Tentsmuir Land Management Plan Background and Context

Introduction

This document provides background context for the revision of the Tentsmuir Land Management Plan (LMP). This document is accompanied by three maps:

- 1. Location map
- 2. Designated areas map
- 3. Context map

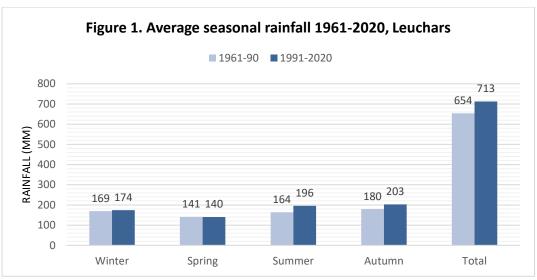
The LMP covers two forest blocks, Tentsmuir and Reres (see Map 1, Location Map). The blocks are located on the Fife coast north of St Andrews and close to the towns of Tayport and Leuchars.

Background information Site Conditions

- Elevation is below 10 metres above sea level.
- The current climate is classed as warm, moist and sheltered. Evidence of recent climate trends recorded at Leuchars climate station have shown the climate is gradually becoming warmer and wetter. The average annual daily temperature has increased from 8.3°C to 9.0°C.
- Soils are sandy and nutritionally very poor to poor. They vary from very dry to very moist depending on how deep the water table sits. Reres Wood is more uniform, mostly made up of sand with moderately deep water table.

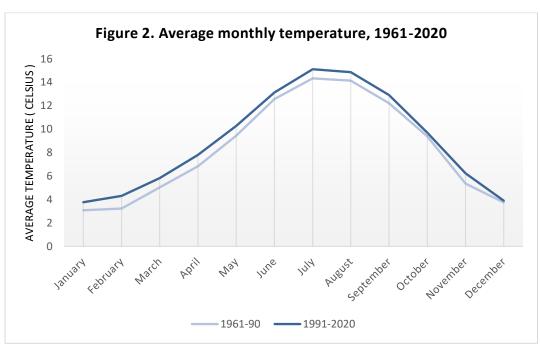
Table 1. Soil types of Tentsmuir and Reres Wood

| Soil code | Soil type | Soil moisture | Soil nutrition | Area (hectares) |
|--------------|---------------------------------------|------------------|-------------------|--------------------|
| 15d | Dunes | Very dry | Very poor | 183 |
| 15e | Sand with deep water table | Very dry | Very poor | 221 |
| 15i | Sand with moderately deep water table | Fresh | Poor | 614 |
| 15g | Sand with shallow water table | Very moist | Poor | 532 |



Source: Met Office, 2022.

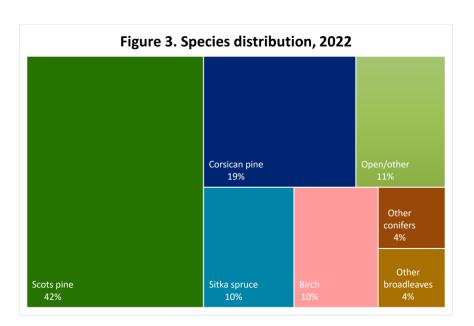
Monthly rainfall has been grouped into seasons: winter (December to February), spring (March to May), summer (June to August) and autumn (September to November).



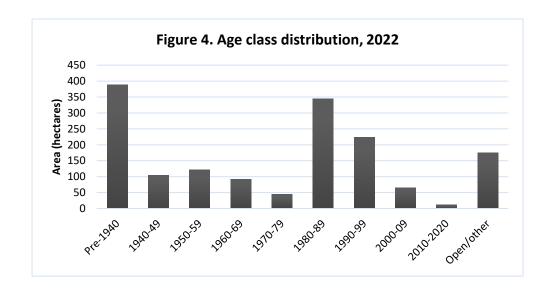
Source: Met Office, 2022.

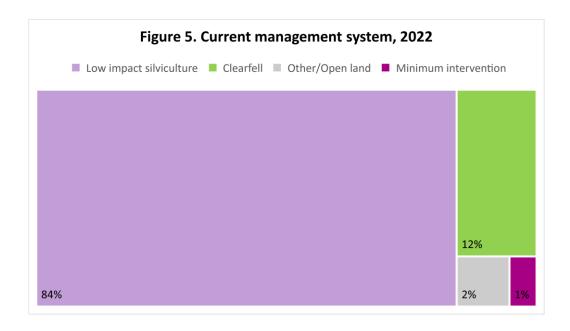
Existing Forest

The forest is mainly comprised of pine (61%) with Sitka spruce (10%), birch (10%) and other species (8%) making up the remainder (Figure 3). 11% of the forest is open ground/other land use; this figure includes areas that have been felled and areas of windblow from Storm Arwen.



Approximately one quarter of the forest was planted before 1940 (Figure 4), and approximately 40% of the forest area is the second rotation crop established during the 1980s and 1990s. The forest is now mainly managed using low impact silviculture (Figure 5). Dothistroma needle blight is present within the pine. Trials have been carried out to test whether the impact of this disease can be controlled using alternative thinning prescriptions, and the progress of the disease is being monitored through regular surveying.





Context and key features

The area surrounding the forest is ecologically important and holds several environmental designations (see Map 2, Designated areas map). Initial analysis has identified the following key features to be considered as the context for the new LMP (see Map 3, Context map):

- The forest is a popular recreation site, with visitor access points at Tayport, Morton
 Lochs and the forest drive leading to the main visitor car park where there is a play
 park, toilet block and food stall. Long distance walking and cycle routes pass through
 the forest, and there is an extensive network of forest paths and waymarked trails.
- The network of drains through the forest are important for the drainage systems of the neighbouring land. Flood modelling has highlighted that low lying coastal areas and the Powie Burn have a 10% risk of flooding each year. In addition, coastal modelling has shown that the north east tip of the forest by Tentsmuir Point, and the area between Tentsmuir and Reres Wood in the south may be subject to coastal erosion in the next 20-40 years.
- There are several heritage features and Scheduled Monuments, including an icehouse and WW2 coastal defences. The forest contains areas of Long Established Plantation Origin woodland. The forest also provides habitat for protected species including red squirrel, white tailed sea eagle and several rare plants.
- A significant area of Tentsmuir along the Tay Estuary and around Morton Lochs was badly damaged in 2021 by Storm Arwen, and harvesting operations have started during 2022 to clear these sites. In addition to these there are further smaller pockets of windblow through the forest.