Deer Management Plan (DMP) – MIDMAR Forest

Background

This DMP should be used as a supporting document/annex for the Land Management Plan (LMP). The DMP should also be used in conjunction with FLS Deer Management Strategy.

National & Local objectives

* Contributing to [Scottish Forestry - Forestry Strategy](https://forestry.gov.scot/forestry-strategy) (also includes Climate Change)
* Deer Management Strategy [Deer management strategy - Forestry and Land Scotland](https://forestryandland.gov.scot/what-we-do/who-we-are/corporate-information/deer-management-strategy?highlight=deer%20strategy)
* Scottish Biodiversity Strategy [Biodiversity strategy: consultation - gov.scot (www.gov.scot)](https://www.gov.scot/publications/scotlands-biodiversity-strategy-consultation/)

Midmar Forest is located in the Echt and Midmar parishes, approximately 4 km west of the village of Echt in Aberdeenshire. The forest covers an area of 572ha located on the foothills of the Hill of Fare, lying between Greymore Hill (394m) and Craigour Hill (406m).

The forest covers an elevation range of 100m to 450m above sea level, with a northerly aspect.

Midmar is a diverse mixed conifer plantation with Sitka spruce and pines the main species covering around 50% of the area. Almost 45% of Midmar was historically wooded.

The forest is being managed using both clearfell and Low Impact Silvicultural Systems (LISS) with additional Long-Term Retentions (LTR) and Natural Reserves (NR). Currently non-clearfell management covers around 142 ha of the area most of which was introduced in the 2005-2015 plan.

What are we going to protect?

* A diverse range of commercial conifer species will be established in resilient mixes where conditions allow, helping to mitigate the impacts of a changing climate.
* In and around watercourses, along forest edges and near infrastructure, corridors of native broadleaves will be established to safeguard these features, improve forest stability and improve environmental value.
* By the end of the plan period, broadleaf species coverage will have increased from the 3% currently to at least 5%.

Deer Species (and other herbivores)

* Roe Deer are the predominant deer species in this area.
* The most recent EDU population assessment was in 2015 giving an estimated density of 65.2 deer/km2.-However this was a combined survey result covering a far wider area and this needs to be considered. Evidence on the ground and recent drone surveys conducted suggest a far lower population within the LMP area.
* There is a level of recruitment into the LMP area due to ingress from neighboring land holdings.
* The cull table below indicates transient Red deer are in the surrounding area, these will be targeted when within the Midmar forest block, highlighting the requirement for better access and for this to be managed and retained open.

What have we done to date?

Deer culls from Midmar:

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Roe** | **Red** | **Total** |
| 24-25 | 4 | 1 | 5 |
| 23-24 | 25 | 5 | 30 |
| 22-23 | 28 | 0 | 28 |
| 21-22 | 10 | 0 | 10 |
| 20-21 | 30 | 0 | 30 |

The culls have been delivered using an FLS Ranger and Deer contract resource.

**Impacts** - the results from a 3-year average from 19/20-22 suggest browsing of 6.96 % damage on commercial crops. With the increased culls planned it is hoped the level of damage across all species will be kept low, however this will prove challenging.

**Fencing:** There are no plans for a perimeter deer fence. Deer fenced enclosures may be required to protect the more palatable broadleaves to allow establishment. This will be discussed with the FM team prior to any planting.

Have an evidence-based approach?

Cull setting within this LMP is challenging, due in principle to the ingress from adjoining land. Along with inaccurate cull data over a number of years. There will be increased focus along with regular use of the FLS deer team drone to survey deer numbers, with this accurate information it will enable the correct culls to be set for the future and allow the deer team to manage and reduce the deer population.

FLS uses an information-based decision-making process to set its deer management operations with the data received from various internal and external reports, including:

* Thermal drone counts
* Herbivore dung counts
* Historical cull data
* Sighting data
* Ranger daily/monthly reports
* Deer Management Contractor daily/monthly reports
* Strath Caulaidh Survey data, independently obtained – i.e., Deer density figure, impacts - NN/HIA, SDA, etc.

All data obtained is then applied to a population model which is used to help set the correct cull.

Link to Deer Dashboard

Data used to create this DMP can be found in the FLS Deer Dashboard.

Population Modeling and Future Culls

* A cull of 30 deer from Midmar has been set for 25-26. This figure is a result of looking at survey information, population modelling and considering local deer movements and the forest plans.
* There was a long standing retained shooting right over this forest and gaining cull figures and information has proved impossible. The future cull planning and deer management may require flexibility to provide the crop protection required.
* The cull set will be challenging to reach with the current access and structure of the forest and a programme to open access-rides and open space must be planned and delivered, to allow future culls to be met providing the crop protection required.
* There is a substantial transient deer population which must be taken into consideration when both setting and delivering culls.

Protection Options – cull/fence/tubes

A robust approach to culling will take place across the LMP to continue to reduce the background deer population and target sensitive areas. Culls will be regularly monitored, reviewed and changed when required to ensure a proactive approach is taken with the deer management to ensure crop success is achieved.

How will objectives be met

* Maintain a deer population of between 2 and 5 per km2.
* Control other herbivores within the LMP area to allow the FLS target of less than 10% damage to leader shoots to be achieved.
* The Midmar LMP area will be managed by using the Wildlife Ranger staff and Deer Management Contract resource.
* All controllers are qualified to Deer Stalking Certificate levels 1 & 2. They also undertake an annual firearms skills test, ensuring the highest levels of safety and competency when undertaking their duties.
* Deer management contractors are a vital resource in FLS’ s deer management toolbox which are selected after satisfying FLS of their competence via a competitive tender. All Deer Management Contractors must meet the FLS standards of health and safety, compliance and be trained to the level of deer management like that of the FLS wildlife staff.
* Out of season shooting is an essential tool in the protection of vulnerable tree crops and natural habitats. This is conducted either under the General License issued by NatureScot for enclosed woodland or by 5(6) authorisations on application to NatureScot for un-enclosed woodland. Male deer of all species will be culled through the 12 months of the year on FLS land. Females will be culled under license from the 1st of September to the 31st of March When early out of season culling of females is conducted any dependent young will be culled first.
* Night shooting is permitted by the Deer (Scotland) Act 1996 as amended by the Wildlife and Natural Environment Act 2011 (WANE Act), under section 18(2) authorizations granted by NatureScot. All operations will conform to current Best Practice Guidance and a copy of the guides will be issued to Wildlife Rangers and Contractors, as necessary. Night shooting is a valuable tool in areas of high deer management pressure where the population has become wise to deer management practices.

Roads/ATV tracks/glades/larders/equipment

* Infrastructure and access within the LMP area is well developed but proves challenging to maintain and keep clear due to a combination of track side vegetation and considerable regen. Flailing of the road’s edge can also increase visibility of deer and vegetation clearance that coincides with Civils Road maintenance programs will be explored.
* Open areas, green ride networks have grown over with regen in recent years which has led to less open areas to shoot deer. This has been mainly due to the lack of resource (In particular the availability of hand cutters), however, the future plans for this LMP area will require a more robust focus to ensure an infrastructure maintenance program is in place and delivered and ongoing which will restore open areas and create shooting opportunities.
* Efficient deer control cannot be undertaken without clear access along all forest roads and ride systems this requires the clearing of these areas to become a priority.
* New infrastructure is planned and installed at the restock stage and foresters consult with the wildlife team to decide the best location for access tracks. This provides an opportunity for improving culling infrastructure surrounding the vulnerable areas enabling more effective crop protection to be conducted.

All FLS Wildlife Rangers have the following kit as standard:

* 4 x 4 vehicle with either a winch or loading crane attached to the back to aid in loading carcasses safely.
* Capstan which and rope to aid in extraction when far away from roads.
* 4 x 4 ATV with winch.
* Trailer to transport ATV.
* Slee Sledge/hill trailer to aid in extraction using the ATV.
* .270 caliber rifles
* Binoculars.
* Handheld thermal imager to increase herbivore detection.
* Various knives, saws, and PPE.
* Access to thermal drone and pilot.

The main Deer Larder for the Midmar LMP area is situated at Bennachie/Tillyfourie.

Venison

* FLS subscribe to the Scottish Quality Wild Venison (SQWV) scheme. This sets the standards for our larders and actions of our staff and contractors to ensure we provide a safe food item for the market.
* All venison is quality assured and sold to Highland Game where it is further processed.
* All waste from the larders is removed by a licensed waste disposal contractor.
* All animal by-products are sold to Highland Game along with the venison.