Ardura - Auchnacraig SSSI		Igneous			Favourable		
	1783.83	petrology	Tertiary Igneous	2001	Maintained	None	N/A
Ardura - Auchnacraig SSSI	1783.83	Broad-leaved, mixed and yew woodland	Upland oak woodland	2001	Unfavourable Declining	SRDP - Woodland plan only; Possible SRDP application in 2016/17 funding round	Yes
Ben More - Scarisdale SSSI			Mineralogy of		Favourable		
	4089.42	Mineralogy	Scotland	2012	Maintained	None	N/A
Ben More - Scarisdale SSSI		Igneous			Favourable		,
	4089.42	petrology	Tertiary Igneous	2001	Maintained	None	N/A
Ben More - Scarisdale SSSI	4089.42	Quaternary geology and	Quaternary of Scotland	2001	Favourable Maintained	None	N/A
Ben More - Scarisdale SSSI		В				SRDP -	,
Den More Sourisdate 3331						(should	
		Broad-leaved,				change by	
		mixed and yew	Upland oak		Unfavourable	end of	
	4089.42	woodland	woodland	2001	Declining	2015).	Yes
Coladoir Bog SAC					Favourable	= 1 10 /.	. 30
20.000200010	155.46	Bogs (Upland)	Blanket bog	2013	Maintained	None	Yes
Coladoir Bog SAC		- 0- (2 3	Depressions on		Favourable		
	155.46	Bogs (Upland)	peat substrates	2013	Maintained	None	N/A

					Favourable		
Coladoir Bog SSSI	155.46	Bogs (Upland)	Blanket Bog	2013	Maintained	None	Yes
Gribun Shore and Crags			Permian -				
SSSI			Triassic (red		Favourable		
	223.07	Stratigraphy	beds)	2012	Maintained	None	N/A
Gribun Shore and Crags		Supralittoral			Favourable		
SSSI	223.07	rock (Coast)	Maritime cliff	2009	Maintained	None	N/A
Gribun Shore and Crags		Calcareous	Subalpine				
SSSI		grassland	calcareous		Unfavourable		
	223.07	(Upland)	grassland	2006	Declining	SRDP	Yes
Gribun Shore and Crags			Rocky slopes				
SSSI			(includes inland				
			cliff, rocky				
			outcrops,				
			chasmophytic		Favourable		
	223.07	Inland rock	vegetation)	2006	Maintained	None	N/A
Gribun Shore and Crags			Cenomanian -		Favourable		
SSSI	223.07	Stratigraphy	Maastrichtian	2002	Maintained	None	N/A
Lagganulva Wood SSSI		Igneous			Favourable		
	210.88	petrology	Tertiary Igneous	2012	Maintained	None	N/A
Lagganulva Wood SSSI		Broad-leaved,					
		mixed and yew	Upland oak		Unfavourable		
	210.88	woodland	woodland	2012	Declining	None	Yes
		Broad-leaved,					
		mixed and yew	Upland oak		Unfavourable		
Loch Ba Woodland SSSI	118.58	woodland	woodland	2000	Declining	None	Yes
Mull Oakwoods SAC	1401.89	Mammals	Otter (Lutra	2003	Favourable		N/A
			lutra)		maintained	None	
Mull Oakwoods SAC	1401.89			2011	Unfavourable	Partial	Yes
		Broad-leaved,			Declining	SRDP	
		mixed and yew	Western acidic			coverage	
		woodland	oak woodland			in 2015.	

Additional Land Use Information

Access

Mull is an area of outstanding beauty, and its open spaces attract many visitors, particularly bird watchers, due to the number of different species readily accessible without having to venture too far from the road. Sea eagles, golden eagles, harriers, short-eared owls and peregrines are just some of the most sought after species which abound on the island. There is only one "Munro" in the Group area, but the entire island is promoted as an area for walking with access encouraged to all areas. Despite the presence of many publications on "Mull Walks", Mull does not attract climbers and ramblers in the same volume as the mainland due to the relative difficulty and cost associated with reaching the island. Estates report each year on the number of interrupted stalks, and while this is on the increase the general level of disruption to stalking activity by walkers, is low. Ecotourism is vital to the Island economy. There are eight Wildlife Tour Operators in the South of Mull alone, and as far is as practicable, the MDMG encourages participation in the appreciation of the diversity of Mull's nature. To assist in minimizing disruption of essential deer management while encouraging walkers to participate in the enjoyment of the countryside, the DMG in conjunction with the Countryside Ranger Service, has produced a document showing the areas and estates where stalking takes place with contact numbers for stalkers and estate representatives. In addition, estates are encouraged to inform local shops and other enterprises when stalking is taking place to promote coordination between walkers and stalkers. The DMG does not currently operate a "hill phone" service as it is considered impractical to implement. Although some estates notably Lochbuie and Knock shoot deer throughout the open season most stag stalking is conducted during the latter part of September and October. Unlike many mainland DMGs, Mull is therefore immune to a greater extent to walkers and campers as this period is too late in the holiday season.

Grouse Moor Management

There are now no significant grouse numbers on Mull, and their presence is not considered a viable management option, largely due to the very significant number of raptors in the DMG area and the lack of suitable moorland management.

Hill Sheep Management

There are over 15,000 sheep grazing on the hill land on the estates covered under this plan. Sheep which graze almost exclusively on low ground areas are not included in the formulation of this plan or in habitat management issues relating to it. Six estates have reported a likelihood of increasing the number of sheep on the open hill. No estates have reported an intention to reduce sheep numbers beyond the current population and it will be taken that the numbers on these estates will remain fairly constant. Quantifying change is crucially important to this overall process, and sheep numbers will have an effect

on future thinking on deer carrying capacity within the MDMG area. Members are encouraged to report substantial changes in sheep numbers at MDMG Meetings. It is recognised that the number of livestock on the open hill will greatly affect the number of deer that can be supported, without causing emigration of deer to lower ground.

Forestry

Mull has wide forestry coverage across the island. This includes both native woodland, commercial and amenity woodland. The DMG recognises the role that woodland plays in the wider public interest, and recognises the requirement to work with the relevant authorities in the management of woodland. The DMG will monitor changing priorities in woodland management, particularly in relation to new plantings and native woodland, and deer management in those areas. Members will be encouraged to report any change in woodland priorities at the biannual meetings. In addition, Forestry authorities will be encouraged to be open regarding their plans for deer management in areas under their control and to explain any radical changes in culling policy.

The National Forest Inventory for Mull, and woodland creation schemes with current herbivore impact are in the Appendices

Employment and Economics

Mull comprises a range of upland farms with deer present throughout the island, providing a sporting interest. A recent survey determined the key activities between group members, focusing on agriculture, forestry and sporting interests. The aim of the survey was to show the significance of sporting interests as a capital asset, a source of revenue to estates and the local economy as balanced with other agricultural or forestry interests. There is little clear pattern or emphasis on land use priorities in the Southern Area. Five estates listed deer management/sporting as a primary, or equal primary, interest, with eleven estates reporting agriculture as a primary or equal primary interest. Of the five estates, comprising 25% of the land area in the Group who listed deer as the primary focus in land management, a secondary interest of agriculture (predominantly sheep) or forestry was listed. The importance and significance of other livestock is expected to play an increasingly important role for all landowners in the light of current and future CAP Reform. This gives a strong bias towards an understood need to balance deer/sporting interests, with any secondary interest of agriculture. Agricultural use is predominantly the grazing of livestock, sheep and cattle. Sheep predominate on the low ground and open hill, whereas cattle are generally restricted to lower ground only. However, in recent years, the number of cattle on the island have increased with inevitable pressure being put on both low ground and to an increasing extent, higher ground grazing. Certain parts of the Island particularly in the South have a population of wild goats. This population is generally restricted to the coastline, and may have a significant impact on grazing. Despite the number of estates, the number of people directly employed on deer management is low.

Within the South Mull DMG area, there are currently 4 full time jobs that are either fully or partially involved with deer management. 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. Almost all deer management staff within the Mull area have a range of other duties, ranging from other wildlife management duties such as river management, livestock management, research, habitat monitoring and rangering.

Revenue from deer management is derived through sporting lets and venison sales to dealers or through direct sales, and is considered an important source of income. Estates have been encouraged to seek added margin by direct marketing of their own venison. The market for wild venison in Mull is limited, and therefore this has only been achieved to a very limited extent. The availability of manpower also limits the extent to which venison can be actively marketed either in or out with the island. The recent upgrading of the cutting room at the Island Abattoir will improve the opportunities of marketing venison directly. Based on an average whole island cull of between 650/800 stags and 650/800 hinds including calves of both sexes, it is estimated that the total value of venison produced within the group area exceeds £200,000.

The total direct economic value of deer management, sales and sporting lets, within the Mull area is therefore likely to be in excess of £250,000 annually for land owners, and an un-quantified sum for the local economy. This is before any ancillary services or economic multipliers are considered. The majority of sporting estates will also consider their overall capital value to be related to the numbers of stags that can be culled, this is now becoming proportionately more important as incomes from river management have declined. This is an important issue when considering the sustainable deer population.

This page is intentionally blank

Mull Deer Management Plan Part 2: Deer Management and the Public Interest

BACKGROUND

Introduction

"Wild deer are an important part of Scotland's ecology, economy and culture. Deer are managed in certain parts of Scotland to protect crops, trees and protected natural areas, as well as to reduce road accidents. Deer stalking also provides an important source of income to many fragile rural economies throughout Scotland". (SNH)

The private deer management objectives of Mull Deer Management Group (MDMG) Members currently contributes to delivering a wide range of public benefits. These have been identified in the <u>Code of Practice on Deer Management</u>, and this section of the plan will demonstrate how MDMG is following the Deer Code and how it is aiming to deliver sustainable deer management.

Using 14 practical <u>Public Interest Actions</u>, derived from Deer Code, the plan will identify what is currently being delivered and areas where there are opportunities to further contribute to delivering the Public Interest. The 14 Public Interest actions are set out in Appendix 1.

Purpose of the Deer Management Plan

The overall aim of this part of the plan is to clearly identify the management actions required to deliver the local public interest objectives of the local area, whilst seeking to maintain individual ownership objectives where possible.

DEER MANAGEMENT GROUP ACTIONS

Actions to develop mechanisms to manage deer

Background

Deer are regarded as a natural resource and as such all those who manage them have a 'responsibility' as set out in the <u>Code of Practice on Deer Management</u>. In most circumstances this responsibility is not a legal obligation but is a moral and social one. The concept of responsible deer management focuses on:

- managing deer as a resource sustainably;
- minimising negative deer impacts on public interest;
- safeguarding deer welfare.

All those with a vested interested in the local deer population should be invited to be Members of a Deer Management Group (DMG). Furthermore, a collaborative approach is required to agree a collective management approach, and where required, the need to negotiate and compromise may be required. This requires a Group to be functioning effectively, to be inclusive and to operate in the spirit of openness

and transparency. The Association of Deer Management Groups has provided some guiding principles through the <u>ADMG Benchmark</u>.

In order to manage deer sustainably, it is essential to be able to estimate the current deer population, in order to set culls to achieve a target density that enables all objectives of the Group to be met. Since 2003, there have been 3 helicopter deer counts on South Mull which provide an accurate estimate of the open-range deer population (see Table 1 below). A more detailed description of trends in deer numbers and historic annual cull figures can be found in Part 3 of the plan.

From the 2011 count figures, and using a population model (Part 2 of the plan), the current population is estimated to be about 7,700 deer. In order to meet the collective objectives of this plan, a target density of less than 20 deer per Km² has been agreed for the South of Mull and culls will be set annually in the Working plan (Part 2) to ensure that the target density with a sex ratio nearing 1:1.5 is achieved by 2020. Cull figures from the North of Mull will be provided from DMG Members and will be integrated with this Plan.

Table 1: Historical Helicopter Counts (hind, stag and calf figures for 2003 and 2007 have been estimated using the unclassified count information)

Counts	Stags	Unclass	Total	Stags	Hinds	Calves	Total	Density
2003	1588	4053	5641	1993	2806	842	5641	10.00
2007	1392	5372	6764	1929	3719	1116	6764	11.99
2011	1508		5907	1508	3120	1279	5907	10.47
Predicted March 2015 All Island				2579	5128		7707	8.7

Plan Objectives

The Deer Management Plan (DMP) will aim to identify specific actions to deliver local public interest and ownership objectives. The DMP should also ensure that representation and Membership of the Deer Management Group enables greater integration of different land-uses at a local level. The planning process should also be consultative, transparent and open. To achieve full participation in the Mull DMG from all estates in the South Mull sub-Group and as much participation as possible from the Northern Group and other interested parties.

Current Delivery.

An agreed Deer Management Plan is in place which was adopted in 2015 and will run until 2020.

- DMG has a Mull DMG Web Site.
- The DMG currently works in Partnership with Government Agencies (SNH & FCS) and the Local Community.
- Although not all properties in the North of Mull are Members of the DMG, the DMG are in discussion with owner/occupiers in the North to ensure there is a mechanism in place for

- discussing deer management issues. Cull targets are set and reported on annually (see Part 2 of the plan)
- The current practice of reporting culls by Member properties, and the subsequent cross check with the number of carcasses collected by the collection service provides a satisfactory measure of deer control.
- The Group meets bi-annually and Group Membership is encouraged to continue its practice of open discussion of cull levels at all meetings.

Targets to be delivered by 2020

Actions	Who?	When?	
Stakeholders consulted on draft plan	DMG Secretary	By end of October 2015	
Final DMP agreed and implemented	DMG Members	By end of 2015	
Final Plan and Minutes of Meetings will published on DMG Website	DMG Secretary	By end of 2015 and ongoing	
Repeat DMG Assessment	DMG Chair and Secretary	By end of 2015 and ongoing	
Working plan reviewed and updated. Management actions will be adjusted and agreed accordingly.	DMG Secretary and DMG Members	Annually	
To review current Membership with regards to participation and inclusion of properties in the North.	DMG Members and Representatives of properties in the North	By end of 2015 and ongoing	
Culls will be reported accurately.	DMG Members	Annually	
Annual recruitment counts will be conducted and a helicopter count conducted when possible	DMG Members	Annually in June/July/August	
To deliver agreed culls to achieve a target density of less than 20 deer per km2 (with a target sex ratio of 1:1.5)	DMG Members	By 2020	

Deer Management Outcome.

Deer are being managed sustainably on South Mull to deliver the public interest locally whilst allowing individual Members to meet their objectives.

Actions for the delivery of designated features into Favourable Condition.

Background

Nationally, there are around 356 designated features (15.8% of total) within the current DMG network where herbivores impacts are contributing to the unfavourable condition of the feature. It is expected that

the MDMG will contribute to the Scottish Government target of achieving 80% of features in Favourable or Unfavourable recovering condition by 2016 by facilitating the reduction of herbivore impacts where this is contributing to the unfavourable condition.

The Mull area is very heavily designated, containing a number of high profile sites of national importance. A total of 10,719 ha has been designated as a Site of Special Scientific Interest (SSSI), 1808 ha is designated as a Special Area of Conservation (SAC) and 28,850 ha as a Special Protection Area. A complete description of all these designated features including the full table is contained in Part 2 of the Plan. Deer management is potentially relevant to many of these (See Table 2 below). This issue is the single biggest natural heritage management consideration within MDMG.

Plan Objectives

The Deer Management Plan (DMP) will incorporate agreed management actions to manage deer impacts to delivering favourable condition on designated sites in the area. The DMG will monitor and review progress.

Current Delivery.

There are 14 designated features (covering an area of 9871.88 ha) where herbivore impacts are considered to be a contributing factor to the site condition (For maps of the designated sites and associated condition see Appendices 2 & 3)

- Of these, currently 4 features are considered to be in 'Favourable Maintained' condition.
- Of the remaining sites in "Unfavourable" condition, 7 features are undertaking management under SRDP schemes to bring them into 'Favourable Recovering' status. This amounts to 3669.17 ha (37%) under "assured management".
- A further scheme is anticipated to be completed in 2015 which would bring a further 4089.42ha into assured management, bringing the total to 79%.
- This leaves just 3 sites, Ardura Auchnacraig SSSI, Lagganulva Wood SSSI and Loch Ba Woodlands SSSI in "Unfavourable Declining" condition representing 21% of the total area of potentially herbivore-impacted features. As these 3 remaining sites are Upland Oak woodland features, consideration will have to be given to the most appropriate management tool to achieving the required reduction in herbivore pressure.
- The helicopter deer count conducted in 2011 showed that since the last deer count in 2007, the
 population density of deer in South Mull fell from 12 deer per km2 to 10.5 deer per km2 with an
 estimated current population of 5907.

Table 2: Designated features with potential herbivore impacts

Name	Area (ha)	Reporting	Feature	Site	Condition	Appropriate	Herbivore
		Category		Visit		Management	Impacts
Ardmeanach			Tall herb	2006	Unfavourable	SRDP	Yes
SAC	374.79	Inland rock	communities		Recovering		
Ardmeanach			Species-rich	2006		SRDP	Yes
SAC			grassland with				
		Calcareous	mat-grass in		Unfavourable		
	374.79	grassland (Upland)	upland areas		Recovering		
Ardmeanach			Vascular plant		Favourable	None	Yes
SSSI	3257.51	Vascular plants	assemblage	2008	Maintained		
Ardmeanach			Subalpine				
SSSI		Calcareous	calcareous		Unfavourable		
	3257.51	grassland (Upland)	grassland	2006	Recovering	SRDP	Yes
Ardmeanach			Montane		Unfavourable		
SSSI	3257.51	Montane habitats	assemblage	2006	Recovering	SRDP	Yes
Ardura -						Woodland plan only	
Auchnacraig						Possible SRDP	
SSSI		Broad-leaved,				application in	
		mixed and yew	Upland oak		Unfavourable	2016/17 funding	
	1783.83	woodland	woodland	2001	Declining	round	Yes
Ben More -		Broad-leaved,				SRDP - (status	
Scarisdale		·	Upland oak		Unfavourable	should change by	
SSSI	4089.42	woodland	woodland	2001	Declining	end of 2015).	Yes
Coladoir Bog					Favourable		
SAC	155.46	Bogs (Upland)	Blanket bog	2013	Maintained	None	Yes
Coladoir Bog					Favourable		
SSSI	155.46	Bogs (Upland)	Blanket Bog	2013	Maintained	None	Yes
Gribun Shore			Subalpine				
and Crags		Calcareous	calcareous		Unfavourable		
SSSI	223.07	grassland (Upland)	grassland	2006	Recovering	SRDP	Yes
Lagganulva		Broad-leaved,					
Wood SSSI		mixed and yew	Upland oak		Unfavourable		
	210.88	woodland	woodland	2012	Declining	None	Yes
Loch Ba		Broad-leaved,					
Woodlands		mixed and yew	Upland oak		Unfavourable		
SSSI	118.58	woodland	woodland	2000	Declining	None	Yes
Mull Oak	1401.89	Broad-leaved,		2011	Unfavourable	Partial SRDP	Yes
woods SAC		mixed and yew	Western acidic		Declining	coverage in 2015.	
		woodland	oak woodland				
		Broad-leaved,					
Sound of Mull		mixed and yew	Upland mixed		Favourable		
Cliffs SSSI	33.13	woodland	ash woodland	2001	Maintained	None	Yes

Actions to manage deer to retain existing native woodland cover and improve woodland condition in the medium to long term.

Background

The Native Woodland Survey of Scotland (NWSS) was published in 2014. This maps non-designated native woodland cover, reports condition and highlights herbivore impacts which threaten medium to long term condition of these important woodlands. Wild Deer- A National Approach (WDNA) has set a national target that 60% of native woodlands should be considered to be in "satisfactory condition" by 2020.

Total area of native woodland in Scotland is 311,153 ha

- b) Area in satisfactory condition (%) 143163 ha (46%)
- c) Area in unsatisfactory condition (%) **167990 ha (54%)**
- d) Additional area needing improvement to reach 60% 43529 ha

Plan Objectives

- DMG Members will implement management to reduce the proportion of native woodland area identified within the 'High' and 'Very High' categories of herbivore impact in order to contribute to targets set by Scottish Government Agencies.
- The DMP will identify all existing woodland and its condition and will consider actions for the next 5 years to ensure that the long term woodland objectives can be met.

Current Delivery.

The NWSS has identified 3223 ha of native woodland across the whole of the Mull. This represents 1% of the total area of native woodland in Scotland. Currently 58% percent of the herbivore impacts from NWSS were considered to fall in the Low to Medium impact category. A map of NWSS Survey Results can be found in Appendix 4.

Table 3: Native Woodland Survey for Scotland Herbivore Impacts on Mull

	Herbivore II	Herbivore Impact Class (ha)						
	Very High	High	Medium	Low				
Native Woodland on Mull (ha)	1,049.42	311.75	1,508.59	353.42				
Percentage of Total (%)	0.33	0.10	0.47	0.11				

There are three properties in the South: Ardura, Argyll Estates and Torosay that between them contribute 35% of impacts regarded as Very High according to the NWSS. In the North of Mull, FCS Aros 1 and 2 and Torloisk contribute a further 28% of Very High Impacts.

However, through various Woodland Grant Schemes (see Map in Appendix 5), a total of 262.14 ha of this Very High or High Impacted woodland has been covered so it would be anticipated that herbivore impacts would have significantly reduced under these schemes. Further monitoring will be required to confirm this however, if this is the case, that would bring the total area falling in the Low to Medium category to 2124.15 ha (66%). A full table showing the extent of woodland establishment and management is contained in Section 2.4.

Table 4: Summary of Woodland Grant Schemes to 2008.

Grant Scheme	NWSS - Very High and High (ha)
SFGS	0.00
WGS1	61.2
WGS2	78.27
WGS 3	183.87
Total	262.14

Targets to be delivered by 2020

Actions	Who?	When?
To identify additional schemes (through SRDP) which will contribute further to the national target.	DMG Members	By 2020
For properties with a WGS/SFGS is in place, provide evidence of woodland condition in the form of an appropriate post-survey scheme (2013 onwards)	DMG Members	By 2020
For older schemes or where no scheme is in place, implement woodland herbivore impacts assessment monitoring protocols and report to DMG.	DMG Members	By 2020

Deer Management Outcome.

The DMG will have put in place a system to monitor impacts on existing native woodland and will agree to implement deer management measures to continue to maintain herbivore impacts within a range suitable to secure good condition.

Actions to demonstrate DMG contribution to the Scottish Government woodland expansion target of 25% woodland cover. Background

Woodland and forest covers over 1.3 million ha in Scotland (around 16% of Scotland). The Scottish Government woodland expansion target of 25% woodland cover will require 10,000 ha of woodland per year to be created. The DMG network area covers some 3,249,442 Ha with significant opportunity to contribute to the delivery of this target through identifying areas for further woodland creation and managing deer impacts to allow for successful establishment of new woodland. Priority should be given

to expansion opportunities where this improves habitat networks. It is expected that DMGs will be proactive in contributing to this target.

Plan Objectives

- Plan will identify all new woodland in last 5 years and beyond (WGS) and any new proposals likely to be adopted during the life of the plan.
- Plan will consider future impact of woodland expansion and timetable for removal/erection of fences and possible expansion/reduction of deer range, where there may be changes in deer densities or movements as a result.
- Given the extent of FCS woodland across Mull, a key element of the plan will be to liaise with FCS. The plan should seek to identify current and longer-term proposals for existing woodland and any new proposals for woodland creation. The plan should identify the current state of deer fencing and possibilities where woodland might be opened up for deer.

Current Delivery.

- Woodland represents almost 19% of the total land area of Mull. This includes both native woodland, commercial and amenity woodland (see Table 6 below) and map of the National Forest Inventory for Mull in Appendix 6.
- The extent of woodland establishment (5078 ha Table 7) represents 31% of the total current woodland area at present and 5.8% of the total land area of Mull.
- Forestry Commission Scotland are active members of the DMG. With FCS managed land accounting for around 11091 ha in total they are responsible for the management of more than half of the Island's woodland.

Targets to be delivered by 2020

Actions	Who?	When?
To identify and scope future woodland proposals and incorporate in the DMP - taking account of potential implications for deer management.	DMG Members	By end 2016

Table 6: Total Area of Woodland Type (National Forest Inventory)

Woodland type	Area (ha)	% of total land area (88170.7 ha)
Assumed woodland	840	0.95%
Broadleaved	2237	2.54%
Conifer	10521	11.93%
Felled	691	0.78%
Ground prep	885	1.00%
Young trees	1214	1.38%
Total	16388	18.59%

Table 7: Summary of Woodland Creation

Grant Scheme	Area of woodland (ha)
WGS1 (1989 - 1992)	142
WGS2 (1993 - 1995)(scheme boundary)	2,235.00
WGS 3 (1996 - 2002) (scheme boundary)	1,152.00
SFGS (2003-2006)	1,690.87
Total	5,077.87

Deer Management Outcome.

DMG will have considered the welfare implications for any new woodland creation on the deer population in terms of removing available open ground associated with the use of fencing. The Group will also have consider opportunities where established woodland could be opened up for deer to utilise.

Actions to monitor and manage deer impacts in the wider countryside.

Background

As a part of the DMG's ongoing commitment to carrying out environmentally responsible deer management in line with the <u>Code on Deer Management</u>, the aim is to implement a programme of herbivore impact assessment across the DMG in order to better inform future deer management.

A map showing the full extent of habitats across the DMG can be found in Appendices. Blanket bog (which covers 11926 ha) and dwarf shrub heath (covering approximately 34580 ha) are two of the habitats that Scottish Natural Heritage have recommended upland deer managers monitor for herbivore grazing and trampling impacts. The DMGs will take responsibility for the monitoring of herbivore impacts on across the deer range and seek to manage these to contribute to wider ecosystem health.

Plan Objectives

Plan will seek to implement a programme of monitoring to assess herbivore impacts and manage those impacts within acceptable ranges (MacDonald et al 1998 1)

Current Delivery.

- DMG has undergone a Habitat Impact Assessment training session but has yet to implement HIA across the DMG.
- Some individual properties have implemented their own HIA Monitoring.

Targets to be delivered by 2020

Actions	Who?	When?
Using revised BPG Guidance set up plots and carry out a baseline habitat impact assessment (HIA) of the current grazing and trampling impacts on blanket bog, dwarf shrub heath and native woodland.	DMG Members using random plots generated by SNH.	As per monitoring schedule in the Working plan (Part 2)
Members with existing habitat monitoring encouraged results to share results with DMG where appropriate	DMG Members	Ongoing
Summary of initial assessment results reported to DMG. Targets and management actions agreed.	DMG Members	Ongoing
Repeat HIA and management actions agreed.	DMG Chair and Secretary	Ongoing as per schedule.

Deer Management Outcome.

DMG will use the information from the baseline HIA results to set habitat targets for blanket bog, dry heath and non-designated woodland. Deer management will be implemented accordingly to deliver these targets and culls set appropriately

Actions to improve Scotland's ability to store carbon by maintaining or improving ecosystem health.

Background

Carbon rich soils and peat land areas provide multiple benefits, e.g. good water quality, biodiversity and climate change mitigation as soil carbon stores and through <u>carbon sequestration</u>. Soils are the main terrestrial store of carbon in Scotland and Peat lands hold most of our carbon store (53%). The depth of peat is important: the deeper the peat soil the more carbon it stores. Undisturbed, active peatlands accumulate about 0.25 tonnes of carbon per hectare per year which is broadly equivalent to around 10% of the amount of carbon accumulated over the duration of a forest crop.

<u>Blanket bog</u> is a type of peat land found in the uplands. Although Blanket bog is a rare habitat globally and is restricted to cool, wet, typically oceanic climates, Scotland holds a significant proportion of the European and world resource. It is one of the most extensive semi-natural habitats in Scotland, covering some 1.8 million hectares, 23 % of our land area. Blanket bog is found throughout the Scottish uplands but is most extensive in the North Highlands and Western and Northern Isles in areas with gentle slopes

and poor drainage. Growing trees is another way to increase the natural carbon reservoir. There is an estimated 50 mega tonnes of carbon locked in Scotland's vegetation, most of it being held in natural woodland and forest plantations. Woodland and forest currently covers over 1.3 million ha in Scotland (around 16% of Scotland).

In partnership with Government agencies, DMGs are expected to contribute to research and implement and deliver actions to deliver optimum habitat condition for carbon capture and storage.

Plan Objectives

The plan will aim to acknowledge all contributions to carbon storage through woodland and peat lands within MDMG and detail actions to address any negative herbivore impacts.

Current Delivery.

- DMG has contributed a total of 5,077.87 ha new woodland creation and an area of 11926 ha of blanket bog has been identified within the DMG Area.
- DMG has undergone Habitat Monitoring Training and Blanket bog is one of the habitats that the DMG will be including in the monitoring programme.
- The actions currently being undertaken by the DMG to retain existing native woodland and encourage woodland expansion have been detailed in Section 2.3 and 2.4
- The DMG has not been asked to contribute to River Basin Management Planning

Table 8: Summary of Blanket Bog and Heather Moor Habitat by Property

Property	blanket bog & peatlands	heather moor	%BB	%DSH
AINTUIM	37.66	43.26	0.32%	0.13%
ARDMEANACH (KILFINICHEN ESTATES)	117.25	842.85	1.01%	2.46%
ARDURA		1,343.53	0.00%	3.92%
ARGYLL ESTATES (MULL)	1,230.88	3,038.65	10.58%	8.87%
AUCHNACRAIG	100.15	206.98	0.86%	0.60%
BEN BUIE	159.00	1,057.35	1.37%	3.09%
BEN MORE LODGE		62.92	0.00%	0.18%
BENMORE ESTATE	382.34	1,895.14	3.29%	5.53%
BURG	115.30	999.31	0.99%	2.92%
CALGARY	217.84	69.05	1.87%	0.20%
CARSAIG	855.45	1,168.76	7.36%	3.41%
CRANNICH FARM	30.41		0.26%	0.00%
CROGGAN	141.90	849.64	1.22%	2.48%
CROGGAN,LAGGAN,GLENBYRE,LOCHBUIE	448.27	941.78	3.85%	2.75%
FCS ACCESS TO ANTIUM FARM	31.42		0.27%	0.00%

			<u>_</u>	
FCS ACCESS TO GLEN GORM		251.15	0.00%	0.73%
FCS ACCESS TO GLENFORSA	75.88	344.33	0.65%	1.00%
FCS AINTUIM ESTATE & ADJUSTMENT	318.87	269.57	2.74%	0.79%
FCS AINTUM	23.85	32.01	0.21%	0.09%
FCS AROS	102.79	53.00	0.88%	0.15%
FCS AROS II	269.23	51.66	2.32%	0.15%
FCS ERRAY (PT)	236.13	254.15	2.03%	0.74%
FCS ERRAY ESTATE	84.10	90.21	0.72%	0.26%
FCS ERRAY MISHNISH ESTATE	8.51		0.07%	0.00%
FCS GLEN GORM	17.81		0.15%	0.00%
FCS GLENARDS ESTATE (PART)	83.53		0.72%	0.00%
FCS GLENFORSA		558.98	0.00%	1.63%
FCS GLENGORM EXCHANGE II	35.53	39.59	0.31%	0.12%
FCS GLENGORM EXCHANGE III	41.30		0.36%	0.00%
FCS GRULINE ESTATE		73.50	0.00%	0.21%
FCS KILLIECHRONAN & TIRORAN EXCAMB	92.44		0.79%	0.00%
FCS KILLIECHRONAN EST (PART)	36.29	342.32	0.31%	1.00%
FCS LETTER MORE	104.23	959.62	0.90%	2.80%
FCS QUINISH ESTATE	41.92	144.49	0.36%	0.42%
FCS ROW GLENGORM	36.93	100.01	0.32%	0.29%
FCS SCALLASTLE/GARMONY EXCHANGE	11.24		0.10%	0.00%
FCS TENGA/CRANNICH EXCHANGE	22.55		0.19%	0.00%
FCS TIRORAN		3.87	0.00%	0.01%
FCS TORRANLOCHAN FARM	27.68		0.24%	0.00%
GLENFORSA	162.94	1,099.65	1.40%	3.21%
GORTEN	159.79		1.37%	0.00%
GRULINE	313.10	1,370.51	2.69%	4.00%
KILFINICHEN ESTATES	272.50	1,410.98	2.34%	4.12%
KILLIECHRONAN	806.62	882.66	6.94%	2.58%
LAGGAN	25.68	2,010.77	0.22%	5.87%
ORMSAIG	42.72	34.25	0.37%	0.10%

PENNYGHAEL	279.24	915.98	2.40%	2.67%
QUINISH	43.27	11.30	0.37%	0.03%
ROSSAL & ARDVERGNISH FARMS	432.76	2,167.65	3.72%	6.33%
SCOOR & BEACH FOREST	20.70	46.38	0.18%	0.14%
SCOOR ESTATE	153.23	719.70	1.32%	2.10%
SUNIPOL FARM	3.42	243.10	0.03%	0.71%
TORLOISK	1,902.91	2,494.99	16.36%	7.28%
TOROSAY	1,356.29	4,463.19	11.66%	13.02%
TRESHNISH	79.89	141.73	0.69%	0.41%
UISKEN CROFT		165.96	0.00%	0.48%
WEST ARDHU	28.77		0.25%	0.00%
Totals	11,629.69	34,266.50	100.00%	100.00%

Targets to be delivered by 2020

Actions	Who?	When?
Using revised BPG Guidance set up plots and carry out a baseline habitat impact assessment (HIA) of the current grazing and trampling impacts on blanket bog and native woodland.	DMG Members using random plots generated by SNH.	Plots to be agreed with SNH during 2015/2016
Summary of initial assessment results reported to DMG. Targets and management actions agreed.	DMG Members	Ongoing
Options for Peat land restoration or management through the Peat land Action Fund promoted to DMG Members	DMG Chair and Secretary	By end 2015
Contribute to River Basin Management Planning as appropriate	DMG Members	As requested.

Deer Management Outcomes

Deer will be managed in such a way as to maintain impacts within acceptable range in woodlands and blanket bog.

Actions to reduce or mitigate the risk of establishment of invasive non-native species

Background

There are no Sika deer within the DMG area, although there have been some suspicious animals reported, and Sika deer are believed to be present on the mainland to the North East. Fallow deer are present in small and controlled numbers within the Mull DMG area. Fallow are seen at Lochbuie House and at Gruline. The numbers of Fallow Deer are controlled by the two estates and there is no significant emigration by this species.

Plan Objectives

- The plan will aim to reduce or mitigate the risk of establishment of invasive non-native species of deer (Sika and Muntjac).
- Plan to detail an agreed policy and actions required by MDMG to monitor.

Current Delivery.

The DMG currently reports on any suspected sightings of Sika.

Targets to be delivered by 2020

Actions	Who?	When?
Muntjac sightings reported to SNH and Sika managed to prevent their establishment on Mull.	DMG Members	Ongoing
In the case of a suspected Sika being shot, a sample of ear tissue will be frozen and sent to Edinburgh University for DNA testing.	DMG Members	Ongoing.
Consider reporting of wider mammalian non-natives such a Pine martens	DMG Members	Ongoing

Deer Management Outcome.

DMG will manage sika deer according to the agreed policy and will ensure that the DMG area remains free from Muntjac.

Actions to protect designated historic and cultural features from being damaged by deer e.g. by trampling.

Background

Certain types of historic or culturally significant features may be impacted positively from deer and deer management activity through for example, grazing to keep sites exposed. Impacts may also be negative however, where deer may cause damage through trampling or by jumping over stone-work for example. DMGs should contribute to conserving and enhancing the cultural and historic landscape e.g. ensure that trampling of sites is avoided particularly in the case of protected designated historic features.

Plan Objectives

Plan to consider deer management actions which contribute or impact on delivery of conserving and enhancing the local cultural and historic landscape.

Current Delivery.

- The DMG is currently unaware of any cultural or historic features that are being impacted on by deer
- Any woodland creation projects are currently required by Forestry Commission Scotland to carry out this assessment

Targets to be delivered by 2020

Actions	Who?	When?
Identify any features on Mull that may be impacted on by deer.	DMG Members	By end of 2015
If features identified, ensure the appropriate management is implemented and report to DMG.	DMG Members	Ongoing

Deer Management Outcome.

Any historically important and culturally significant features identified will be protected from damage by deer.

Actions to contribute to delivering higher standards of competence in deer management.

Background

Members of the Deer Management Group recognise the need for deer to be managed by trained personnel. A Trained Person is an individual who can produce evidence of training to cover the requirements of Regulation (EC) No 852/2004, and Regulation (EC) No 853/2004 as they apply to wild game. An approved qualification such as the updated Deer Stalking Certificate Level 1 or the Certificate in Wild Game Meat Hygiene (large game), is the most robust way in which stalkers can show that they have the appropriate knowledge.

The DMG recognises the importance of delivering higher standards of competence in deer management through:

- promoting and offering opportunities for Members to take up formal training opportunities;
- facilitating continuous professional development activities;
- ensuring Wild Deer Best Practice guidance is adopted in deer management activities throughout the DMG.

Plan Objectives

DMP to ascertain training levels among Group Members and to develop a training policy and programme.

Current Delivery.

• Each reporting unit, and any other individual involved in the culling of deer, has access to an individual with the above qualifications.

Targets to be delivered by 2020

Actions	Who?	When?
DMG will adopt the training policy statement	DMG Members	By end 2015
Ascertain training levels among DMG Members and report on progress on an annual basis.	DMG Secretary and Members	By end 2015 and On-going
Develop and implement a training programme to assist in the provision of training for DMG Members who lack the necessary qualification or for individuals who wish to enhance their skills.	DMG Chair and Secretary	By 2020

Deer Management Outcome.

Deer management throughout the DMG area will be carried out to industry recognised standards that safeguards deer welfare, public safety and food safety. All those who actively manage deer within DMG will be "competent" according to current standard.

Actions to Identify and promote opportunities contributing to public health and wellbeing.

Background

Deer are of great social and cultural value to Scotland. As one of Scotland's top iconic wildlife species they provide a range of benefits, for example through their contribution to tourism and people's enjoyment of the outdoors. Venison is also a healthy meat enjoyed by many. Deer can, however, also lead to health and safety risks e.g. road traffic accidents and deer related disease such a Lymes disease. Actions relating to venison production are included in Section 2.11 and road traffic accident actions are covered in Section 2.12.

Mull is a popular tourist destination, and wildlife tourism in particular is important to the local economy. Deer, as one of Scotland's top iconic species, are an important element of this. In terms of access, there are three popular mountains listed on the Heading for the Scottish Hills website: Ben More, Beinn Talaidh and Dun da Ghaoithe. Historically there have been concerns raised by the local community regarding deer in and around populated areas such as Tobermory and Craignure.

Plan Objectives

The aim of the plan is to:

- Identify and promote opportunities contributing to public health and wellbeing benefits associated with deer and deer management;
- Identify, raise awareness and where possible minimise the local health and safety risks;
- Identify and increase the opportunities for people to enjoy and benefit from deer;
- DMG should raise awareness of road safety issues associated with deer to reduce the risks of road traffic accidents (covered in Section 2.12);
- Co-ordinate action to minimise deer-related human disease risks:
- Promote responsible Access and the following of the Scottish Outdoor Access Code.

Current Delivery.

- Access generally promoted across DMG. The DMG prints and circulates a leaflet with contact details for individual properties to facilitate and encourage responsible access provision.
- Tick awareness already discussed with estates and staff on some estates.
- DMG collectively signed up to principles of Best Practice which provides guidance on safeguarding public safety and food safety.
- Pennyghael Estate processes and markets a limited amount of venison locally.
- Mull Ranger Service attend meetings of the DMG

Targets to be delivered by 2020

Actions	Who?	When?
Update and make access leaflet available on-line and to relevant tourism operators - possibly include health information about tick awareness.	DMG Secretary	By end of 2015 and ongoing
Complete relevant Access information for the Heading For the Scottish Hills initiative	Relevant DMG Members	By end 2015
Raise awareness of threats relating to Chronic Wasting Disease and sign up to CWD Biosecurity Policy (Part3)	DMG Members	By end of 2015 and ongoing
Investigate opportunities for awareness raising/educational events for the local community	DMG Members	Ongoing
Provide opportunities for any concerns from the local community to be addressed	DMG Chair and Secretary	Ongoing

Deer Management Outcome.

Spread of notifiable diseases will be prevented and food safety safeguarded with regards to Venison production. DMG will have implemented a Biosecurity Policy to prevent a possible spread of CWD. DMG will have raised awareness of risks associated with Ticks to Members and wider community through the Communications Policy. The main access and recreational activities will have been identified, access promoted and any access issues reduced. An open access policy will have been implemented by DMG.

Actions to maximise economic benefits associated with deer

Background

Wild deer are considered a resource and can play an important role in promoting and sustaining economic activity, especially in rural areas where they can contribute to businesses, particularly tourism and food production. Optimise economic benefits of Deer Management in Scotland by establishing and quantifying current benefits within DMG areas, determining opportunities for increasing economic benefit, particularly where collaborative opportunities exist, and through seeking and promoting investment opportunities which delivers increased economic benefit. DMGs should seek to broaden economic activity associated with deer management through sport, tourism, and venison production.

Plan Objectives

DMP identifies the economic interests of DMG ownership and identifies opportunities to maximise these including employment, sporting stalking, tourism, venison.

Current Delivery.

- DMG operates a unique system of venison carcass collection to minimise costs associated with upgrading individual larders to comply with current regulations
- All estates are aspiring to qualify for certification under the Scottish Quality Wild Venison scheme.
- Carcasses are collectively marketed of by the Group to secure competitive pricing from game dealers.
- Lochbuie, Ben More and Pennyghael have their own chillers.
- Pennyghael Estate processes and markets a limited amount of venison locally.

Targets to be delivered by 2020

Actions	Who?	When?
Ensure all estates have qualified for SQWV Quality Assurance Scheme	DMG Members	By 2020
Continue to collectively market venison on behalf of the DMG	DMG Chairman and Secretary	Annually
DMG Members to seek opportunities to market venison locally	DMG Members	Ongoing
Ascertain the number of full-time jobs related to deer management.	DMG Secretary	By end 2015

Deer Management Outcome.

Income from venison will be optimised with downstream Island benefit, with the possibility of increased employment.

Actions to minimise the economic costs of deer, and ensure deer management is cost-effective

Background

Wild deer are considered a resource and can play an important role in promoting and sustaining economic activity. However they can also create costs to other land-use objectives and have a negative impact on other economic activities including agriculture and forestry. Deer Vehicle Collisions may also incur an

economic as well as social cost. Although relatively infrequent, these occur predominantly in the North and East of the Island (for Map see Appendix 8)

Plan Objectives

The DMP will seek to minimise the economic cost of deer through identifying issues and implementing management to reduce or mitigate deer impacts where this results in an economic cost. The plan will aim to identify where deer are having an economic cost particularly with regard to forestry and agricultural impacts. Incidents of Deer Vehicle Collisions (DVCs) will be monitored. Opportunities to work collaboratively to reduce these costs will be identified and actioned. A chart showing deer related traffic incidents is at Appendix 8.

Current Delivery.

- FCS is currently a Member of the DMG
- Local Police attendance at DMG meetings to advise on DVCs
- Numbers of DVCs are reported at DMG meetings

Targets to be delivered by 2020

Actions	Who?	When?
Ensure local agricultural/ forestry interests are consulted on DMP and invited to/represented at DMG meetings	DMG Chairman and Secretary	By end of 2015
Set up monitoring and reporting of DVCs through website, DMG meetings and local Police contact.	DMG Secretary	By end of 2015 and ongoing
Implement actions to mitigate against DVCs including localised deer management, use of signage, fencing etc	DMG Members	Ongoing
Report on out of season and night shooting authorisations	DMG Members	Annually

Deer Management Outcome.

Where possible, numbers of deer shot under Authorisation for Out of Season shooting and Night Shooting are minimised. Incidents of DVCs are monitored and deer management actions implemented where required. Incidents of DVCs will not have increased within DMG area and where possible reduced through mitigating actions.

Actions to ensure effective communication on deer management issues.

Background

Effective collaborative deer management requires effective communication on deer management issues both within the DMG and throughout the wider community in order to promote better awareness and education of deer and deer management.

Plan Objectives

To ensure that the DMG is inclusive, open, transparent and that local issues have been addressed. DMP will include a Communications policy to encourage participation and collaboration and to communicate the public benefits being delivered through local deer management activity. DMG Constitution will set out methods for conflict resolution.

Current Delivery.

- DMG has a web site.
- The DMG works in partnership with SNH, FCS, the local Ranger Service and the Local Community.

Targets to be delivered by 2020

Actions	Who?	When?
Stakeholders consulted on draft plan	DMG Secretary	By end of October 2015
Final Plan and Minutes of Meetings will published on DMG Website. Local community invited to attend	DMG Secretary	By end of 2015 and ongoing
DMG Constitution and ADMG Principles of Collaboration (see Part 3 of plan) adopted	DMG Members	By end of 2015
Agree and adopt a DMG Communications Policy	DMG Members	By end of 2015

Deer Management Outcome.

Local community and wider public have greater awareness of the public interest being delivered by deer management in the local area by DMG.

Actions to ensure deer welfare is taken fully into account at individual animal and population level.

Background.

The definition of welfare in relation to wild deer is 'concern for their physical and psychological well-being'. This definition can be applied to both the individual animal and population level. Wild Deer Best Practice Guidance states that with increasing intervention (e.g. fencing, feeding, culling, development) comes increasing responsibility for their welfare.

Ensure deer welfare is taken fully into account at individual animal and population level through effective planning and delivery of deer management activities. DMGs should carry out an assessment of welfare state of deer and promote positive welfare.

Within the DMG there is relatively little supplementary or diversionary feeding specifically for deer in the Group area, although feed blocks and silage laid out for sheep can sometimes be utilized by deer. Only two estates reported regular feeding of deer in winter, although deer will access fodder placed for other livestock on low ground.

Plan Objectives

DMP to detail a welfare policy and set out indicators to collect data on. DMP will promote and safeguard deer welfare through effective planning and the undertaking of training for deer managers and the carrying out of deer management activity to <u>Wild Deer Best Practice Guidance</u> industry standards.

Current Delivery.

 Members currently monitor and report on levels of winter mortality as well as any other significant health issues encountered.

Targets to be delivered by 2020

Actions	Who?	When?
Agree and adopt welfare policy	DMG Members	By 2015
Provide information on welfare indicators annually. Baseline information established in year 1 of DMP and welfare indicators reported on annually.	DMG Members	Ongoing

Any new fencing in DMG area will consider welfare implications in design and extent and the appropriate management undertaken	DMG Members	Ongoing
Monitoring and reporting of significant levels of winter mortality	DMG Members	Ongoing

Deer Management Outcome.

Deer management is conducted to industry standards to ensure that welfare of individual deer culled and of the population is safeguarded. Deer health and welfare is safeguarded through prevention of spread of notifiable diseases and CWD. Any access issues that may affect deer management or deer welfare through disturbance will be identified and mitigated against where possible.

Mull Deer Management Plan Part 3: Group Operation

DMG Objectives and Targets

The purpose of the Mull Deer Management Group is to manage deer on a collective basis, in accordance with Scottish Government strategy (Scotland's Wild Deer: A National Approach, 2008), the Code of Practice on Deer Management (2012), and in a manner that integrates different land-use objectives, recognising that compromises over objectives may be required where conflict occurs

Membership

The DMG was formed in 1957. It is not part of any other association, and operates under its own constitution. Mull enjoys a very strong level of participation from estate members of the group with a good attendance at the biannual meetings. There is a list of estate contacts in the Appendices.

It has a total of 26 reporting estates including essential participation by FCS. Some of these historical estates now form part of a larger estate, but for reporting purposes and where practical, they will remain as separate entities. Further membership comprising local interest from farmers and other interested bodies is considered an asset to the DMG. In the North, there are ten estates of which seven are the main reporting estates.

The Members of the Group are committed to being represented at the Group's two principal meetings and to participating in the related business of the Group.

The MDMG has a broad membership, including all significant private estates and farms, as well as tenant farmers, forestry organisations and a range of individuals who have a vested interest in the management of deer. There is an unwritten aim to include ALL personnel and land owners involved with the management of deer in the DMG.

Meetings

Meetings The Group holds two principal meetings each year in February and October. These meetings are well attended by members and in addition, representatives of Forestry Commission Scotland, SNH, National Trust for Scotland and other interested parties are invited to attend. Agendas are circulated in advance for these meetings and minutes produced soon afterwards, with the minutes circulated to all Members and attendees. The Minutes are also available on the MDMG Website.

 The main business of the February meeting is to undertake a systematic review of the previous season and to review:

- Culls achieved against cull targets set at the previous October meeting
- Deer numbers, based on latest counts and such indirect monitoring as might be carried out by members as well as updates on planned counts for the year.
- Any current problems in the Group area, based upon evidence gathered from monitoring procedures used by individual members.

If necessary, these should be prioritized and a plan of action agreed upon. The main business of the October meeting will be the agreeing of cull targets amongst the membership for the coming winter / spring, taking in to account the results of any recent information that might be relevant. For the duration of this Plan, cull targets for individual landholdings will not be agreed in conjunction with SNH, but will be implemented in the spirit of co-operation that underpins the Group.

The Agenda and minutes of open meetings will be published on the DMG Website

DMG Constitution

The Mull Deer Management Group (MDMG) is constituted as a stand-alone Deer Management Group (DMG), this being adopted on formation in 1957. The Group operates a Membership system, where estates are members and others are encouraged to join. It is proposed to create a wider membership within estates where there are regular participants in deer management. In addition, anybody involved with the management of wild deer within the Group area, will be encouraged to participate in the execution of this Deer Management Plan. The membership fee is currently fixed at £100 per estate per year. The Group aims to be efficient and effective, while having a relatively informal character and seeking to operate on a consensus basis. Significant changes to its operation and associated arrangements will require the support of a majority of the Mull Deer Management Group.

Long Term Vision and Strategic Objectives

The sport of deer stalking of both stags and hinds is a valuable island asset. It provides employment, business for hotels and B and Bs, increased revenue for local shops, and the opportunity to market venison though co-operation with the abattoir. It also accounts for the greatest number of deer culled annually on the Island, which is essential in the overall management of deer in the Group Area. Although the island deer population is considered as a whole, deer populations are managed locally so that their management is fully integrated with all local land uses and land use objectives. The management of local deer populations will ensure high standards of deer welfare and public safety, and play a constructive role in the long term stewardship of local habitats. Local deer management will continue to deliver and further develop its positive contributions to the rural economy. Involvement with deer management and wildlife management more generally within the Group will be seen as an attractive and worthwhile occupation associated with high standards of skills and employment practice.

- To safeguard and promote deer welfare within the MDMG area
- To achieve an appropriate balance between deer and their habitat, and between deer and other land uses, so that they are rarely causing unacceptable damage to agricultural, forestry, other sporting or natural heritage interests. It should also monitor these relationships and amend priorities in the light of new evidence.
- Within the constraint of (2), to fulfil the annual sporting and venison production objectives of individual Members. This currently represents a value of at least £250,000 to the DMG.
- To market such activity and produce to best advantage.
- Without prejudice to (3), to maintain the overall size of the herd over the period of this plan, while improving the ration of hinds to stags to nearer 1.5:1 during the period 2015-20, to maintain numbers in line with actual sporting aspirations, and to facilitate an overall grazing regime. It is anticipated that the target March, post cull and post winter mortality (March) population will then be some 2,700 stags, 5,800 hinds excluding calves. Numbers will be maintained near this level, subject to ongoing reviews of group objectives and regular condition monitoring.
- To facilitate the implementation of any other deer-related management agreements within the group area, and to provide a mechanism for dealing with any disputes.
- Where appropriate, to provide site specific management advice or information.
- To provide a forum for the discussion of related interests which might be in conflict with ongoing deer management.
- To report on changes in sheep numbers across the DMG area annually.
- To ensure full participation from throughout the area in the deer management group.

ADMG Principles of Collaboration

Dispute Resolution within the Mull DMG All Group members are encouraged to deal with disputes in the first instance with those parties concerned, be they other Group members, external parties or Government Agencies. Failing that, the Chairman of the Group will seek to facilitate an agreement. This may involve the opportunity to air relevant issues at a meeting of the Group. A request to do this should be made in writing at least two weeks prior to any such meeting. Representatives from ADMG are available to assist with disputes, should it prove impossible to resolve issues within the Group. Should this arise, The Group accepts that the findings of ADMG will be implemented.

Communications Policy

Members of the Deer Management Group will promote and encourage effective communication on deer management issues both within the DMG and throughout the wider community in order to promote better awareness and education of deer and deer management through the following actions:

- Deer management planning will be open, inclusive and seek local consultation
- DMG web-site will be regularly updated to include the Deer Management Plan, Minutes and Agendas for meetings as well as any other relevant information which seeks to promote openness and transparency
- The DMG will ensure that contact details are available for anyone seeking information or wishing to raise concerns.
- DMG members will actively promote deer management to raise awareness
- DMG will seek opportunities to promote deer management through training, educational or awareness raising events

Culling Operations

To maintain or reduce the deer population means that individual culling decisions become proportionately more important, including the accurate reporting of culls. The current practice of reporting culls by member estates, and the subsequent cross check with the number of carcasses collected by the collection service provides a thoroughly satisfactory measure of deer control. In addition, the bi-annual meetings of the group membership is encouraged to continue its practise of open discussion of cull levels at all meetings.

- All MDMG members agree to make sufficient resources available to carry out the culling
 programme outlined in this plan, and to make arrangements with immediate neighbours to
 assist in a culling programme where time or weather have precluded the target cull in being
 achieved.
- If extra resources are required for any reason, then further resources should be sought from other MDMG members.
- The culling of all deer is accurately reported at both meetings of the DMG. However, in the interest of welfare and the wider monitoring of the Island herd, estates are encouraged to report the details of all deer culled using the record form at the Appendix. These are to be made available for the Group Meetings as required.

Data and Evidence Gathering: Cull Information

For the purposes of the Plan, although each estate is treated as a separate reporting unit, the island population will be considered as a whole. Within a single estate, there may be different "beats" or subestates that have in the past reported separately. This delineation is arbitrary and follows estate boundaries, as in fact many estates share their stag population between up to three or four neighbouring estates. Although there will be a certain amount of stag movement between these areas, it is considered that these contain reasonably discreet hind populations, and the consensus within the group suggests

that this is a suitable working model for deer management planning purposes. Historically, there have been variations in the recording of deer numbers over neighbouring estates, particularly on the Ross of Mull. It is for this reason that the island population will be considered as a whole with all estates contributing proportionately to the culling of deer.

Data & Evidence Gathering: Habitat Monitoring Protocols

Background

A key element of a demonstrably effective and environmentally responsible management plan is that it should highlight habitats relevant to deer management, set out clear objectives for those habitats, carry out monitoring and detail the actions and reporting to be implemented to achieve the targets set.

The environmental objectives will be linked to Scottish Government policy but the DMG will be expected to manage localised deer impacts to deliver and sustain good condition of a range of designated and non-designated habitats.

Habitat Objectives for the DMG

Within the Mull DMG area, there are three main environmental objectives.

- To deliver favourable or recovering condition on designated sites;
- To manage existing and new native woodland and to improve woodland condition where this is being impacted by deer;
- To manage impacts in the wider non-designated area such as peat land which along with woodland contributes to Scotland's ability to store carbon, and habitats which support a range of species. In particular the DMG will focus monitoring on dwarf shrub heath and blanket bog habitats

In addition to the adherence to the cull plan as set out in this document, it is essential that estates: Undertake habitat assessment, particularly in those areas where there are designated sites, or competition from other herbivores. In 2012, nine estates took part in a habitat assessment day organised by SNH. It is hoped that further days can be arranged. In any event, estates are encouraged to assess their habitats for over-grazing and report annually to the DMG.

Habitat Assessment will be conducted so as to:

- Design, collect and interpret habitat data to inform deer management
- Set up a baseline to allow changes in impacts to be measured over time
- Understand the methods used by government agencies.

A further aim must be to map habitat types across estates, particularly with a view to establishing areas of high carbon-sensitive habitats across the DMG range. Estates should establish areas within their boundaries where there is scope for habitat improvement particularly in relation to peat land improvement work.

Wild Deer Best Practice Guidance & Monitoring data sheets

These guides describe the methods used by SNH to monitor deer impacts. These methods are also a key part of how other agencies monitor deer impacts. Copies of the Guides and Habitat Monitoring Forms for Blanket Bog and Dwarf Shrub Heath are attached at the Appendices.

Random Plot Generation

SNH has assessed areas to be monitored for each DMG. A series of random plots has been generated for the DMG to enable individual properties to set up and undertake monitoring which will be representative of significant habitats within the Group area.

Timescales

Under the initial guidance of SNH, suitable sites will be selected and a monitoring schedule for each habitat agreed. The schedule is detailed in the Working Plan (Part 4). Each property will then be responsible for reporting on the condition of their particular habitat using the correct procedure as shown in the Appendices.

DMG Policies and Principles

Principles of Collaboration

As member of this DMG, we:-

- Acknowledge what we have in common namely a shared commitment to a sustainable and economically viable Scottish countryside;
- Make a commitment to work together to achieve that;
- Accept that we have a diversity of management objectives and that we respect each other's objectives;
- Undertake to communicate openly with all relevant parties;
- Commit to negotiate and where necessary compromise in order to accommodate the reasonable land management requirements of our neighbours;
- Undertake that where there are areas of disagreement, we will work to resolve these.

Culling Policy

It is not possible to draw up a single policy for all estates. Culling policy currently varies from estate to estate, and there are different factors which govern this, some of which do not necessarily promote the formation of a balanced herd in terms of stag and hind numbers. Despite other commercial pressures, estates are encouraged to work with their neighbouring estates in establishing a target ratio of 1: 1.5 stags to hinds.

The Ross of Mull and parts of Lochbuie estate, quite clearly share their stag population with neighbouring estates. While the Deer Management Plan will suggest a cull number of both sexes, it is vital for groups of estates that share their deer population to work closely and cooperate in managing stag/hind ratios.

The Plan will address the overall Island cull as a whole, as it is the only rational manner of addressing the geographical diversities that exist on the Island. A further complexity arises through the culling of deer across the island by non-estate owners, for instance to reduce predation by deer on low ground.

While most of these occurrences are reported, it is recognised that in reality, more deer are culled than are reported. This has been factored into the Island cull policy.

In some cases, the deer management model has shown that a current culling policy of some estates will result in a widening stag/hind ratio with the net result of stag migration. Care must be taken therefore in balancing the proportion of the herd to be culled, despite other economic pressures.

Mull Deer Management Plan Part 4: Working Plan

Appendices: DMP 2015 - 2020: 50 of 70

INTRODUCTION

Aim

The aim of this section of the plan is to produce a dynamic, working document which sets out clearly the actions of the DMG and of Individual group members.

This Working Plan will require information to be provided by members on an annual basis (as per the Return Sheet in the Appendices).

Group Objectives and Targets

The purpose of the Mull Deer Management Group is to manage deer on a collective basis, in accordance with Scottish Government strategy (Scotland's Wild Deer: A National Approach, 2015), the <u>Code of Practice on Deer Management</u> (2012), and in a manner that integrates different land-use objectives, recognising that compromises over objectives may be required where conflict occurs.

Specifically the Working Plan will seek to:

- Identify DMP targets and actions related to the Public Interest
- Identify actions relating to Group Function
- Deer population model & cull targets
- Set out a monitoring and Review Schedule

PLAN TARGETS AND ACTIONS: PUBLIC INTEREST AND GROUP FUNCTION

Actions	Who?	When?
Deer numbers managed to maintain "Favourable Condition" status and according to any management targets agreed in SRDP agreements.	DMG Members	On-going
Properties with "Unfavourable Declining" features to work with SNH to implement "appropriate management"	DMG Members	By 2020
Overall density of deer to be maintained with an overall reduction in hind numbers to achieve a target density of less than 20 deer per m sq.	DMG Members	By 2020
In areas where Designated Sites are believed to be under threat, to foster cooperation between neighbouring estates to manage deer numbers as appropriate.	DMG Members	Ongoing

Deer Management Outcome.

All herbivore-impacted features will be have appropriate management in place to bring them into "Favourable Condition"

Appendices: DMP 2015 - 2020: 51 of 70

POPULATION MODEL AND CULL TARGETS

The following model is a projection of current deer number. The main objective of this management regime is to produce a more streamlined deer herd that is capable of supporting a sporting stag cull of at least 550 sporting stags, while redressing the current imbalance between stags and hinds across the Group area. This Plan will also be in keeping with the main natural heritage and woodland and protection objectives within the area.

The overall aim is to maintain the population, whilst redressing the imbalance of stags to hinds. The aim is to have a 1:1.5 ratio of stags to hinds.

- The following assumptions are used in formulating the population model and resulting cull numbers:
- Target densities should be should be less than 16 deer per km².

Appendices: DMP 2015 - 2020: 52 of 70

The population model assumes a recruitment rate of 30% with additional mortality as reported.

	Whole Island				
		Stags	Hinds	Calves	Densit
2015	Nov 11 Actual Population	2579	5128	1700	10.6
	Summer population	3429	5978	1793	12.7
	Cull	600	727	218	
	Mortality	69	120	108	
2016	Spring Population	2760	5131	1468	10.6
	Summer Population	3494	5865	1760	12.6
	Cull	600	780	200	
	Mortality	70	117	106	
2017	Spring Population	2824	4968	1454	10.5
	Summer Population	3551	5695	1709	12.4
	Actual Cull	600	750	200	
	Mortality	71	114	103	
2018	Spring Population	2808	4585	2110	10.3
	Summer Population	3863	5641	1660	12.2
	Proposed Cull	500	650	200	
	Mortality	72	111	100	
2019	Spring Population	2706	4583	2110	10.1
	Summer Population	3757	5634	1606	11.9
	Proposed Cull	600	750	200	
	Mortality	72	107	96	
2020	Spring Population	2920	4497	1310	9.9
	Summer Population	3575	5152	1545	11.6

Priority Management Considerations

Based on the aims and objectives of the DMG and the actions identified to meet these, it is considered that the following criteria are the priority considerations for the Mull Deer Management Group in setting annual cull targets:

- To ensure the integration of deer management with other agricultural, sporting and amenity interests with due regard to the protection of Designated Sites.
- To reduce the overall group red deer hind population to, redress the imbalance of hinds to stags.
- To retain an ongoing sporting return of approximately £250,000 from stag and hind stalking and venison sales, and to seek the best market for venison.

MONITORING AND REVIEW SCHEDULE

Actions	Who?	2015	2016	2017	2018	2019	2020	2020
			Foot/Heli?					
Deer Count	DMG		Count					
Recruitment			Spring &	Spring &	Spring &	Spring &	Spring	Spring
Count	Stalkers		Summer	Summer	Summer	Summer	Summer	Summer
Habitat								
Monitoring	DMG							
Blanket Bog	Members							
Habitat								
Monitoring								
Dwarf Shrub	DMG							
Heath	Members							
Habitat								
Monitoring								
Native	DMG							
Woodland	Members							
Review Habitat								
Results	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Set & Agree	DMG							
Culls	Members	Spring	Spring	Spring	Spring	Spring	Spring	Spring
Collate DMG								
Information &								
Review Working							Review	Review
Plan Actions	All	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	DMP	DMP

Mull Deer Management Plan Appendices

Appendices: DMP 2015 - 2020: 55 of 70

Group Estate Contacts

Ardura Estate Contact Details:

David Hooker 12, Lindsay Square London SW1V 3SB dsh@arduraestate.com

Ardmeanch Estate Contact Details:

Andrew Holman 22, Billiter Street London EC3M 2RY amh@holmans.co.uk

<u>Ardnacross</u>

Rory Forester Ardnacross Farm Aros Isle of Mull PA72 6JS

Burg Contact Details:

Andrew Holman 22, Billiter Street London EC3M 2RY

amh@holmans.co.uk

Kilfinichen Estate Contact Details:

Andrew Holman 22, Billiter Street London EC3M 2RY amh@holmans.co.uk

Argyll Estates Contact Details:

Andrew Montgomery Estate Office Inverary Castle Argyll

am@inverarycastle.co.uk

Callum Entwistle callume@btinternet.com

Auchnacraig Contact Details:

Richard de Klee 28a, Alva Street Edinburgh EH2 6PY rdk@deklee.com

Ben More Estate Contact Details:

Tim Radford Heydour House Heydour Lincolnshire NG32 3NG timradford@hotmail.com

Ben Buie

Contact Details:
Jim Corbett

Jim Corbett Lochbuie Isle of Mull PA62 6AA

jim@lochbuie.com

Carsaig

Contact Details:

Mark Horton Studham Hall Dunstable LU6 2NP

mark.horton@slaughterand may.com

<u>Glenaros</u>

Contact Details:

Colum Scott
Glenaros House
Aros
Isle of Mull
PA72 6JP
colum@btinternet.co.uk

<u>Glenforsa</u>

Contact Details:

Tim Radford Heydour House Hetdour Lincolnshire NG32 3NG

timradford@hotmail.com

Donald Bisset dbisset@hotmail.co.uk

Glengorm

Contact Details:

Tom Nelson Glegorm Castle Glengorm Isle of Mull PA75 6QE

tom@glengormcastle.co.uk

Glenbyre Contact Details:

Jim Corbett Lochbuie Isle of Mull PA62 6AA

jim@lochbuie.com

Gruline

Contact Details:

James Harmer Gruline Salen Isle of Mull PA71 6HS

harmer.lochba@btinternet.c om

Kinlochspelve Contact Details:

Jim Corbett Lochbuie Isle of Mull PA62 6AA

jim@lochbuie.com

<u>Laggan</u>

Contact Details:

Jim Corbett Lochbuie Isle of Mull PA62 6AA

jim@lochbuie.com

<u>Ormsaig</u>

Contact Details:

Jasper Heusdens Mepplerweg 2 8331 CW Steenwijk Netherlands

heusdens@yahoo.com

Pennyghael Estate

Contact Details:

Graham Sinclair Pennyghael Estate Isle of Mull PA70 6HD info@pennyghaelestate.co.uk

Rossal and Ardvergnish

Contact Details:

Timothy Laing Baldarroch Murthly Perth PH1 4EZ

tjal@baldarroch.co.uk

Beach Forest Limited

Contact Details:

Callum Entwistle Scoor Farm Bunessan Isle of Mull

callume@btinternet.com

Scoor

Contact Details:

David Johnson

Torosay

Contact Details:

Tim Radford Heydour House Heydour Lincolnshire NG32 3NG

timradford@hotmail.com

Torloisk

Contact Details:

Bill Bewsher Sruan Calgary Isle of Mull PA75

Hf.bewsher@sky.com

<u>Ulva</u>

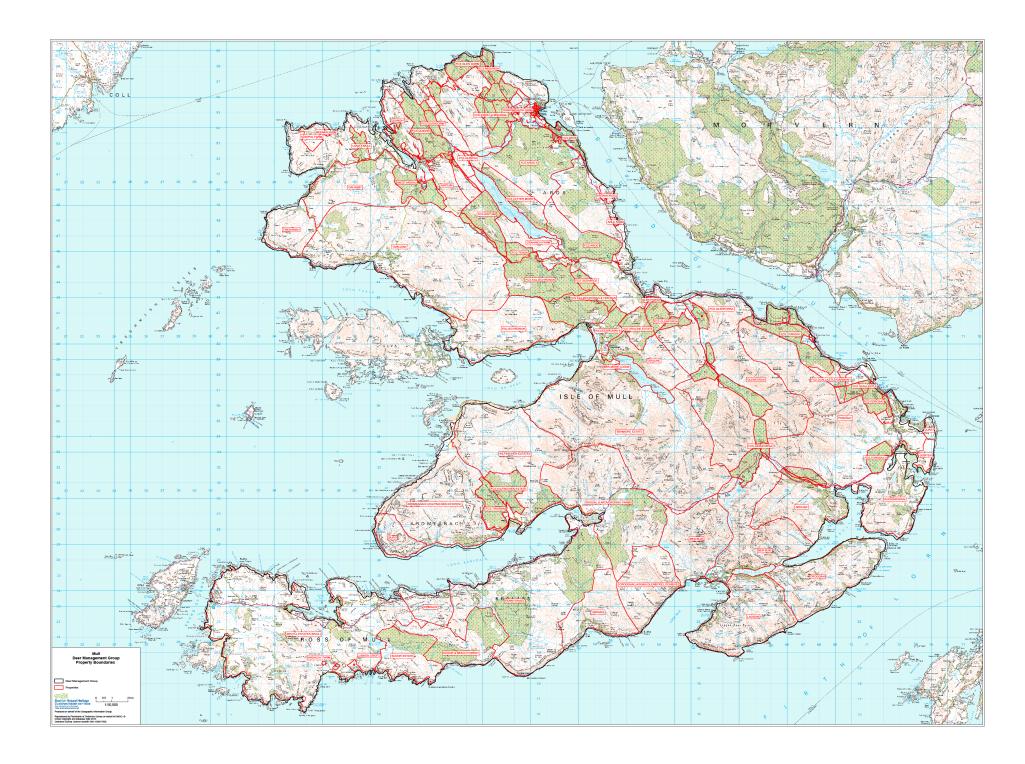
Contact Details:

John Addy

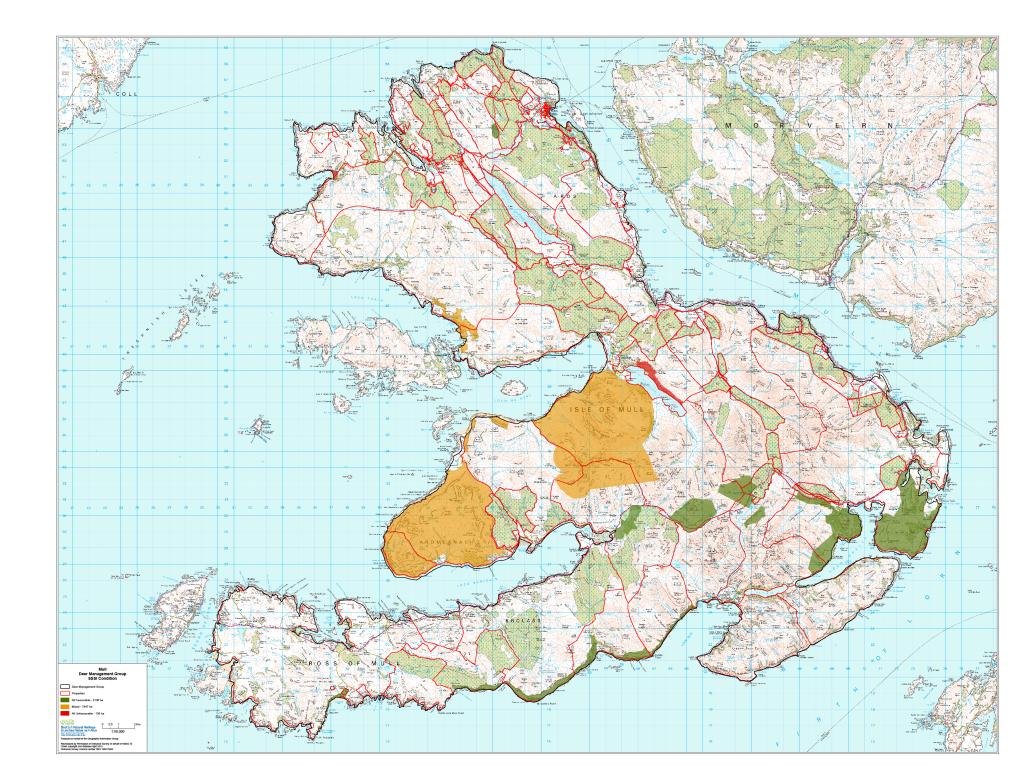
DEER LARDER RECORD

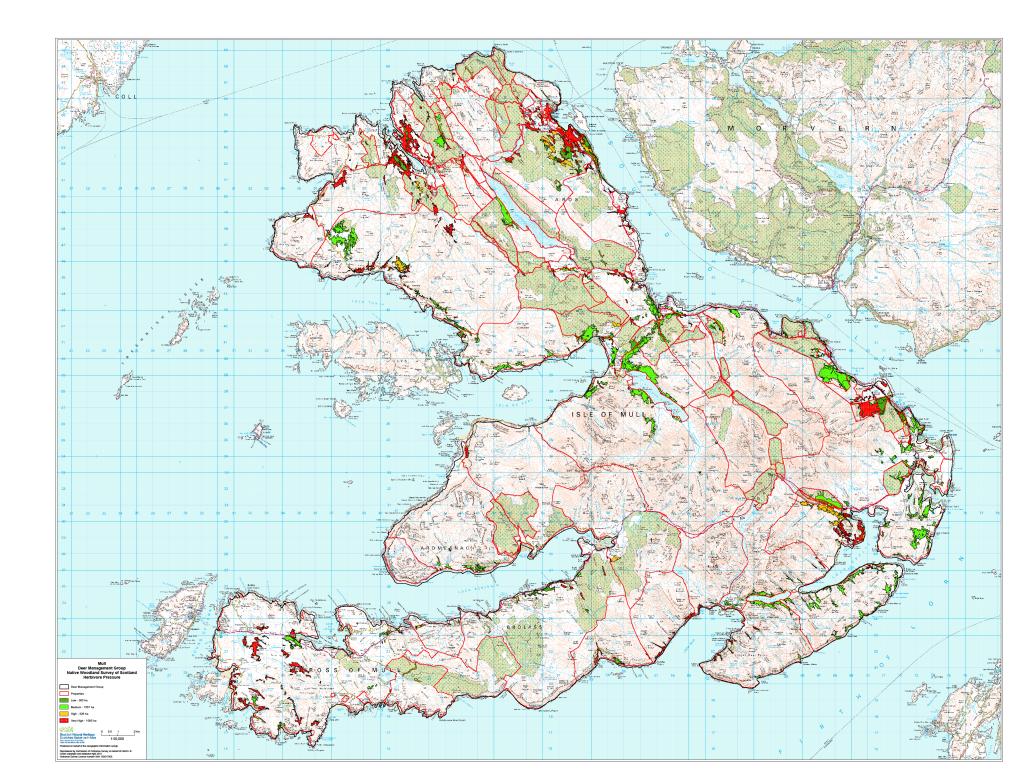
ESSENTIAL DATA				
Record Number				
Tag/declaration no.				
Date Shot (DD/MM/YY)				
Species				
Sex (M/F)				
Location Shot (grid ref / other)				
Time culled (to nearest hour)				
Abnormalities in carcass	*			
Abnormailities in condition & behaviour before shot				
Carcass contamination				
Declaration signed by				
Butcher weight (Kg)				
MANAGEMENT DATA (optional)				
Gralloched by				
Age (Code or number) Jaw retained?				
Reproductive status Embyo (Y / N / number) Corpus lutea (Y / N / number) Milk? (Y/N)				
Hill Weight (Kgs)				
VENISON DATA (optional)				
Kidney fat cover (percentage)				
Shot placement code Bullet Entry Bullet Exit				
Time into chiller/ larder (to nearest hour)				
Air temp of chiller/larder (°C)				
Estate/ site:	Recorders:	Date	s:	Year:

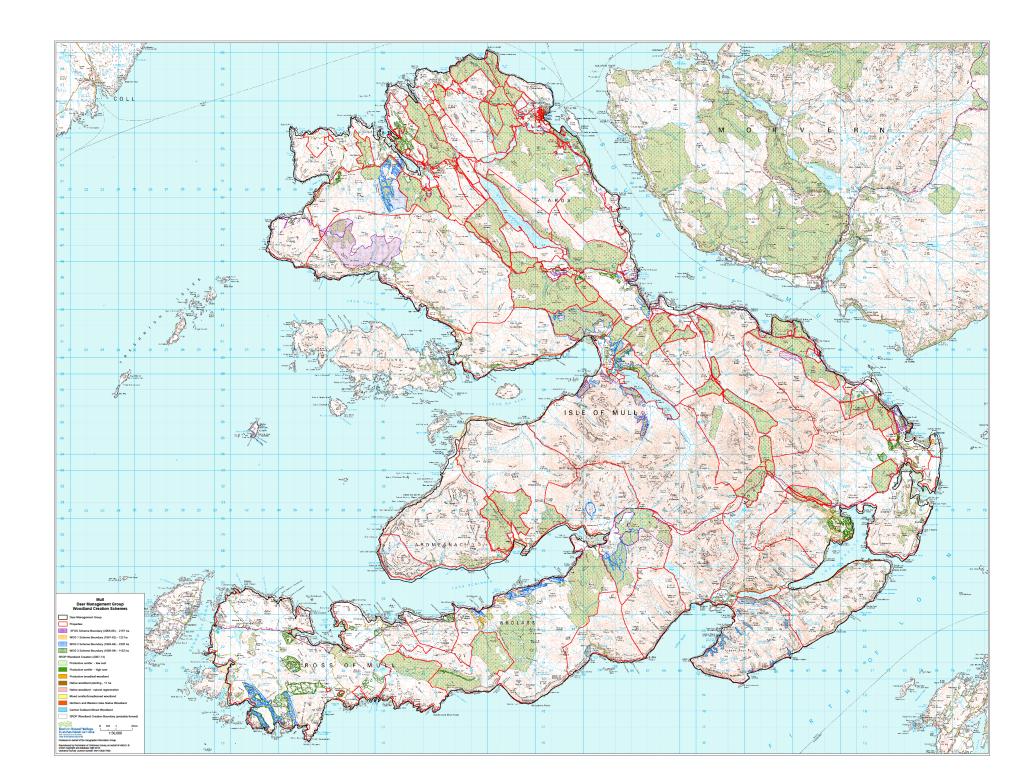
Appendices: DMP 2015 - 2020: 58 of 70

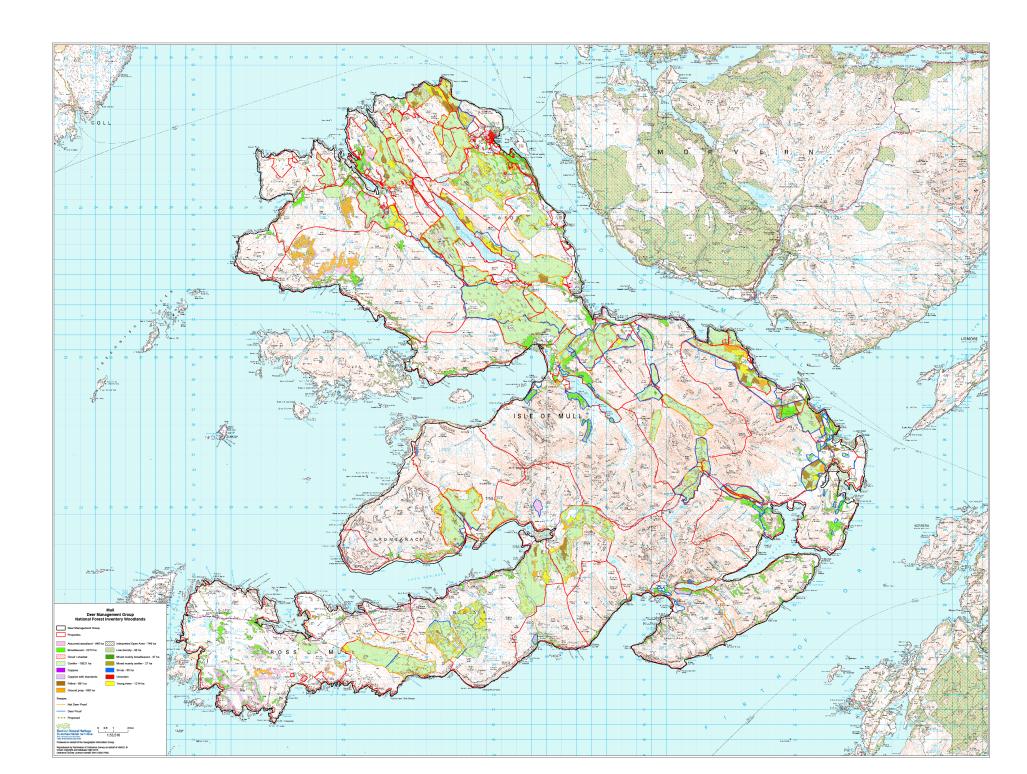


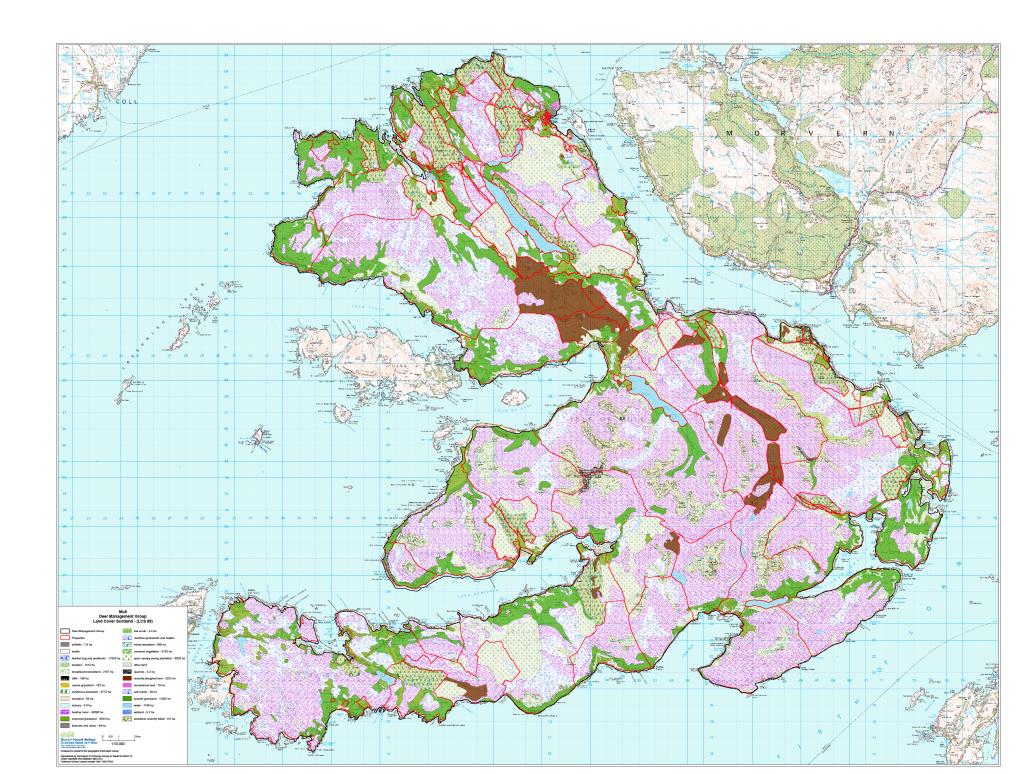












Reported locations of deer road casualties or related traffic collisions (DVCs) logged in SNH DVC database from 2002-2013. Incidents from 2002 to 2007 (yellow symbols) and overlaid by incidents from 2008 to 2013 (red symbols). Morvern



(for breakdown by year and roads with most reported incidents see overleaf)

This page is intentionally blank

Appendices: DMP 2015 - 2020: 67 of 70

BLANKET BOG DATA SHEET

Estate/ site: Recorders:		Dates: Year:				
Plot number:	Digital photo numbers:	GPS: Grid re	ef:			
			1 5 9 13	2 3 4 6 7 8 10 11 12 14 15 16		
adrat % last y browse	rears heather shoots d	Bare ground with hoof prints present?	Bog Moss present?	Vegetation height (cm)		
1 <33	33 - 66 >66	Yes No	Yes No			
2		Yes No	Yes No			
3		Yes No	Yes No			
4 <33	33 - 66 >66	Yes No	Yes No			
5		Yes No	Yes No			
6		Yes No	Yes No			
7		Yes No	Yes No			
8		Yes No	Yes No			
9		Yes No	Yes No			
10 <33	33 - 66 >66	Yes No	Yes No			
11		Yes No	Yes No			
12		Yes No	Yes No			
13 <33	33 - 66 >66	Yes No	Yes No			
14		Yes No	Yes No			
15		Yes No	Yes No			
16 <33	33 - 66 >66	Yes No	Yes No			
			Average hei	ght:		
Deer dung pre		Comm	ents:			

Appendices: DMP 2015 - 2020: 68 of 70

DWARF SHRUB HEATH DATA SHEET

Estate/ site: Recorders:		Dates: Year:
		Tour.
Plot number:	Digital photo numbers:	GPS: Grid ref:
8		1 2 3 4 5 6 7 8 9 10 11 12
Quadrat	% last years heather shoots	13 11
Quadrac	browsed	Heather present? Vegetation height (cm)
	<33 33 - 66 >66	Yes No
2		Yes No
3		Yes No No
	<33 33 - 66 >66	Yes No
5		Yes No
6		Yes No
7		Yes No
8		Yes No
9		Yes No
10	<33 33 - 66 >66	Yes No
11		Yes No
12		Yes No
13	<33 33 - 66 >66	Yes No
14		Yes No
15		Yes No
16	<33 33 - 66 >66	Yes No
eather stem	breakage:	Average height:
Light/mo		
eer dung pre		Comments:

Appendices: DMP 2015 - 2020: 69 of 70

Annual Return

MULL DEEF	R MANAGE	MENT GROUP ANN	IUAL RETUF	RN	
YEAR					
Estate, Farm or Organisation					
LState, Farm of Organisation			L		
DMG Members					
			_		
QUALIFIED PERSONEL (eg DMQ)			QUALIFICAT	ION	
QUALITIED FERSONEE (eg DINQ)			QUALII ICAT	ION	
HABITAT ASSESSMENT					
TRAINING		DATE			
LAST ASSESSMENT (attach data)		DATE			
00/4// 0 -4/5 1 7/50/10		1			
SQWV Certified YES/NO					
COUNTS			Stags	Hinds	Calves
LAST HELICOPTER COUNT	DATE		Stags	HIIIUS	Caives
LAST FOOT COUNT	DATE				
RECRUITMENT COUNT	DATE		Percentage		
WINTER MORTALITY COUNT	DATE		Percentage		
SHEEP					
NUMBER ON OPEN HILL					
ROAD TRAFFIC ACCIDENTS					
NUMBER					
CHIL DATA	IN UNIDED	A. (EDA OE) A (E) O: T	LIEAN (IECT		
CULL DATA	NUMBER	AVERAGE WEIGHT	HEAVIEST		
STAGS HINDS					
STAG CALVES					
HIND CALVES					
HIND CALVES					

COMMENTS

FORM COMPLETED BY: