

TAY FOREST DISTRICT
Forestry Commission Scotland

LADYBANK FOREST PLAN

Forest District Ref. Number	504/06/56
Perth Conservancy Ref. Number	

APPROVAL PERIOD (Although illustrated to 2031)	2007 - 2016
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Supplementary documentation available at Tay Forest District, Inverpark, Dunkeld, PH8 0JR

LOCATION (see Appendix 1)	<p>Ladybank forest consists of series of small woods in and around Ladybank and Giffordtown in Fife. The A92 trunk road, and Edinburgh and Aberdeen and Ladybank to Perth railway line run through the middle.</p> <p>The forest is in the flat landscape of the Howe of Fife where the land use is predominantly arable with a network of small woodlands and shelterbelts.</p>
FOREST AREA	284 hectares

PLAN OF KEY FEATURES AND ISSUES (Appendix 2):

	STATUTORY DESIGNATIONS (e.g. SSSI, SAM, etc.)
<u>KEY FEATURES AND ISSUES</u>	There are 2 Scheduled Ancient monuments - SAM 789 the Cairnfield cairn and SAM 4442 the Cairnfield Enclosure. They are shown in Appendix 2
	LANDSCAPE
<u>KEY FEATURES AND ISSUES</u>	The main external views are from the country roads and the local villages, but the internal views are just as important as the forest is well used by walkers, cyclists and horse riders. However due to the flat landscape only sections of the forest are seen at any one time.
	CONSERVATION AND HERITAGE
<u>KEY FEATURES AND ISSUES</u>	Ancient woodland – most of the forest is Long-Established woodland of plantation origin (i.e. it has been woodland since at least 1860). There are nine unscheduled monuments listed – 2 possible barrow sites, 2 wartime anti-tank defenses, an enclosure, ring ditch, possibly an old road and some old cultivation. Helen’s Myre is listed as an enclosure, but is also a raised bog notable for Cranberry (<i>Vaccinium oxycoccos</i>), which is locally rare in Fife. Red squirrels, bats, otters and badgers are also resident in the forest
	RECREATION
<u>KEY FEATURES AND ISSUES</u>	The whole of the forest is well used primarily by the local communities and there is a very pro-active Ladybank Forest User Group. Recently the User Group raised funds for surfacing paths, including an all abilities access trail and new interpretation boards. The Rotary club of the Howe of Fife has also raised money for another all-abilities walk.
	TIMBER PRODUCTION
<u>KEY FEATURES AND ISSUES</u>	The forest is mostly Scots pine and 58% of forest was planted before 1960. The soils are mostly podzolised brown earths and podzols over alluvial gravels and sands. In some areas the fairly high water table has led to some gleying, which has caused slight induration. Generally though the soils are suitable for predominantly pine woodland managed under a continuous cover regime.
	WATER
<u>KEY FEATURES AND ISSUES</u>	There are few watercourses in the area and the only significant one running through the forest is Rossie drain skirting the south edge of Heatherhall before running south into the River Eden. An underground reservoir of water exists below the entire area. The other water feature is the open water in the Angle Park block created during the restoration of the area after mineral working. These are all marked on constraints maps and are considered as part of the detailed operational planning process for individual forest operations.
	SERVICES
<u>KEY FEATURES AND ISSUES</u>	Powerlines transect the woodland as shown in Appendix 2

CONSULTATION ON ISSUES AND DRAFT STRATEGIC PLAN (Appendix 3)

The sustainable and efficient management of this forest will be driven by the identification of an appropriate balance between environmental issues, people's interests and economic productivity. To aid this process a draft Strategic Plan was prepared for initial consultation. This included a proposed zonation and relative priority for key issues within the **broad categories of conservation, landscape, recreation and timber production.**

In comparison with other forests within the national forest estate in Scotland, the following classification gives a wider context to the overall value of this forest:

Category	Relative value	Comments
Landscape	Low	Flat landscape; although forests are an important component within this landscape
Conservation/heritage	Mod	Valuable lowland heath and pine woodland, with a strong resident red squirrel population.
Recreation	High	Intensively used by a range of local and regional visitors. Maintained by Forest Users Group.
Timber Production	High	Produces high quality pine for a range of end uses, coupled with easy access at all seasons.

This information was circulated to the following people on: 8/12/2006

Consultee	Interest
Ladybank forest Users Group	Users and co-managers
Historic Scotland	Ancient Monuments
Scottish Environmental Protection Agency	Water
Fife council Planning and Environment department	Local Council
Scottish Natural Heritage	Heritage
Forestry Commission Perth and Argyll Conservancy	Authority
Giffordtown and District Community Council	Community Council
Ladybank Community Council	Community Council
Royal society for the Protection of Birds	Birds

and the resultant feedback is summarised below:

Consultee	Date response received	Main issues raised	Our response
Ladybank Users Group	12/2/2007	Many issues raised, and amendments included in the plan. The main difference is that they are concerned that the Conservation Heritage designation should be High	In a national context Ladybank is not a high conservation area though it is important locally.
RSPB	No response		
Ladybank Community council	No response		
Giffordtown Community council	19/1/2007	Concerned that there should be no recreation development in the Edenmuir area. Concern over possible windblow behind houses. Keen that the Angle park wetlands should be protected from vehicle access	Made it clear that no development is planned but management will make the area more attractive. Promised inspection of trees, and barriers erected at Angle Park
SNH	22/1/2007	Concerned over Red Squirrel management in Ladybank, including the suggestion for grey squirrel control.	Agreed importance of Squirrels. Any control or further measures will be in line with national policy. No control proposed at present.
SEPA	19/12/2006	No objections if there is no pollution	No response required
Forestry Commission	23/1/2007	Suggested removal of large seeded species during thinning. Suggested the inclusion of the possible land acquisition should the gravel extraction proposal be accepted	Agreed to removal of large seeded species within the prescription. Other suggestion not accepted as there is a fairly long time span and some considerably uncertainty involved.
Fife Council	29/1/2007	Encouraging response. Concerned with the Red Squirrel habitat and the new wetlands in Angle Park. Suggested circular paths around these features.	Agreed the importance of the Angle Park wetlands. Pointed out that they tended to be seasonal, and therefore not so suitable for establishing continuous access.

STRATEGIC PLAN (Appendix 3) STRATEGIC OBJECTIVES (Appendix 4)

Recreation/Conservation will be a key driver over much of the forest. Timber production will remain important; but the management proposals will increase structural diversity and enhance the character of the forest- increasing its value for recreation and as a habitat.

FELLING SEQUENCE AND RETENTIONS (Appendix 5)

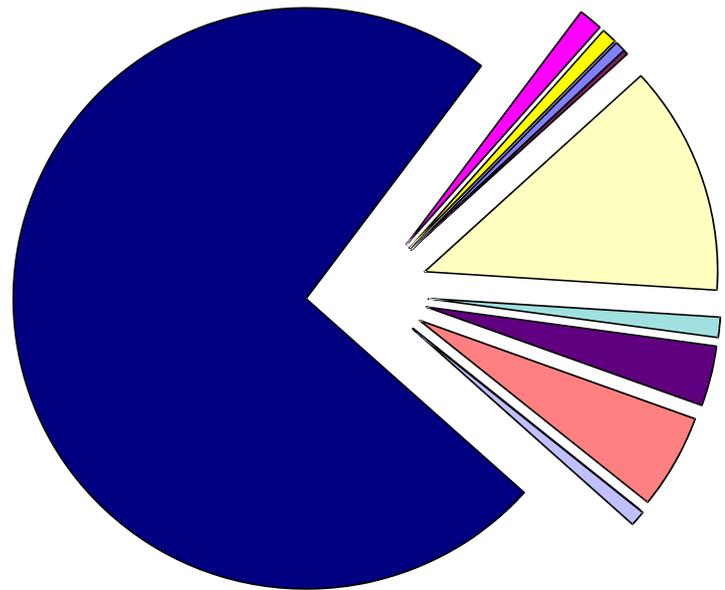
Subject	Comments
Timing and scale of coupes	This is not applicable as the whole forest is to be thinned on a continuous cover system. However the North Annsmuir plantation will be subject to planning application for mineral working and if permission is granted this area will be felled for the gravel extraction, before likely future re-instatement to predominately pine forest. Coupes will be worked on roughly a 5 to 7 year cycle as shown in Appendix 5 should this go ahead.
Roading	No new roads are planned; there maybe a new road in the Annsmuir block dependent of future negotiations
Management of retentions	The detailed prescriptions for the areas committed to continuous cover and open space/broadleaves are summarised in Appendix 6. These outline issues such as the reasons for selection, the long-term structure proposed, conversion period and next planned operation. The detailed local records will be amended with comments as the retention areas develop and become a longer term record for future reference.
Change in forest structure (see figure below)	Changes will be small scale and will lead to greater structural diversity within stands. This will gradually reduce some of the peaks in the age structure and encourage new young trees to come through to spread the age range. Some low growing shrubs will be planted in the railway firebreaks.

THINNING MANAGEMENT (Appendix 5)	
Subject	Comments
Long-term structure	<p>The continuous cover management will promote a new understorey of younger pine and so the woodland will gradually change to a multi-aged stand, although visually it will probably look like 2 storeys.</p> <p>There are 2 areas of open ground either side of Gravel pit wood, to the east of Ladybank, that will be available to plant if the Planning permission for mineral working in Annsmuir is granted. These will be the subject of a Forest Plan amendment. The existing wetlands will be retained.</p>

Species change

No species change is anticipated, as the forest will be managed as continuous cover to perpetuate the current species mix.

Ladybank comparative area of species



BE	Beech	1.338
BI	Birch	0.812
CP	Corsican pine	30.72
JL	Japanese larch	3.168
MB	Mixed broadleave	8.202
MC	Mixed conifers	12.52
NS	Norway spruce	0.220
OK	Oak	2.263
SP	Scots pine	179.0
SS	Sitka spruce	3.343
WH	Western hemlock	2.368

Other issues	Deer management to aid restocking and natural regeneration will be as described in the relevant part of Tay Forest District's Protection Plan. This defines the target deer population as related to the changing forest structure, together with the date and method for achieving that density. Rabbit control may be necessary to ensure regeneration.
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LANDSCAPE: IMPACT OF MANAGEMENT

Subject	Comments
Visual changes in landscape	The landscape impact of managing the forest by thinning rather than clearfelling will be minimal. However if the planning permission for mineral working is granted in North Annsmuir, it is anticipated that this area will be felled on a phased basis over a number of years before being restored to woodland.

IMPACT OF PROPOSALS ON OTHER KEY SUBJECTS

Subject	Comments
Conservation and heritage	Ladybank forest has a healthy population of red squirrels and the improvement to the forest structure through thinning and promoting an understorey will help improve their habitat. All our machine operators and staff have been trained to identify dreys and bat roosts and understand the correct measures to take to protect them. There will be removal of some beech during thinning operations. Any standing deadwood which is not dangerous will be left intact. All the known unscheduled archaeological sites will be protected as described in the Tay Forest District Conservation Site Schedule which is referred to before any operations are carried out in their vicinity. Any new features discovered within the forest will brought to the attention of Fife Council's archaeologist. to ascertain their value.
Recreation	There will be some disruption to recreation from forest operations as virtually all of the forest is used for walking,

	cycling or horse riding. However disturbance will be kept to a minimum by providing good notice of the intended operations and working small areas each year allowing for recreation to continue over the majority of the forest.
Water	Any thinning, will be carried out strictly in adherence to the Forest and Water Guidelines (4 th Edition). Timber extraction will normally avoid crossing the burns or main drains but, where necessary, each crossing point will be piped or bridged. Branches will be kept out of watercourses and trees will generally be felled away from the watercourses. The pond complex at Angle Park will be monitored and maintained as open water.
Other	Any herbicide treatment will follow the procedure specified in Forestry Commission Field Book 8 "The Use of Herbicides in the Forest". Any waste arising from forest operations will be disposed of in a responsible manner or recycled (e.g. old fencing material). Where appropriate, disposal will be through registered outlets. This does not include branches, timber offcuts and roots scattered across felling sites, which are regarded as green manure returning nutrients to the soil.

TOLERANCES TABLE FOR AMENDMENTS TO THE FOREST PLAN

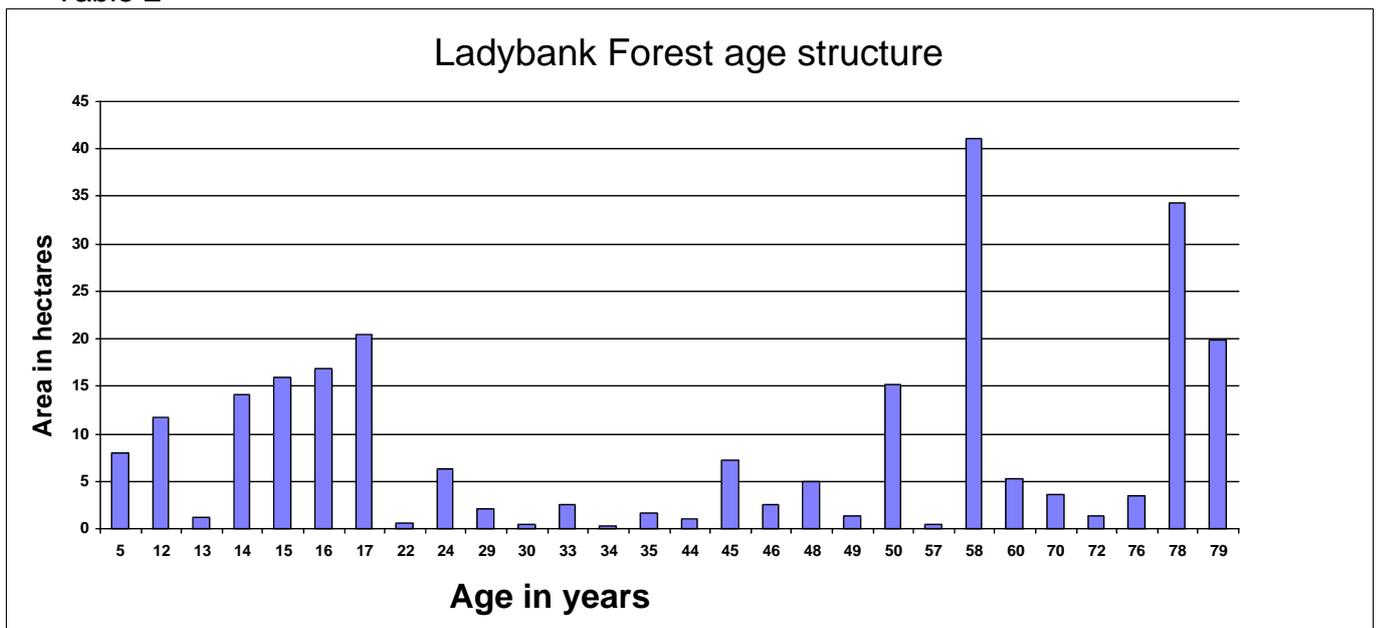
	<u>Adjustment to felling coupes</u>	<u>Timing of restocking</u>	<u>Change to species</u>	<u>Windthrow clearance</u>	<u>Changes to road lines</u>
FC approval not normally required	0.5ha or 5% of coupe – whichever is less	Up to 4 planting seasons after felling	Change within species group e.g. evergreen conifers, broadleaves	Up to 0.5ha	
Approval by exchange of letters and map	0.5 to 2.0ha or 10% of coupe – whichever is less			0.5 to 2.0 ha – if mainly windblown trees 2.0 to 5.0ha in areas of low sensitivity	Additional felling of trees not agreed in plan Departures of >60m in either direction from centre line of road
Approval by formal plan amendment	> 2ha or 10% of coupe	Over 4 planting seasons after felling	Change from specified native species	>5ha	As above, depending on sensitivity

			Change between species groups		
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Table 1 – proposed change of species percentages over the period of the plan

	Existing (%)	Approval period (%)	By 2034 (%)
Sitka spruce	1	1	1
Norway spruce			
Scots pine	63	63	63
Other pine	11	11	11
Larch	1	1	1
Other conifers	4	4	4
Broadleaves	4	4	4
Other (open space, roads, wayleaves, etc.)	16	16	16

Table 2 –



Supporting documentation listing

- Appendix 1 Location Map
- Appendix 2 Plan of Key Features and Issues
- Appendix 3 Strategic Plan
- Appendix 4 Strategic Objectives

Appendix 5 Thinning management

Appendix 6 Management prescriptions