



Forestry Commission
England

East Anglia Forest District

**MILDENHALL WOODS
FOREST DESIGN PLAN**

Total Plan Area: 592 Hectares

LOCAL PLANNING AUTHORITIES:

Suffolk County Council

Forest Heath District Council

Date – May 2011

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1. Description

The plan area of 592 hectares lies to the east of Mildenhall town with the woodland divided into segments by a number of busy public roads; of these the A11 (to be made dual carriageway in 2012) and the A1065 Mildenhall to Brandon road are the most significant. The whole of the plan area lies in the county of Suffolk, and is within the administrative boundary of Forest Heath District Council. A man-made drainage channel known as the 'Cut-Off Channel' passes north-south across the area, physically separating the eastern and western sections of the woods. The plan area is owned freehold by the Forestry Commission and has been dedicated as open access land under the Countryside and Rights of Way Act 2000 (CROW Act).

Most of the FDP area has been designated as a Special Protection Area (SPA) under the European Bird Directive. The two birds of interest are the Woodlark (*Lullula arborea*) and Nightjar (*Caprimulgus europaeus*) and as a result of the SPA designation the area is also notified as a Site of Special Scientific Interest (SSSI). These birds both use open ground to nest on and as such rely on the clearfell tree harvesting system to generate suitable nesting habitat. There is also a 35 hectare heathland re-creation area in the south-east corner of the wood, which is managed by Norfolk Wildlife Trust.

Mildenhall Woods has also been designated for a number of other conservation interest features including the Rex Graham Reserve SAC (Special Area of Conservation), which has been notified for the rare plants that it contains; notably the Military Orchid. There are two geological SSSIs as well; Warren Hill and High Lodge Mildenhall which "...all provide evidence for interpreting and understanding the links between the geography, climate, environment and human history of East Anglia during the Middle Pleistocene." (SSSI citation).

The soils are characteristic of the Brecks being sands of varying depth, overlying chalk. Soil pH levels range from 5.5 in the heath areas to 7.5 where the soil is thin and the chalk is near the surface. The climate is generally mild with very warm summers, but spring and early summer frosts are common. These factors, coupled with relatively low rainfall (520 - 640 mm/year) create an almost continental micro-climate.

Mildenhall contains more mixed woodland than many of the areas in Thetford Forest, with broadleaf belts and open rides running through all the segments of the wood. Conifer tree species currently account for 60% of the forest area, with the remaining 40% being broadleaves and open space. There are also four areas that are designated as natural reserves and these will be managed by minimum intervention to allow natural ecological processes to take place.

There is one Scheduled Ancient Monument (Mildenhall Warren Lodge) designated within the FDP but there are also a number of unscheduled sites that are of archaeological importance; these sites range from the Mesolithic Age to WWI training trenches.

Mildenhall Woods straddles a change in landform with those wooded segments that lay to the west of the 'Cut-Off Channel' sitting on a plateau below the 10m contour that stretches out into The Fens. While those to the east gently rise to the 30m contour with the southern segment of the wood dipping southwards towards the River Lark. The wood is bordered by Mildenhall Town to the west and agricultural or heathland elsewhere.

2. Original FDP – Assessment

The FDP process has changed in a number of ways since the original plan was drafted ten years ago and this is reflected in the new areas that the FDP needs to address. These new areas are listed below with a description of their potential impact.

The UK Forest Standard – This is a Forestry Commission document that sets the standard that both public and private owner should meet to demonstrate good forest practice. One of the main impacts of the standard on this plan is the requirement to have at least a 7 year gap between adjacent felling coupes. The issue of “adjacency” of coupes does occur within this plan.

The UK Woodland Assurance Standard (UKWAS) – The Forestry Commission has received accreditation under this standard, therefore all Forestry Commission timber can be marketed as Forest Stewardship Council (FSC) certified. This standard covers a wide range of issues that affect the way the forest is managed. The main effect of UKWAS on this plan is the requirement for the new FDP to meet certain minimum design thresholds. These include the amount of open space that is created during the life of the plan and the area that is designated as a natural reserve and managed by minimum intervention.

East Anglia Forest District Strategic Plan – This plan shows how the district will deal with strategic issues and how it will carry forward some of the objectives of the East of England Regional Woodland Strategy. There are three strategic objectives that will affect this FDP:

“P1.3.iii) To collate and prioritise the ideas/objectives of all teams to fully inform the FDP.”

“P1.3.iv) Take into account the internal and external landscape considerations for the area.”

“En 2.2) To manage and monitor SACs, SPAs and SSSIs.”

The first two objectives are part of the normal forest design planning process and the third objective is tested when the revised FDP undergoes an appropriate assessment for its impact on the Breckland Forest SSSI/SPA.

3. Design Brief

The issues that the forest design plan should address are set out below under the three broad headings of sustainable land management.

Economic

- The felling plan should aim to smooth production from crops in cyclic clearfell but also meet market commitments for 2012-16.
- Restocking should aim to maximise production but also to increase species and habitat diversity.
- Restock species should take soil pH into account and the threat posed by Red Band Needle Blight.

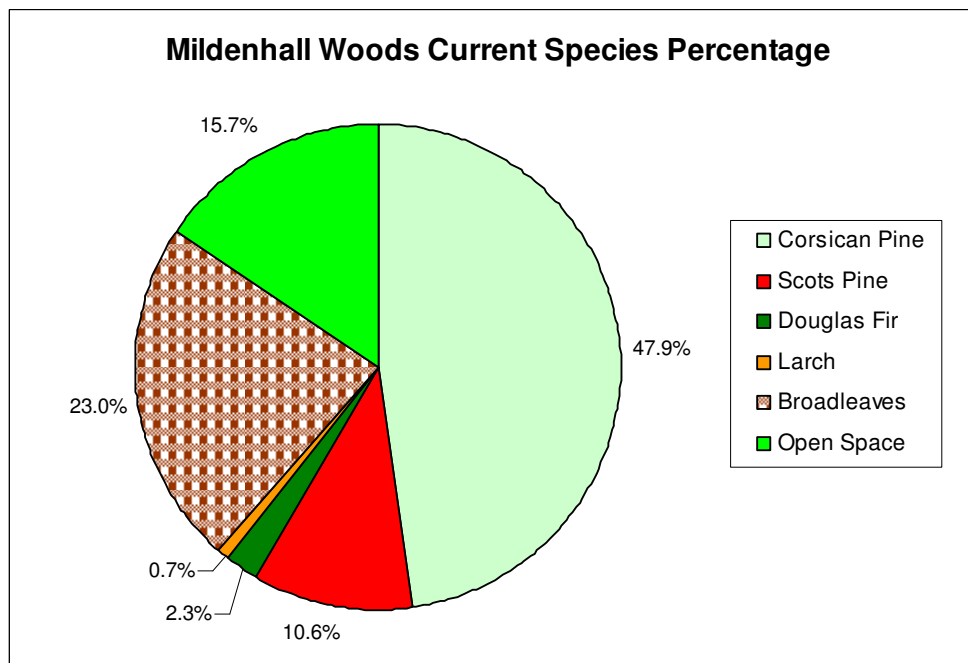
Social

- Maintain a pleasant woodland environment for use by local dog walkers and horse riders.
- Address the safety issue of mature trees affecting the military aircraft glideslope while minimising disruption around the new play and bike skills areas.
- Reduce the size and shape of felling coupes to fit into the landscape

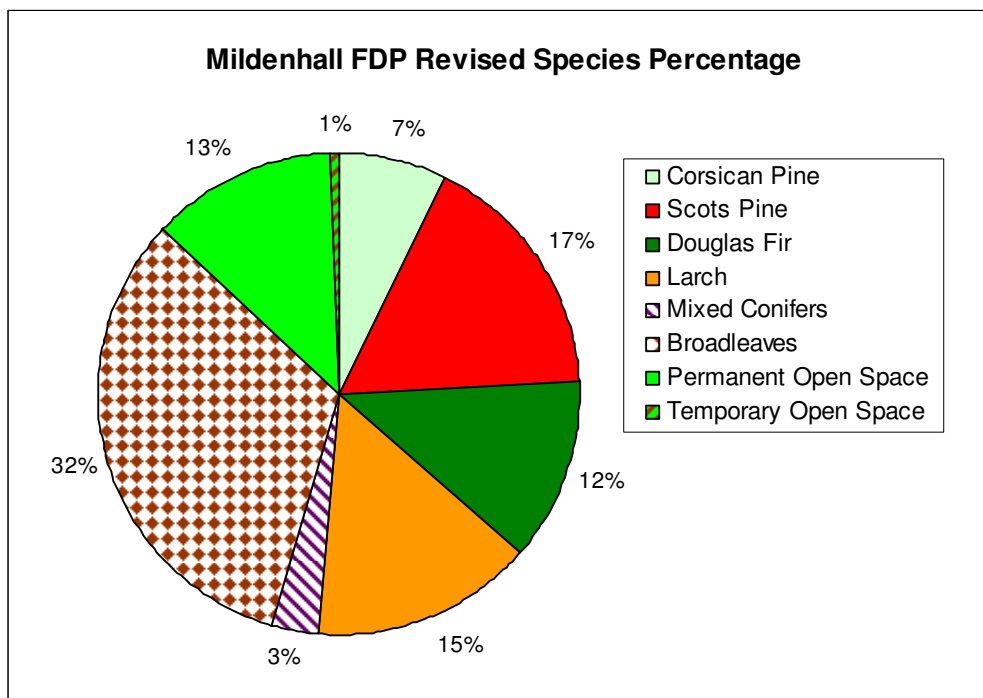
Environment

- Felling plans should aim for a more even distribution of felled area for Woodlark/Nightjar habitat under the SPA.
- Link open spaces and widen conservation rides.
- Encourage people away from heathland area at sensitive times
- Protect and maintain sensitive archaeology sites within the wood

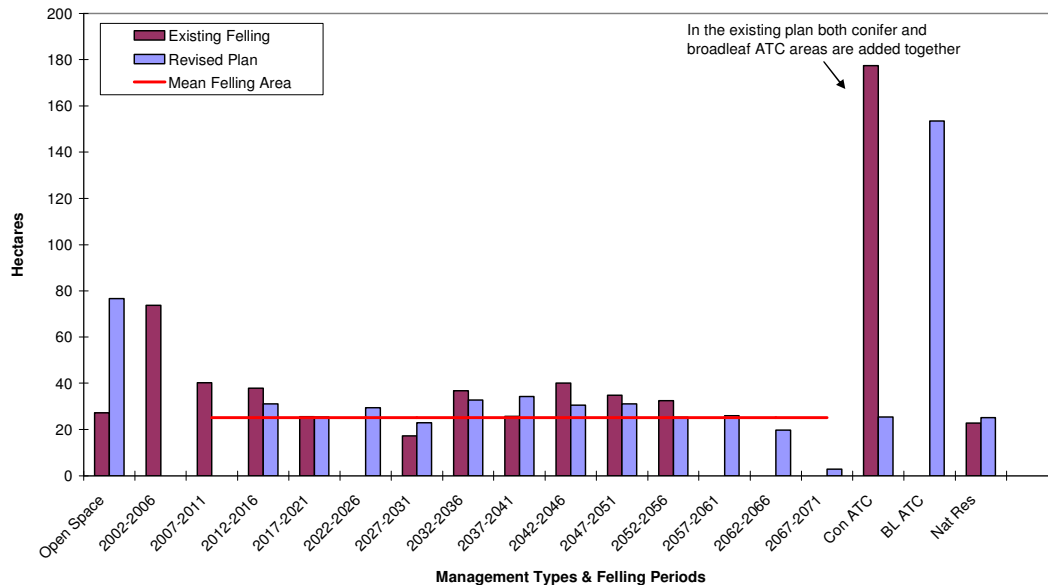
4. Species and Felling Area



Proposed



Comparison of Existing and Revised Felling



* The indicative mean is an estimated value based on the area of cyclic clearfell within the FDP divided by 59. The 59 represents an average rotation length of 57 years plus 2 years of fallow while the ground is prepared for the next crop.

5. Plan Appraisal

The appraisal of the revised plan is measured against the design brief on page 4, this has three separate sections and the appraisal relates to these sections:

Economic Issues

The relationship between timber volume production and felling area is close enough for the bar chart above to illustrate the smoothing effect that the revised plan has had on volume. The production of timber volume has been levelled significantly but it will take another rotation before the actual felling area is closer to the indicative mean value.

A comparison of the pie charts on page 5 indicates that species diversity will increase over the life of the plan. The plan shows a decrease in the amount of Corsican Pine (CP) that will be planted; the exact restock species will be determined by a site assessment of each coupe after felling. This reduction in CP is partly as a response to the threat posed by Red Band Needle Blight but also as a result of the need to widen the range of tree species, including broadleaves, across the FDP area. The future management of the mixed conifers and most of the broadleaved areas will be by various continuous cover systems.

Social Issues

The revision of the plan has increased the diversity of tree species that will be used for restocking thereby maintaining visual diversity. In other parts of the plan, groups of mature trees have been kept past their normal fell age to maintain structural diversity in the landscape. The coupe size range has also been modified so there are

no excessively large coupes. There is a clearfell coupe close to the play and bike skills areas but this felling area is to address the safety issue of tall trees on the glideslope approach for aircraft coming into land at RAF Mildenhall and therefore takes precedence.

Environmental Issues

As mentioned earlier, the felling area chart on page 6 shows how the revised plan has “smoothed” the creation of felling area so that Woodlark and Nightjar habitat is more evenly distributed. The effect of the revised plans on the cyclic felling area across the whole SPA has been calculated on GIS (Geographic Information System). The SPA regulations require that no more than 10% of the clearfell area is in coupes less than 5 hectares in size, as felled coupes smaller than this are judged to be less attractive as breeding habitat for Woodlark and Nightjar. An analysis of the SPA area including this revised plan shows that 5% of the clearfell area is in coupes of less than 5 hectares in size.

The pie charts on page 5 shows that the area of permanent open space has decreased by 2.7% when compared to the original plans. This is due to mapping errors in the original plan dating back to 2000 as new areas of open space have been created, largely, by widening rides and creating new links to existing open space. The resulting effect is a network of rides but few large open areas. The creation of this network can be hastened by widening the rides at the time of next thinning. It should also be noted that the cycle of clearfelling produces an abundance of ephemeral open space, which is the preferred nesting habitat for Nightjar and Woodlark.

6. Monitoring

Once the felling of a coupe has been completed, the shape of that coupe is captured on the ground using a GPS (Global Positioning System) receiver and the data is uploaded into GIS. The resulting point data is then compared to the original coupe shape to confirm that the felling coupe has been accurately laid out on the ground. A felled coupe is usually restocked two years later, when all the ground preparation and weed control has been completed. At this point the forest district database is updated to show the newly planted species and their proportions. As part of this updating process the restocking information is compared with the FDP restock plan to confirm compliance. The restocking can vary slightly from the FDP as physical features, such as banks and pits, come to light after felling, which were not picked up during the planning process. Most of these minor changes are within the tolerances agreed between Forest Enterprise and the Forestry Commission – see Appendix I.

Appendix I

Tolerance Table

	Adjustment to felling coupe boundaries	Timing of Restocking	Changes to species	Windt cleara
FC Approval normally not required	0.5 ha or 5% of coupe	Up to 3 planting seasons after felling	Change within species group e.g. conifers; broadleaves	Up to 2
Approval by exchange of letters and map	0.5ha to 2ha or 10% of coupe	Up to 4 planting seasons after felling	Change from other conifers to Corsican Pine	> 2ha
Approval by formal plan amendment	> 2ha or >10% of coupe	Over 4 planting seasons after felling	Change from broadleaves to conifers	> 5ha

Appendix II Scanned signatures

CSM 6 Appendix 1a

FOREST ENTERPRISE - Application for Forest Design Plan Approvals in England

Forest Enterprise - Property

Forest District:	East Anglia
Woodland or property name:	Mildenhall Woods
Nearest town, village or locality:	Mildenhall
OS Grid reference:	TL737752
Local Authority district/unitary Authority:	Forest Heath DC

Areas for approval

	Conifer	Broadleaf
Felling	67ha	27
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.

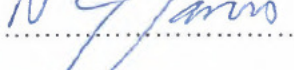
2. ~~*I apply for an opinion under the terms of the Environmental Impact Assessment (Forestry) (England & Wales) Regulations 1999 for afforestation*/deforestation*/roads*/quarries* as detailed in my application.~~

3. I confirm that the pre consultation, carried out and documented in the Consultation Record attached, incorporated those stakeholders which the FC agreed must be included. Where it has not been possible to resolve specific issues associated with the plan to the satisfaction of consultees, this is highlighted in the Consultation Record.

4. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.

5. I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed 
Forest District Manager

Signed 
Conservator


District 

Conservancy 

Date

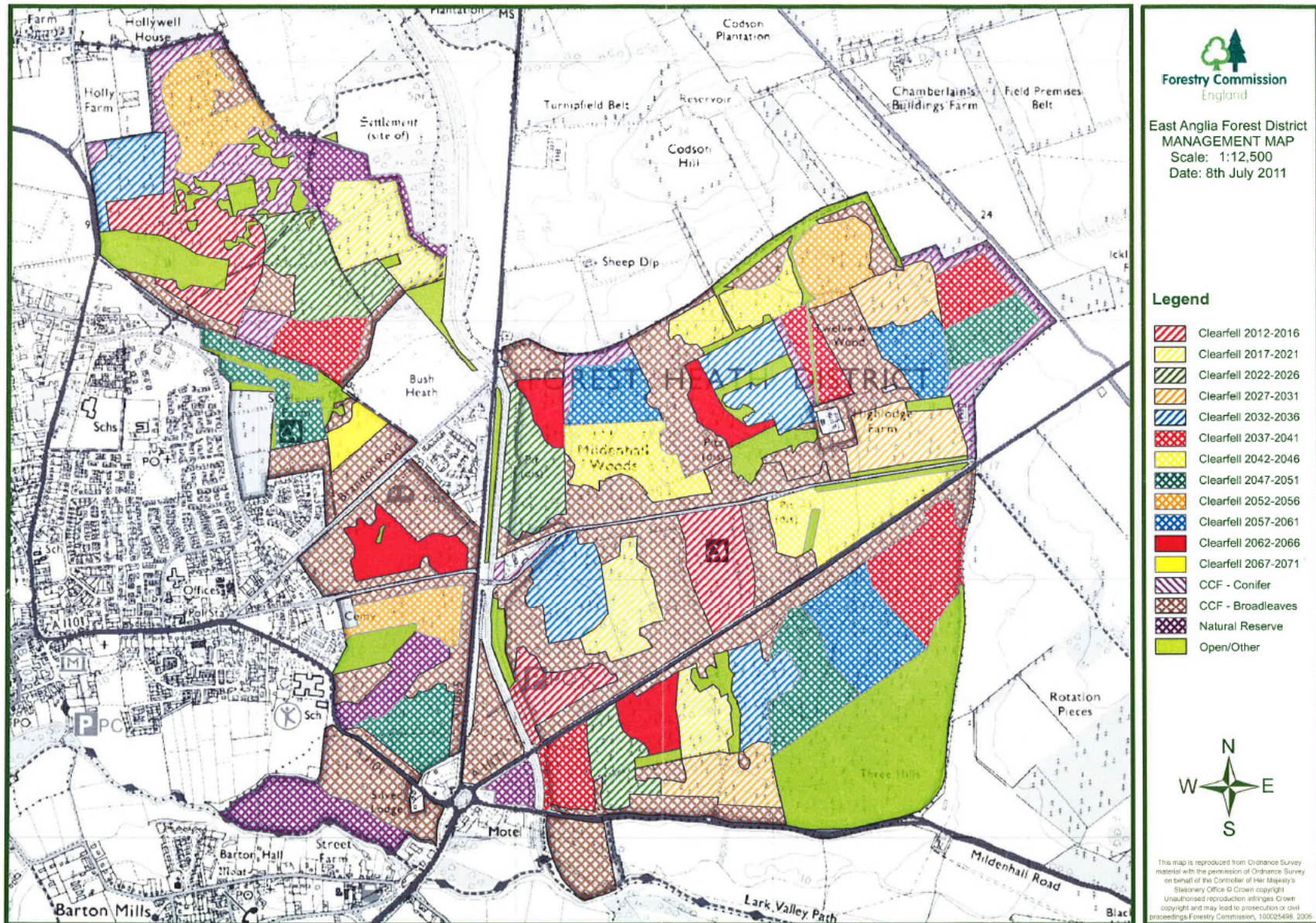


Date of Approval 

Date approval ends 

*delete as appropriate

Appendix III Felling Map



Appendix IV Restock Map

