



Deer Management Plan (DMP) – Tentsmuir 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

- National
 - Contributing to [Scottish Forestry - Forestry Strategy](#) (also includes Climate Change)
 - Deer Management Strategy [Deer management strategy - Forestry and Land Scotland](#)
 - Scottish Biodiversity Strategy [Biodiversity strategy: consultation - gov.scot \(www.gov.scot\)](#)

Tentsmuir is situated on the north-east coast of Fife between St Andrews and Tayport. The Land Management Plan area covers 1573 hectares and comprises the northern block of Tentsmuir Forest (including Morton Lochs NNR)

Most of the land was acquired by the Forestry Commission in the 1920s and planted predominantly with Scots pine and Corsican pine. There are still a few sites where the first rotation of pines planted between 1922 and 1925 have been retained. Much of the forest is managed using a continuous cover forestry approach.

In addition to commercial forestry, careful management has created an interesting mixture of open space, ponds, trees and sand dunes that are rich in wildlife and popular for recreation. The coastline surrounding the forest also has several local, national and international designations which influence the management of the forest. The site and the



coastline also contain several heritage features and Scheduled Monuments, including numerous World War II coastal defences.

The revised land management plan will also include the areas affected by Storm Arwen in 2021 along the north coast of Tentsmuir and Morton Lochs.

What are we going to protect?

- To achieve less than 10% damage to leaders on all commercial restocks.
- Enable a wider diverse range of tree species to be planted successfully within the existing Forest area.
- Reduce the deer population across the Forest to less than 5 Deer/km².
- Control other herbivores within the LMP area and across the wider LMP area to allow the FLS target of less than 10% damage to leader shoots to be achieved.



Deer Species (and other herbivores)

- Roe deer are the predominant deer species in this area.
- The most recent EDU population assessment in 2022 gives an estimated density of 7.0 deer/km².
- There is an elevated level of recruitment into the LMP area from both ingress from neighbouring land holdings and a high survival rate within juveniles due to favourable weather conditions and food availability.
- There is a low-level population of brown hares within Tentsmuir and the surrounding land holdings which historically have not caused any significant issues with crop establishment.
- Historically there was a large rabbit population within Tentsmuir Forest particularly focused on the coastal dune system, but in recent years this has reduced in size due to disease in the form of Myxomatosis but more importantly Rabbit Haemorrhagic Disease (RHD). The monitoring and control of the population is required especially in establishment sites.

What have we done to date?

- Deer culls from Tentsmuir

Year	Roe	Total
20/21	185	185
21/22	105	105
22/23	81	81
23/24	147	147

- The culls have been delivered using deer management contract resource primarily.
- Accurate cull setting based on population modelling cull data evidence is challenging on LMP area due to the elevated level of ingress from our neighbouring land holdings which is estimated at >80%



Impacts: within the area there is currently little recent data due to the LMP area being predominantly continuous cover. However, there will be areas requiring restocking post Storm Arwen which will generate up to date data.

Fencing:

- Tentsmuir has a perimeter deer fence to the western edge of the Forest which although ageing is deer proof and effective.
- There is a small, fenced enclosure on the north end of the forest with a low value deer fence planted as a test plot for various softwoods.
- A maintenance program will be in place to ensure fences are regularly inspected and necessary repairs conducted.

Have an evidence-based approach?

Cull setting within this LMP is challenging, due in principle to the ingress from adjoining land.

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

- 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.



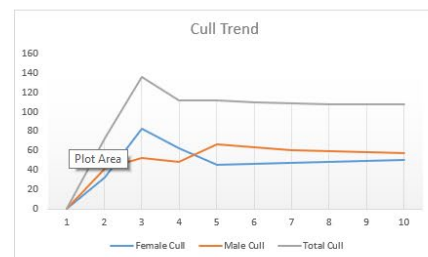
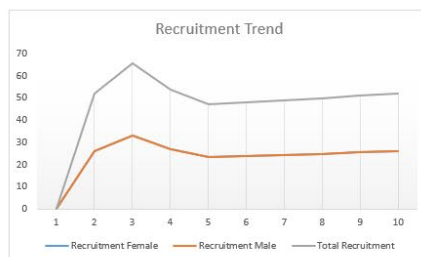
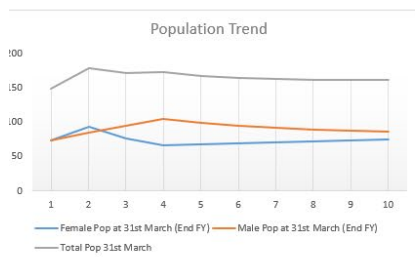
Link to Deer Dashboard

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

Population Modelling and Future Culls

- A cull of 100 deer from Tentsmuir 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.
- The cull set will be challenging to reach, and should be viewed as the minimum amount at present which allows the forest objectives to be met.

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	Est Annual Mortality/Immigration %	Female Immigration/mortality	Est Annual Mortality/Immigration %	Male Immigration/mortality	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
2021	55	55	110	7.0	0	0	0	0	35	19	35	19	74	74	148	9.5	0.0	0	0	0	0.0	74	74	148
2022	74	74	148	9.5	70	26	26	52	35	26	35	26	126	126	252	16.1	0.0	32	41	73	29.0	94	85	179
2023	94	85	179	11.4	70	33	33	66	35	33	35	30	160	147	307	19.6	0.0	83	53	136	44.3	77	94	171
2024	77	94	171	10.9	70	27	27	54	35	27	35	33	130	154	284	18.2	0.0	63	48	112	39.4	67	105	172
2025	67	106	172	11.0	70	24	24	47	35	24	35	37	114	166	280	17.9	40.0	46	56	102	40.0	69	99	168
2026	89	99	168	10.7	70	24	24	48	35	24	35	35	116	159	275	17.5	40.0	47	53	100	40.0	70	95	165
2027	70	95	165	10.5	70	24	24	48	35	24	35	33	119	153	271	17.3	40.0	48	51	99	40.0	71	92	163
2028	71	92	163	10.4	70	25	25	50	35	25	35	32	121	149	270	17.2	40.0	48	59	107	40.0	73	89	162
2029	73	89	162	10.3	70	25	25	51	35	25	35	31	124	146	269	17.2	40.0	49	58	107	40.0	74	87	162
2030	74	87	162	10.3	70	26	26	52	35	26	35	31	126	144	270	17.2	40.0	50	58	108	40.0	76	86	162



Protection Options – cull/fence/tubes

The full spectrum of protection options available will be used within this LMP.

- Culling across the site to continue to reduce the background deer population and target sensitive areas.
- Tubes for isolated pockets of native hardwoods where they are best suited.



How will objectives be met

The Tentsmuir LMP area will be managed by a using both Wildlife Ranger staff and Deer Management Contract staff.

- 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 September to the 31st 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.
- 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 winch and rope to aid in extraction when far away from roads.
 - 4 x 4 ATV with winch.
 - Trailer to transport ATV.
 - Sledge/hill trailer to aid in extraction using the ATV.
 - .270 calibre 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 Tentsmuir is on the Forest block itself at Fetterdale and although small in relation to capacity because of its proximity to Highland Game regular uplifts are possible.



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 to 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.