



## Appendix V

### Deer Management Plan (DMP)

### Morvern (Lochaline N & S, and Barr) LMP

#### Background

This DMP outlines the deer management issues and priorities in the National Forest Estate holdings in Morvern, which are managed by Forestry and Land Scotland, and presents the objectives and key targets for the next 10 years. The DMP is a supporting document for the Morvern Land Management Plan (LMP) and should be used in conjunction with the FLS Deer Management Strategy.

The LMP area (covered by this DMP) extends over 5,883 ha and lies at the north-western end of the Morvern peninsula. The forest stretches from the shoreline to 410 m above sea level and comprises three adjacent forestry blocks - Barr, Lochaline North & Lochaline South. Barr, which is the most northerly forest, contains significant areas of Plantation on Ancient Woodland Sites (PAWS) and lies adjacent to extensive areas of Atlantic Oakwood that lie out with the LMP area along Loch Sunart, many of which are former areas of intensely worked Oak coppice. Lochaline North forest lies on the south-eastern side of the LMP area and is characterised by high ground, a sweeping line of steep cliffs and sheltered corries. Lochaline South is the largest forest block within the LMP and comprises extensive areas of productive Sitka spruce, with limited areas of mature native broadleaves and PAWS. Lochaline village lies along its southern / south eastern boundary.

Significant areas of additional felling have been required, particularly in Lochaline South, in response to Statutory Plant Health Notices (SPHN) for *Phytophthora ramorum* infection on larch. This has disrupted the planned harvesting schedule and has influenced the selection of felling coupes in the LMP revision. The resulting extensive areas of restock will be vulnerable to browsing pressure. *Dothistroma* is present in Lochaline South and high numbers of weevil are found in places, contributing to pressures on young establishing trees.

In line with the Scottish Government's consultation on Scotland's Strategic Framework for Biodiversity "Tackling the Nature Emergency" FLS recognises that reducing herbivore impacts is one of the most effective ways to reduce biodiversity loss and enable regeneration at scale. This is relevant to this LMP area where native broadleaf restoration is being carried out in riparian areas and in PAWS areas of high ecological potential at Barr, which will also protect designated ASNW on neighbouring land.

## National & Local objectives

Contributing to [Scottish Forestry - Forestry Strategy](#) (also includes Climate Change)

Adaptation and resilience are strategic drivers for delivery of Scotland's Forestry Strategy (2019 – 2029) objectives. Deer and other herbivores are an identified threat to woodland establishment and management, which in turn impacts forest resilience to pests, diseases and other pressures and the ability to adapt to a changing climate and environment. Priorities for action include the need to mitigate the risks posed by deer and other herbivores.

Deer will be managed to help ensure Scotland has a healthy, diverse ecosystem, contributing to our climate change objectives, whilst also contributing to our national and local economy in line with Scottish Government objectives and public interest.

- Lower deer densities to 2-7 per km<sup>2</sup> to ensure the above objectives can be met sustainably.
- Ensure all designated sites are in favourable condition
- Achieve less than 10% leader browsing damage on all first year restock coupes.
- Ensure Stocking Density Assessment at year 5 achieves productive forest objectives of 2500 per hectare.
- Ensure all designated sites are in favorable condition meaning that the features for which SSSIs or Natura sites are designated are in satisfactory condition; or are recovering, with the necessary management measures in place, such that Naturescot (SNH) predicts, using expert judgement, that the land will in due course reach favourable condition.

Deer Management Strategy [Deer management strategy - Forestry and Land Scotland](#)

Deer will be managed to help ensure Scotland has a healthy, diverse ecosystem, contributing to our climate change objectives, whilst also contributing to our national and local economy in line with Scottish Government objectives and public interest.

Management of the deer population will be done in a professional, humane and cost-effective way, ensuring the physical wellbeing of the remaining deer populations within the forest boundaries. Venison income will be optimised and opportunities to create revenue from recreational deer management permissions (RDMP) will be taken, but without compromising the over-riding issue of minimising negative impacts by grazing herbivores.

FLS will work with relevant organisations, NatureScot and neighbours in managing the deer populations, recognizing the objectives of all parties. Preventative management will be undertaken, regarding the spread of non-native deer species into new areas. Compliance with legislation, certification and quality assurance schemes will add value to both the forest estate and venison products that come from it.

Scottish Biodiversity Strategy [Biodiversity strategy: consultation - gov.scot \(www.gov.scot\)](#)

The proposed outcome for Scotland's Rural Environment – Farmland, Woodlands and Forestry, Soils and Uplands by 2045 is to have: A range of nature recovery activity that enables a sustainable natural regeneration of woodlands; greater diversity of woodland species and age structure, increased woodland cover and woodland connectivity; soils as a nature-based solution for issues contributing to restoration of degraded ecosystems; deer range management contribute to high standards of sustainable land use in upland areas that supports regenerating habitat and wildlife interests.

FLS Corporate Plan 2022 – 2025: [Corporate Plan 2022-2025 | Forestry and Land Scotland](#)

Outcome 2 of the FLS Corporate Plan 2022 – 2025: Looking after Scotland's national forests and land is most relevant to this Deer Management Plan and specifically:

- Tackling the twin crises of climate change and biodiversity loss
  - Helping the Scottish Government to meet forest and woodland management and creation targets
  - Increasing our contribution to the Peatland Action programme
  - Managing the national forests and land to further the conservation and enhancement of biodiversity
  - Working beyond designated sites at the landscape scale with partners where we can – for example in Scotland's rainforests
  - Increasing ancient woodland restoration
- Protecting our forests and land from other threats
  - Implementing a programme to improve the resilience of the national forests and land to the impacts of climate change and tree health threats
  - Continuing to implement the FLS Deer Management strategy while working in partnership with others to support the Scottish Government's response to the Independent Panel's recommendations on deer management in Scotland
- Working at the landscape scale and in partnership, to make a bigger difference
- Collaborating with partners on integrated landscape scale approaches to habitat management and restoration, using our capabilities to complement and support the work of others.

## Local Objectives:

The main objective of deer management within the West Region is to manage deer populations at a level that is compatible with FLS environment and other management objectives. The aim is to:

- prevent unacceptable damage to commercial tree crops;
- protect young establishing planted and naturally regenerating conifer and broadleaved trees;
- maintain or enhance biodiversity in key areas, including ancient woodland restoration;
- protect all designated sites;
- work beyond designated sites at the landscape scale with partners where we can – for example in Scotland's rainforests;
- manage sites on steep and unstable slopes;
- protect soil health and stability;

- contribute to the Peatland Action Programme

FLS deer management teams generally try to maintain deer densities at 2-7 deer per km<sup>2</sup> (and ideally below 5 per km<sup>2</sup>). In the Morvern LMP area, the lower range of this population density is appropriate for PAWS restoration and native woodland development.

## What are we going to protect?

- > 3,000ha conifer woodland, approximately 84% of which is Sitka spruce
- > 240 ha native broadleaves
- 74.6 ha ASNW
- > 123 ha PAWS to be restored over the next 10 years
- 215.58 ha open habitat, including 75 ha peat that will be restored
- A further 28 ha of peat restored that is currently under commercial crop
- Natural regeneration of native broadleaves along watercourses and coupe margins

See section three in the Morvern LMP.

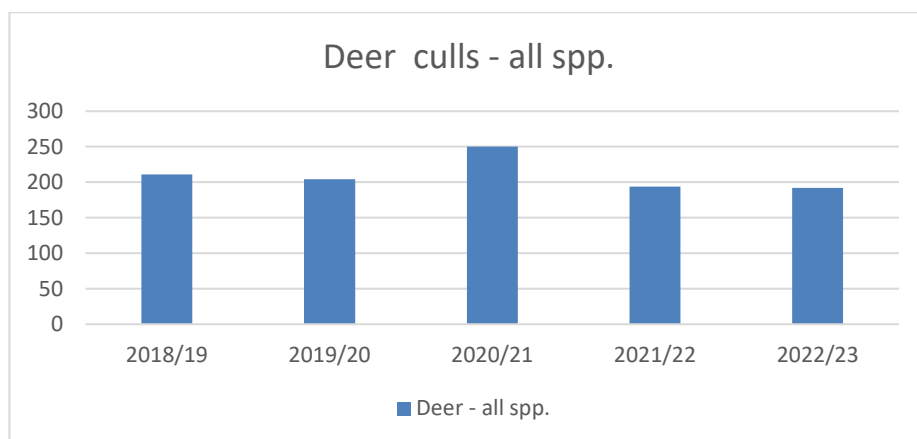
## Deer Species (and other herbivores/feral pigs)

Red deer are common; Roe are found occasionally (mainly in Barr and Lochaline North); Sika are not present in significant numbers. There has been sheep ingress into parts of the forest from the East (Ardtornish) in the past but this has been resolved.

The last Deer Population Assessment was undertaken in 2018/19 by Strath Caulaidh, using the Faecal count method (Faecal Accumulation Rate and Faecal Standing Crop). This estimated a deer density of 18.1 deer/km<sup>2</sup> (all species). Cull figures have remained relatively stable since then – see below:

## What have we done to date?

Year	species	Female	Male	Spp. Total	species	Female	Male	Spp. Total	TOTAL CULL
2024/25	Red	58	124	182	Roe	11	21	32	214
2023/24	Red	43	102	145	Roe	11	10	21	166
2022/23	Red	74	83	157	Roe	16	19	35	192
2021/22	Red	41	98	139	Roe	30	25	55	194
2020/21	Red	91	118	209	Roe	20	21	41	250
2019/20	Red	76	97	173	Roe	12	19	31	204
2018/19	Red	82	87	169	Roe	19	23	42	211



Deer damage is monitored through Nearest Neighbour and Herbivore Impact Assessments. Although the data is variable, there is evidence of high browsing pressure including on Sitka spruce, which is generally less palatable and more resilient to browsing. High levels of damage have been found in all blocks, including 50% deer damage to Sitka in Lochaline North; 57.7% Sitka damage in Barr and 45 – 46% soft conifer damage in Lochaline South. Although most of the data quoted is older, it include 42% Sitka damage in Barr in 2022. High levels of deer damage at Barr would have significant impacts on any broadleaved regeneration and therefore the success of PAWS restoration, if deer numbers are not sufficiently controlled.

Block	Year	coupes	species	% crop dieback	% SS deer damage	% soft con deer damage	% BL deer damage
Barr	2022	69233, 69518, 69609	SS/ BL	3	42		
Lochaline N	2019	71639	SS/BL	30	50		
Lochaline S	2019	75631	SS/ SC/ BL		29.3	46.2	
Lochaline S	2019	75935	SC/BL	26		35.1	
Lochaline S	2019	75633	SS	44	23.9		
Lochaline S	2016	75338	SS/ SC	42	2.7		
Lochaline S	2015	75510, 75800	SC			45.5	
Barr	2015	69429	SC			9.3	
Lochaline N	2011		SS/SC		39.6	23.4	
Barr	2010		SS/BL		0		0
Barr	2010		SS/SC		57.7		
Lochaline N	2009		SS/SC		10.8		

Deer management is carried out by the FLS Wildlife Management team. Deer numbers are managed across the three blocks as one Deer Management Unit (Lochaline) and the area is covered by a Deer Management Group, in which FLS participates.

There are deer and livestock fences along part of the forest boundaries, in variable states of repair, and there are sections in the north-east and south-east without any form of fence. The three forest blocks are surrounded by a mixture of moorland and open hill; commercial conifer plantations; scrub habitat; more fertile areas of farmland on lower ground, and loch margins. There are significant areas of ASNW on adjacent land surrounding the northern part of Barr forest. Red deer movement from neighbouring ground, particularly from nearby moorland in winter, is likely and successful deer control is dependent on activity on neighbouring land. Roe deer immigration is less likely due to absence of suitable habitat on adjacent land. Various woodland schemes are underway on the neighbouring Estate to the East, at Ardtornish, which rely on maintaining a sustainable deer population for tree establishment. Neighbouring ground to the West is a mixture of sporting estates and managed woodland, so a secure deer fence on this side of the LMP area is important.

## Geography

NatureScot have defined the Landscape Character Type across the LMP area as *Stepped Cliffs and Terraces*. This includes dark basalt cliffs with a stepped slope profile, including both low outcrops and massive walls of rock. Between these cliffs lie wide terraces of grass or heather moor, with more fertile ground along coastal pastures. There are areas of broadleaved woodland on inaccessible slopes.

The three forests are well – roaded. However, access for deer control and carcass extraction is generally challenging, with steep ground interspersed with dense conifer crop; windblow across several existing tracks and rides and areas of deep peat on open ground. The large number of watercourses and wet ground also impede access and relatively few ATV tracks exist.

Significant areas have been felled in response to a series of SPHNs for *P. ramorum* on larch and required felling is ongoing, together with scheduled harvesting. In total, 596.94 ha (net) will be felled with 958.89 ha (net) young restock completed by 2035. There is scope to construct new ATV tracks post – felling but the scale of the felling and restocking will present challenges for protection of young crops from herbivore pressure.

A significant area of PAWS will be restored over the next 10 years and native broadleaves will be established along riparian zones. These areas will be particularly vulnerable to deer browsing.

The three forest blocks are valued by the community and both residents and visitors use the forest mainly for walking, albeit in small numbers. Many of the old ATV tracks that were used previously by forest managers before the forest roads were constructed have now become overgrown and most public access is via the forest road network. A long distance right of way runs East-West through Barr. In Lochaline North, a circular core path runs from the eastern boundary to the ruined township at Aoinidh Mhoir (scheduled monument) and there are two circular core path routes in Lochaline South, following forest roads for much of their length.

Public access across the whole LMP area is also maintained under the Scottish Outdoor Access Code (SOAC). Deer management activity must take account of public access within the forest.

See section 2.2 in Morvern LMP: key challenges

## Have an evidence based approach

As described, population assessments conducted to-date have been based on the faecal count method, with the last assessment carried out in 2018. An up-to-date population assessment is needed. Within the Deer Management Group, there has been a move away from helicopter counts, instead adopting comprehensive open range foot counts; sample recruitment counts and mortality assessments. Moving forward, FLS plan to undertake drone assessments of deer numbers in the LMP area.

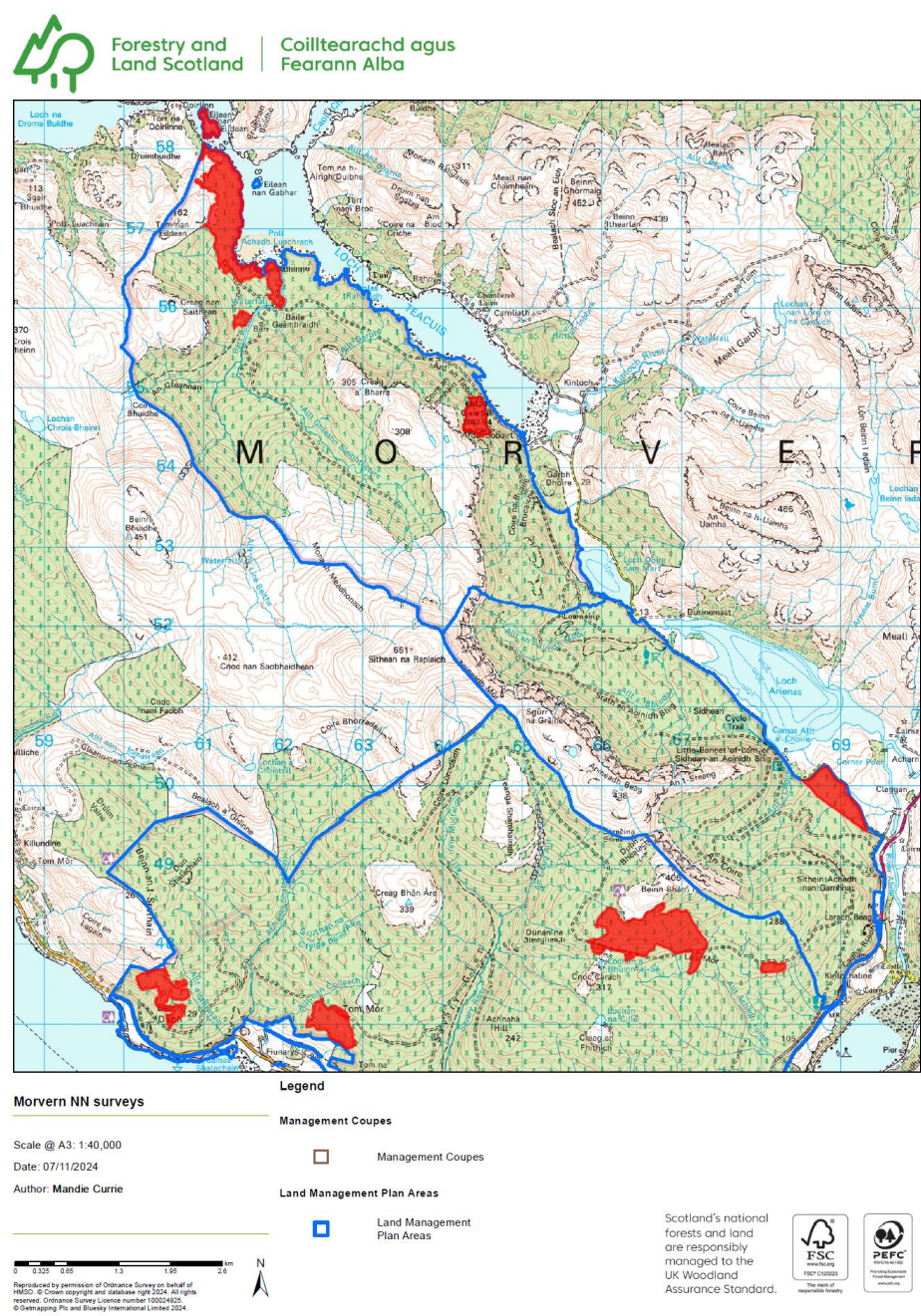
The level of deer damage that exists, while variable across the blocks, does indicate that deer populations are too high in each of the three blocks, or that there are problem areas where deer are congregating.

Deer impacts are measured by FLS using various surveys: Nearest Neighbour (NN); Herbivore Impact Assessments (HIA); natural regeneration surveys; Stocking Density Assessments (SDA); ASNW and PAWS surveys.



Nearest Neighbour Surveys:

The map below shows the results from the Nearest Neighbour Surveys Herbivore Impact Assessments, which are designed in a systematic way to ensure accuracy and consistency in measurements across the crop. The red areas show coupes where higher than 20% damage has been recorded between 2009 and 2022 (see table presented earlier for details).



**Morvern NN surveys**

Scale @ A3: 1:40,000  
Date: 07/11/2024  
Author: Mandie Currie

**Legend**

**Management Coupes**

 Management Coupes

**Land Management Plan Areas**

 Land Management Plan Areas

Scotland's national forests and land are responsibly managed to the UK Woodland Assurance Standard.

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Map 1: Areas (in red) with more than 20% deer damage (Nearest Neighbour Surveys)



# Native Woodland Survey for Scotland (NWSS) HIA:

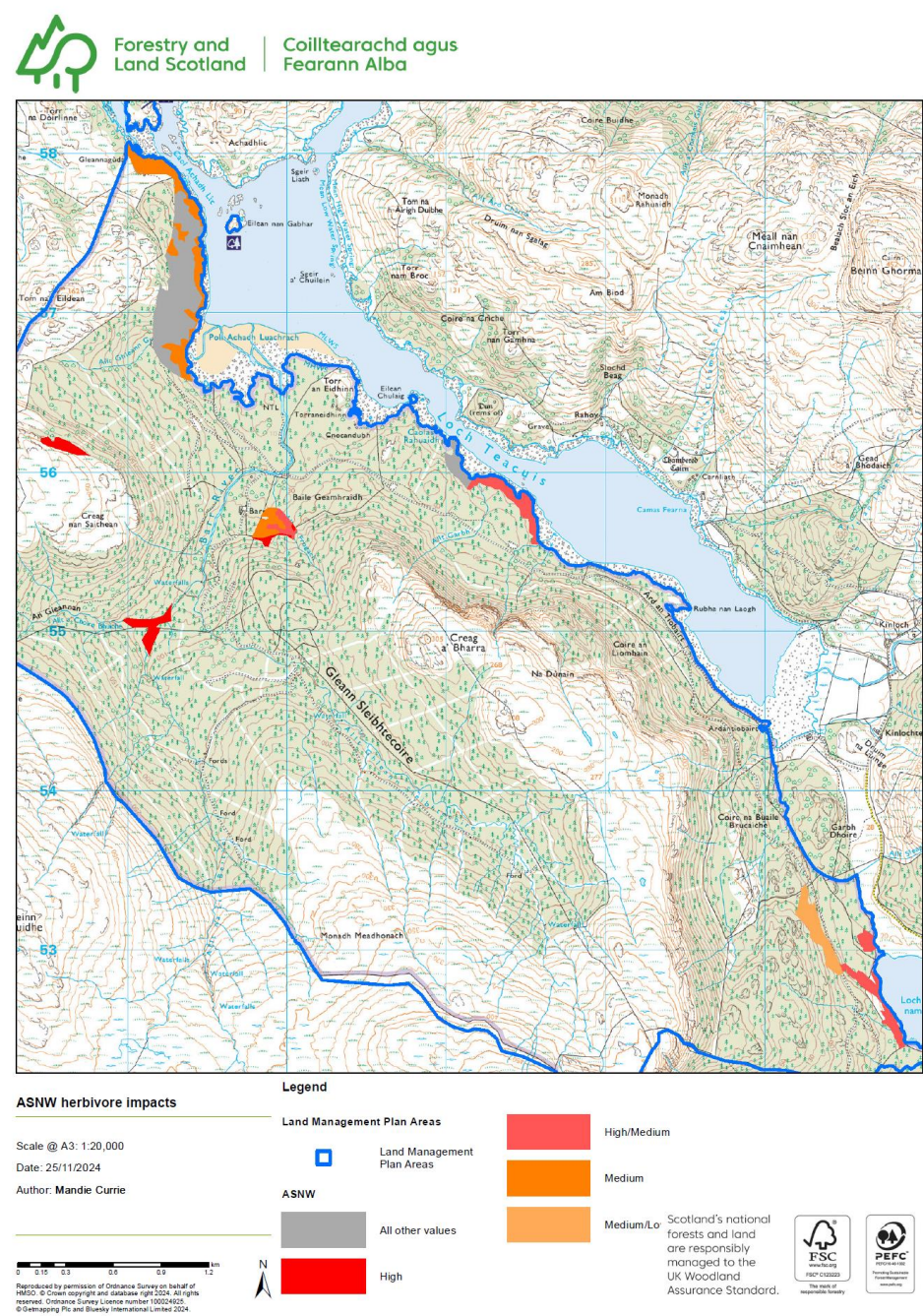


Map 2: Levels of herbivore damage on native woodland sites (Herbivore Impact Assessments)

This map shows herbivore damage in native woodland sites, which includes damage to trees and woodland flora. The NWSS was a national survey carries out between 2009 and 2013. The survey indicates low to medium levels of damage across the forest blocks but high and very high levels of damage on neighbouring ground. This appears to contradict other data for Barr (see map 3) but may reflect a deer incursion when the other surveys were carried out (in later years).

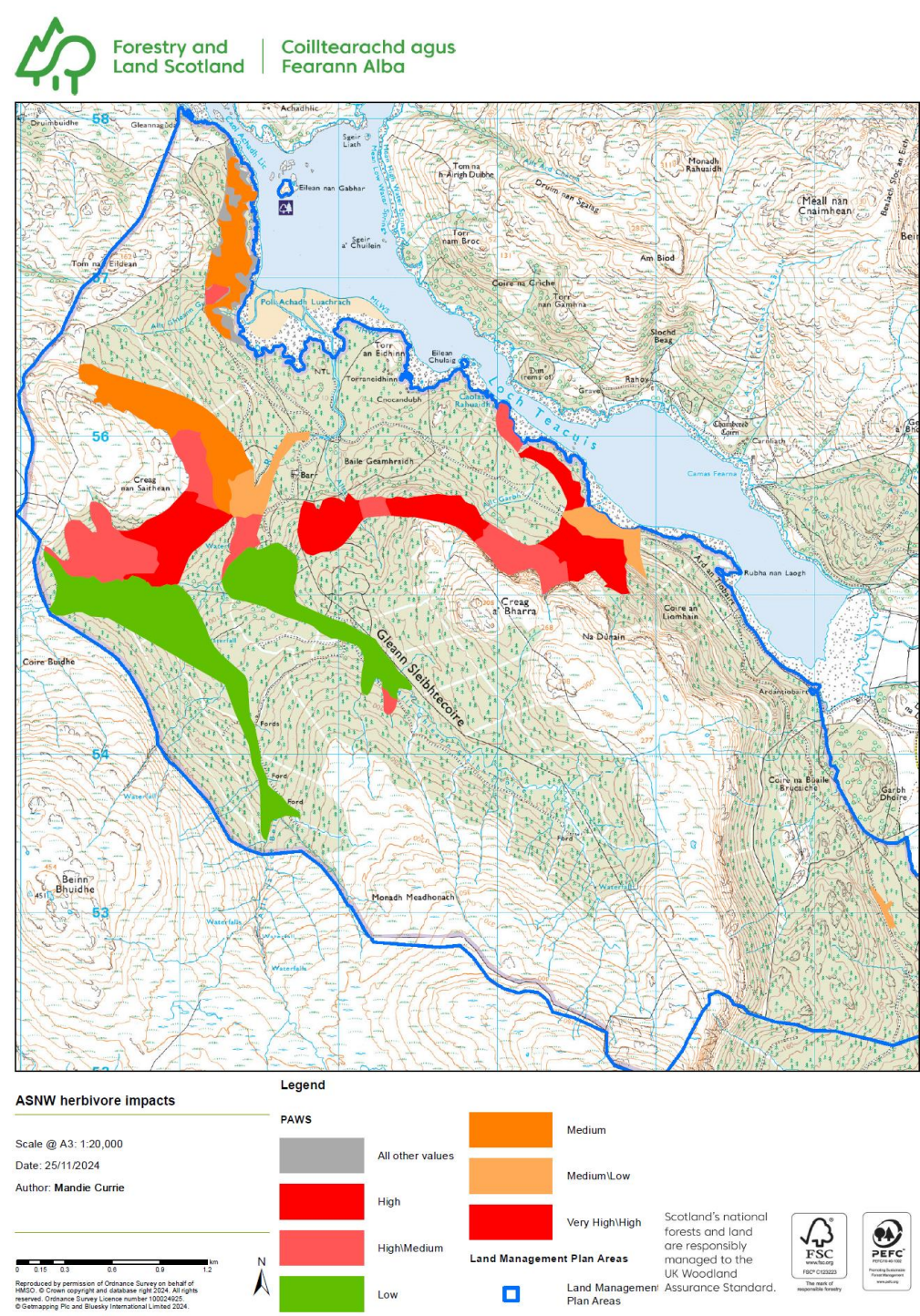


Ancient Semi-Natural Woodland (ASNW) surveys – also capture herbivore impact. Small areas of ASNW remnants are found across the blocks but the largest area is found in Barr forest. The following map shows areas of ASNW in Barr where herbivore impacts are medium, high or very high. In places, some damage may be caused by livestock ingress. The ASNW survey was conducted in 2020.





Plantation on Ancient Woodland Sites (PAWS) surveys capture the herbivore impacts and threats to woodland features in sites that are restored or establishing as native woodland and sites that will be restored from non-native to native species. The last survey was completed in May 2024. The map below shows areas of PAWS with medium to high / very high levels of herbivore impacts.



Map 4 a: Herbivore impacts in PAWS in Barr



# ASINW herbivore impacts

Author: Mandie Currie

Scale @ A2: 1:20,000

Date: 25/11/2024

## Legend

PAWS

All other values

High/Medium

Low

Medium

Medium/Low

Land Management Plan Areas

Land Management Plan Areas



Map 4 b: Herbivore impacts in PAWS in Lochaline

Stocking Density Assessments are routinely carried out at years 1 and 5 of a planted woodland's stage of establishment. These assessments determine if the crop is growing successfully and at the stocking density appropriate to agreed site objectives. These assessments now incorporate HIA and thus can help identify where appropriate deer management operations are required.

Objective	FLS Target(s)	Assessment method
Produce quality timber of all conifer species	2,500 live stems per ha at Year 1 of re-stocks	Crops assessed in the 1st year by the FM team
	No more than 10% of leading shoots on new trees browsed by deer in Year 1 and Year 2	Crops assessed annually after their 1st year by Strath Caulaidh as part of the national 'Nearest Neighbour' survey
	2,500 live stems per ha at Year 5 on re-stocks	Crops assessed in the 5th year by the planning team
	Less than 20% stem forked trees at Year 5 on re-stocks	Crops assessed in the 5th year by the planning team
Protect the environment	Deliver 'Favourable Condition' of designated sites (e.g. SSSI, SAC)	Habitat assessed by the Environment Team as required
	Protect native woodland or expand (PAWS)	Native woodland assessed by the Environment Team as required
	Establish planted broadleaf trees at 1,600 stems per ha at Year 5 on re-stock sites	Planted trees assessed in the 5th year by the planning team
	Establishment of native woodland through natural regeneration	Assessed between yr 5 and yr 10 following felling by the planning team
	Restoration of XX ha of peatland over 10 years	Assessment as part of the peatland contract delivery

The FLS wildlife team have invested in drones and although at an early stage of use, these have produced useful real time information on the numbers and distribution of deer throughout FLS properties. This method can identify deer through much of the tree canopy. It will be adopted as the most reliable method of population assessment and may be carried out several times annually to gauge overall deer density.

## Link to Deer Dashboard

Most of data is used to create this DMP can be found in the Deer Dashboard



## Population Modelling and Future Culls

Population models were prepared, working from the Deer Population Assessment produced by Strath Caulaidh in 2018, using cull figures to date and projecting forward with a cull rate of 30% and based on recruitment rates of 34% Red deer and 38% for Roe deer. Mortality and net migration are set at zero.

Red deer:

Morvern	
Yr 1 EUD km2 @ 1st April	7.6
Start Yr Population	447.108
Area (ha)	5883

Sex Ratio	Female	Male	100%
	50%	50%	

Financial Year (FY)	Population at 1st April (Start FY)	Population at 1st April (Start FY)	Total Population	No per 100ha 1st April	Kid % of pop at 1st April	Recruitment Female	Recruitment Male	Total Recruitment
2025	224	224	447	7.6	34	38	38	76
2026	195	195	389	6.6	34	33	33	66
2027	159	159	319	5.4	34	27	27	54
2028	131	131	261	4.4	34	22	22	44
2029	107	107	214	3.6	34	18	18	36
2030	88	88	175	3.0	34	15	15	30
2031	72	72	143	2.4	34	12	12	24
2032	59	59	117	2.0	34	10	10	20
2033	48	48	96	1.6	34	8	8	16
2034	39	39	79	1.3	34	7	7	13

Female pop 31st Aug	Male pop 31st Aug	Population 31st Aug	No per 100ha 31st Aug	Set % Cull	Female Cull	Male Cull	Total Cull	% Cull Achieved	Female Pop at 31st March (End FY)	Male Pop at 31st March (End FY)	Total Pop 31st March
262	262	523	8.9	30.0	67	67	134	25.6	195	195	389
228	228	455	7.7	30.0	68	68	137	30.0	159	159	319
186	186	373	6.3	30.0	56	56	112	30.0	131	131	261
153	153	305	Plot Area	30.0	46	46	92	30.0	107	107	214
125	125	250	4.3	30.0	38	38	75	30.0	88	88	175
102	102	205	3.5	30.0	31	31	61	30.0	72	72	143
84	84	168	2.9	30.0	25	25	50	30.0	59	59	117
69	69	137	2.3	30.0	21	21	41	30.0	48	48	96
56	56	113	1.9	30.0	17	17	34	30.0	39	39	79
46	46	92	1.6	30.0	14	14	28	30.0	32	32	65

Roe deer:

Morvern		
Yr 1 EUD km2 @ 1st April	3.43	
Start Yr Population	201.7869	
Area (ha)	5883	
Sex Ratio	Female	Male
	50%	50%

100%

Net mortality / immigration is set at zero

Financial Year (FY)	Population at 1st April (Start FY)	Population at 1st April (Start FY)	Total Population	No per 100ha 1st April	Kid % of pop at 1st April	Recruitment Female	Recruitment Male	Total Recruitment
2025	101	101	202	3.4	38	19	19	38
2026	90	90	180	3.1	38	17	17	34
2027	75	75	150	2.6	38	14	14	29
2028	62	62	125	2.1	38	12	12	24
2029	52	52	104	1.8	38	10	10	20
2030	43	43	87	1.5	38	8	8	16
2031	36	36	72	1.2	38	7	7	14
2032	30	30	60	1.0	38	6	6	11
2033	25	25	50	0.9	38	5	5	10
2034	21	21	42	0.7	38	4	4	8

Female pop 31st Aug	Male pop 31st Aug	Population 31st Aug	No per 100ha 31st Aug	Set % Cull	Female Cull	Male Cull	Total Cull	% Cull Achieved	Female Pop at 31st March (End FY)	Male Pop at 31st March (End FY)	Total Pop 31st March
120	120	240	4.1	30.0	30	30	60	25.0	90	90	180
107	107	214	3.6	30.0	32	32	64	30.0	75	75	150
89	89	179	3.0	30.0	27	27	54	30.0	62	62	125
74	74	149	2.5	30.0	22	22	45	30.0	52	52	104
62	62	124	2.1	30.0	19	19	37	30.0	43	43	87
52	52	103	1.8	30.0	15	15	31	30.0	36	36	72
43	43	86	1.5	30.0	13	13	26	30.0	30	30	60
36	36	72	1.2	30.0	11	11	21	30.0	25	25	50
30	30	60	1.0	30.0	9	9	18	30.0	21	21	42
25	25	50	0.8	30.0	7	7	15	30.0	17	17	35

Total Summary:

All species

Morvern
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Yr 1 EUD km2 @ 1st April	11.03
Start Yr Population 1st April	648.8949
Area (ha)	5883

Cull Target

Cull Target			
Yr	Female	Male	Total
Yr 1	97	97	194
Yr 2	100	100	201
Yr 3	83	83	165
Yr 4	68	68	136
Yr 5	56	56	112
Yr 6	46	46	92
Yr 7	38	38	76
Yr 8	31	31	63
Yr 9	26	26	52
Yr 10	21	21	43

WMU Population

Financial Year (FY)	Population 1st March	Population 1st March	Total Population	No per 100ha 1st April
Yr 1	285	285	569	9.7
Yr 2	234	234	469	8.0
Yr 3	193	193	386	6.6
Yr 4	159	159	318	5.4
Yr 5	131	131	262	4.5
Yr 6	108	108	216	3.7
Yr 7	89	89	178	3.0
Yr 8	73	73	146	2.5
Yr 9	60	60	121	2.0
Yr 10	50	50	99	1.7

Species Population	Red	Roe	Sika	Fallow
Yr 1	389	180	0	0
Yr 2	319	150	0	0
Yr 3	261	125	0	0
Yr 4	214	104	0	0
Yr 5	175	87	0	0
Yr 6	143	72	0	0
Yr 7	117	60	0	0
Yr 8	96	50	0	0
Yr 9	79	42	0	0
Yr 10	65	35	0	0

Based on these estimates, a deer population density (all species) of less than 5 deer / km<sup>2</sup> may be achieved by year 5 of the DMP/LMP, with a population of around 2-3 deer / km<sup>2</sup> (more appropriate for broadleaved establishment) by year 7 / 8.

## Protection Options – cull/fence/tubes

Deer culling within the Morvern LMP area is carried out by the FLS Wildlife Rangers. Key challenges include steep, inaccessible ground (including areas of windblow and scrub) and the very large areas of restocking that have resulted from an accelerated felling programme, required in response to a series of SPHNs. Weather conditions (drifting snow) can make it easier for deer to cross and may damage fences. Mature crops provide shelter from where deer can foray into newly restocked areas to graze and browse.

Deer culling is required, to achieve sustainable population levels that promote habitat recovery and well as creating and maintaining healthy deer populations.

A deer fence runs along the West side of the LMP area and is in fair- to- good condition but requires ongoing maintenance and eventual replacement. Self- closing gates to facilitate improved access onto the open hill should be considered when the deer fence is replaced. There is no fence in the NE of the LMP area but deer pressure from this direction is low. The livestock fence along the East side of the LMP area is in poor condition along much of the length and will require upgrade (new stobs) or replacement. The livestock fence along the southern boundary adjacent to the village is in reasonable condition – ongoing monitoring and maintenance-only required.

## How will objectives be met?

FLS are obliged to manage deer to sustainable levels under the Scottish Forestry Strategy and Biodiversity Strategy, as well to achieve compliance with the UK Forestry Standard and the UK Woodland Assurance Standard.

FLS aims to manage a deer population of 2-7 deer/km<sup>2</sup> in national forests; ideally less than 5 deer/km<sup>2</sup>. Although Sitka spruce will remain the main commercial species, alternative conifers will be included in restock where conditions are suitable and these species are more vulnerable to herbivore impacts. Protection of ASNW and the priorities for PAWS restoration, particularly at Barr, and native broadleaved woodland along riparian zones, are all highly dependent on reducing browsing pressure. Lower deer population densities (2- 3 deer / km<sup>2</sup>) are generally required for successful establishment of broadleaved species. Species such as Aspen are particularly palatable and require even lower herbivore densities (and consequently, are extremely infrequent). As noted earlier, densities of <5 deer / km<sup>2</sup> may be achieved by year 4 and ca. 2 deer / km<sup>2</sup> is projected to be achieved by year 7 or 8.

Objectives will be met through:

- Culls carried out by FLS wildlife management team and enhanced activity around young restock coupes and areas planned for natural regeneration

- Use of drone counts where feasible, to provide accurate and real time information on deer numbers and deer behaviour, to inform and provide flexibility in management
- Fences – maintenance of the deer fence, with eventual replacement; replacement of the livestock fence on the eastern boundary (repair possible along sections); maintenance of the livestock fence on the southern boundary
- Self-closing gates to be included at key points when the deer fence is replaced
- Upgrade and maintain existing ATV tracks throughout the LMP area
- Create new ATV tracks in felled coupes to aid protection of young trees - if possible, creating links to existing paths where this would benefit informal public access
- Annual review (wildlife, FM, environment and planning teams) of progress on establishment in Morvern to identify where further action is needed to achieve success.

This DMP will be reviewed regularly, as a minimum at years 5 and 10, to consider if the proposed actions have led to reductions in herbivore pressure and are sufficient to promote acceptable growth of desired species.

## Infrastructure - Roads/ATV tracks/glades/larders/equipment

The three forest blocks are served by the FLS deer larder at Lochaline.

The LMP is well served by a network of forest roads, which enable access throughout the forest. Short stretches of new roads are planned, where roads are required to extend into management coupes and a section in Lochaline South that will enable haulage from neighbouring ground through the forest, under a third party agreement.

Post- harvesting, further ATV tracks will be considered within coupes where topography allows, to facilitate establishment operations, including deer management.

## Collaborative working opportunities

Effective deer management is required to restore and protect native woodland on FLS land. Also, FLS participates in the Atlantic Rainforest project on Morvern, so co-operating with neighbours to manage deer, access, fencing and timing of operations for mutual benefit will help achieve the wider landscape-scale native woodland restoration that is required.

As part of the Deer Working Group Recommendations, opportunities will be sought where FLS can take a collaborative approach to achieving Deer Management Objectives. This will include working with immediate neighbours/DMG to identify where there is a mutual benefit to cross boundary culling agreements.

## DMG present

Lochaline South, Lochaline North and Barr forests (the Morvern LMP area) lie within the Morvern DMG. FLS is an active member of the DMG, which meets twice a year and includes all neighbouring landowners except one.



## Venison

FLS subscribes to the Scottish Quality Wild Venison (SQWV) scheme. All venison is quality assured and sold to Highland Game via the Lochaline larder.