Moray and Aberdeenshire Forest District

Correen Hills

Land Management Plan

Plan Reference No: LMP 30

Plan Approval Date:

Plan Expiry Date:

It's important to keep people informed about management proposals affecting their local forests.

Forestry Commission forests are independently certified as being responsibly managed. We're regularly audited against 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.

Keeping in touch with our stakeholders is an important part of the standard. We welcome comments on these proposals.

The mark of responsible forestry

FOREST ENTERPRISE - Application for Forest Design Plan Approvals in Scotland

Forest Enterprise - Property

Forest District:	Moray & Aberdeenshire FD
Woodland or property name:	Coreen Hills
Nearest town, village or locality:	Alford, Aberdeenshire
OS Grid reference:	NJ 551 225

Areas for approval

	Conifer	Broadleaf
Clear felling	153ha	
Selective felling		
Restocking	130.5ha	22.5ha
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 ~~afforestation* /deforestation~~*/ roads*/ ~~quarries~~* 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 …… Forest District Manager

Signed …… Conservator

District Moray & Aberdeenshire

Conservancy Grampian

Date ……

Date of Approval:……

Date approval ends: ……

FOREST ENTERPRISE - Request for Approval of Thinnings

To: Conservator

Grampian Conservancy
Portsoy Road
Huntly
Aberdeenshire
AB54 4SJ

I apply for Authority to carry out a programme of thinnings within Coreen hills in Moray & Aberdeenshire Forest District during the 10 years commencing from the date of approval.

I undertake to identify any statutory designations which apply to any of the land to be subject to thinning, and to obtain the necessary permissions from the appropriate statutory body before commencing work under any approval which is granted.

Signed…….. Signed ……
Forest District Manager Conservator

District Moray & Aberdeenshire Conservancy Grampian

Date …… **Date of Approval**……..

Environmental Impact Assessment Determination Enquiry Form

Complete this form to find out if you need consent, from the Forestry Commission (under the EIA Regulations 1999), to carry out your proposed work.

Section 1 Proposed work							
Please put a cross in the box to indicate the type of work you are proposing to carry out. Give the area in hectares and where appropriate the percentage of conifers and broadleaves.							
Proposed work	cross	Area in hectares	% Conifer	% broadleaves	Proposed work	cross	Area in ha
Afforestation					Forest roads	X	9.6
Deforestation					Forest quarry		
Location and District			Coreen hills, Alford				

Please attach map(s) showing the boundary of the proposed work and also give details of the operations.

Section 2 Property details	
Property Name	Coreen hills
Grid Reference (e.g. AB 123/789	NJ 533 233
Local Authority	Aberdeenshire council
Nearest Town	Alford

Section 3 Applicant's category *(please put a cross in one box)*			
PE Personal occupier		PU Public ownership	X
BU Business occupier		OT Other	
VO Voluntary organisation		CT Crofting tenant	

Section 4 Applicant's type *(please put a cross in one box)*			
LS Lessee		OW Owner	X
TE Tenant		TR Trust	

Section 5 your agent or woodland manager's details							
Title	Mr	Initials	M	Surname	Reeve		
Organisation	Forest Enterprise Scotland						
Address	Moray & Aberdeenshire FD, Portsoy Road,						
Huntly							
				Postcode	AB54 4SJ		
Tel No				Mobile	07990 802879		
Fax				e-mail	mark.reeve@forestry.gsi.gov.uk		
Is this the address for correspondence?				yes	X	No	

Section 6 Applicant's details							
Title		Initials		Surname			
Organisation	Forest Enterprise Scotland						
Address	Moray & Aberdeenshire FD, Portsoy Road,						
Huntly							
				Postcode	AB54 4SJ		
Tel No				Mobile			
Fax				e-mail			
Is this the address for correspondence?				yes	X	No	

Section 7 Sensitive Areas: Give the area of the proposal that is covered by any of the following designations	
Sensitive Area as listed in "Schedule 2" of the 1999 EIA Regulations Area (ha)	Area in hectares
a. Sites of Special Scientific Interest (SSSI) or Proposed Sites of Special Scientific Interest (PSSSI)	
b. SSSI's with a Nature Conservation Order (Section 29 of the Wildlife and Countryside Act 1981)	
c. National Park (NP)	
d. The Broads	
e. World Heritage Site	
f. Scheduled Ancient Monument (SAM)	
g. an area designated as National Scenic Area	
h. Area of Outstanding Natural Beauty (AONB)	
i. “Natura 2000” site - *(European network of special areas of conservation and special Birds Directive protection areas under the Wild)*	

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Land Management Plan Summary

This plan is for the area known as Correen Hill which is the amalgamation of the Whitehaugh and Knockespock forests. These are now managed as one unit and therefore combined in one plan.

The purpose of the plan is to set out management objectives and prescriptions for the forest 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 Forestry Standard.

The main objective for the management for the blocks in the plan area is the production of a sustainable crop of high quality timber.

The forest covers an area of about 1,476 hectares and is split into two areas separated by a minor public road known as the Suie. Whitehaugh (687ha) lies to the east and Knockespock (789ha) to the west of this road.

The majority of Whitehaugh was originally planted in the late forties to early fifties with significant areas now in their second rotation having been restocked from the late seventies onwards.

Knockespock is almost entirely a first rotation area planted over four years from 1978 - 1981. The predominant species is Sitka spruce with small areas of Japanese and Hybrid larch, Scots pine, Lodgepole pine and Douglas fir.

The soils across the plan area are strongly acidic with low nutrient levels with 99.7% of the soils having a poor or very poor nutrient regime.

There are two designations which affect parts of the plan area. A small part (25ha of the 274ha total) of the Coreen hills Site of Special Scientific Interest (SSSI) lies on FES land on Mire of Midgates, at the western boundary of Knockespock. Plus a small area of old Scots pine woodland on the northern slope of Knockespock has been designated as Plantation on Ancient Woodland Site (PAWS).

The Gordon Way long distance path passes through Whitehaugh, ending at a car-park on the Suie road. The path is unsurfaced with loose rocks and muddy sections. This is the only way-marked route and there are no other formal recreational facilities.

1.0 Introduction

Refer to Map 1: Location.

1.1 Setting and context

The forest is located on the Coreen Hills in south/central Aberdeenshire. The town of Alford lies approximately 6 km to the south.

The forest covers an area of about 1,476 hectares and is split into two areas separated by a minor public road known as the Suie. Whitehaugh (687ha) lies to the east and Knockespock (789ha) to the west of this road.

The majority of Whitehaugh was originally planted in the late forties to early fifties with significant areas now in their second rotation having been restocked from the late seventies onwards. Although Sitka spruce is the main species there is a variety of others, including Scots pine, Japanese larch, Norway spruce and Douglas fir.

Between Suie Hill and the public road is an area of 139ha which was not planted until 1977. This is predominantly Sitka spruce.

Knockespock is almost entirely a first rotation area planted over four years from 1978 - 1981. The predominant species is Sitka spruce with small areas of Japanese and Hybrid larch, Scots pine, Lodgepole pine and Douglas fir. Harvesting work began in the last few years following the construction of several miles of forest road and access points onto the public road. Many areas were thinned for the first time in 2014 & 2015.

All timber is extracted to the Suie road following the construction of additional linking forest roads, thus avoiding the need to haul timber past neighbouring properties and subsequently along the minor roads to Montgarrie and in the populated valley of the Mill Burn.

1.2 Land management objectives

The objectives for managing this land have been identified following a review of the following factors:

- the physical context and current crop;
- neighbouring land uses;
- a review of the land management objectives already established by statutory bodies;
- the physical capability of the land;
- the locational objectives identified in the Moray & Aberdeenshire Forest District Strategic Plan;
- the views expressed by the public and statutory stakeholders (see appendix1).

This has led to the **primary objective** for the forest being the production of a quality timber crop.

In common with the management of all woodland in the National Forest Estate, the forest will be managed to meet the requirements of the UK forest standards. This will ensure that the plan area meets multiple land use objectives while utilising the intrinsic specific strengths of the block.

2.0 Analysis of previous plans

The previous plan was approved in 2004. The table below compares the outcomes achieved against the objectives of these plans.

The objectives set in the previous plans do not fit neatly with the current FES national themes. However the table below attempts to set the objectives of the previous plans against these current themes and summaries the progress made towards achieving them during the last plan period. It also shows which of the objectives, if any, will be carried forward into the next plan period, as they still meet our current aspirations for the management of the blocks.

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	Objective	Work proposed in previous plan	Outcome over plan period	Objective achieved
Social	Improve the environs of the Gordon Way and extend through Knockespock.	Make the route of the Gordon Way more visually diverse.	Some variety has been provided during felling and restructuring but limited to date due to the age of the adjacent crops.	In progress
		Explore possibilities of extending the route with Aberdeenshire council.	The way was not extended due to funding constraints.	No

	Objective	Work proposed in previous plan	Outcome over plan period	Objective achieved
	Horse riding is popular and there is scope to increase riding opportunities in Knockespock.	Consider provision for horsebox parking. Look at options in consultation with local riders.	The forest remains well used by local riders but no specific facilities have been provided. The extensive network of roads and tracks means that no additional trails are required.	N/A
	Reduce lorry traffic past neighbouring properties.	Create a new forest road and access point so that all haulage is onto the Suie road rather than through Montgarrie.	New road and access point created. All haulage is now onto the Suie Road.	Yes
Environmental	Improve linkage between areas of moorland habitat.	No felling in these areas was scheduled to be carried out in the design plan period.		No
	Improve the habitat along water courses.	Fell conifers within riparian zones.	Thinning has been undertaken and started the process of conifer removal in some riparian zones. Early felling due to windblow has also opened up some wetland areas.	In progress

	Objective	Work proposed in previous plan	Outcome over plan period	Objective achieved
	Improve the habitat for black grouse.	Open up old lek sites.	The locations of lek sites were not specified in previous plan so it is not possible to determine if any of this work was undertaken.	Uncertain
	Extend the moorland habitat.	Early removal of checked and poorly growing crops.	Few of these areas were scheduled for felling during the plan period. Those that were felled naturally regenerated with extensive areas of Sitka spruce.	No
	Restore and expand PAWS areas.	Deer fence and removal of non-native species from around the old granny pines.	The deer fence was not erected. The forest road into the area was constructed in 2014 and harvesting began in 2015. The areas within the PAWS designations have not yet been felled.	No
Economic	Avoid loss of income by the premature felling of crops in Knockespoch.	Scheduling of felling coupes to avoid premature fellings.	Fellings coupes rescheduled, forest roads constructed and first thinning of crops started.	Yes
	Help smooth the production forecast across the district.	Allocate appropriate felling years to coupes to help smooth the production volumes.	Appropriate felling dates allocated.	Yes

	Objective	Work proposed in previous plan	Outcome over plan period	Objective achieved
	Avoid adjacency with all planned felling coupes.	Reschedule some of the felling coupes to avoid adjacency.	Felling coupes rescheduled.	Yes

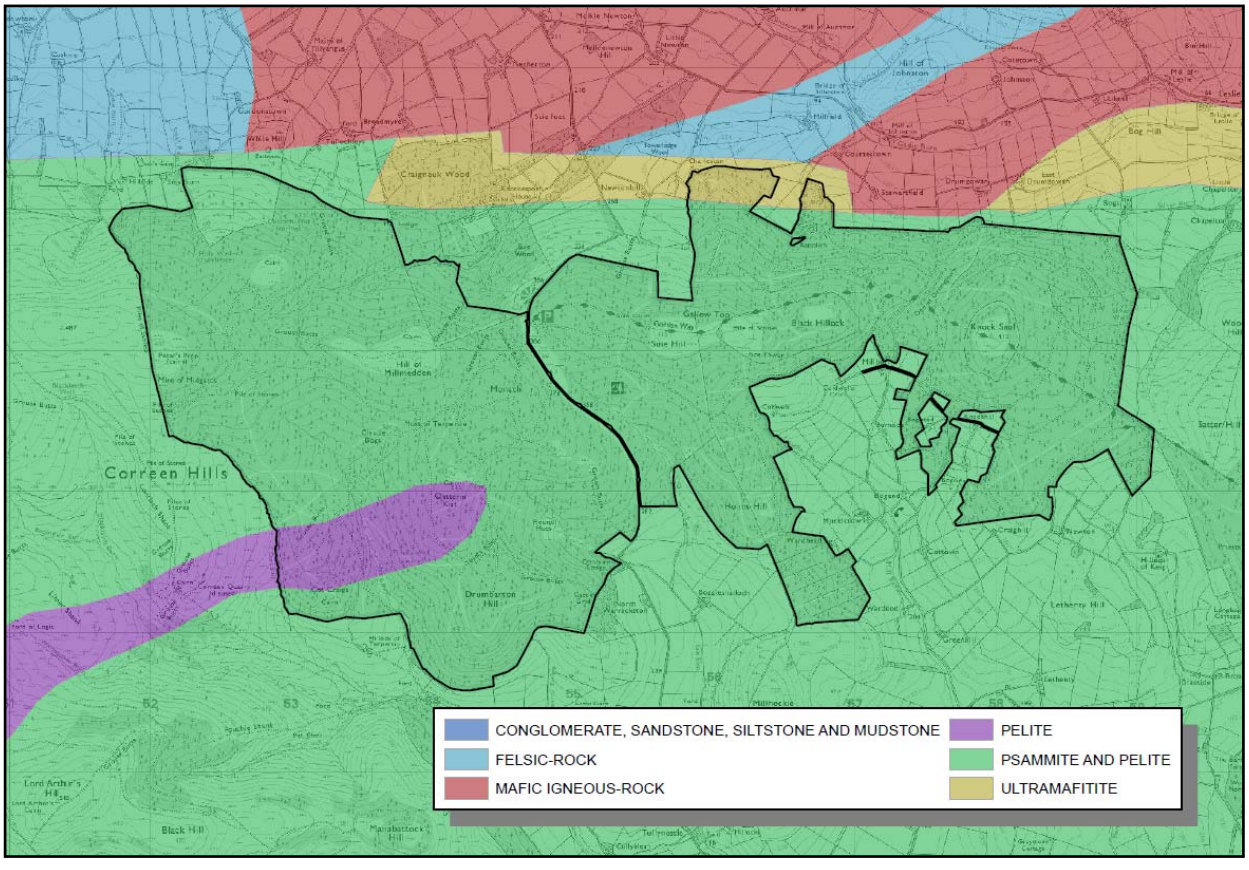
3.0 Background information

3.1 Physical site factors

Refer to Map 2: Key Features.

3.1.1 Geology, soils and landform

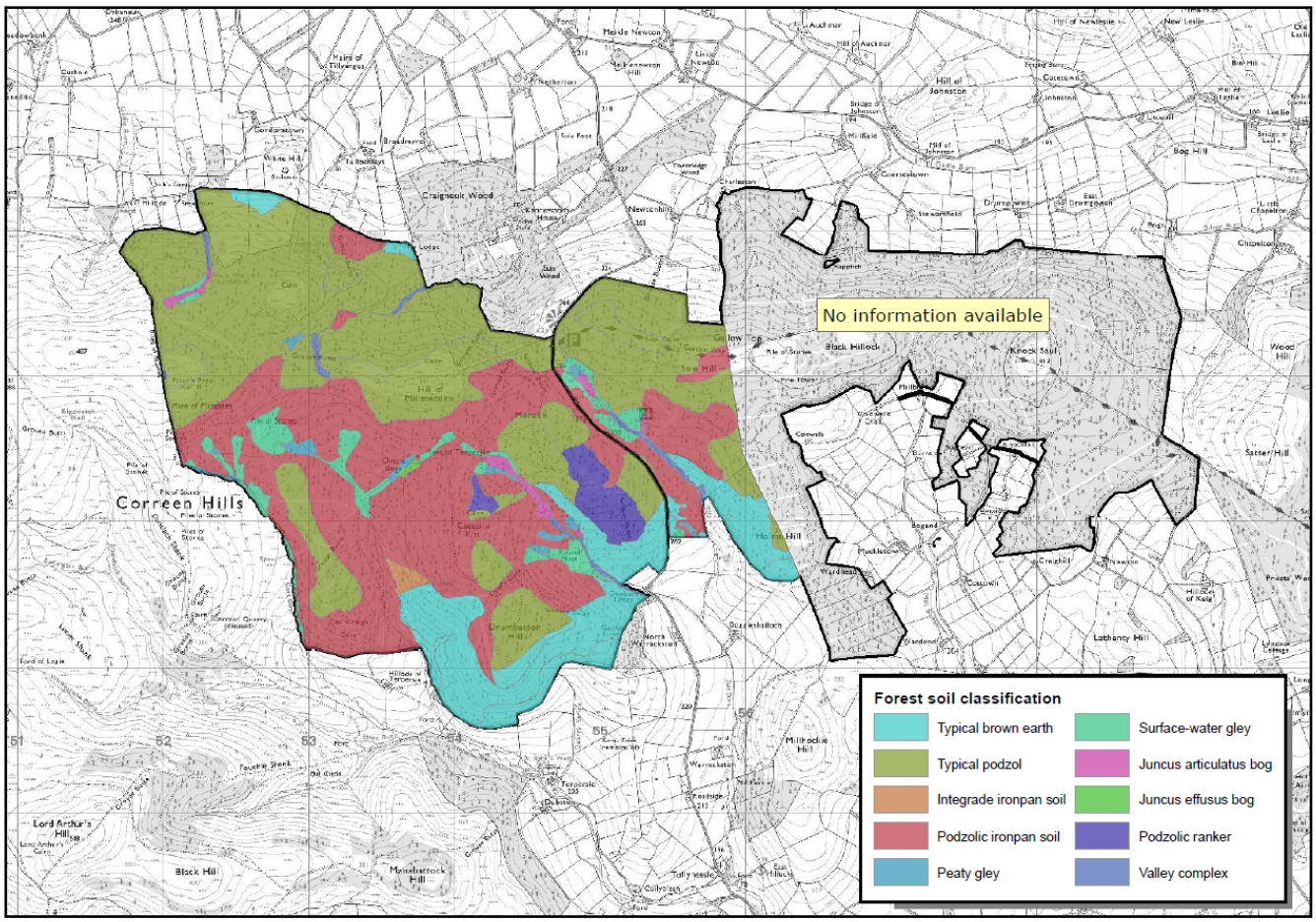
Geology - According to the British Geological Survey (Geological Map of the UK), the vast majority of the land management plan area is underlain by Psammite or Pelite with a small area of Ultramafitite on the northern boundary. All these rocks are part of the Southern Highland Group of the Dalradian Supergroup and are metamorphosed sedimentary rocks (sandstone) with varying grain sizes and therefore textures. They all parent rocks give rise to soils with medium nitrogen availability.



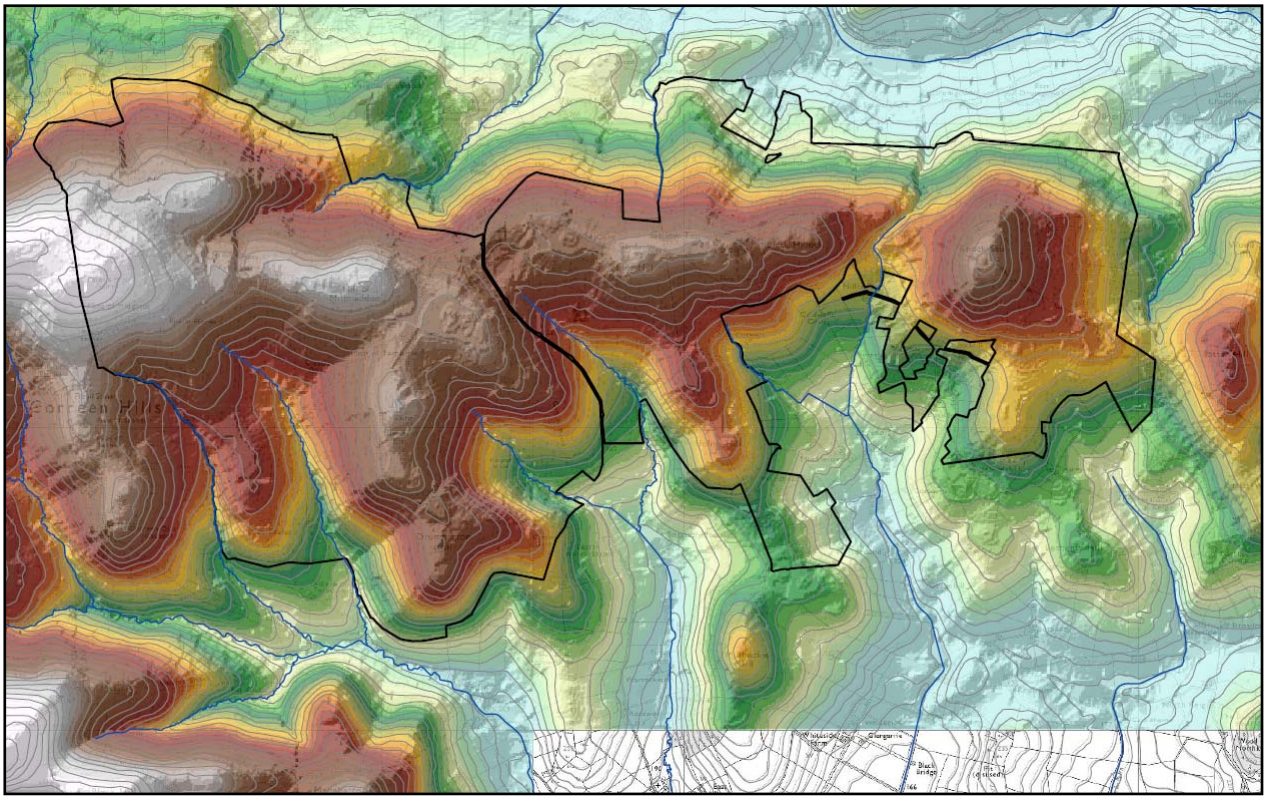
Soils – There are a range of soils across the western half of the block but the eastern half as not been surveyed so there is no detailed information. Where information is available it is clear that the majority of the soils are Podzols or Podzolic ironpans with areas of brown earths along the southern boundary and podzolic ranker on some of the highest ground.

Due to the topography of the block and the continuity of the two halves it is reasonable to assume that the eastern half of the block has similar soils to those in the surveyed half.

The podzolic soils are normally free draining with relatively good conditions for rooting, although the depth of soil in some areas is limited. These soils are however strongly acidic with low nutrient levels. In fact 99.7% of the soils have a poor or very poor nutrient regime. Some wetter sites with bogs and brown earth provide more nutrients. This information along with the climate details will be used to help inform the choice of planting species.



Topography - The Coreen Hills form a long ridge with several rounded hilltops running east-west for about 5 miles. The summits are separated by several steep sided valleys containing watercourses. The forest lies on the north, south and eastern faces of the ridge. The ridge is steep on the northern side and less so on the southern aspect. The altitude varies from 441m at the Hill of Millmedden to 220m at the north eastern corner. This gives rise to a wide range of aspects, exposure and slope gradients within the forest. See the map below.



3.1.2 Water

There are several watercourses that arise within the plan area. These are mainly in pronounced and steep sided gullies and drain the ridge to the north or south. The main burns are the Casaiche and Den of Drumgowon on the north side and the Clystie, Den and Suie Burns to the south. The Millburn and its tributaries rise just outside the forest but their catchment extends into the woods.

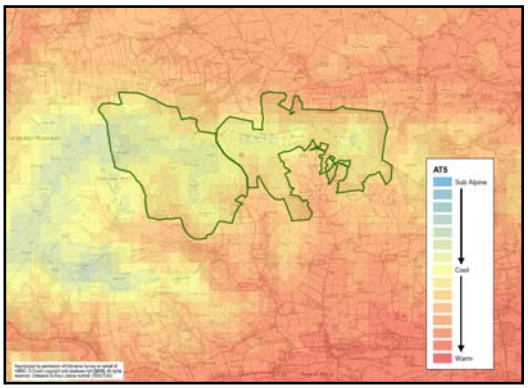
Additionally there are a number of private water supplies located within the block that will be protected during all forest operations planned in their locality.

3.1.3 Climate

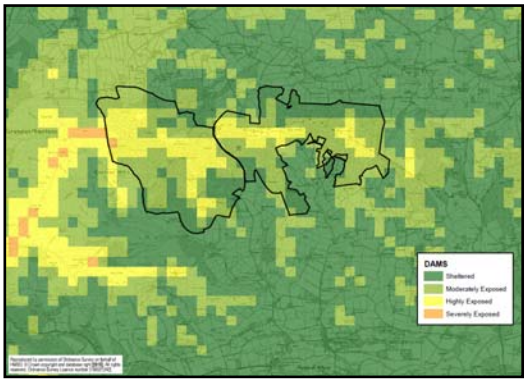
The climate data for the design plan area is obtained from the Ecological Site Classification system (ESC).

The results of interrogating this system gives the following information.

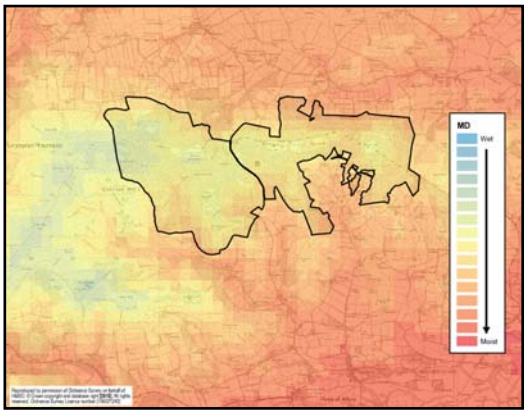
AT5	DAMS	MD
724 - 1038	9 - 19	26 -94
Sub-alpine - Cool	Sheltered – Severely exposed	Wet - Moist



AT5 is the accumulated total of the day-degrees above the growth threshold temperature of 5º, which provides a convenient measure of summer warmth. The results for AT5 range from 724 to 1038 degree days. This places this block mostly in the “cool” zone with a small area of the highest ground classed as “sub alpine”.



DAMS is the Detailed Aspect Method of Scoring. This represents the amount of physically damaging wind that forest stands experience in the year. The values vary from 19 on the higher hilltops to 9 on the lower and more sheltered slopes. This means the majority of the block falls between the “highly exposed” and “sheltered” zones.



MD is the Moisture Deficit for the area. Moisture deficit reflects the balance between potential evaporation and rainfall and therefore emphasises the dryness of the growing season (rather than the wetness of the winter or whole year). The values here range from 26mm on the highest ground to 94mm in the sheltered areas.

This places the vast majority of the block in the “wet” zone.

These results will be used to help assist in the choice of tree species for restocking in this LMP. Each tree species has tolerances for these and other factors and they will be used to identify species suitable for the site conditions.

Further information on these criteria and the application of ESC can be found in Forestry Commission Bulletin 124 - An Ecological Site Classification for Forestry in Great Britain.

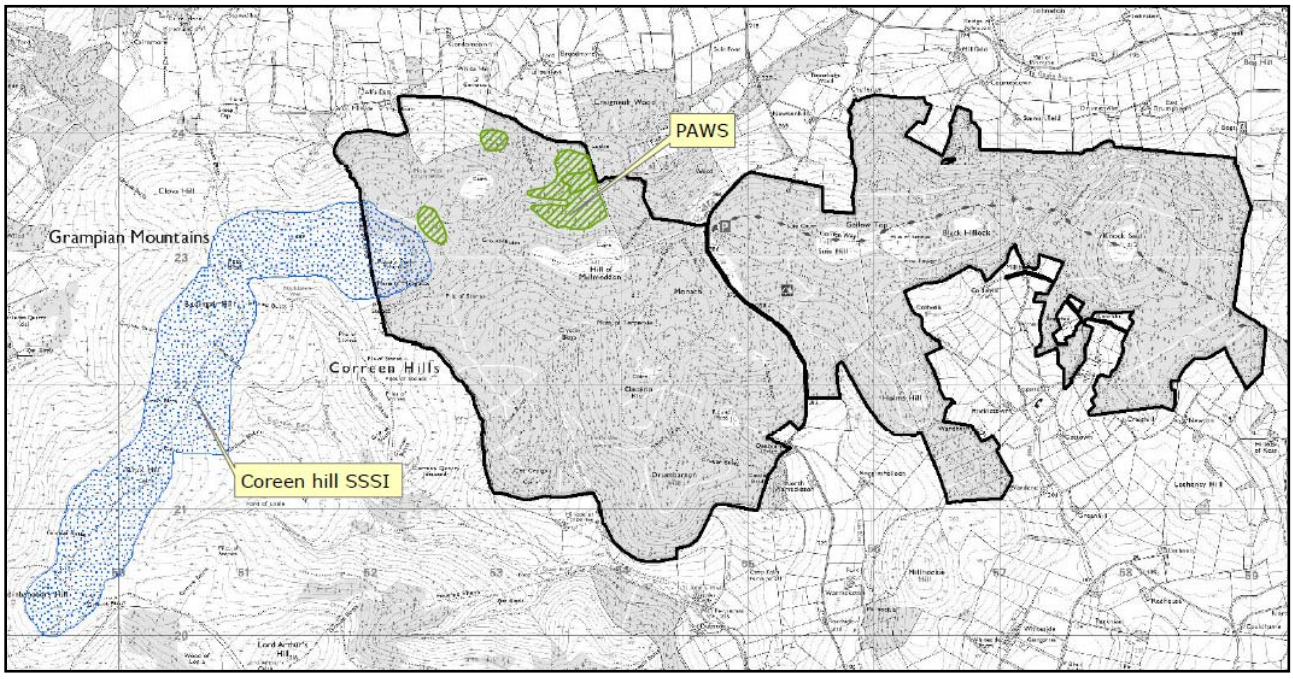
3.2 Biodiversity and environmental designations

There are two designations which affect parts of the plan area (See map below).

A small part (25ha of the 274ha total) of the Coreen hills Site of Special Scientific Interest (SSSI) lies on FES land on Mire of Midgates, at the western boundary of Knockespock.

This area was originally designated in August 1988 due to the presence of a breeding colony of Common Gulls. However the colony declined for several years with the number of breeding pairs falling from 13,000 in 1988 to zero in 2003. The reasons behind this decline are not fully understood but may include a combination of predation, land use changes and the movement of the colony elsewhere.

A small area of old Scots pine woodland on the northern slope of Knockespock has been designated as Plantation on Ancient Woodland Site (PAWS).



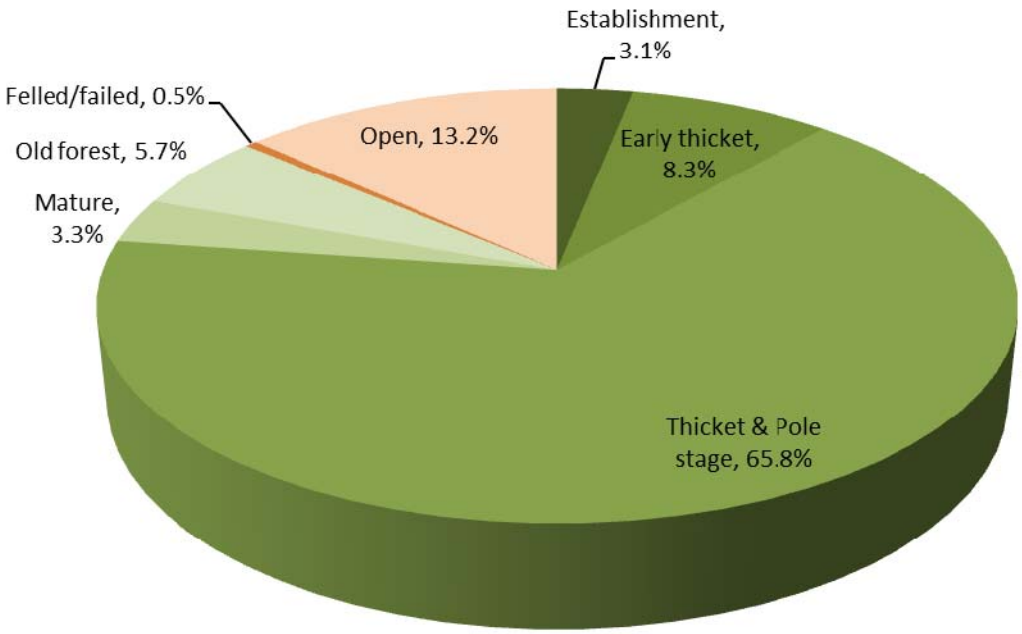
3.3 The existing forest

3.3.1 Age structure, species and yield class

Age Structure

Ages of trees (years)	Successional Stage	Area (ha)	%
0 -10	Establishment	46.1	3.1
11 – 20	Early Thicket	123.8	8.3
21 – 40	Thicket & Pole Stage	975.2	65.8
41 – 60	Mature High Forest	49.4	3.3
61+	Old Forest	84.6	5.7
	Felled	7.4	0.5
	Open	196.3	13.2

The age structure of the woods is heavily weighted to thicket and pole stage crops. This is due to the large area of even aged crops in Knockespoch that are just coming to the first thinning stage.

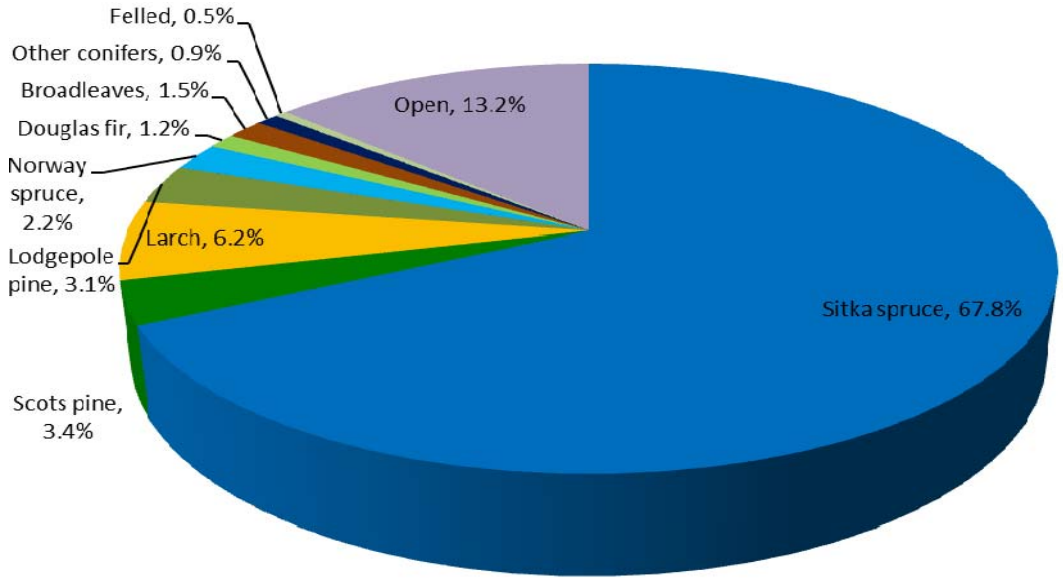


Species

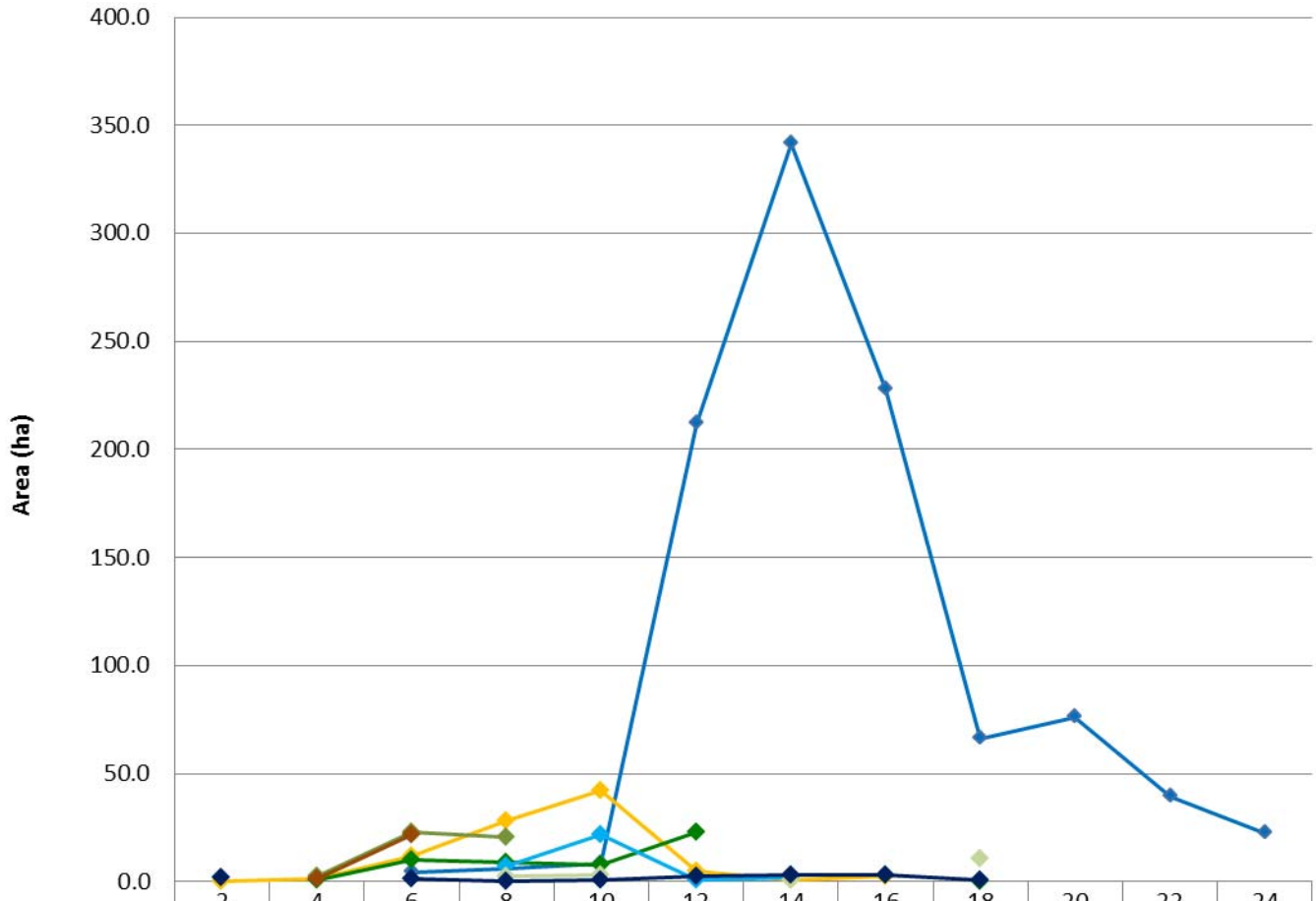
Species	Area (ha)	%
Sitka Spruce	1004.7	67.8
Larch	91.8	6.2
Scots Pine	50.7	3.4
Lodgepole Pine	46.0	3.1
Norway Spruce	32.1	2.2
Douglas fir	17.3	1.2
Broadleaves	22.9	1.5
Other conifers	13.6	0.9
Felled	7.4	0.5
Open	196.3	13.2

Sitka spruce makes up over three quarters of the existing area. This is due to the large area planted on Knockespoch. Due to the young age of most of this crop little of it will be due to be felled this plan period so there will be little chance to make major changes to this species mix.

Currently broadleaves form only 1.5% of the species mix, well below the 5% required to meet the UK forest standard. This will be addressed in this plan as felling coupes allow.



Yield class



	2	4	6	8	10	12	14	16	18	20	22	24
Sitka spruce	0.4		4.1	6.3	8.6	212.1	341.5	227.9	65.9	76.3	39.5	22.2
Larch	0.2	1.2	11.9	27.9	42.3	5.1	0.8	2.5				
Scots pine		0.9	10.4	9.0	7.6	22.7			0.2			
Lodgepole pine		2.4	22.9	20.7								
Norway spruce				7.1	22.0	0.9	2.1					
Douglas fir				2.3	3.2		1.0		10.8			
Broadleaves		1.4	21.5									
Other conifers	2.2		1.4	0.1	0.7	2.5	3.2	3.0	0.6			

Sitka spruce was planted widely across the plan area, especially on the upper ground where growth rates are reduced due to the poor soils and climate. This has been ameliorated by applications of fertiliser in the past.

3.3.2 Access

Following construction of several miles of new roads during the period of the previous plan all of the forest can be accessed from entry points on the Suie road. A new road now connects the Holms Hill section which was previously isolated and could only be accessed from the minor public road in the Millburn valley.

The forest is well roaded and this is complemented by several old 'green roads' which are still useable by 4WD vehicles or on foot. These green roads are of particular value for public access and will be protected from damage and kept open wherever possible.

New forest roads are planned for construction during the period of this plan.

3.3.3 LISS potential

In the existing plan approx. 45.7ha or 3% of the area is designated for management under Low Impact Silvicultural Systems (LISS).

These management systems are defined as: '… silvicultural systems whereby the forest canopy is maintained at one or more levels without clear felling.'

LISS prescriptions mean that no area larger than 2 ha may be felled at any one time.

The potential for LISS is based on the wind hazard class of the crop, the soil nutrient regime, the suitability of the species to the site and the history of thinning of the site. Issues that could limit the success of LISS within the plan area are:

- The current ground vegetation is too dense for natural regeneration;
- The browsing pressure from mammals is too high;
- The existing crop is not old enough to produce sufficient viable seeds;
- The light levels under the crop are not sufficient to allow natural regeneration to develop.

During the planning process all coupes will be assessed for their suitability for continuing to be managed under LISS. Those assessed as unsuitable will be returned to management by clearfell while any coupe not currently designated but thought to have a good potential will be changed to LISS management

3.3.4 Current and potential markets

The current breakdown of the timber being harvested from this design plan area across the range of sites, species and ages is shown in the table below.

Material	End product	Percentage
Short roundwood	Chip board, Orientated strand board (OSB), Paper	40
Short log	Pallets & slats	30
Log	Construction	30

The majority (95%) of this production is sold into markets in the north east of Scotland, with little travelling more than 50 miles to the processing facility. The forest is well located with sawmills at Banchory, Aboyne and Mosstodloch.

The development of the woodfuel market has created local markets closer to hand with a large processing facility at Kinnoir. In the past considerable amounts of small roundwood were exported from Montrose and Aberdeen harbours.

3.4 Landscape and land use

3.4.1 Landscape Character and Value

The visual amenity of the Coreen hills is important given its prominent ridge top location in the local landscape.

Scottish Natural Heritage, in partnership with local authorities and other agencies, has carried out a national programme of Landscape Character Assessment (LCA). This programme aims to improve knowledge and understanding of the contribution that landscape makes to the natural heritage of Scotland. It considers the likely pressures and opportunities for change in the landscape, assesses the sensitivity of the landscape to change and includes guidelines indicating how landscape character may be conserved, enhanced or restructured. These assessments are considered during the preparation of all land management plans.

The design plan falls within the area covered by Scottish Natural Heritage Review No102, South and Central Aberdeenshire: Landscape Character Assessment, produced in 1998.

The forest falls into the “Moorland Plateaux” Landscape Character Type. This type is essentially ‘Highland’ in character with heather clad, windswept moors, mountainous exposure and, often, a thick mantle of coniferous plantation. The plan area fits well with the description of the character type.

Topography is variable; most commonly it encompasses rolling ridges of both gentle and severe relief. Streams cleave deep gullies between the hills disrupting the smooth flow of the terrain; plantation woodland is totally dominant and the result is the detail of the landform is obscured and the landscape exhibits a pattern of smooth folds, simple shapes and subdued tones and shades. Heather moor still prevails on the rounded hilltops.

The Coreen Hills forest forms part of the Grampian Outliers Landscape area, which is one of two landscape areas within the Moorland Plateaux Landscape Character Type. The key characteristics of the area found within the forest are:

- Smooth undulating landform, which forms dark ridges across skyline when viewed from lowlands.
- The hills stand proud of surrounding low farmland.

- Extensive tracts of conifer plantation covering the slopes, mixed to varying degrees with areas of heather moorland on the hill-tops.
- The forest has a sharply defined edge with green fields of pasture on lower slopes.
- Promontories present spectacular views over surrounding lowland.

The Landscape Character Assessment lays out specific guidance for land managers in order to achieve the following aims:

To increase the diversity of land-cover

- Extensive monocultures present uniform backdrop to views from lowland areas; increased species mix will enhance visual diversity and interest.
- Increased proportions of open space/moorland within forest blocks will also create visual interest and appear more natural.

To conserve the distinct moorland edge

- The union of forestry and farmland at the base of the slopes can appear attractive, but a more gradual transition between moor and field with conservation of drystone dykes and a succession of vegetation, will encourage wildlife and provide local visual interest.
- Scattered, loosely planted stands of conifers and native pine on lower slopes add a natural feel to the upland edge which can provide an interesting transition between the upland and farmed landscapes.

To preserve and extend moorland area

- This landscape character area is physically fragmented by lowland inliers, but dense coniferous forest fragments open moorland still further; maintenance of a continuous tract of moorland with views into lowland areas will provide a valuable recreational resource and link distinctive upland features.
- Maintenance of open views at points along upland roads provides a good opportunity to experience the landscape.

3.4.2 Visibility

Being on a high ridge the forest is prominent in the landscape for some distance from all directions. Most views though are quite distant and the central areas are largely invisible.

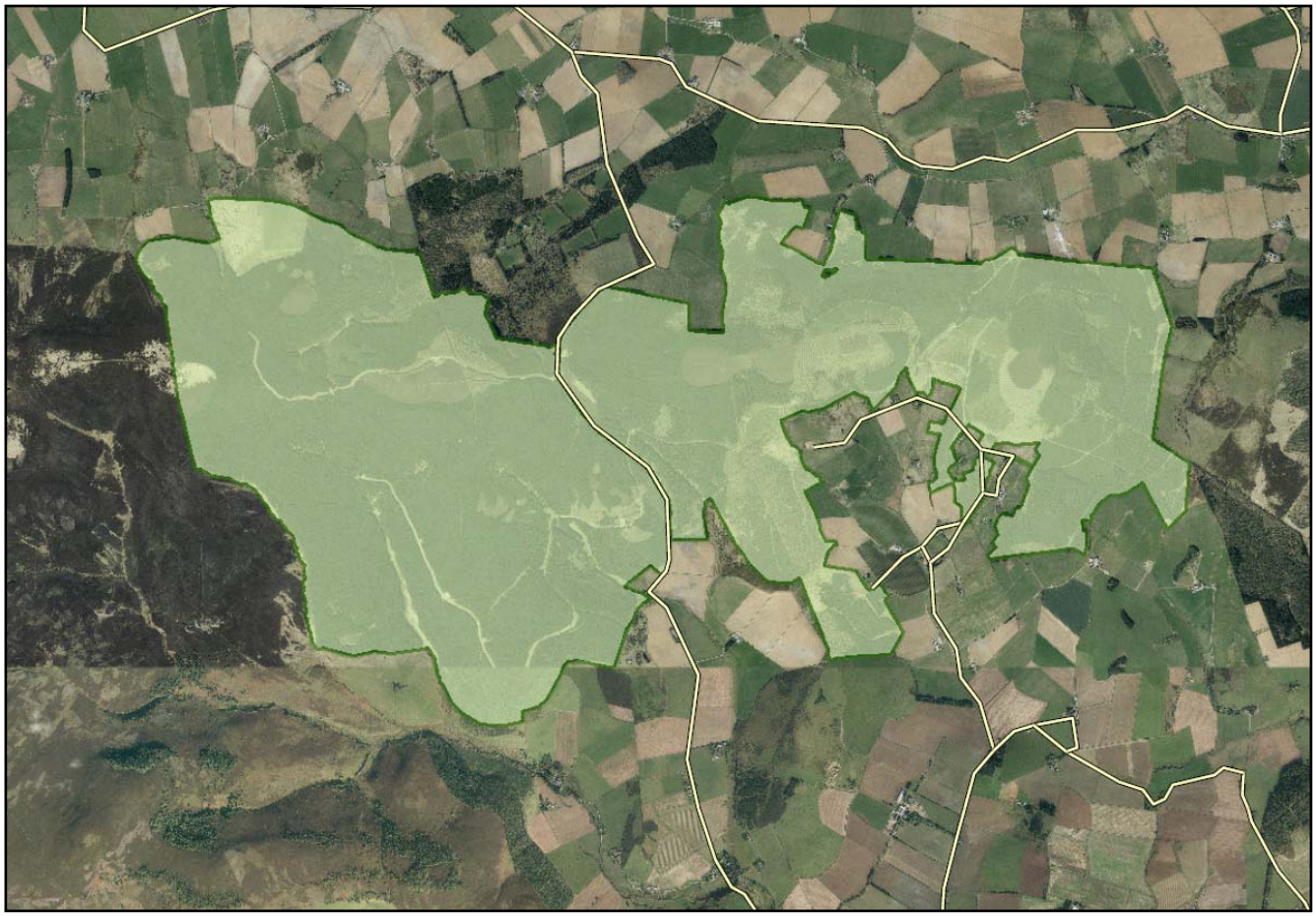
Coreen hills seen from the north on the minor road just leaving Kennethmont.

Coreen hills seen from the south on the dead end road heading for Terspersie castle.

Coreen hills seen from the south on the road from Bridge of Alford heading for Suie hill.

3.4.3 Neighbouring land use

The forest is bordered by farmland on the north, south and east sides where it extends to quite low elevations. The western march is at high elevation and here the land is given over to grouse moor. Trees are planted right up to the forest boundary and in places trees are shading the adjacent farmland.



3.5 Social factors

3.5.1 Recreation

The Gordon Way long distance path passes through Whitehaugh, ending at a car-park on the Suie road. The path is unsurfaced with loose rocks and muddy sections. This is the only way-marked route and there are no other formal recreational facilities.

The wood is well used informally by walkers and horse-riders. The old 'green roads' provide a pleasant surface for walking or riding and some of these are well used.

Suie cairn alongside the Gordon way.

3.5.2 Community

Community involvement is low because of the low recreational impact of the woodland and the sparsely populated nature of the surrounding land.

The nearest town of Alford is about 7km south of the block. To the north there are no major centres of community with only a scatter of farms.

To the south of Whitehaugh a number of crofts and small-holdings are enveloped on three sides by the forest and access to some of these is on roads through the forest. These residents are affected by forest operations so will be informed as part of the detailed planning of the operations.

The eastern part of Whitehaugh is within the search zone of the proposed Beauly-Blackhillock-Kintore 275Kv power line. This could require a wayleave corridor up to 45m wide.

3.5.3 Heritage

There are no Scheduled Monuments in the plan area but there a large number of non-scheduled monuments of heritage value present within the woods. A check of both internal records and the SMR has been undertaken to establish the location of these features. The details of these will be included in the work plan that is drawn up for every operation carried out within the plan area.

Boundary stone

Farmstead

3.6 Pathogens and diseases

The upsurge in the disease threat over the last decade has a range of causes linked to globalization and associated climate change. Disease risk management has always been an integral part of forestry management; however the pace of recent events has created a great deal of uncertainty. While specific outcomes for species are hard to predict, the general principles for creating resilient forests are well known, and these include such actions as promoting diversity in all its forms.

Given the dynamic nature of the disease threat it is proposed to focus on creating a more diverse forest during the plan period and thinning to promote tree vigour and adjust microclimate.

3.6.1 Hylobius

Hylobius can cause extensive feeding damage to young trees used to restock clearfell sites but damage is often highly variable. Previously it has not been possible to predict damage and so insecticides have been routinely used to protect the trees to try to safeguard the young crop. However on clearfells where Hylobius numbers are low this treatment may be unnecessary and conversely when numbers are very high the treatment may be unable to protect the trees. Both of these situations result in losses in valuable resources.

3.6.2 Dothistroma needle blight (DNB)

Dothistroma needle blight is a fungal pathogen affecting the woods within Moray & Aberdeenshire forest district. It is present within Coreen hills but at a very low level currently.

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.

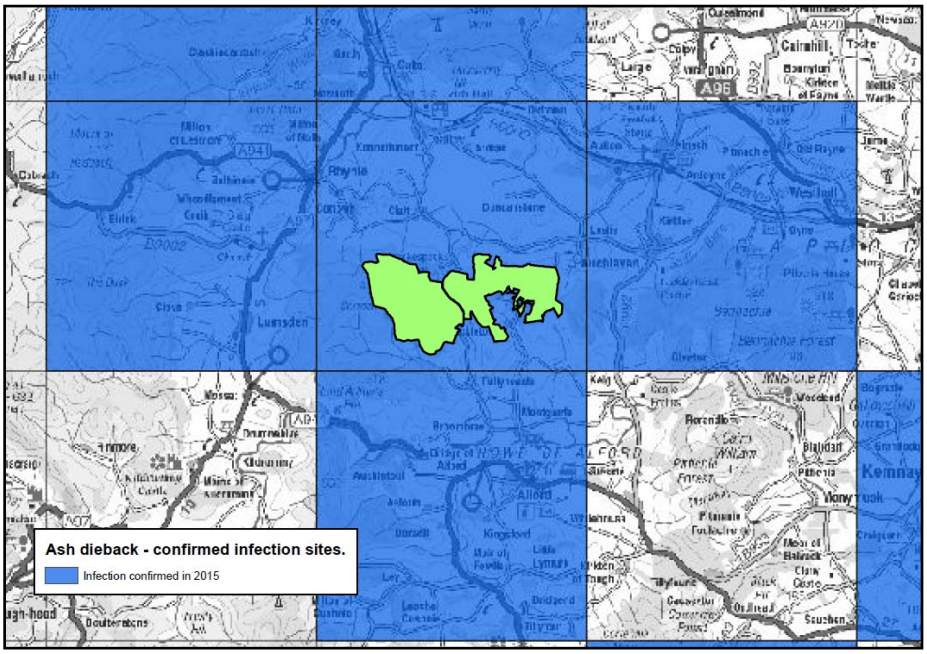
Due to the extent and severity of the disease there is now a five-year moratorium on the planting of Corsican Pine on the national forest estate.

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.

It is not a major issue within the plan area at present. However, should it appear then it will have an impact on the forest structure. We will keep up to date with the latest research and implement the guidelines produced.

3.6.3 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. The map below shows the confirmed infection sites based on the OS 10km grid squares and is based on information obtained of 30 June 2016.



3.6.4 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 which 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 also been four isolated outbreaks in the north east of Scotland but none within the Coreen hills plan area to date. The total infected area within Scotland is estimated to be now in excess of 6,500 ha.

3.7 Statutory requirements and key external policies

This Land Management Plan has been drafted to ensure that planning and operations functions comply with the following legislation and policies:

Biodiversity
- Conservation (Natural Habitats) Amendment (Scotland) Regulations 2007
- Nature Conservation (Scotland) Act 2004
- Wildlife and Natural Environment (Scotland) Act 2011
- Land Reform (Scotland) Act 2003
- The Water Environment and Water Services (Scotland) Act 2003
- Water Environment (Controlled Activities)(Scotland) Regulations 2011
- UK Woodland Assurance Standard 2008
- UK Forestry Standard 2011 – Forests and biodiversity, Forests and water
- Deer (Scotland) Act 1996

Climate Change
- The United Nations Framework Convention on Climate Change
- The Kyoto Protocol
- EC Directive 2003/87/EC
- Climate Change (Scotland) Act 2009
- UK Forestry Standard 2011 – Forests and climate change

Historic Environment
- Ancient Monuments and Archaeological Areas Act 1979
- Planning (Listed Buildings and Conservation Areas)(Scotland) Act 1997
- Treasure Trove Scotland
- UNESCO World Heritage Convention
- European Convention on the Protection of the Archaeological Heritage Valetta 1992
- UK Forestry Standard 2011 – Forests and historic environment

Forests & People
- Control of Substances Hazardous to Health Regulations 2002
- Employers Liability (Compulsory Insurance) Act 1969
- Equality Act 2010
- Gangmasters (Licensing) Act 2004
- Health and Safety at Work Act 1974
- Management of Health and Safety at Work Regulations 1999
- Occupiers' Liability (Scotland) Act 1960

- Provision and Use of Work Equipment Regulations 1998
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995
- The Highways Act 1980
- UK Forestry Standard 2011 – Forests and people, Forests and landscape

Soils

- Control of Pesticides Regulations 1986
- The Waste Management Licensing Regulations 1994
- European Soil Charter
- UK Forestry Standard 2011 – Forests and soil

4.0 Analysis and Concept

Refer to Map 4: Analysis and concept.

National key commitment	Analysis	Concept
Healthy	The structural diversity is poor within the western half of the block with large areas of mostly even aged Sitka spruce.	Work with FES landscape architect to plan felling and restock coupes that will start to increase the structural diversity.
Healthy	The quality of the soils in the area means that a limited range of species are suitable for restocking within the plan area.	Select a range of species for restocking to increase the species diversity where site conditions and plan objectives allow. Use ESC together with the practical experience of what grows well on this site.
Productive	Current crop age and condition allows a planned programme of harvesting to be undertaken.	Manage suitable areas to increase the quality and quantity of timber products that can sequester carbon.
Accessible	The Gordon Way runs through the eastern half of the block.	Continue to encourage the use of this route for health benefits by improving the environs of the path during operations in adjacent coupes.

Cared for	There are three separate small PAWS areas within Knockespoch.	Fully restore these low priority PAWS areas. Work will be undertaken over an extended timescale by utilising planned operations such as selective thinning.
Cared for	The SSSI within the forest block is a small part of a much bigger designated area. The site is cited for a common gull breeding colony.	Ensure that all planned operations are undertaken in such a manner so as not to reduce the biodiversity value of this area.
Cared for	There are existing areas of open ground where moorland habitat is dominant.	Retain areas of open habitat and where appropriate increase their biodiversity value by connecting them with other habitats of biodiversity value.

5.0 Land Management Plan Proposals

5.1 Management

Refer to Map 5: Management.

5.1.1 Thinning

Wherever possible the district will continue to maximise the area managed through thinning. FES policy assumes that all productive conifer crops will be thinned. The only exceptions are where:

- Thinning is likely to significantly increase the risk of windblow;
- The crop is out with its thinning window;
- A single thinning operation is likely to require an unacceptably large initial investment in relation to the potential benefits due to access or market considerations;
- Thinning is unlikely to improve poorly stocked or poor quality crops.

An active thinning programme is essential for the long term vigour and quality of the crop within Coreen hills. The block is split into thinning coupes, which will be worked on either a 5 or 10 year cycle depending on the growth rates of the crop. See Map 6 – Thinning.

All thinning decisions will be guided by Operational guidance Booklet No 9 ‘Managing thinning.’

5.1.2 Clearfell

The main silvicultural system employed in British forestry is ‘patch’ clear-felling followed by restocking by planting or, occasionally, natural regeneration.

Although clear-felling can appear to have a negative impact on landscape and habitat it is still an important management system. To a degree it mimics the natural disturbances caused by natural processes such as fire or windblow in a

forest. It allows the forester to alter the even aged structure of the canopy over a relatively short period of time. The adoption of a 'fallow' period before replanting also creates transient open habitat that is exploited by several species such as voles, deer and raptors. This will continue to the main silvicultural system employed in Coreen hills.

The eastern half of the forest is well into a second rotation; it has been planted or replanted over many years and already has a diverse age structure. However the western half is very even aged as it was planted over a short time period. Due to the even aged structure of the forest and the potential constraints of windblow the majority of the area would ideally be felled over a relatively short period to produce the best economic return. It is currently difficult to justify early fellings to diversify the age structure as this will substantially reduce the productivity of the woodland. In order to extend the rotation length and maximise the proportion of sawlogs as much of the area as possible will be thinned and felled at, or beyond, the age of maximum annual increment. However this aspiration may be constrained by future windblow event. If this does turn out to be the case then the current plan may need to be reviewed to ensure it is still fit for purpose.

The process of drawing up the proposed felling coupes in the western half of the block has been undertaken with the assistance of the FES landscape architect. Due to the even age and structure of this area the potential boundaries for the felling coupes are difficult to identify. The potentially windfirm boundaries do not lend themselves to felling coupe shapes that fit with the underlying landform. Following site visits felling coupes were designed that are in keeping with the scale and topography of the local landscape, but ignoring the current crop limitations. These were tested with 3D visualisations (see appendix 3) and amendment s made to arrive at coupes that fitted to the landform (see map 5 – Future coupes to fit landform).

However the coupes shown in map 5 are not achievable during the felling of the first rotation due to crop stability and access issues. The felling of the first rotation has therefore been planned to move towards these coupes while taking account of the windblow and access issues. Where the coupes in this plan cross the boundary of two future coupes the restocking will take this into account and a suitable coupe division will be left unplanted. This will ensure there is a windfirm edge that can be used during future felling operations to create coupes of a suitable size and shape to fit with the topography. See map 6 for the proposed felling coupes.

5.1.3 Low impact silvicultural system (LISS)

'Low impact' is defined as the use of silvicultural systems whereby the forest canopy is maintained at one or more levels without clearfelling. Clearfelling is defined as the cutting-down of all trees on an area of more than 2.0ha.

The attraction of low impact forestry lies in the fact that this approach is suited to an era of multi-purpose forestry where environmental, recreational, aesthetic and other objectives are as important as timber production in places. In particular, low impact forestry is seen as a means of reducing the impact of clearfelling and the associated changes that this produces in forest landscapes and habitats.

The LISS areas identified in the previous plan were assessed during the plan review process and LISS is now not considered to be the most appropriate management system to achieve the stated objective of this plan.

The current crops of larch and Scots pine that were designated as LISS in the previous plan have Sitka spruce as the only natural regeneration. This is due to the grassy ground flora. LISS management will lead to a less diverse species mix unless under planting were to be undertaken. Therefore these areas are to be managed as long term retentions to maintain the current species over a longer period. When appropriate these crops will be clearfelled and restocked with species to suit the objectives of the approved plan at the time of clearfelling.

As the young Sitka spruce crops are thinned there is a strong possibility that natural regeneration will occur. If this is the case then future revisions of this plan will take this into account and may determine that LISS is appropriate for these areas.

5.2 Future Habitats and Species

Refer to Map 7: Future habitats and management.

The choice of restocking species has been guided by the objective of producing a quality timber crop.

Sitka spruce is growing well within the plan area and will remain the main species. However the species mixture will be diversified where the soil conditions allow and the objective of timber production can still be met.

Currently there are some good stands of grand fir and western hemlock. Therefore these species will form a proportion of the restock mix. Where there are areas of better soils Norway spruce will be planted.

This plan will act as a guide for species choice, based on soil, climate and other data, however the operational foresters will make the final decision based on the characteristics of individual sites. Where this may result in a major change from the plan, consultation with the appropriate staff and woodland officer will be instigated before a final decision is made.

In common with the majority of the Forest Enterprise Scotland estate, most restocking in the plan area has traditionally taken place within two years of sites being clearfelled. However this has left them vulnerable to *Hylobius* attack. See section 5.9 Pathogens for details of how this threat will be dealt with by using a fallow period.

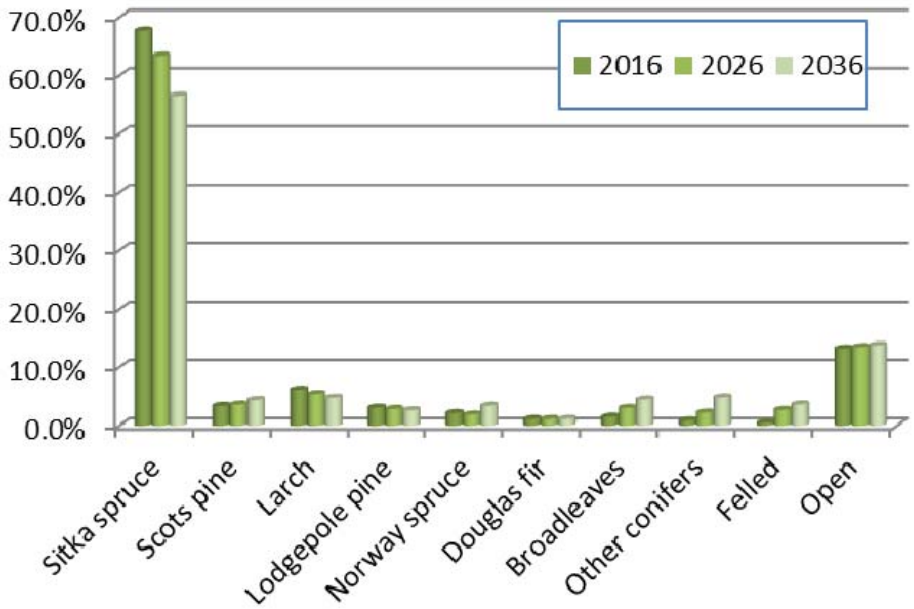
The restocking in the plan period will see a significant increase of broadleaf woodland as sites suitable for restocking with broadleaves are felled. The long term objective is to increase the broadleaf proportion of the plan area to above the 5% required to meet UKFS. During this plan period the area of coupes to be felled that are suitable for broadleaf restocking allow the broadleaf area to be increased from 1.5% to 3.1%. By the end of the next plan period this area will have increased to 4.5% as additional suitable coupes are felled.

Large restock coupes will include wide rides that will create future wind firm boundaries that will allow the felling of coupes that are more in keeping with the landform during the next rotation.

5.3 Species Table

The changes in areas of species in the period 2016 -2036 are shown in the table below.

Species	Current distribution 2016 (%)	Projected distribution 2026 (%)	Projected distribution 2036(%)
Sitka spruce	67.8	63.4	56.6
Larch	6.2	5.5	4.8
Scots pine	3.4	3.6	4.4
Lodgepole pine	3.1	2.9	2.7
Norway spruce	2.2	1.9	3.4
Douglas fir	1.2	1.2	1.2
Broadleaves	1.5	3.1	4.5
Other conifers	0.9	2.2	4.9
Felled	0.5	2.7	3.7
Open	13.2	13.5	13.8

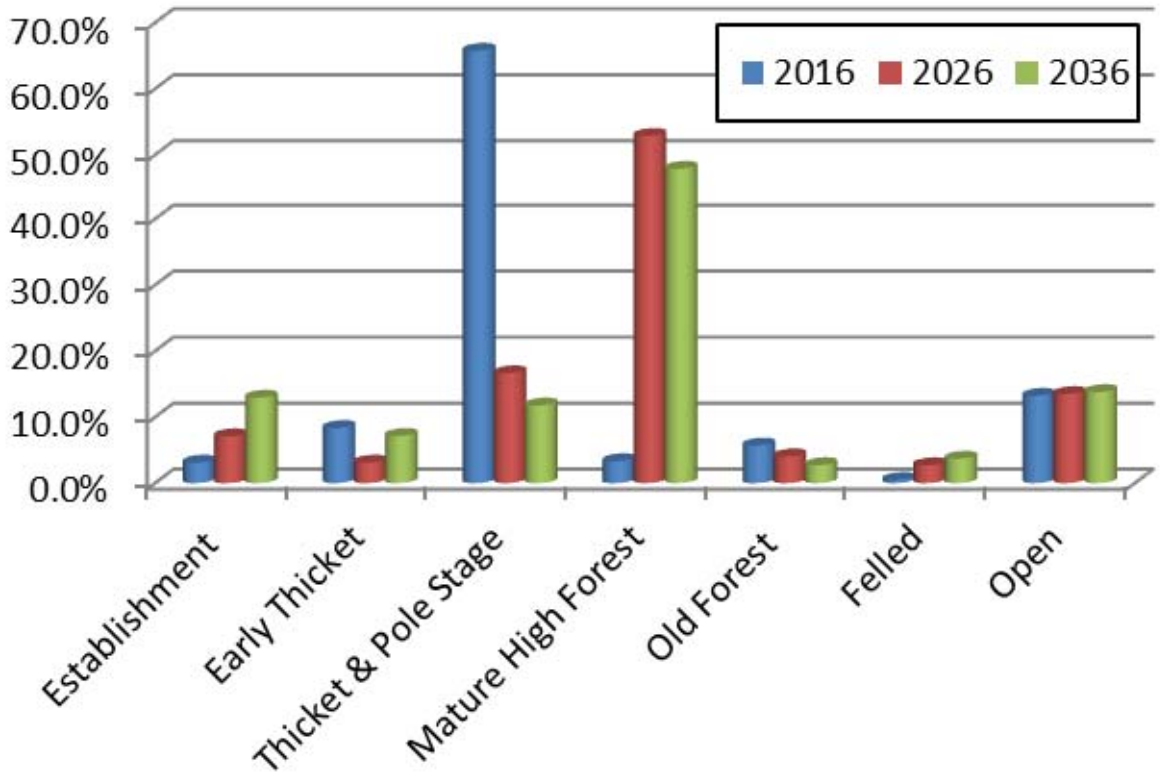


The percentage of Sitka spruce is reducing slightly as a consequence of the amount of Scots pine, Norway spruce, broadleaves and other productive conifers increasing. The most significant change is the doubling of the broadleaf area from the current 1.5% to 3.1% by the end of the plan period, with the ambition of reaching 4.5% by 2036.

5.4 Age structure

The changes in areas of age structure in the period 2016 -2036 are shown in the table below.

Ages of trees (years)	Successional Stage	Current distribution 2016 (%)	Projected distribution 2026	Projected distribution 2036
0 -10	Establishment	3.1	7.1	12.9
11 – 20	Early Thicket	8.3	3.1	7.2
21 – 40	Thicket & Pole Stage	65.8	16.6	11.8
41 – 60	Mature High Forest	3.3	52.9	47.9
61+	Old Forest	5.7	4.1	2.7
	Felled	0.5	2.7	3.7
	Open	13.2	13.5	13.8



5.5 PAWS restoration

There are areas of PAWS in the plan area consisting of low density over-mature Scots pine within a matrix of spruce and other conifers. This is a low priority for restoration as there is little pinewood flora present on the site. However as these are the only over-mature trees within the western half of the forest and the area fits with the landscape felling coupes this area will be thinned in the period of this plan to ensure the retention of the remaining Scots pine.

There is currently little likelihood of natural regeneration of pine due to the grassy sward so when this area is eventually felled it will need to be restocked with a mix of Scots pine and native broadleaves to suit the ground conditions.

Other areas not considered appropriate for commercial management will include areas designated as long term retentions and minimum intervention (see map 5 – Management).

5.6 Management of open land

Open ground is already a significant component of this forest. It will be slightly increased in the form of wide rides in restock coupes to create smaller wind firm felling coupes that fit better with the landform in the next rotation.

The main areas of existing open land within the forest are mostly associated with the higher ground where moorland habitat is dominant. The plan will ensure that the biodiversity value of these areas is maintained. The plan will retain the areas as open ground.

Where possible open habitats will be connected with other habitats, be they open or woodland, which have a higher biodiversity value to create habitat networks.

The open habitats will require monitoring to ensure they deliver the required objectives. Non-desirable species, such as non-native conifer regeneration, may require removal.

5.7 Deer management

All deer management will be carried out in accordance with OGB 5 - Deer management and the Scottish Governments strategy “Scotland’s Wild Deer - a National Approach” and under the auspices of the Code of Practice on Deer Management. The strategy and code takes recognition of the fact that wild deer are an asset, an integral part of Scotland’s biodiversity and provide healthy food and recreation 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 landowners for forestry, agriculture, sporting and other forms of land use.

The principal legislation governing the management of deer in Scotland is the Deer (Scotland) Act 1996

Our aim is to manage deer density safely and humanely at a level which is consistent with acceptable impacts on forests and other habitats. This is likely to be at a deer density level of 5 to 7 deer per 100 hectares.
At this level experience shows limited adverse impacts on commercial tree crops and wider habitats.

All deer culling will be carried out in an exemplary and humane way. We will collaborate with relevant organisations and neighbors to make sure that there are integrated deer management plans which seek to recognize the interests of all parties.

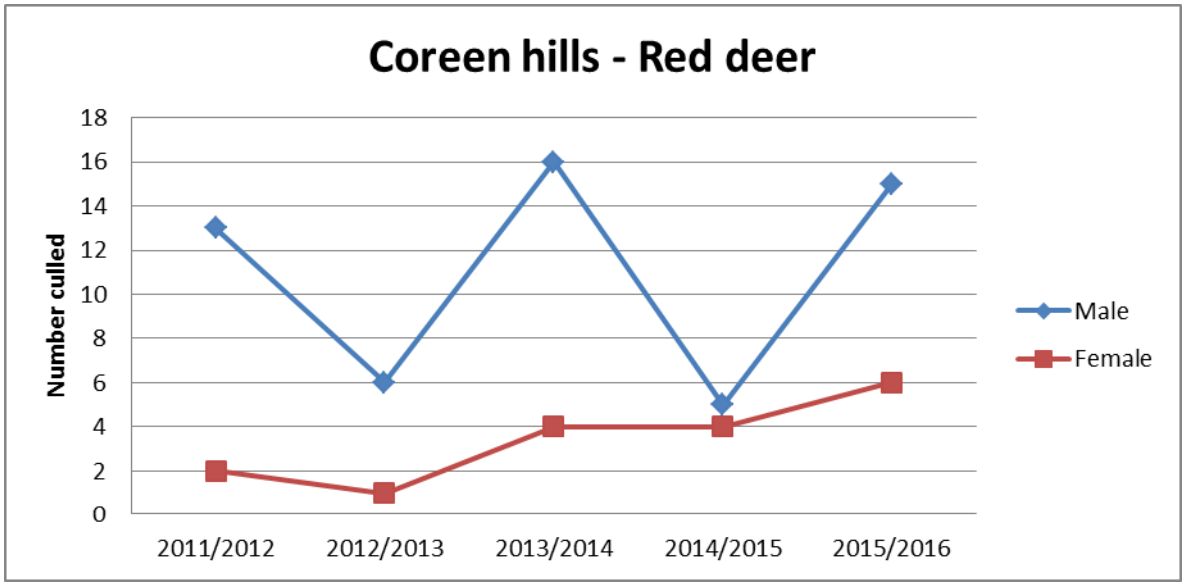
We will take opportunities to optimise income from venison and sporting where this does not conflict with our primary objective of maintaining deer impacts at an acceptable level in line with Quality Meat Scotland accreditation in the form of the Scottish Quality Wild Venison (SQWV) Assurance Scheme.

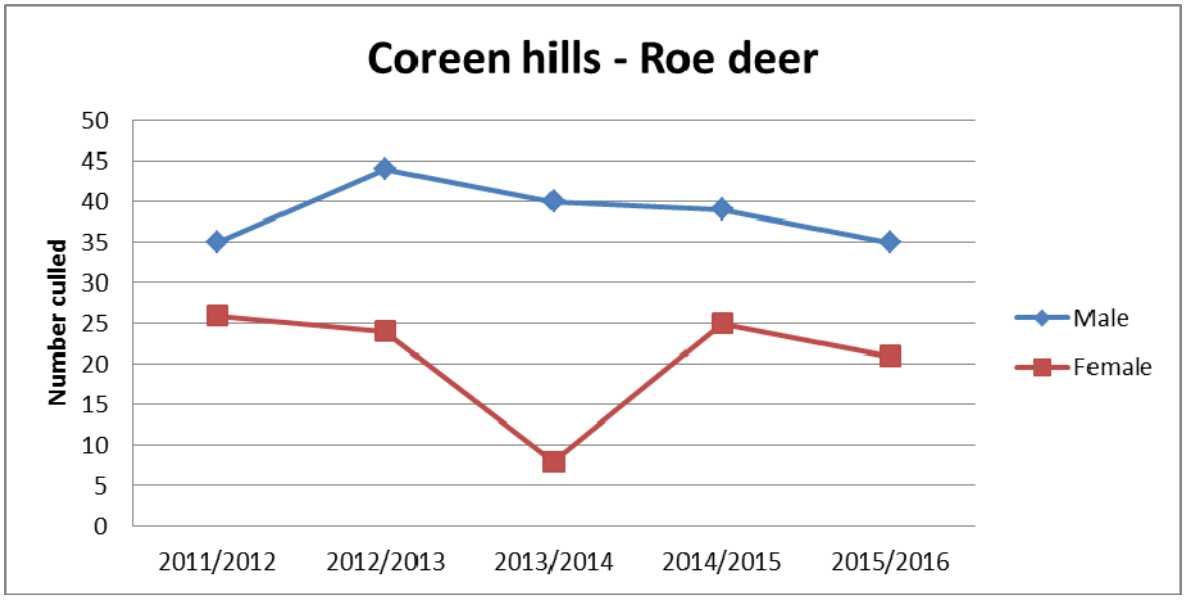
We will take all practical steps to slow down the expansion of deer species into areas where they are not currently present.

Roe and red deer are both present in the plan area. Boundary deer fencing is not present and the deer management strategy does not include the erection of any external deer fences. Internal fences will only be considered for restock areas where the species being planted is particularly susceptible to deer damage and is unlikely to produce a quality timber crop without additional protection. These fences are considered temporary and will be removed once their role has been fulfilled.

Currently deer management in Coreen Hills is carried out under a recreational deer management permission. The deer cull targets for the plan area is set annually by the Deer Management Officer utilising available data on damage assessments and deer densities provided by external contractor (StrathCauldh) and previous cull figures.

The graphs below show the cull figures since 2011. The increasing cull of red deer in indicates that the population of red is increasing, probably due to the expansion of their territory in this area. While the roe deer cull is steady and we believe we have their numbers under control enough to allow successful tree establishment to be undertaken.





5.8 Access

Most of the block has good access with a network of forest roads. The exception is the need for additional roads to be constructed in Knockespock to allow access to allow all areas to be thinned. These planned roads are shown on the management map. There are no other access issues that need to be addressed in the period of this plan.

5.9 Pathogens

Hylobius

Due to the expected high level of Hylobius and the adopted policy for environmental management to “reduce the use of Insecticides where feasible” restocking is planned to take place at the end of year four. Restocking may take place before then if monitoring, using the Forest Research Hylobius Management Support System, shows that it is safe to do so.

Dothistroma Needle Blight

Dothistroma Needle Blight will be addressed differently depending on the level of current infection in the crop. The severity of infection and crop symptoms produced range from the dropping of a couple of yield classes to high levels of mortality within the stand. The level of mortality is the key concern as once dead the integrity of the tree quickly deteriorates to a state where it cannot successfully be harvested. Categorisation of the infected crop will allow us to prioritise the harvesting of such areas.

The following Crop Condition Survey (CCS) protocol has been developed by Forest Research. The crop is graded using a seven point scale based on a visual assessment of needle retention, mortality, crown density, bark condition and light levels/ground vegetation abundance.

1 - Healthy Crop. No evidence of infection.
1/2 - Intermediate between 1 and 2.
2 - Evidence of early stages of infection (e.g. some needle loss, thinning of crowns, early signs of mortality).

2/3 - Intermediate between 2 and 3.
3 - Clear evidence of infection (e.g. significant needle loss, 'lion's tail' effect, clear sight lines through the crop, presence of vegetation cover on forest floor, possible bark splitting, mortality is evident).
3/4 - Intermediate between 3 and 4.
4 - Crop is dead or is very likely to die (e.g. will die within the next few months, high mortality and is unlikely to recover).

This has led to the following action plan for dealing with Dothistroma Needle Blight infection:

- prioritise infected areas to be felled by swapping felling coupes of non-infected crops in the current program;
- include into thinning operations the felling of any infected crops within the area to minimise costs. Amendments to the land management plan will be required as specified in the tolerance table for felling such areas;
- reassess badly affected blocks and consider if a full review of the land management plan is required;
- planting programs will need to be amended to include replacement species suitable for the site.

In the plan area there are currently 29ha of pine confirmed as having DNB infection in the range of 2 to 3 on the above scale. There are no specific measures within this plan area to reduce the impact of DNB as it is only a minor component of the area and there are no areas of high value Scots pine to protect from the infection spread.

5.10 Critical Success Factors

Continue with an active thinning programme to improve the timber quality of the final crop.

Expand species and structural diversity to increase forest resilience, while retaining SS as a major crop element.

Complete the road building programme to allow access to all area for harvesting operation, in particular upcoming thinning operations.

Appendix 1 – Consultation record

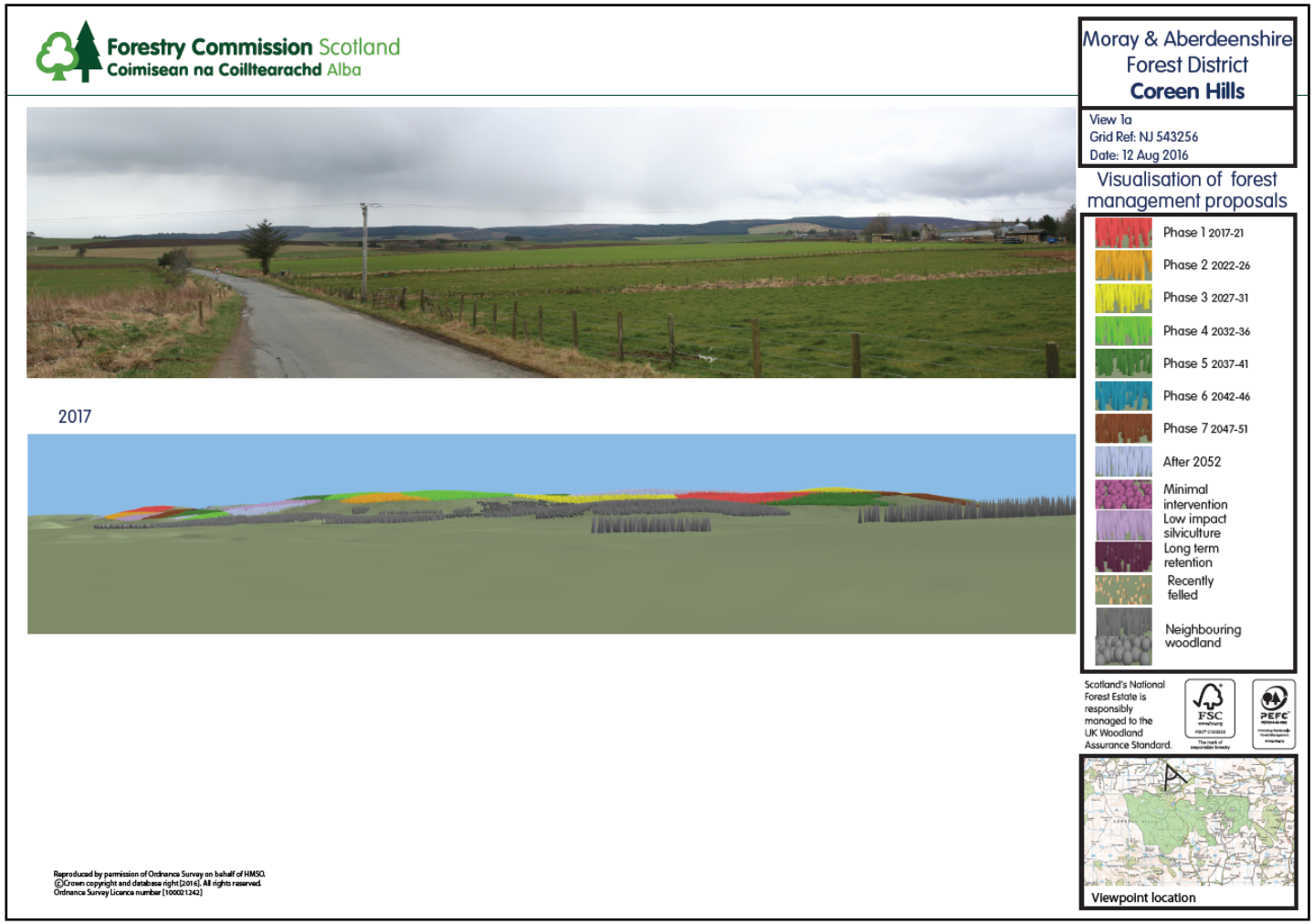
Consultee	Date contacted	Date response received	Issue raised	Forest District response
Karen Cunningham RSPB	31 March 2015	8 May 2015	Enhance planting of native species and increase open ground where possible	The plan shows an increase in Scots pine and more significantly and increase in broadleaf area from 1.5% to 3.1% of the plan area. With additional areas planned for subsequent plan periods. Open ground is already a significant component of this forest. It will be slightly increased in the form of wide rides in restock coupes to create smaller wind firm felling coupes that fit better with the landform in the next rotation.
			Improvements for blackgrouse. Detailed recommendations supplied.	Many of the recommendations have been undertaken to a greater or lesser degree as part of this plan. This includes increasing the area of Scots pine and broadleaves, leaving wide interconnecting rides at restocking, opening up riparian zones and retaining larch where possible.
			Forest is close to the Strathbogie wildcat 'hotspot'.	FES support the local initiative to protect wildcats but it is believed that the proposals in this plan will have a beneficial impact on the habitat for wildcats.

Emma McCarron SEPA	31 March 2015	28 April 2015	The forest is in a Nitrate Vulnerable Zone and having soils susceptible to erosion on steep gradients.	All operations will be undertaken in full accordance with the UKFS forest and water guidelines which will ensure no negative impacts result to the NVZ.
			Carbon balance and impacts on peat.	Areas of deep peat will be identified and managed as per the recent deep peat restocking guidelines.
Kate Hunter Tap o' Noth Community Council	31 March 2015	6 May 2015	Broadleaf percentage. A general comment that 5% broadleaves seems low.	5% broadleaves is the minimum requirement under UKFS. This forest is managed with timber production as the primary objective and although the eventual broadleaf percentage may be higher than 5% it will not go much above this figure.
Mike Smedley SNH	31 March 2015	24 April 2015	SSSI common gull colony. SNH confirm that this nesting site is now disused. SNH suggest that the forest edge is pulled back from the SSSI boundary. Can more predator control be carried out?	As the gull colony is not currently used there is currently no plans to pull back the forest edge or to undertake predator control. If the gull colony was to come back into active use we would be happy to enter discussions on management proposals.

Appendix 2 – Tolerance table

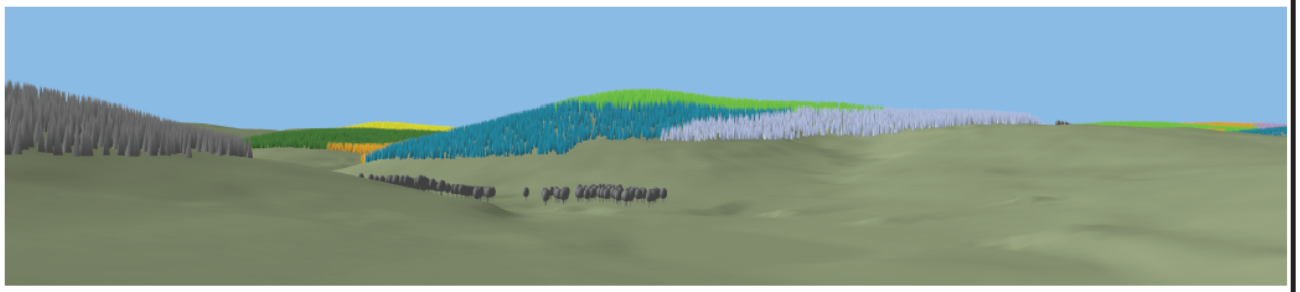
	Adjustment to Felling period	Adjustment to felling coupe boundaries	Timing of restocking	Change to species	Changes to roadlines	Designed open space	Windblow Clearance
FC Approval not normally required	Fell date can be moved within 5 year period and between phase 1 and phase 2 felling periods where separation 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 2nd 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

Appendix 3 – Future management coupe visualisations



Forestry Commission Scotland
Coimisean na Coilltearachd Alba

2017



Moray & Aberdeenshire
Forest District
Coreen Hills

View 2
Grid Ref: NJ 549197
Date: 12 Aug 2016

Visualisation of forest management proposals

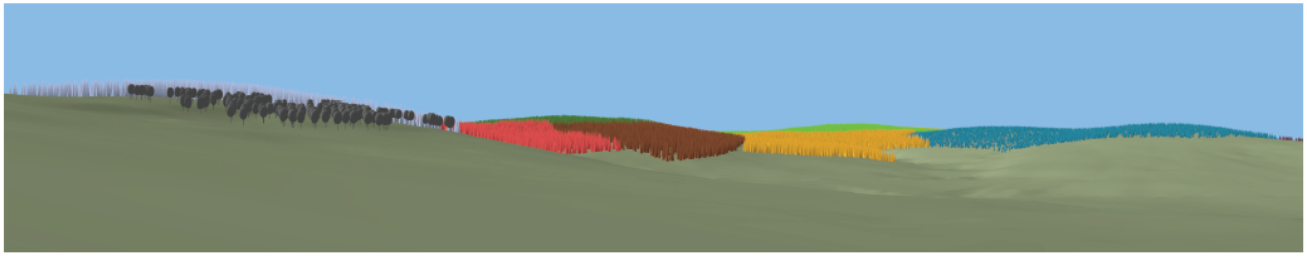
- Phase 1 2017-21
- Phase 2 2022-26
- Phase 3 2027-31
- Phase 4 2032-36
- Phase 5 2037-41
- Phase 6 2042-46
- Phase 7 2047-51
- After 2052
- Minimal intervention
- Low impact silviculture
- Long term retention
- Recently felled
- Neighbouring woodland

Scotland's National Forest Estate is responsibly managed to the UK Woodland Assurance Standard.

Viewpoint location

Forestry Commission Scotland
Coimisean na Coilltearachd Alba

2017



Moray & Aberdeenshire
Forest District
Coreen Hills

View 3a
Grid Ref: NJ 556210
Date: 12 Aug 2016

Visualisation of forest management proposals

- Phase 1 2017-21
- Phase 2 2022-26
- Phase 3 2027-31
- Phase 4 2032-36
- Phase 5 2037-41
- Phase 6 2042-46
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