

Moray and Aberdeenshire Forest District

Newton

Land management plan



Plan Reference No: FDP 44

Plan Approval Date:

Plan Expiry Date:

Newton Nursery Land Management Plan 2017-26

We manage Scotland's National Forest Estate to the United Kingdom Woodland Assurance Standard – the standard endorsed in the UK by the international Forest Stewardship Council® and the Programme for the Endorsement of Forest Certification. We are independently audited.

Our land management plans bring together key information, enable us to evaluate options and plan responsibly for the future. We welcome comments on these plans at any time.



The mark of
responsible forestry



Newton Nursery Land Management Plan 2017-26

FOREST ENTERPRISE - Application for Forest Design Plan Approvals in Scotland

Forest Enterprise - Property

Forest District:	Moray & Aberdeenshire FD
Woodland or property name:	Newton nursery
Nearest town, village or locality:	Elgin
OS Grid reference:	NJ 162 637

Areas for approval

	Conifer	Broadleaf
Clear felling	-	-
Selective felling	-	-
Restocking	-	10.2ha
New planting (complete appendix 4)	-	-

1. I apply for Forest Design Plan approval*/~~amendment approval~~* for the property described above and in the enclosed Forest Design Plan.
2. * I apply for an opinion under the terms of the Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999 for Deforestation*/roads* as detailed in my application.
3. I confirm that the initial scoping of the plan was carried out with FC staff on
4. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.
5. I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which the FC agreed must be included.
6. I confirm that consultation and scoping has been carried out with all relevant stakeholders over the content of the of the design plan. Consideration of all of the issues raised by stakeholders has been included in the process of plan preparation and the outcome recorded on the attached consultation record. I confirm that we have informed all stakeholders about the extent to which we have been able to address their concerns and, where it has not been possible to fully address their concerns, we have reminded them of the opportunity to make further comment during the public consultation process.
7. I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed Signed
 Forest District Manager Conservator

District Moray & Aberdeenshire FD Conservancy Grampian

Date **Date of Approval**

Date approval ends:

Contents

Forest Design Plan Summary

1.0 Introduction

1.1 Setting and context

2.0 Background information

2.1 Physical site factors

2.2 Biodiversity and environmental designations

2.3 The existing forest

2.4 Social factors

2.5 Pathogens and disease

3.0 Land Management Plan Proposals

3.1 Future Habitats and Species

3.2 Deer management

Appendices:

Appendix 1 – Tolerance table

Forest Design Plan Summary

This plan is a review of Forestry Commission Scotland's management of Newton nursery.

The purpose of the plan is to set out the management objectives and prescriptions for the plan area for the next ten years in detail, and in more broad terms for the following twenty years, which will fulfil the requirements of the UK Woodland Assurance Scheme.

The plan only covers the ground out with the nursery fields, including the shelter belts (5.9ha), but not the working of the nursery beds. The management of these is covered by a separate nursery management plan.

Within the plan period the only work planned is the restocking of an area of Scots pine that was felled to control the spread of Dothistroma needle blight.

1.0 Introduction

Refer to Map 1: Location.

1.1 Setting and context

Newton nursery is situated 3km west of Elgin and is just north of the A96.

It is one of three FC nurseries in the UK, the other two being Delamere and Wykeham. Currently Newton produces 7 million of the 20 million trees required by FES each year.

The FC owned nursery extends to 40ha of which 33ha are currently used for production purposes, with the remaining 7ha being infrastructure or ground not suited to nursery production. A further 23ha of ground is currently leased in two separate areas; 3ha at Wester Oldtown Farm in Roseisle and 20ha adjacent to the existing FC owned nursery from Moray estates. Consideration is also currently being given to extending the area currently being leased from Moray Estates by a further 20ha to meet future increased production demands.

Traditionally the mix of trees produced was:

Sitka spruce - 3 million
Lodgepole pine – 2 million
Scots pine – 1.5 million
Norway spruce – 0.5 million

These figures are changing due to the change in objectives set for the national forest estate by the Scottish Government. They are also lead by advanced plant orders.

The nursery employs 12 full time staff and an additional 13 agency staff at the peak productive times of year.

2.0 Background information

Refer to Map 2: Key features

2.1 Physical site factors

The soils in the productive area of the nursery are brown earths and free draining. A total of 10.2ha Lodgepole pine/Scots Pine were recently felled due to DNB infection. The soils in this area have a clay content that makes them wet and so unsuitable for nursery production.

The nursery has the second lowest rainfall in the UK, outside of East Anglia, only 58.5cm per year, and a mild climate which makes it suitable for nursery production. The mild winters mean there are few restrictions on the lifting of trees during the winter.

There is a pump house at the northern end of the site that feeds the irrigation system.

The site is surrounded by arable farmland owned by Moray estates and Mr Petrie.

Deer and rabbits are both controlled on site by shooting by the FES wildlife ranger for the area. In addition gulls are a problem and the nursery has a licence from SNH to destroy nests and eggs. A falconer is also employed to fly at the birds.

2.2 Biodiversity and environmental designations

There are no biodiversity or environmental designations in the nursery area.

2.3 The existing forest

There are several small areas of existing trees. These include seed orchards, experimental blocks and shelterbelts.

The seed orchards and experimental blocks will continue to be used and managed during the period of this plan. The shelterbelts, which are predominantly broadleaf trees, will be designated as long term retentions with the objective of maintaining them for as long as feasible.

The areas of the elements of the nursery are shown in the table below.

Description	Area (ha)	%age
Nursery beds	52.0	62
Seed orchards	11.5	14
Felled *	10.2	12
Shelter belts*	5.9	7
Open ground*	3.4	4
Office & yard	1.2	1

* Areas covered by the LMP.

2.4 Social factors

There is no recreation, community or heritage features in the plan area. Landscape is not an issue that needs to be considered in this plan due to the nature of the work being undertaken at the nursery.

2.5 Pathogens and diseases

Dothistroma needle blight (DNB)

Dothistroma needle blight is an economically important disease affecting a number of coniferous trees, pines in particular. The disease has a world-wide distribution but until recently was mainly of concern in the southern hemisphere.

In much of the world, including Britain, it is caused by the fungus *Dothistroma septosporum*. Dothistroma needle blight causes premature needle defoliation, which results in the loss of timber yield and, in severe cases, tree mortality. Since the late 1990s the incidence of the disease has increased

dramatically in Britain, particularly on Corsican pine. More recently the disease has caused significant damage and death to Lodgepole pine and Scots pine. Due to the extent and severity of the disease there is now a moratorium on the planting of Corsican Pine on the national forest estate.

The reasons for the increase in the incidence of this disease are unclear but could be due to increased rainfall in spring and summer, coupled with a trend towards warmer springs, optimising conditions for spore dispersal and infection. Such conditions may become more prevalent in Britain over the next 20 years if current trends in climate change continue. On the national forest estate disease management is currently focused on silvicultural measures to reduce inoculum loads and the use of alternative, less susceptible species in future rotations.

Hymenoscyphus fraxineus (previously Chalara fraxinea)

Ash dieback is an aggressive fungal disease and is caused by *Hymenoscyphus fraxineus* (previously *Chalara fraxinea*). The disease causes leaf loss and crown dieback in affected trees, and usually leads to tree death. Ash trees suffering with the infection have been found widely across Europe since trees believed to have been infected with this newly identified pathogen were reported dying in large numbers in Poland in 1992. These have included forest trees, trees in urban areas such as parks and gardens, and also young trees in nurseries.

Phytophthora ramorum

P. ramorum is a fungus-like plant pathogen which attacks a wide range of tree and shrub species. It was first found in nursery stock in Scotland in 2002 and in an established garden in September 2007. It was first detected on Japanese larch in south west England in 2009 and in Scotland late in 2010. Although European and hybrid larch are also susceptible to *P. ramorum*, current evidence indicates that the impact of the disease is greatest on Japanese larch can die within one to two seasons, with consequential economic, environmental and amenity impacts. The disease on larch showed a significant expansion in 2013 with a core area of some 5-6000 ha of larch within South West Scotland showing extensive signs of infection. Further, smaller and more sporadic infections have also been identified along the western seaboard of Scotland principally in the Argyll and Cowal areas. There have been isolated outbreaks in the north east of Scotland. The total infected area within Scotland is estimated to be now in excess of 6,500 ha.

3.0 Land Management Plan Proposals

3.1 Future Habitats and Species

Refer to Map 3 Management & Future habitats and species.

The restocking of the areas currently felled has been guided by the objective for the plan area, which is for the area to remain as a productive tree nursery. The species selected for restocking are those that will not cause a disease issue in the future. The areas will be replanted with sycamore that will be managed to be productive in the longer term.

The emphasis for the areas of Long Term Retention (LTR) is on retaining the existing stands of trees. They are being retained to provide shelter to the nursery fields. Ideally these areas would be managed by LISS but the narrowness of the shelterbelts makes this impractical, thus they have been designated as LTR.

The shelterbelts will eventually be replaced when the current stand reaches the end of their rotation, which is likely to be when severe windblow starts to affect them.

3.2 Deer management

Deer management will continue to be undertaken by the FES wildlife ranger for the area and numbers will be kept to a level that allows the nursery to produce planting stock for the national forest estate.

Wild deer on the National Forest Estate (NFE) are managed in accordance with the Scottish Government's strategy "Scotland's Wild Deer a National Approach" and under the auspices of the Code of Practice on Deer Management. The strategy and Code of Practice takes recognition of the fact that Wild deer are an asset, an integral part of Scotland's biodiversity and provide healthy food and recreational opportunities. The challenge of managing wild deer originates in a need to balance the environmental, economic and deer welfare objectives of the Scottish nation with the objectives of private landowners for forestry, agriculture, sporting and other forms of land use.

Newton Nursery Land Management Plan 2017-26

The principal legislation governing the management of deer in Scotland and hence on the NFE is the Deer (Scotland) Act 1996.

It is therefore FCS deer policy to;

- Prevent adverse deer impacts on commercial tree crops and the wider habitat. In doing so to carry out deer culling in an exemplary and humane way.
- Work closely with relevant organisations and neighbours to make sure that there are integrated deer management plans which seek to recognise the interests of all parties.
- Take opportunities to optimise income from venison from sporting where this does not conflict with our primary objective of maintaining deer impacts at an acceptable level, in line with Quality Meat Scotland accreditation in the form of The Scottish Quality Wild Venison (SQWV) Assurance Scheme
- Take all practicable steps to slow down the expansion of deer species into areas where they are not currently present.

All deer management will be carried out in accordance with OGB 5 - Deer management.

Appendix 1 – Tolerance table

	Adjustment to Felling period	Adjustment to felling coupe boundaries	Timing of restocking	Change to species	Changes to roadlines	Designed open space	Windblow Clearance
FC Approval not normally required	Fell date can be moved within 5 year period and between phase 1 and phase 2 felling periods where separation or other constraints are met	Up to 10 % of coupe area	Normally up to 2 planting seasons after felling. Where hylobius levels are high up to four planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised.	Change within species group e.g. conifers, broadleaves.		Increase by up to 5% of coupe area	
Approval by exchange of letters and map		Up to 15 % of coupe area	Between 2 and 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised.		Additional felling of trees not agreed in plan Departures of more than 60m in either direction from centre line of road.	Increase by up to 10%. Any reduction in open ground within coupe area.	Up to 5 ha
Approval by formal plan amendment may be required	Advanced felling (phase 3 or beyond) into current or 2 nd 5 year period	More than 15% of coupe area	More than 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised.	Change from specified native species. Change between species group.	As above depending on sensitivity.	More than 10% of coupe area. Colonisation of open areas agreed as critical.	More than 5 ha