Forestry Commission England

East Anglia

TUNSTALL

FOREST DESIGN PLAN

Total Plan Area: 1170 Hectares

LOCAL PLANNING AUTHORITIES:

Suffolk County Council

Suffolk Coastal District Council

Date – June 2007

CONTENTS PAGE

1. Description

Tunstall Forest lies near the east coast of Suffolk in the heart of the Sandlings between the villages of Tunstall, Sudbourne, Chillesford and Orford. The forest covers 1170 hectares and includes three outlying blocks; Sudbourne Wood, Chillesford Wood and Gedgrave Broom. The forest is all owned by the Forestry Commission with the exception of Gedgrave Broom, which is leasehold. The plan area lies within the Suffolk Coast and Heaths Area of Outstanding Natural Beauty and is administered by Suffolk Coastal District Council

The forest rises to a maximum of 20m above sea level. There is a narrow, shallow valley running NE - SW from Tunstall Common towards Orford. The outlying blocks of Sudbourne Wood, Chillesford Wood and Gedgrave Broom are all of a similar height and aspect. Average annual rainfall is 650mm per annum.

Although the woods are centred in the Sandlings belt there is a marked variation from north to south. In the north the soil is pure sandy heath whilst to the south the Chillesford clays come close to the surface resulting in more ponds and water loving vegetation (e.g. Juncus effusis). In Gedgrave Broom there is an outcrop of the scarce Corraline Crag.

2. Original FDP – Assessment

The FDP process has changed in a number of ways since the original plan was drafted five 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 so that it can sell its timber 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 was recently revised by the forest district to show how it 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 effect 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 Sandlings SSSI/SPA

3. Design Brief

The issues that the forest design plan should address are set out below under three broad headings, which relate to the structure of the English Forestry Strategy.

Economic

- The felling plan should aim to smooth production from crops in cyclic clearfell but also meet market commitments for 2007-11.
- Design felling coupes that are economical to restock.
- 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.

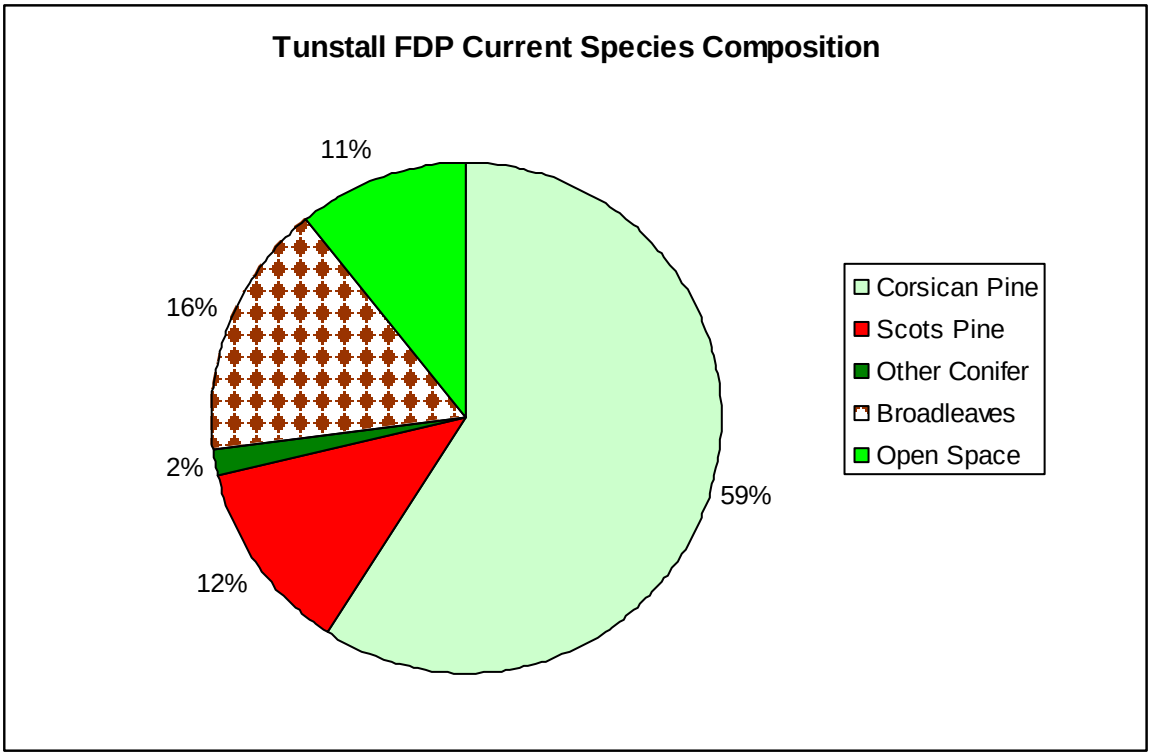
Social Issues

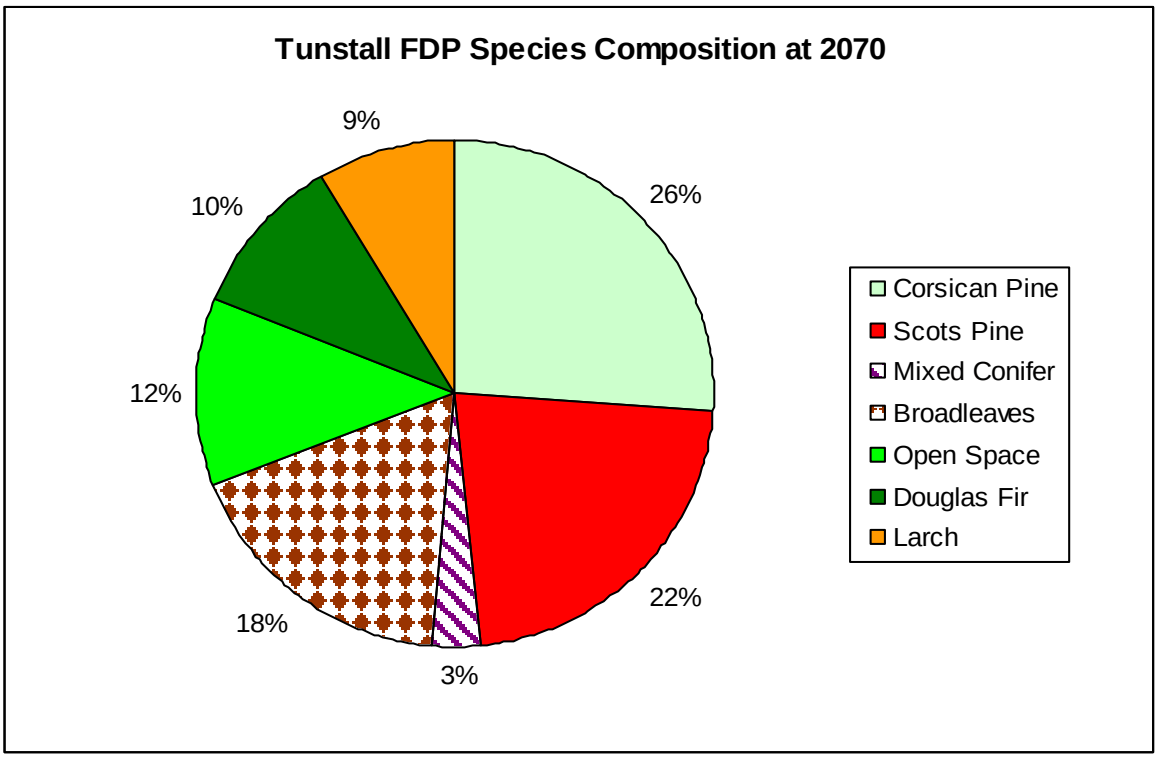
- Maintain a pleasant woodland environment for use by local dog walkers and horse riders.
- Reduce the size and shape of felling coupes to fit into the landscape

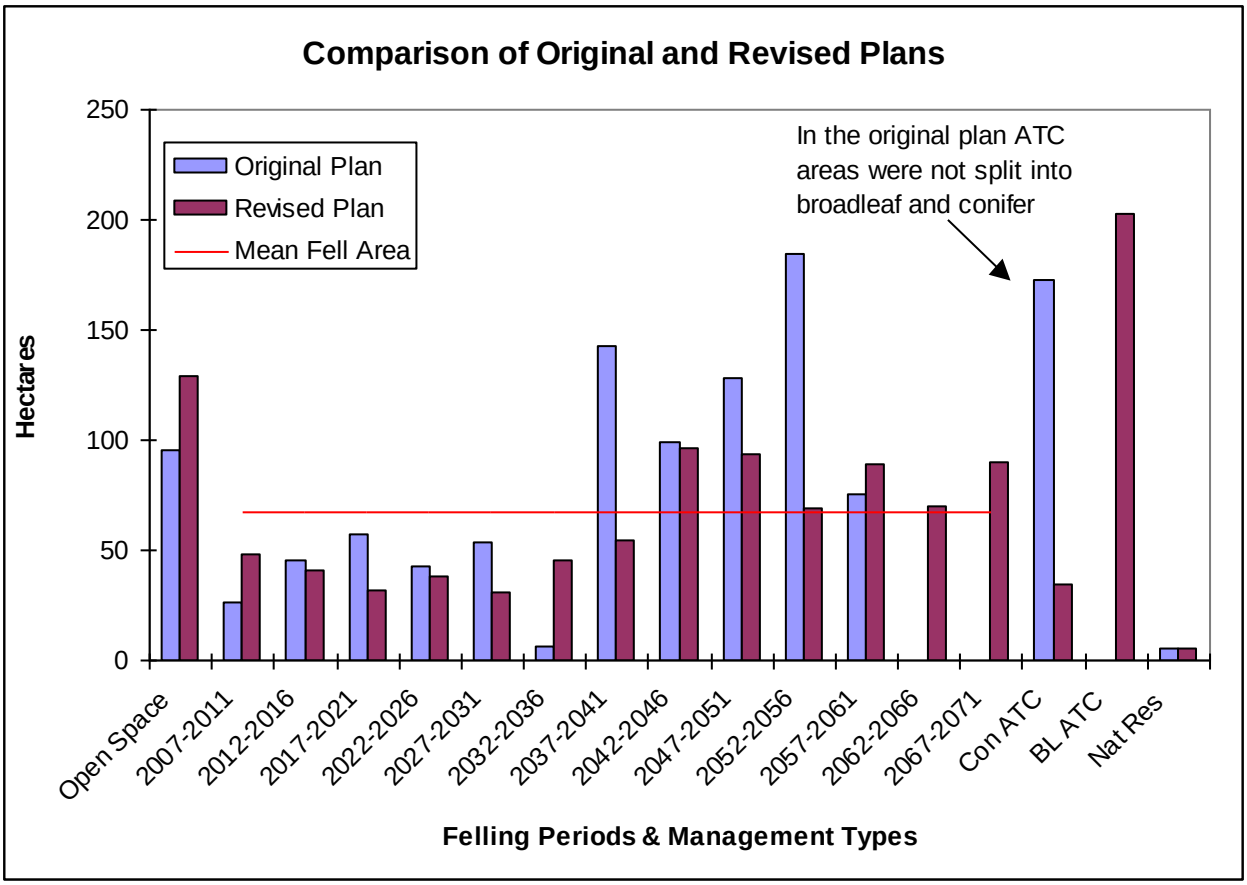
Environmental Issues

- 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.
- Maintain amount of open space above minimum of 10% of the plan area (UKWAS target).
- Identify a minimum of 1% of the plan area, which is suitable as a Natural Reserve (UKWAS target).

4. Species and Felling Area







* 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 3, 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. It is also noticeable that the felling area for the period up to 2041 is considerably below the indicative mean, this is due to the loss of mature timber in the 1987 storm. The felling area increases after this date, as post storm re-planting becomes mature.

A comparison of the pie charts on page 4 indicates that species diversity will increase over the life of the plan. The plan shows a decrease in the amount of Corsican Pine that will be planted. This is partly as a response to the threat posed by Red Band Needle Blight but also as a result of matching species to the appropriate soil type. The future management of the mixed conifers and broadleaved areas will be by continuous cover systems, with 1% of the total area managed by minimum-intervention.

Social Issues

The revision of the plan has retained continuous cover areas around the forest thereby maintaining the visual diversity of the area. 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. The original plan had one coupe that covered 50 hectares where as in the revised plan the majority of coupes are in the range of 5 to 15 hectares.

Environmental Issues

As mentioned earlier, the felling area chart on page 5 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).

In the Sandlings Forest SSSI "Views About Management" statement, English Nature asks for no coupes to be 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. This is not possible given the age structure of the forest but the number of small coupes is kept to a minimum. In the revised plan the area of felling in coupes less than 5 hectares is 14% but many of these small coupes are being felled to add to existing open space (see management and habitat maps).

The pie chart on page 4 shows an increase in permanent open space of 1% when compared to the original plans. This increase in open space has been created, largely, by widening rides and creating links with existing open space. The resulting effect is a network of wide rides of high conservation value. 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 particularly used by 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.

7. Plan Review

This FDP will be reviewed internally after 5 years and formally revised before 31 March 2017.

8. Approval

I seek approval to clearfell and restock 121 ha of the Public Forest Estate also to selectively fell approximately 40 ha within an area of 236 hectares (for the purpose of continuous cover forestry) during the period 1/4/2007 to 31/3/2017 as shown on the enclosed plans.

Maps included with this document are as follows –

Analysis & Concept Management Species/Habitat

Signed: .....…Date…….

Forest Management Director

Approved: .....Date……..

Regional Director

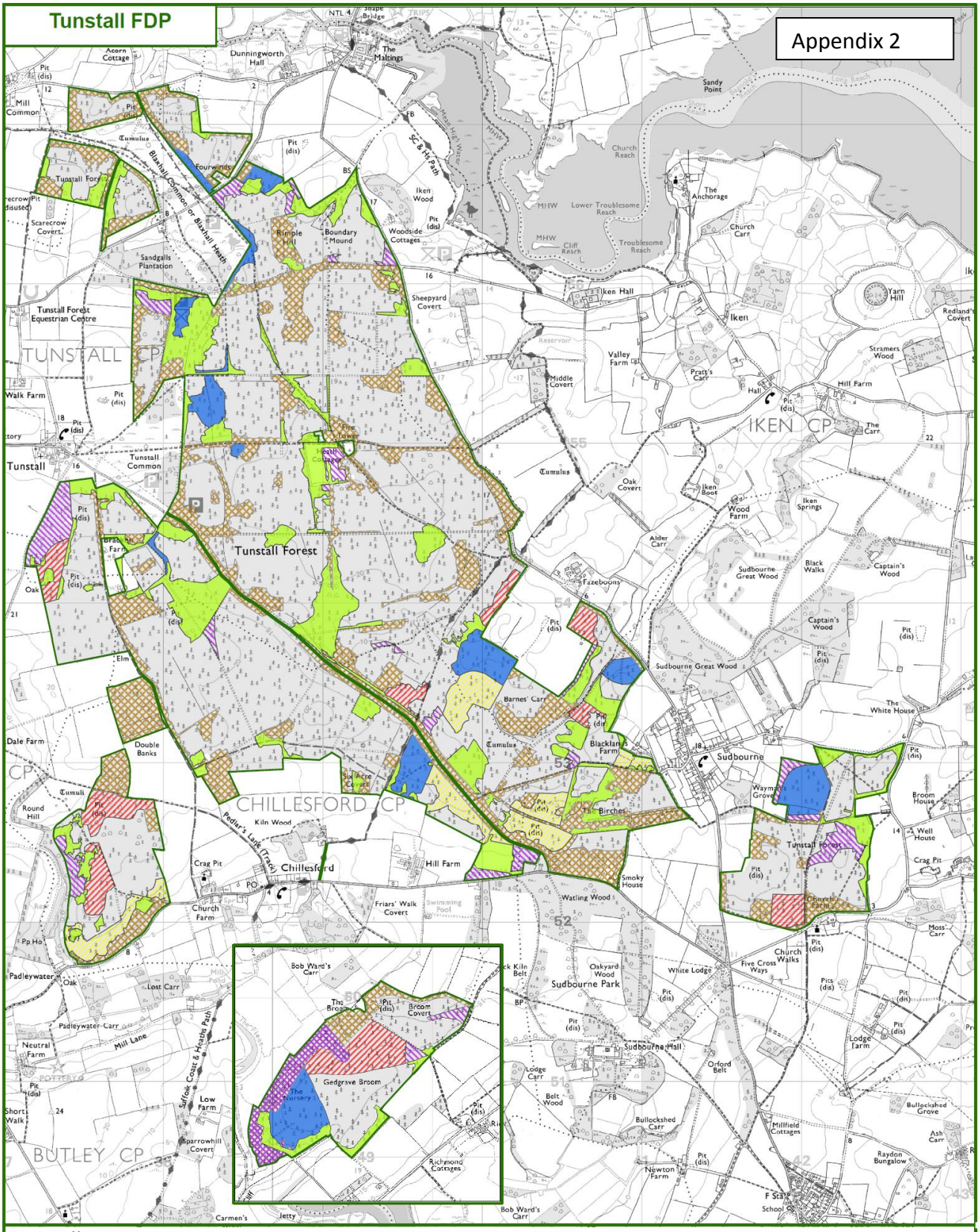
Appendix I

Tolerance Table

	Adjustment to felling coupe boundaries	Timing of Restocking	Changes to species	Windthrow clearance
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. evergreen conifers; broadleaves	Up to 2ha
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 to 5ha
Approval by formal plan amendment	> 2ha or >10% of coupe	Over 4 planting seasons after felling	Change from broadleaves to conifers	> 5ha

Tunstall FDP

Appendix 2



Felling Map

East Anglia Forest District
MANAGEMENT MAP
Scale:1:15,000
Date: 6 July 2007

Legend:

- Open / Other
- 2007-2011
- 2012-2016
- 2017-2021
- Conifer Continuous Cover
- Broadleaf Continuous Cover
- Natural Reserve (minimum intervention)

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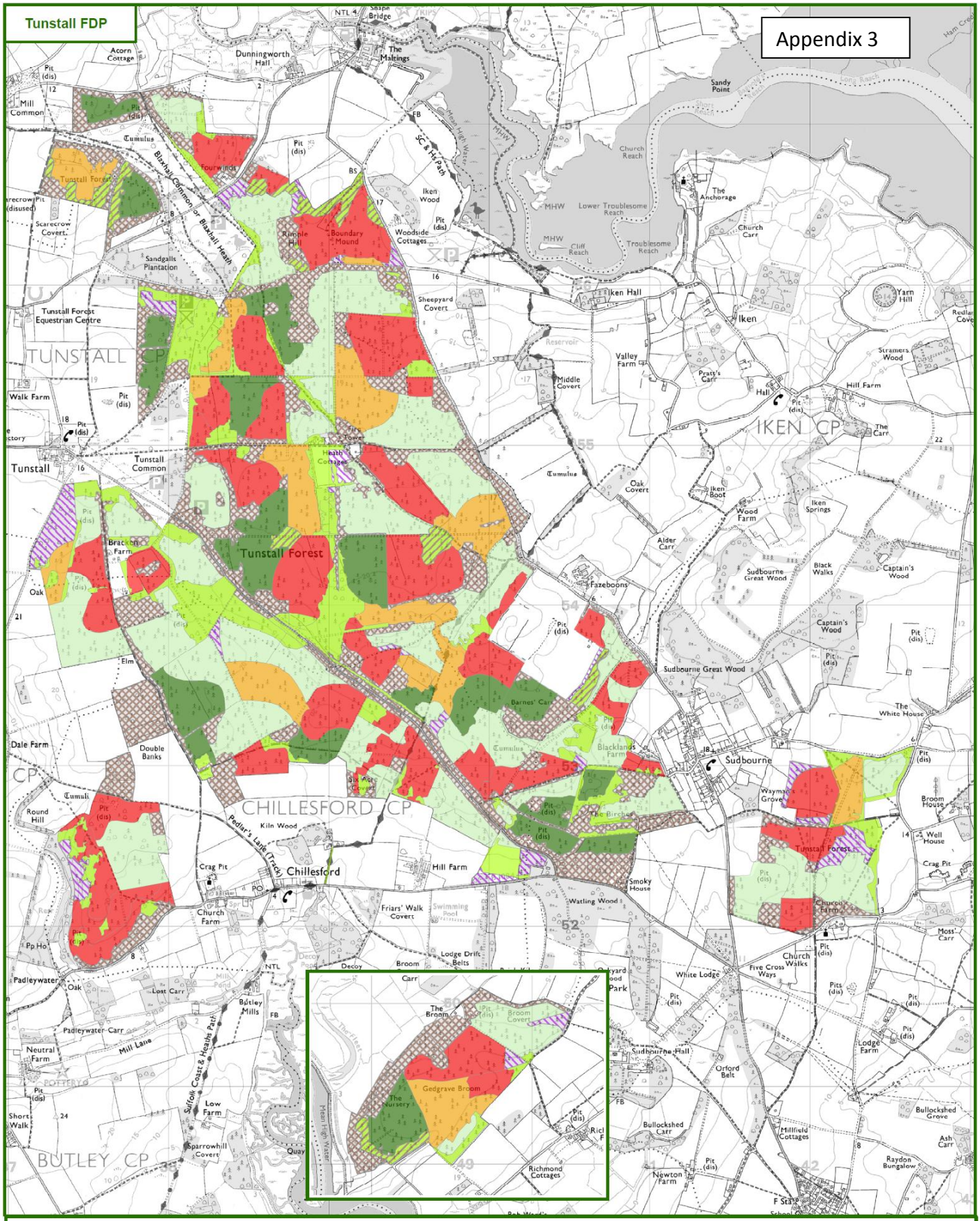
Tunstall FDP

Appendix 3



East Anglia Forest District
Habitat Map
Scale: 1:15,000
Date: 6th July 2007

Legend:

- Corsican Pine
- Douglas Fir
- Larch
- Open Space
- Temporary Open Space
- Mixed Conifers
- Scots Pine
- Broadleaves

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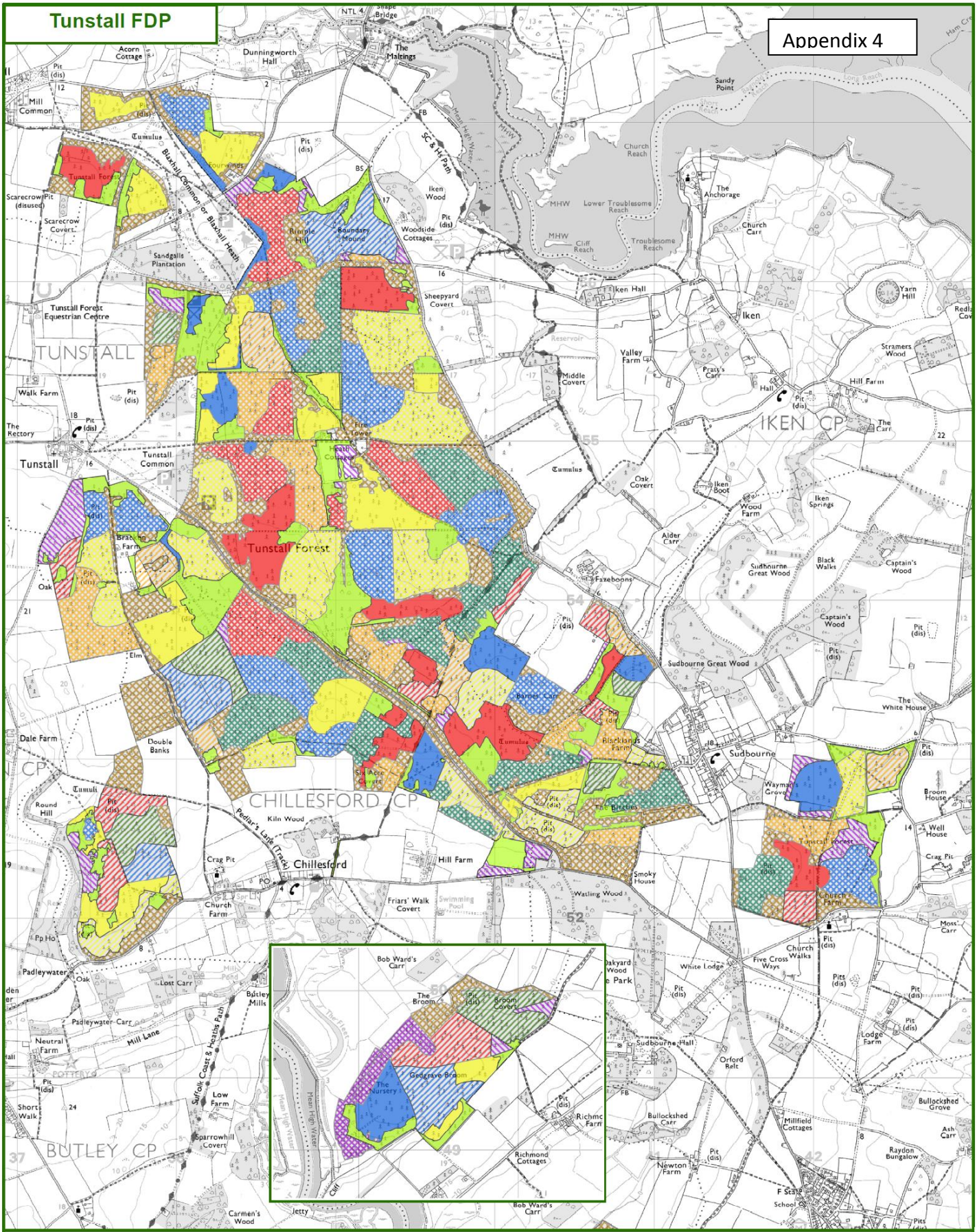
Tunstall FDP

Appendix 4



East Anglia Forest District
Management Map
Scale: 1:15,000
Date: 6th July 2007

Legend:

- Open / Other
- 2007-2011
- 2012-2016
- 2017-2021
- 2022-2026
- 2027-2031
- 2032-2036
- 2037-2041
- 2042-2046
- 2047-2051
- 2052-2056
- 2057-2061
- 2062-2066
- 2067-2071
- Conifer Continuous Cover
- Broadleaf Continuous Cover
- Minimum Intervention

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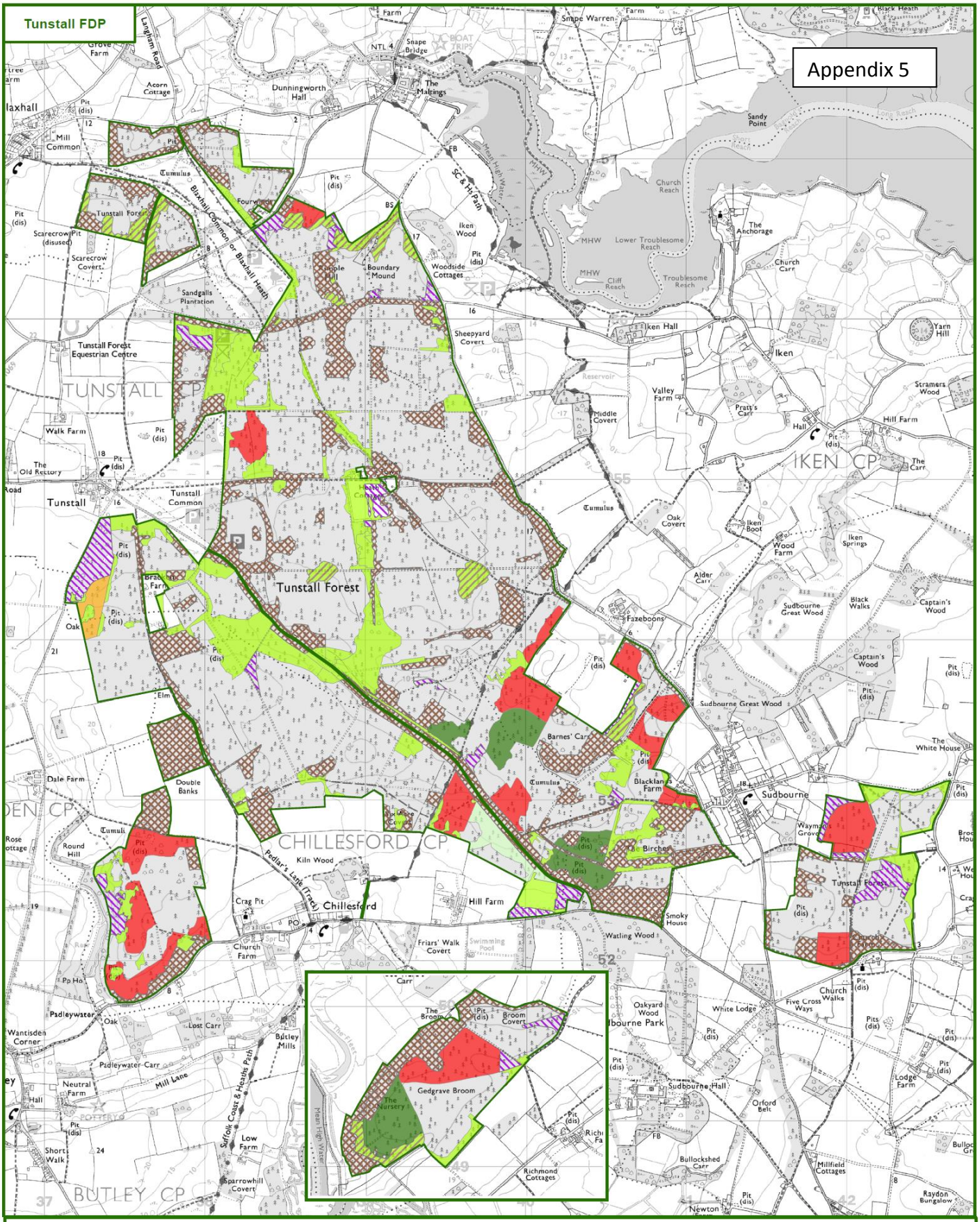
Tunstall FDP
Appendix 5
Tunstall Forest
TUNSTALL CP
CHILLESFORD CP
IKEN CP
BUTLEY CP
Tunstall
Chillesford
Sudbourne
Iken
Restock Map
East Anglia Forest District
Habitat Map
Scale: 1:15,000
Date: 6th July 2007
Legend:
Corsican Pine
Douglas Fir
Larch
Open Space
Temporary Open Space
Mixed Conifers
Scots Pine
Broadleaves
Forestry Commission
England
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