



# ROTHIEMURCHUS

## **Forest Plan 2016-2035 -Summary-**

**February 2016**

### **INTRODUCTION**

This Long-term Forest Plan (LTFP) covers all of the woodlands on Rothiemurchus Estate (1879ha). It is based on the 2006 LTFP prepared by Stuart Blackhall (estate forester 2002-2009), revised by Piers Voysey (estate forester since 2010) in 2011. This is the third revision to accommodate the sale of some 2,300ha of forest and open hill land to Forestry Commission Scotland in 2014.

This plan retains the “Framework for the Management of Rothiemurchus Pinewoods” and the “Rothiemurchus Biodiversity Action Plan” prepared by Dr. Phil Ratcliffe as key, under-pinning documents.

The purpose of the plan is to describe the forest, identify opportunities and constraints, present the vision, aims and objectives for the management of the woodlands over the next 20 years and to set out the timing, location and scale of woodland operations in detail for the first 10-year period (2016-2025) and in outline to 2035.

The plan was prepared under a Scotland Rural Development Programme (SRDP) grant and approved by Forestry Commission Scotland (FCS). Public consultation has been carried out according to FCS guidelines and it has been strongly supported by the statutory public agencies making up the Rothiemurchus Concordat (Scottish Natural Heritage, FCS, The Highland Council and the Cairngorms National Park Authority). There will be formal reviews of the plan with FCS every 5 years.

The plan takes account of the woodlands’ varied history and applies it in the context of changing user demands and expectations. It develops proposals in line with the themes of biodiversity enhancement (forest habitat networks, Natura 2000 designations), visual landscape enhancement, public access management and economic sustainability. The plan is part of sustainable estate

management that includes farm and mountain land; managed together to enhance biodiversity and sustain the economic viability of the estate as a whole.

## HISTORICAL BACKGROUND

Outwith the mountain realm of the estate, Rothiemurchus retains a woodland landscape surrounding farmland and habitation. Some of this woodland has grown, developed and been influenced by human activity without significant interruption since the last ice-age. As such it is part of the remnant of Caledonian forest that is now rare in Scotland and remains contiguous with a wider landscape of Caledonian forest stretching from Glen Feshie through to Abernethy.

The woodlands of Rothiemurchus have been managed over the centuries for timber production, woodland grazing, deer stalking, nature conservation and amenity; although the focus of management will have varied with the fashions and economics of the time. Commercial planting in the low-lying areas only commenced in the 1800's. More recently, after further periods of timber extraction during the World Wars followed by livestock grazing, the native woodland areas are once again in a period of regeneration. The national and international significance of the Caledonian Forest and montane habitat has been recognised by SSSI, National Park and Natura 2000 designations. Tourism and public access has also become a significant factor in the management of the estate.

## FOREST DESCRIPTION

Much of the forest is growing on soils developed over free-draining glacial drift of sands and gravels. Deeper forest soils have developed in some areas, such as Callart Hill. Deep peats have formed in basins between moraines. The soils largely reflect the silica rich nature of the surrounding geology, but in places, such as Ord Ban, there are outcrops of lime-rich material that influences the natural vegetation.

The estate forest area can best be described in 5 general types:

1. semi-natural mixed broadleaved woodland along the Spey and tributaries at 210m amsl;
2. Policy woodlands associated with the Doune designed landscape and other 'domestic' landscapes;
3. Plantation woodland;
4. Caledonian pine woodland including areas of birch dominant woodland, juniper scrub, bog woodland and open moorland that is regenerating to native tree species;
5. Other significant areas of open ground, largely in the montane zone between 400m and 700m amsl that has the potential to regenerate to montane scrub and to contribute to the area of Caledonian woodland in the future.

Woodland types classified in this plan:

Woodland type	2015 Area (ha)	%
Scots pine, birch, juniper	896.09	47.69
Unstocked heath / acid grassland (largely tending to regenerate with pine)	577.45	30.73
Coniferous plantation	208.99	11.12
Bog woodland	57.83	3.08
Riparian woodland (alder, pine, bird cherry)	42.35	2.25
Mesic broadleaves	35.66	1.90
Policy woods	27.57	1.47
Misc scrub	17.22	0.92
Acid oak and birch	9.79	0.52
Sub-montane scrub (pine, dwarf willow and juniper)	3.9	0.21
Other land: tracks, open water, buildings	2.13	0.11
<b>Total</b>	<b>1878.98</b>	<b>100</b>

Key to the significance of Caledonian pinewood are the rare species associated with it, such as twin flower, intermediate wintergreen, single flowered wintergreen, narrow headed ant, crested tit and capercaillie, along with several species of bryophytes, fungi and invertebrates, many of these species are represented in the Rothiemurchus woods.

## **FOREST MANAGEMENT; VISION, AIMS, OBJECTIVES**

The national and international significance of the pinewoods, their significance in the landscape, the cultural heritage of the area and the aspirations of the Grant family to sustainably manage the estate all combine to set the vision, aims and objectives for the woodland.

The long-term vision for the forest is that at least 60% of the forest area will be managed as Caledonian and other native woodland; that this area is regenerating, with high structural and age-class diversity and delivering the ecological functions appropriate to meet biodiversity action plan objectives for species and habitat conservation. As well as delivering conservation services the forest will be enjoyed by many thousands of visitors and support sustainable livelihoods for the owners, employees and associated contractors.

In addition to forest management being compliant with the UK Forestry Standard (UKFS), all forest areas (except where Government approval has been given for conversion to non-forest use) will be independently certified under the UK Woodland Assurance Standard.

The Key aims are to:

- Combine ecological sustainability with economic and social sustainability
- Engage visitors in sustainable land management - by welcoming them and promoting understanding, appreciation and enjoyment of the estate environment.
- Enhance Forest Habitat Networks
- Increase the sequestration of carbon through sustainable forest management
- Maintain and enhance the character and quality of the landscape

The objectives are set out in detail in Section 1 of the Forest Plan.

The rationale and principles for forest management activity have been informed by the Woodland Biodiversity Action Plan, the Rothiemurchus Forest Framework and the management statements for the relevant SSSI's. Activities are based on the needs of key pinewood species and identification of habitats that will be managed to reverse previous fragmentation of the forest. It is accepted that, in many areas, felling and timber production is a necessary part of conservation and recreation management. Thinning and coup felling can introduce structural diversity into a woodland, improve light levels for objectives relating to the field/shrub layer and stimulate natural regeneration of tree species. The habitat management areas identified at the sub-compartment level are listed below with a brief description of the level of management expected in these areas:

- Core Old Growth – minimal intervention, monitoring only, removal of exotics.
- Extension Old Growth – low intervention, deadwood creation to 40m<sup>3</sup>/ha, removal of exotics, enhancement of minor species. Will include elements of riparian woodland where management will improve broadleaf component.
- Extended Rotation Woodland – deadwood creation to 20m<sup>3</sup>/ha, timber harvesting and thinning to create structural diversity with felling coupe rotation lengths greater than 120 years, management of exotics.
- Timber Production – rotational timber harvesting largely based on systems that will maintain the forest environment (continuous cover or alternatives to clearfell) where practical; deadwood creation to 5m<sup>3</sup>/ha, may include non-native species outwith designated areas.
- Policy woodland – managed for landscape/amenity objectives with a wide variety of tree species, both native and introduced, rotation lengths according to location in landscape and proximity to buildings, deadwood component as appropriate.
- Woodland Expansion – monitoring of regeneration.

- Bog Woodland – no intervention, monitoring only.
- Sub-montane woodland – no intervention, monitoring only.
- Open Ground – management for landscape/amenity objectives, to maintain important conservation features and to aid control of deer numbers.

Within all of these areas, as appropriate, the enhancement of minor species, such as aspen and holly will be prioritised.

Coniferous plantation areas on Creag Phitiulais and Ord Ban have separate management prescriptions due to their significance in the landscape and options to convert parts of them to native woodland.

Similarly policy woodlands, especially within the Doune designed landscape also have specific management requirements to reflect their role within the landscape of Strathspey.

## **ARCHAEOLOGY**

There are three, Scheduled Ancient Monuments (SAMs) relevant to the forest plan area:

- Loch an Eilein Castle (ruin on island, possibly originating in the 15<sup>th</sup> C, with several periods of development);
- Doune Motte (possibly an ancient defensive site);
- Balvattan (field system with hut circles, possibly Bronze-age).

Operational work plans will show known archaeological sites, and these will be marked on the ground with an appropriate buffer zone for the duration of operations. If known sites could be affected by operations, the Archaeology Unit of The Highland Council will be notified. In the case of scheduled monuments, Historic Environment Scotland will be notified and if relevant the appropriate consents applied for. The Forestry Commission's Forestry and Archaeology Guidelines will be followed and relevant legislation complied with. If previously unknown archaeological sites are discovered during woodland operations these areas too will be taped off and The Highland Council notified.

## **ACCESS & RECREATION**

The general public places considerable value on the cultural and natural heritage, landscapes, facilities and attractions of Rothiemurchus. With an estimate of over 380,000 visits per year, of which more than 50% are staying away from home and 95% are from outwith the local community<sup>1</sup>, the promotion of responsible access to visitors on arrival is critical for Forest Management and public enjoyment.

The public uses Rothiemurchus Forest formally by way of managed tours, walks, activities and educational trips, and informally; principally for walking and cycling. This level of use contributes to the local and wider economy and healthy living, but places substantial demands on the forest environment and its ability to deliver all these benefits, which people have come to expect. Forest Management at Rothiemurchus recognises this, and the management treatments proposed in this plan aim to ensure that the forest will be able to deliver.

The Recreation Management Plan accounts for the changing patterns of use of the forest by the public. This strategic document will detail how the changes resulting from recreation will affect the woodlands, and how the impacts will be addressed. There will be opportunities to monitor visitor numbers, to add value to the visitor experience by promoting the Forest Plan through interpretation, to schedule track repairs, to collect litter, to assess dangerous trees etc.

## **FOREST ROADS**

There is no requirement for new roads to meet the Forest Plan objectives. However, very few of Rothiemurchus' internal forest roads were designed with modern harvesting vehicles in mind. Minor modification will be phased according to need and detailed plans will include both tree works

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<sup>1</sup> Rothiemurchus 2013 Recreation Plan survey data. CNPA/Progressive Cairngorms Visitor Survey 2015, interim report

and improvements to the roads themselves. This seeks to minimise the ecological impacts and to avoid unnecessary expenditure. The existing character of the roads and tracks, which meander between trees or adjacent to a river, will maintain the attractiveness and appeal of these routes for recreational access. Prior to any road up-grading works being carried out detailed plans will be submitted to FCS using their Environmental Impact Assessment (EIA) “determination enquiry form”.

Management of forest Natura 2000 sites should not lead to a decline in the forest conservation status of habitats or species (European Commission<sup>2</sup>, 2003). To this end, some tracks and old sections of road were re-instated during 2006-2010, to mitigate against the impacts of future upgrades to sections of the forest road network. This is additional to the considerable habitat gains that will be achieved through implementation of the Forest Plan.

## **DEVELOPMENT**

The creation of the new community of An Camas Mòr consisting of up to 1500 homes and associated work and community space at Cambusmore within an area of some 100ha of woodland is a major consideration. Having received outline planning permission in 2014, detailed plans are being prepared, which include recreation, landscape and compensatory habitat management designed to enhance surrounding woodlands. These have been considered in the preparation of this plan.

Two smaller developments are proposed for other woodland sites; one on the former sawmill site at Inverdrue and the other to improve the campsite at Coylumbridge.

## **FORESTRY EMPLOYMENT**

Rothiemurchus Estate has employed a Forester since May 2003, as part of its commitment to ensuring a consistent and long-term approach to identifying opportunities and meeting objectives at both strategic and site level. This is the Estate’s preferred approach to management of this remnant of the Ancient Caledonian Pinewood.

The forester is supported by the maintenance team and recreation rangers where appropriate, but significant operations are largely undertaken by forest contractors.

## **DEER MANAGEMENT**

Deer management on Rothiemurchus covers the whole estate, not just the woodland area, but it is included within the forest plan as a key component of forest management. Deer management on the estate is also strongly influenced by the deer management activities of neighbouring estates; more so now that the Upper Rothiemurchus Forest is managed by Forest Enterprise. Liaison on deer management between estates is largely done through the Cairngorms and Speyside Deer Management Group. Red and roe deer are resident species and, very rarely, Sika deer will be encountered on the estate.

Deer fencing has been largely removed from the estate except the key strategic fence-line to separate hill ground from farmland areas. This fence has now been marked to prevent woodland grouse collisions with the fence.

## **Long-Term Vision**

Rothiemurchus aims for the full integration of objectives in relation to the management of wild deer, through the application of sound knowledge and Best Practice, leading to the enhancement of the Natura 2000 interests.

## **Management Statement**

Deer are an important element of the biodiversity of the forest. They are also important for our cultural heritage, wildlife tourism and for venison. They contribute in many ways to the public benefit derived from these designated sites.

Rothiemurchus' deer management practise is designed to reflect this and to ensure that deer continue to populate these woodlands and hills in numbers, which enhance these values. Deer Management at Rothiemurchus aims to:

- Enable the ongoing expansion and enhancement of the Pinewood by natural regeneration, at levels commensurate with a wide range of management objectives and in line with European requirements
- Maintain balanced populations of healthy wild deer based on sound knowledge and Best Practice
- Achieve successful establishment and promote enhancement of planted woodlands, including restock sites
- Protect agricultural and farm land against damage from wild deer
- Provide employment and sustain the viability of stalking and its contribution to the rural economy
- Maintain the sporting heritage of Rothiemurchus
- Manage the cull so that deer may still be seen by the public
- Provide quality venison for processing and retailing
- Exclude non-indigenous species such as Sika deer

### **Objectives**

Control of deer numbers by shooting, in season to ensure sustainable forest habitats including:

- a vegetation under-storey (shrub layer) over more than 20% of the Pinewood area (Scottish Natural Heritage, 2003<sup>1</sup>);
- on-going expansion of the forest area through natural regeneration, including the establishment of woodland habitats towards a climatic tree line above 500m amsl and re-stocking of felled areas within 15 years of felling;
- more than 75% of established Scots pine seedlings achieving positive leader growth each year;
- Establishment of Native Broadleaves (including natural regeneration) with > 75% showing positive growth each year;
- Establishment of other conifer species within timber production areas (see habitat networks) with > 90% showing positive leader growth each year;

In addition:

- Sika deer to be culled immediately using safe and legal means
- Utilise deer fences to protect plantations or regeneration if necessary as a contingency measure. These need to be well marked in areas utilised by woodland grouse and removed when they have served their purpose.

### **DELIVERY**

Delivery of the Forest Plan is dependent on the availability and cost of suitable contractors, timber values, public contribution towards non-market benefits, voluntary contribution and the weather.