

Robin & Repton Forest Plan 2016-2026

Draft

Summary

The Robin and Repton Forest Plan (FP) summaries proposals by the Forestry Commission for the management of five woodlands, Robin Wood (98.1ha), Repton Shrubs (83.4ha), Hartshorne Wood (31.7ha), Poppy Wood (26.6ha) and Stanton by Bridge Woodland (19.2ha) which lie in The National Forest, South Derbyshire. The plan area of 259ha lies between 10km south of Derby, 7km east of Burton on Trent and have easy access from both the M1 and A38.

The Robin and Repton are largely dominated by productive mature conifer forest with Hartshorne and Poppy Wood being new woodlands recently planted with mixed hardwoods and Stanton by Bridge ex-agricultural land due to be planted in 2016. The management plans objectives will be to continue to grow commercial crops on a sustainable basis, diversify the forest structure through harvesting operations, conserve ancient woodland features, increase the number of deadwood habitat and Trees of Special interest, improve the value of the woodlands for butterflies and visitors.

The principal ecological interest in the plan are some of the remenant ancient woodland features, new and emerging woodland habitats and fauna associated with it. The FP will help to develop a more diverse woodland structure through active forest management. This will be achieved specifically through the retention of some strands of trees in perpetuity, the development of mixed open stands along water courses, restoration of semi-natural woodland and increased length of woodland edge habitat. Recent felling operations have already begun to increase the available nesting site for birds.

Forestry Operations 2016 to 2026

Woodland Name	Grid Reference	Total Area (ha)	Felling (ha)	Restocking, Natural Regeneration & Enrichment planting	Open Space
Robin Wood	SK 3600 2550	98.1	11.5	10.5	
Repton Shrubs	SK 31572340	83.4	9.4	8.1	
Hartshorne	SK 32622180	31.7		1.5	
Poppy Wood	SK 37192595	26.6		1	
Stanton by	SK 36462548	19.2		18	1.2

Central Forest District - Bagots Forest Plan (FP)
Maps
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1. What are Forest Plans?

Forest Plans are produced by us, the Forestry Commission (FC), as a means of communicating our management intentions to a range of stakeholders. They aim to fulfil a number of objectives:

- To provide descriptions of our woodlands to show what they are like now.
- To explain the process we go through in deciding what is best for the woodlands' long-term future.
- To show what we intend the woodlands to look like in the future.
- To detail our management proposals, for the first ten years so we can seek approval from the statutory regulators.

Our aim is to produce a plan that meets your needs for the woodland; meets the needs of the plants and animals that live there and meets our needs as managers.

We have produced this draft plan to illustrate our management proposals thereby creating an opportunity for you to comment on the plan, whether you are a user, a neighbour or a member of one of the many stakeholder groups that have an interest in the woodlands.

Information on how to get your comments to us is on our webpage.

This plan does not set out the detailed yearly management operations for each small piece of a wood, known as a coupe*. It is not possible to say which year a particular operation will take place, but we can say in which five-year period it should happen.

All tree felling in the UK is regulated and a licence is required before trees can be felled; the scale of tree felling in Central England Forest District, which this plan forms part of, is such that the Forest Plan is the best mechanism for applying for this licence.

Responsibility for checking that the plan meets all the relevant standards and statutes lies with another part of the FC (Forest Services). If all the criteria are met, full approval is given for the management operations in the first ten years (2016 - 2026) and outline approval for the medium term vision (2026 - 2066). The plan will be reviewed after the first five years (2021) to assess if the objectives are being achieved.

We use some technical words and phrases in the text because they best describe what we are doing. There is a glossary at the back of the plan with some commonly used technical forestry terms and abbreviations. These technical words are identified with an *.

A Application for Forest Plan Approval

i Plan Area Identification:

Forest District:	Central Forest District
Beat:	National Forest
Name:	Robin and Repton Forest Plan
Nearest Town:	Burton on Trent
OS Grid Reference:	Robin Wood SK 36002550
	Repton Shrubs SK 31572340
	Poppy Wood SK 37192595
	Hartshorne SK 32622180
	Stanton by Bridge SK 36462548
Local Planning Authority	South Derbyshire

ii Designations:

Ancient Woodland Site (AWS), Plantation on an Ancient Woodland Site (PAWS)*, Secondary Woodland*, National Forest Community Woodland and lies within the Natural Character Area*, Profile No.70. Melbourne Parklands.*

iii Date of Commencement of Plan

As soon as possible once approved.

Area (ha)	Conifers	Broadleaves
Felling	18.7	
Restocking – <i>planted stock & natural regeneration</i>		16.5
Low Impact Silvicultural Systems (LISS) *		8
Open Space	2.2	

* NB The 8ha refers to the net area of felling that will take place within the next 10 years

Total clear fell area 18.7ha
Forest Plan maps are attached

I apply for Forest Plan approval for the area described above and in the enclosed Forest Plan.

I undertake to obtain any permission necessary for the implementation of the approved plan.

Signed Approved

FDM

District Conservancy

Date Date

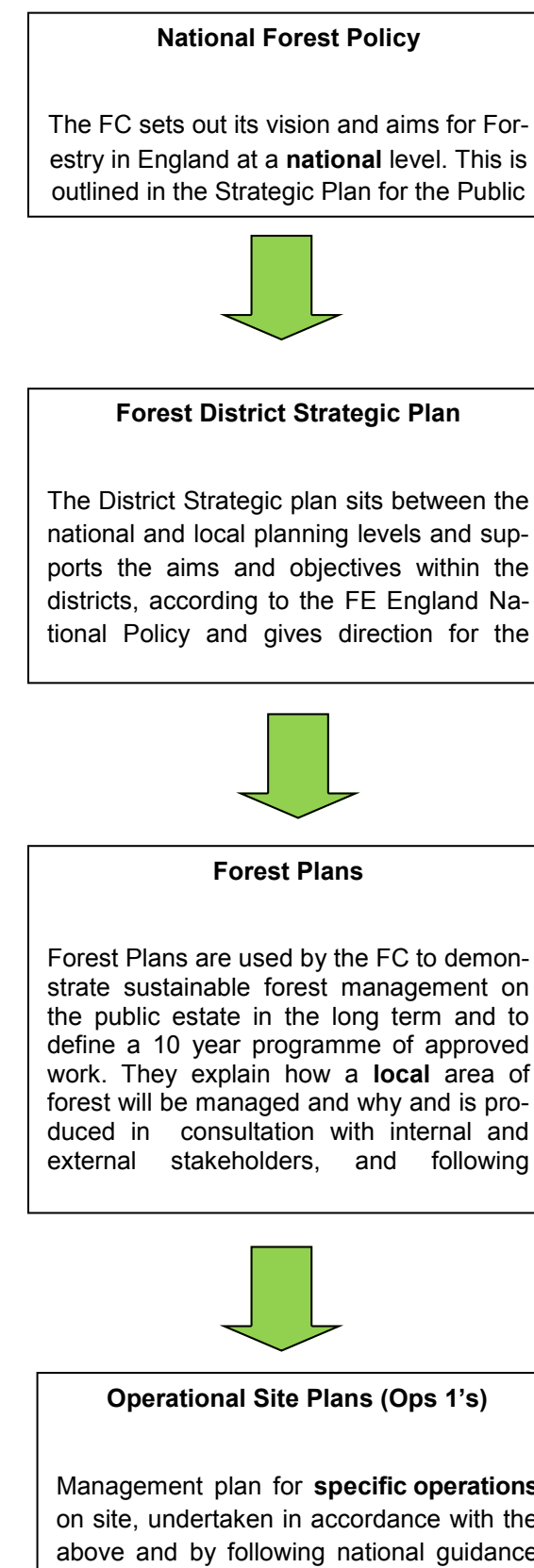
1. Introduction

This Forest Plan (FP) is updating an older plan prepared in 2003 and provides approval for felling and restocking over the next 10 years and sets out our management proposals for the next fifty years. FP's are operational plans and although they do take into account the presence of social and environmental features, their management will be dealt with in separate documentation.

This FP is guided and directed by a number of policies and strategies - the main documents are summarised in Fig.1. Delivering this plan will require the Forestry Commission (FC) to be responsive to shifts in our operating environment and increasingly flexible in our approach, and to sustain this responsiveness over decades to come.

Protecting and Expanding England's Forests and Woodlands and Increasing their
Value to Society and the Environment

Fig 1. Forestry Commission England's Planning Strategy

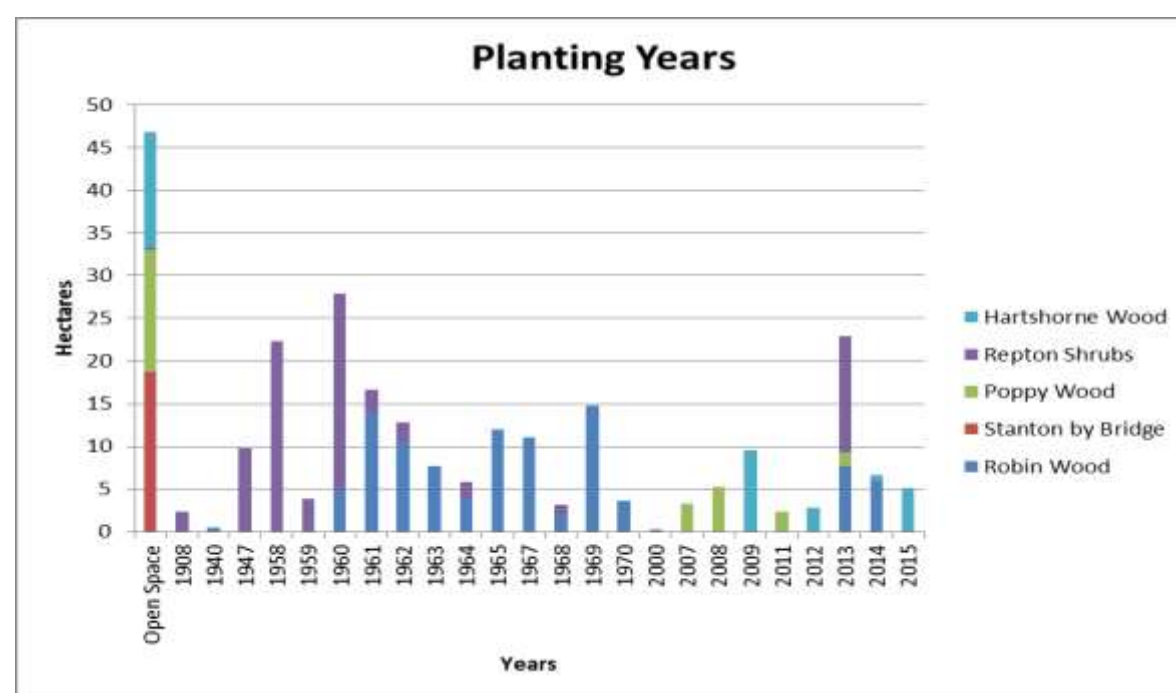


1.1. Robin and Repton FP – Survey Data

The Robin and Repton Forest Plan (259ha) comprises of five woodlands, Robin (98.1ha), Repton (83.4ha), Hartshorne (31.7ha), Poppy Wood (26.6ha) and Stanton by Bridge (19.2ha) which lie in the Melbourne Parklands Natural Area, South Derbyshire. The plan area of 259ha comprises of 69% high forest, 22% of new woodland, 10% is open land and 7% agricultural land now to be planted with trees.

Robin and Repton were planted between 1957 and 1967 and are dominated by mature conifers with some mature broadleaves scattered amongst the conifer stands. These two woodlands are former Ancient Woodland Sites (AWS) and the design plan will focus on the restoration of these woodlands. Poppy Wood and Hartshorne are new woodlands planted between 2007 and 2012 on agricultural land and they are now well established. These new woodland were planted with a mixture of species dominated by broadleaves. Stanton by Bridge is a new acquisition which lies adjacent to Robin wood and will be planted in 2016 winter period with conifers and some small groups of broadleaves. Fig1 shows the current age structure across the FP area.

Fig.2 Age Structure



The woodlands all lie within The National Forest and are used on a daily basis by locals. The only formal public facilities are at Poppy Wood where a small public car park, waymarked trail with interpretation and art work attracts the greatest number of visitors.

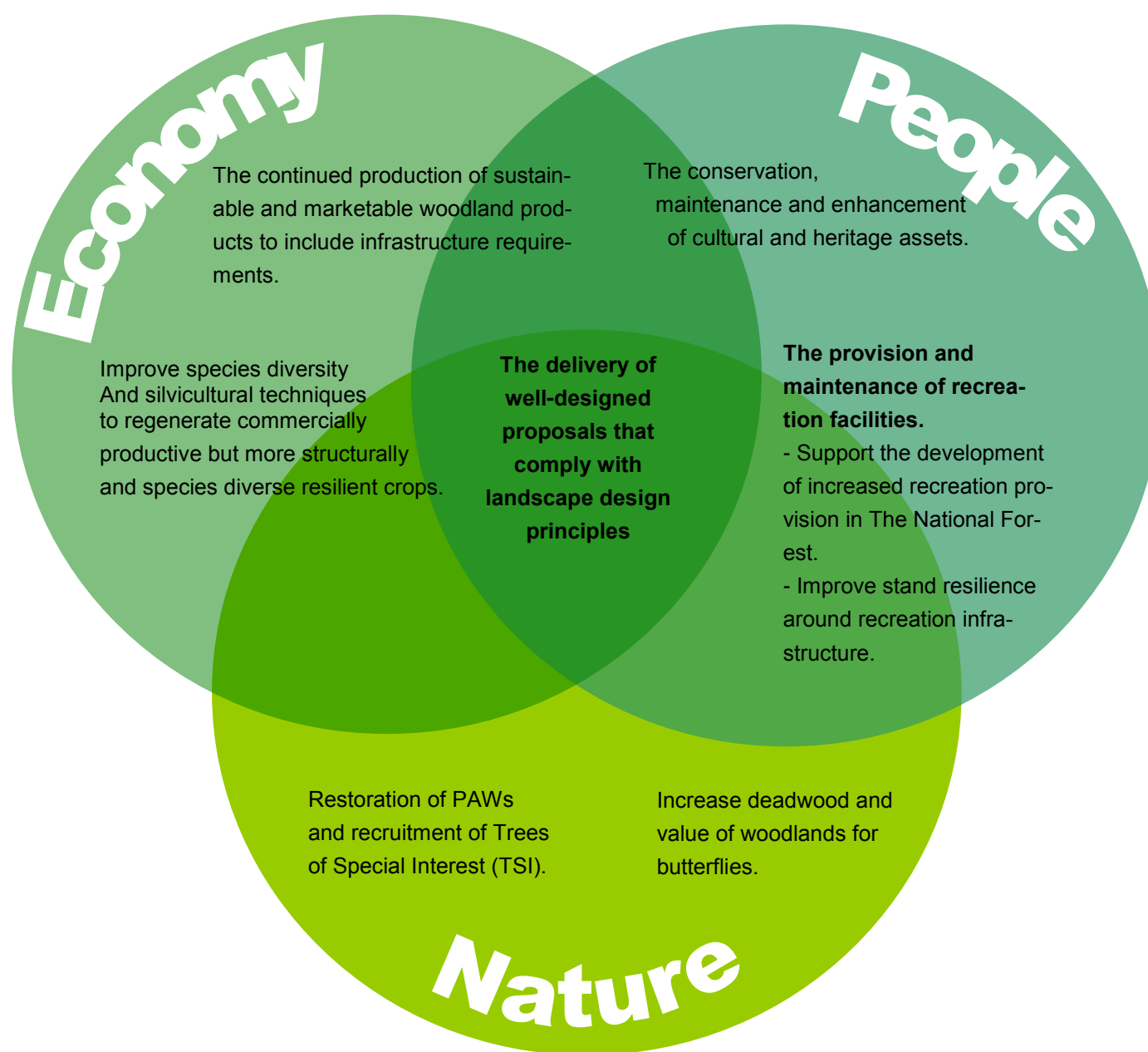
Mature stands of Corsican pine dominate Robin and Repton woodlands with some Scots pine and small blocks of broadleaves present. Felling operations have now begun in the mature stands and have created some structural diversity in the uniform mature high pine forest.

The Corsican pine has been badly affected by Dothistroma Needle Blight (DNB) a fungal like pathogen that affects tree growth through defoliation which significantly reduces timber yields. It can also eventually lead to mortality. Scots pine has also become infected by DNB but the impact currently has not been as great. Chalara dieback of ash is another serious disease now affecting the ash trees in Hartshorne and Poppy Wood. The disease is spread by a fungus called *Hymenoscyphus fraxineus* which causes leaf loss and crown dieback in affected trees, and in most cases leads to tree death.

The dominant local landscape character is rolling arable farmland with hedgerows and small areas of mature ancient and plantation woodland. The extensive new woodland plantings associated to the National Forest, of which this plan forms part of, is changing the landscape character of the area from its ex-industrial use back to the Parkland landscape it was once associated to.

The FP lies 10km south of Derby, 7km east of Burton on Trent and have easy access from both the M1 and A38.

2. Management Objectives



3.0 Forest Plan Objectives

3.1 Woodland

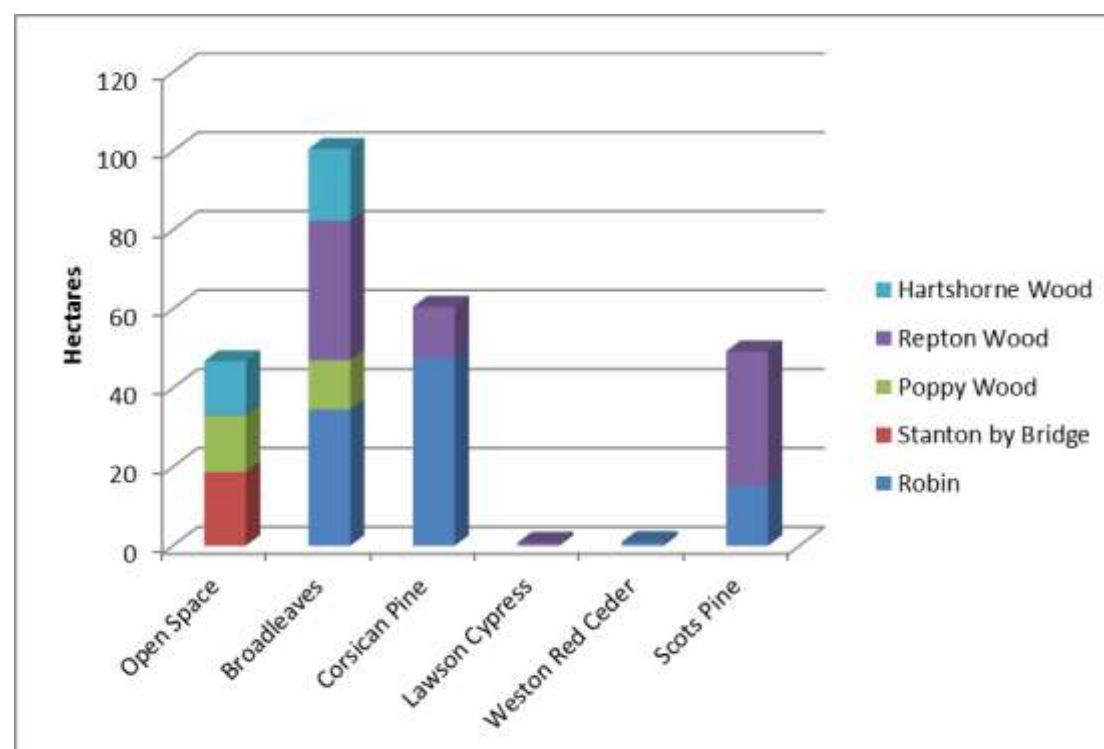
The key management objective for the forest plan woodlands will be the continued production of sustainable timber crops, whilst diversifying the forest structure and restoring Robin and Repton Woods back to broadleaved woodlands. This will be achieved using a combination of silvicultural techniques selected by ground conditions and presence of broadleaves within the existing crops. In conifer stands where there are few broadleaves

clearfells will be used to remove the conifers creating adequate space and light levels for the site to be re-established with broadleaves by natural regeneration and enrichment planting. In more mixed stands where there is either mature broadleaves or young trees which have become fully established Low Impact Silvicultural Systems (LISS)* will be used. The type of LISS, frequency and intensity of harvesting within these stands will be decided by the Beat forester* when they create their operational plan. The management objective will be to create the correct woodland conditions to allow any existing broadleaves to develop fully and create the correct microclimate for any restocking or natural regeneration to establish successfully.

Mature broadleaved stands in Robin and Repton and young broadleaved stands in Hartshorne and Poppy Wood will be managed using LISS allowing over time a mixed stand structure to develop with trees of varying age, stocking density, species and crown cover. This will help diversify the woodland ecosystems* and link the food chain associated with the forest floor up into the mature tree canopy's. To enable these planned operations a new forest track will need to be created to allow access for forest machinery through Stanton by Bridge into Robin Wood, see Access Map.

The threat to timber production from climate change and more directly from pest and diseases (DNB and Chalara fraxinea (ash die back) is already having a major impact in the forests, with Corsican pine and ash being worst affected. To ensure longterm sustainable timber production, the present tree species will be diversified in future rotations selecting species that are more resistant to the current and increased incidence of pests and disease. Where natural regeneration is used to restock sites enrichment planting will take place to allow for the introduction of alternative species and honorary natives. Corsican pine will be targeted where possible for early removal in the future harvesting programme due to the effect of DNB.

The woodlands all lie on fertile soil that comes from the Triassic Mercia Mudstones that cover the area and gives rise to reddish soils. The yield classes recorded for the pine stands ranges from 14-20m³ demonstrating how productive the woodland soils are.

Fig.3 Current Species within Robin and Repton Forest Plan

Table 1. Current Species

	Robin Wood	Stanton by Bridge	Poppy Wood	Repton Wood	Hartshorne Wood	Total	Percentage
Open Space		18.7	14.3	0.2	13.6	46.8	18.1
Broadleaves	34.6		12.4	35.4	18.2	100.6	38.8
Corsican Pine	47.6			13		60.6	23.4
Lawson Cypress				0.8		0.8	0.3
Weston Red Cedar	1					1	0.4
Scots Pine	15.4			33.9		49.3	19.0
Grand Total	98.6	18.7	26.7	83.3	31.8	259.1	100

The woodlands all lie on fertile soil that comes from the Triassic Mercia Mudstones that cover the area and gives rise to reddish soils. The yield classes recorded for the pine stands ranges from 14-20m³ demonstrating how productive the woodland soils are.

3.2 Environmental

The FP area has a wide variety of conservation interests that will benefit both directly and indirectly from the active management programme put forward. The woodland structure in both the mature and new woodlands is quite uniform which has limited the diversity of woodland habitats available.

3.2.1 Harvesting

Through the harvesting programme that has now begun, and scheduled to be extended further across the mature woodlands, a patchwork of transitional open space will be created and over time a varied canopy level will begin to appear following restocking providing benefits for ground nesting birds. LISS will be used in existing broadleaved stands to develop a varied age structure, canopy cover and stocking density within these areas that will benefit the ground flora and increase available feeding and breeding habitat for woodland fauna. Coppice with standards will be reintroduced again on an area of over mature sweet chestnut coppice that is surrounded by a carpet of bluebells creating dappled shade of varying intensity through the coppice cycle. Chestnut will be cut on a 20-30 year cycle with individual stems been retained as standards. Thinning operations will begin during the plan period on many of the new woodland areas to open up stands and create space and light within the dense young stands. Several areas have been identified as minimum intervention and in these areas following any immediate restructuring, the stands will be left undisturbed creating an oasis for wildlife and allow the woodland ecosystem within these areas to evolve naturally.

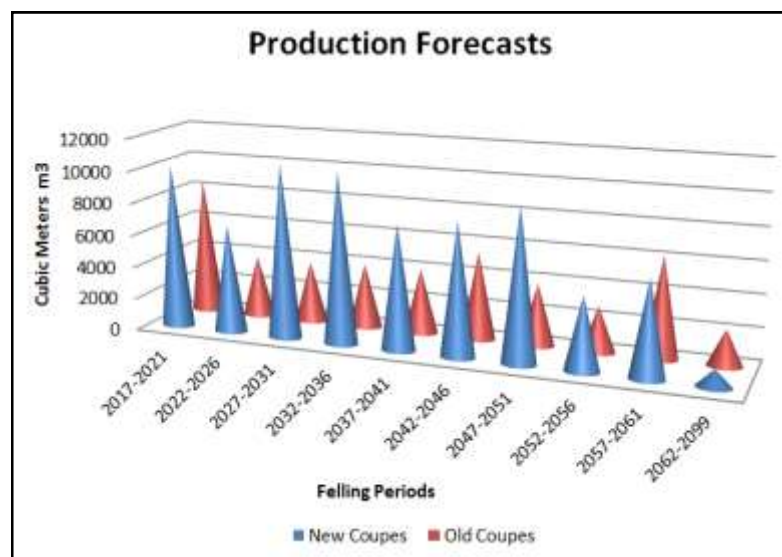
The proposed harvesting programme will generate approximately 75,000m³ over the next 50 years as opposed to the old plan that would have generated 45,000m³. The additional volume has come about due to new coupe shapes, update yield models and survey data for the current crops and three additional woodland areas now being part of the new FP Fig.5. To ensure the future harvesting programmes can be undertaken in Robin Wood and Stanton by Bridge a new forest road will be created following survey by our Civil Engineers, Environmental Impact Assessment (EIA) and planning approval.

There are few Trees of Special Interest (TSI) and limited deadwood habitat in the woodlands. Through the provision of minimum intervention areas and the retention of individual and small groups of conifers and broadleaf in perpetuity, the number of TSI and volume of deadwood will gradually increase over time. This will provide valuable nesting and feeding habitats for bats, birds and invertebrates.

The Forestry Commission is working in partnership with Butterfly Conservation who have been monitoring Hartshorne and walking weekly transects between April and September

since 2014. They have recorded over 21 different species of butterfly including one of our more elusive species the White-letter hairstreak. The FC has subsequently planted a variety of elm including Wych elm which is the preferred food source for caterpillars of this species.

Fig.4 Production Forecasts



3.3 Social

The National Forest receives nearly 8 million visitors a year and the Robin and Repton FP is an integral part of the landscape visitors come to enjoy. The current use across the FP is low although the daily use of Poppy Wood is very high as a proportion of the total number of people visiting each of the woodlands. Currently the only formal facilities provided are in Poppy Wood with a small car park, waymarked trails and information points leading visitors around the site. Picnic benches have been provided at both Poppy and Hartshorne Wood. The FC open access policy into its freehold woodlands means that the public has access to all areas (except Repton Wood which is leasehold and has access restriction placed on it) for informal recreational use. The FC is now receiving a number of inquiries from different user groups for permission to host events in the freehold woodlands and the FC will, where possible continue to work with these groups.

Forestry operations including new planting will create a more varied woodland edge effect along key access routes. This will help increase the aesthetic value of the trails to visitors by selecting and opening up frame trees with good shape and form and creating a tapestry of colour and texture between groups of trees. Varied cutting patterns of ride sides will also create a mixture of soft and woody vegetation and provide ideal conditions for a more varied ground flora.

There are no Scheduled Ancient Monuments in the plan area but there are a number of historic features and these as well as any others that may be found in the future will be conserved wherever possible.

3.4 Restocking and Future Management

The current forest composition will change quite markedly over the next rotation in Robin and Repton Woods moving away from what is now conifer woodland with isolated broadleaves to a woodland dominated by broadleaves which contains a few small groups and individual conifers. This will be achieved through a combination of planting and natural regeneration. Felled areas will have trees planted in groups scattered across the felled area with the remaining area left to naturally regenerate. This will allow new species to be introduced onto the site and the origin* and provenance* of the planting stock to be selected for its resilience to future threats from pest, disease and climate change. The stocking density within the planted groups will be designed to grow trees of good shape and form with reduced branching which will in turn lead to better quality timber production in the future. In areas managed as LISS natural regeneration from the parent broadleaves will be used to restock these areas with some enrichment planting to achieve full stocking and create the opportunity to introduce new seed stock from different provenance and origin.

The new acquisition known as Stanton by Bridge will be planted in the winter/spring 2016/17 with a mixture of 5 conifer species and groups of broadleaves. This is a new woodland site and will be managed to produce quality timber. Small groups of conifers will be planted in both Poppy Wood and Hartshorne Wood primarily along rides and within the woodland edge. These new plantings will group species into blocks to create strong changes of colour and texture against the mixed broadleaved woodland especially in winter. Planting patterns will be arranged to break up the linear parallel woodland edges and open corridors that are developing as the new woodland establishes, and to create a more natural irregular edge effect and parkland feel along the access routes.

The new species that will be used to diversify the forest will be increasingly palatable to mammals and a greater level of protection may be needed to ensure successful establishment and a combination of mammal control and fencing will be used to achieve this.

3.4.1 Habitat Management

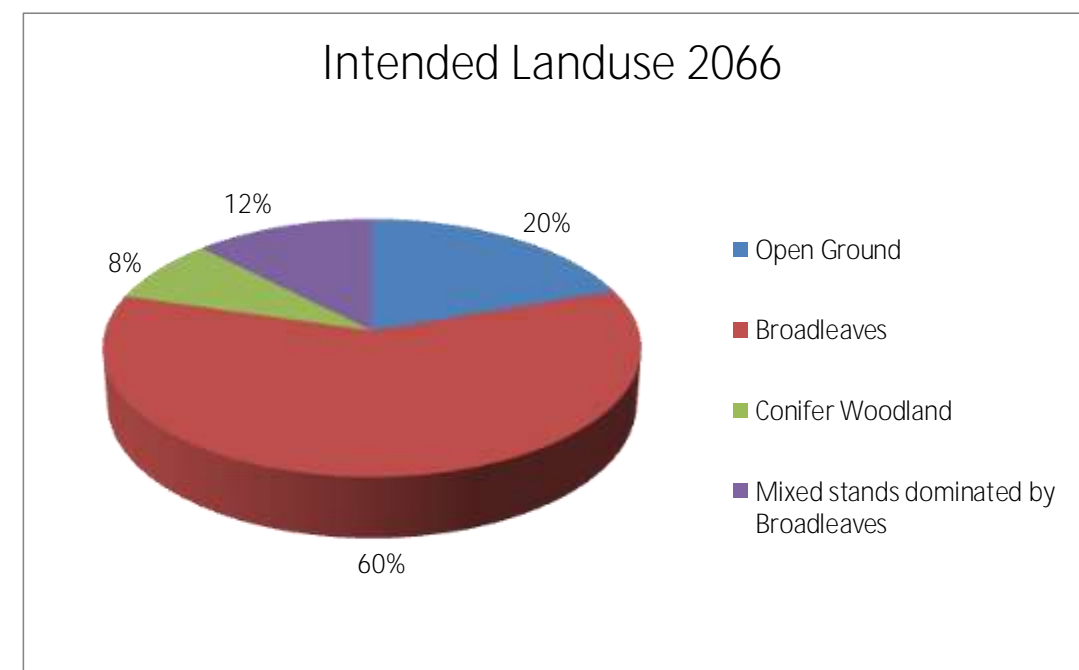
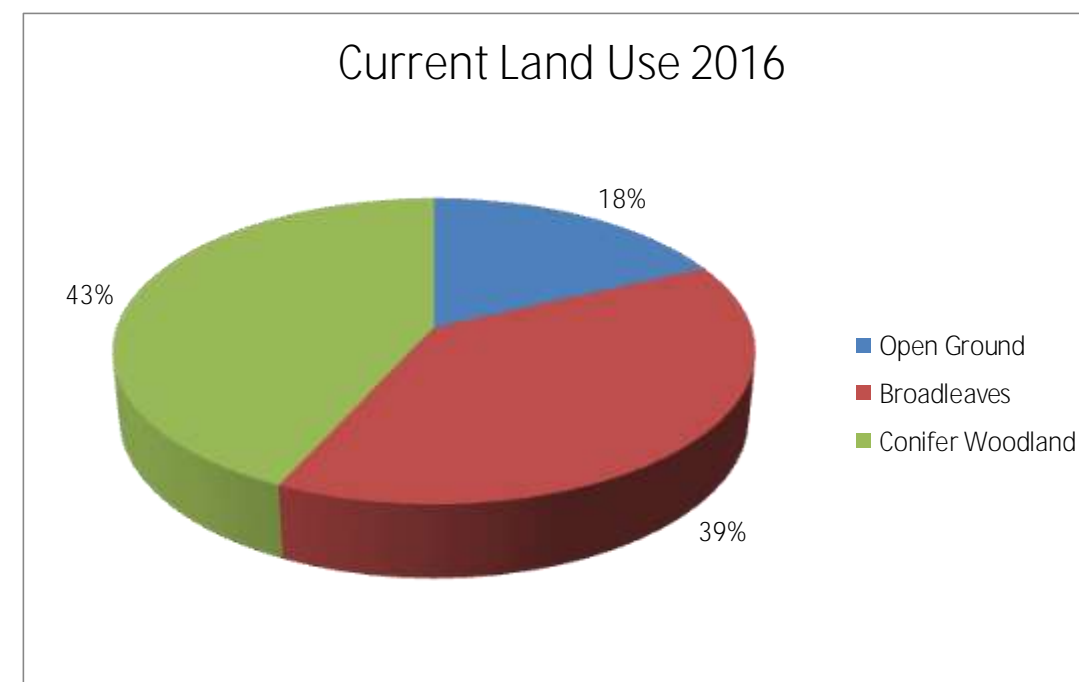
The water courses will be actively managed moving back the tree line which will allow more light onto the water course and open space for a diverse aquatic and riparian zone to develop into. Individual trees with good crowns will be retained within these areas and provide cover for birds. These areas will act as buffer zones for when adjacent stands are felled and reduce the risk of siltation into the watercourse following felling operations.

The rides within the mature woodlands will be gradually opened up during thinning operations and subsequent restocking, creating a wide woodland edge where an understorey of trees and shrubs will develop to link the herbaceous vegetation associated with forest roads to the forest canopy. In both mature and new woodlands the edge effect will be gradually broken up through harvesting and new planting to remove straight edges and create a more irregular edge. This will in turn increase the woodland edge habitat and increase sheltered sunny glades especially on the north side of rides which will receive more sunlight. This will benefit the indigenous ground flora and increase the available breeding and feeding habitats for the woodland fauna.

Table 2 Future Species Composition – 2066

Habitat	Hectare	Percentage
Open Ground	51	20
Broadleaves	155.1	60
Mixed stands dominated by Broadleaves	32	12
Conifer Woodland	21	8
Total	259.1	100

Fig.5 Future Forest Structure



4. Meeting and Monitoring Management Objectives

Objective	Description	Proposals	Methods of Monitoring
Woodland	The woodlands will be managed to produce commercial broadleaf and conifer timber using a variety of silvicultural systems which will be chosen to aid establishment. Restocking and future species.	The existing conifer and broadleaves will be managed through a combination of clearfell and LISS based on current health of crops, natural regeneration present and landscape considerations. Stands will be thinned at regular intervals (5yrs conifer – 10years broadleaves) until the end of their economic rotation or until they have reached market diameter.	Monitored through Sub-compartment database.
		Conifer stands will be managed as uniform high forest while broadleaves stands will be encouraged to develop into more structurally diverse stands. Natural regeneration with enrichment planting will be the preferred option across the plan area. Stands throughout the FP area will be diversified using a range of broadleaved and conifer species best suited to the site conditions and resilience to predicted impact of climate change, pest and disease. Due to the limited seed source for broadleaves in Robin and Repton Woods restocking to diversify indigenous species will be used to supplement the natural regeneration that has in the past been limited to birch. On AWS sites restocking will include up to 20% honorary native and 20% non-native species in this next rotation.	Monitored through Sub-compartment database.

Objective	Description	Proposals	Methods of Monitoring
Woodland	New Woodlands on secondary woodland sites.	The new woodlands at Poppy, Hartshorne and Stanton by Bridge will be managed to produce commercial quality timber. Final tree selection systems will be used and target trees pruned to produce clean logs. Forestry operations will be carried out sympathetically to enhance the aesthetic value of the woodland to visitors over time.	Monitored by beat team and through Sub-compartment database.
	Pests and disease - <i>Dothistroma</i> Needle Blight (DNB) is now affecting the Lodgepole and Corsican pine stands. <i>Chalara fraxinea</i> (ash die back) is a fungal disease effecting ash trees and <i>Phytophthora ramorum</i> is now present in Central England and the risk to Sweet Chestnut is likely to increase.	Any stands badly affected by pests or diseases will be felled early and replanted with alternative tree species that will be more resilient.	Monitored by beat team and through Sub-compartment database.

Objective	Description	Proposals	Methods of Monitoring
Biodiversity	Woodland edge habitat.	The current uniform mature high forest will be gradually broken up as felling operations take place. The current straight edges will be broken up to create space for an understory to develop and trophic links between short vegetation along rides and canopy of high forest.	Monitored by wildlife ranger through Operational plans and at FP review.
	Riparian areas.	The riparian areas alongside water courses and ponds will be opened up to create varying levels of dappled shade over the water and space for an understory to develop.	Monitor by beat team, Operational plans and at FP review.

Objective	Description	Proposals	Methods of Monitoring
Biodiversity	Trees of special interest (TSI) and deadwood.	Standing snags will be left and individual and small groups of trees will be retained beyond their economic rotation, to become trees of special interest and provide additional deadwood habitats.	Monitored through Operational Plans and GIS conservation layer.

Objective	Description	Proposals	Methods of Monitoring
Social & Recreation	The demand for access onto the Rbin and Repton FP area has increased over recent years.	The Forestry Commission will continue to allow open access onto its freehold land and to facilitate the future demand for recreation and tourism. No formal provision for new recreation facilities is planned at this time.	No monitoring required.
Heritage	There are no scheduled monuments in the FP area but a number of historical features have been identified.	Any significant heritage features found will be taken into consideration when operations are planned and undertaken.	Monitored through Operational Plans and at FP review.

5. 2016 Forest Plan comparison against the 2003 Forest Plan

The new FP has seen a major change in its management objectives for Robin and Repton Wood that were previously to be managed as productive conifer woodlands. The objectives now are to revert the woodlands back to 'native' broadleaved woodland due to their status as former AWS. To achieve this there will be a move away from large scale clearfells used in the old plan to a mixture of small scale felling and LISS. Restocking will now incorporate greater use of natural regeneration to help new stands become established with any restocking focusing on the introduction of new species and provenances which it is hoped will be more resilient to the current and future treats posed by disease, insects and climate. The harvesting programme being proposed will help deliver a number of ecological benefits through the diversification of woodland structure, creation of transitional open space and creation of more woodland edge habitats.

6. Consultees

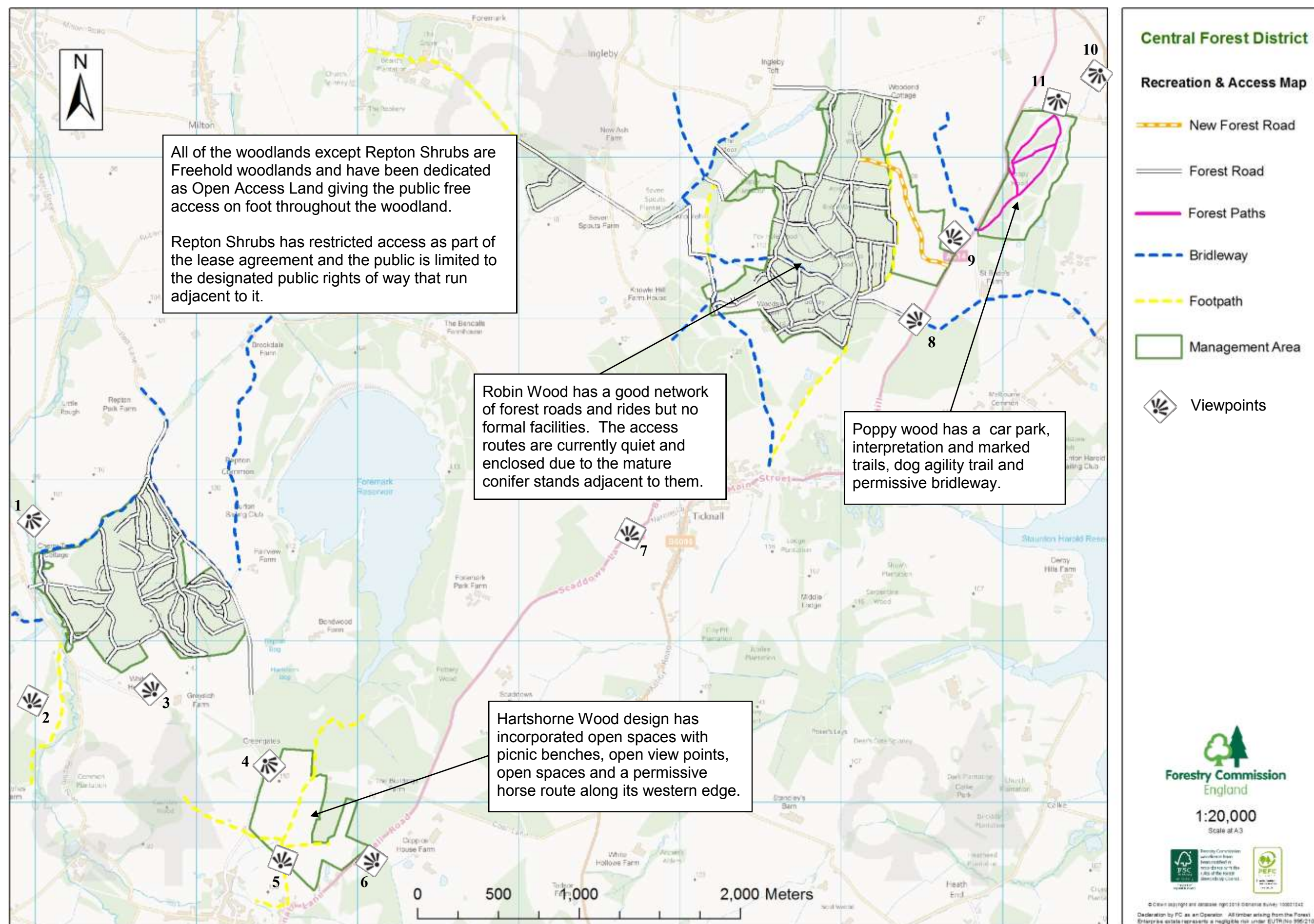
<i>The consultation undertaken in the preparation of this plan has been wide ranging and extensive. Full documentation including letters, notes of conversations etc. are held at our District Offices.</i>				
Consultee	Date Contacted	Date Response Received	Issues Raised	Forest District Response to Issues
<i>To be completed following initial consultation outlining comments made</i>				
As part of the local consultation letters were sent to stakeholder, copies of the plan made available via the FC website, and notices placed on site. Comments received and the Forestry Commission's responses are recorded above.				

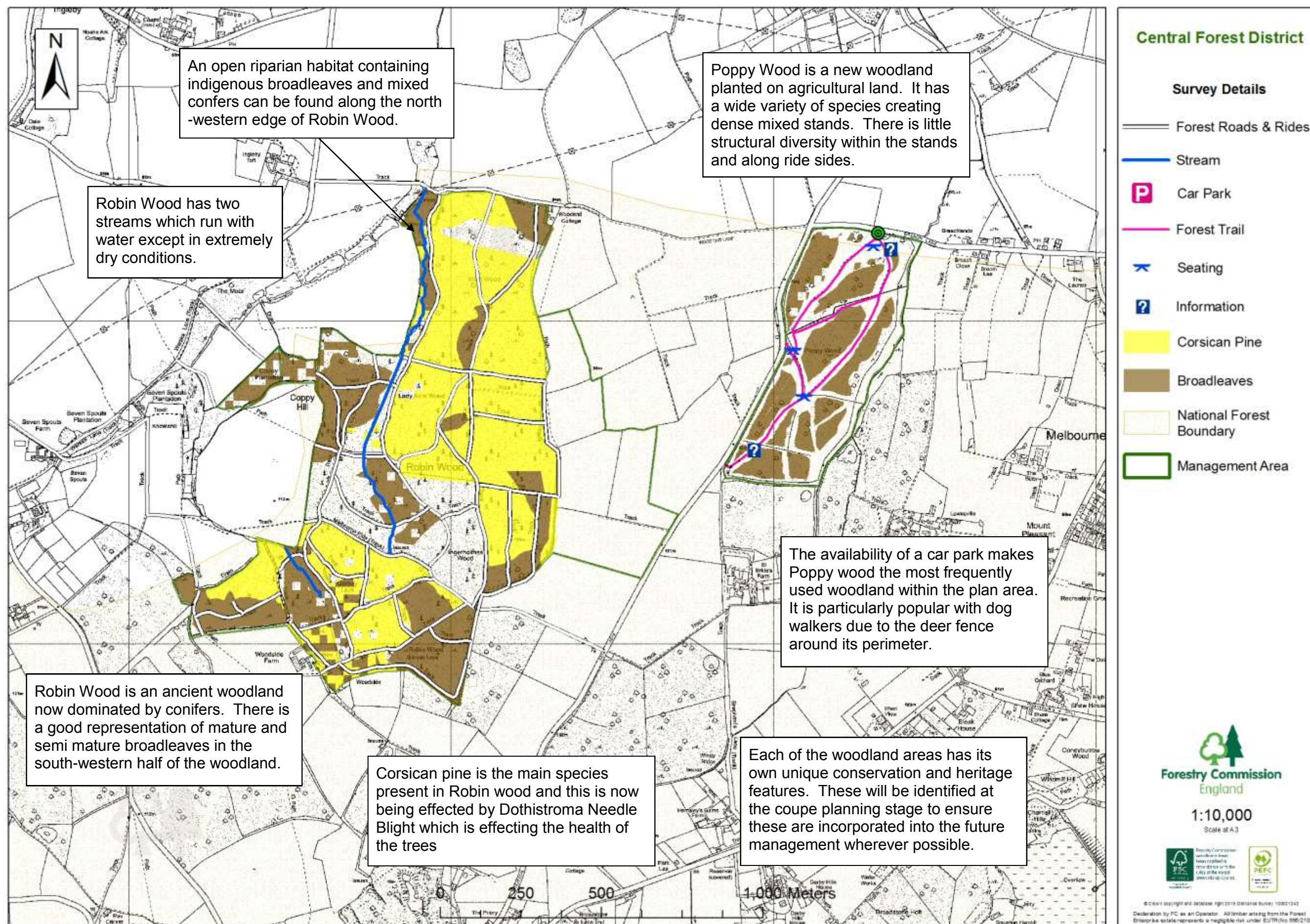


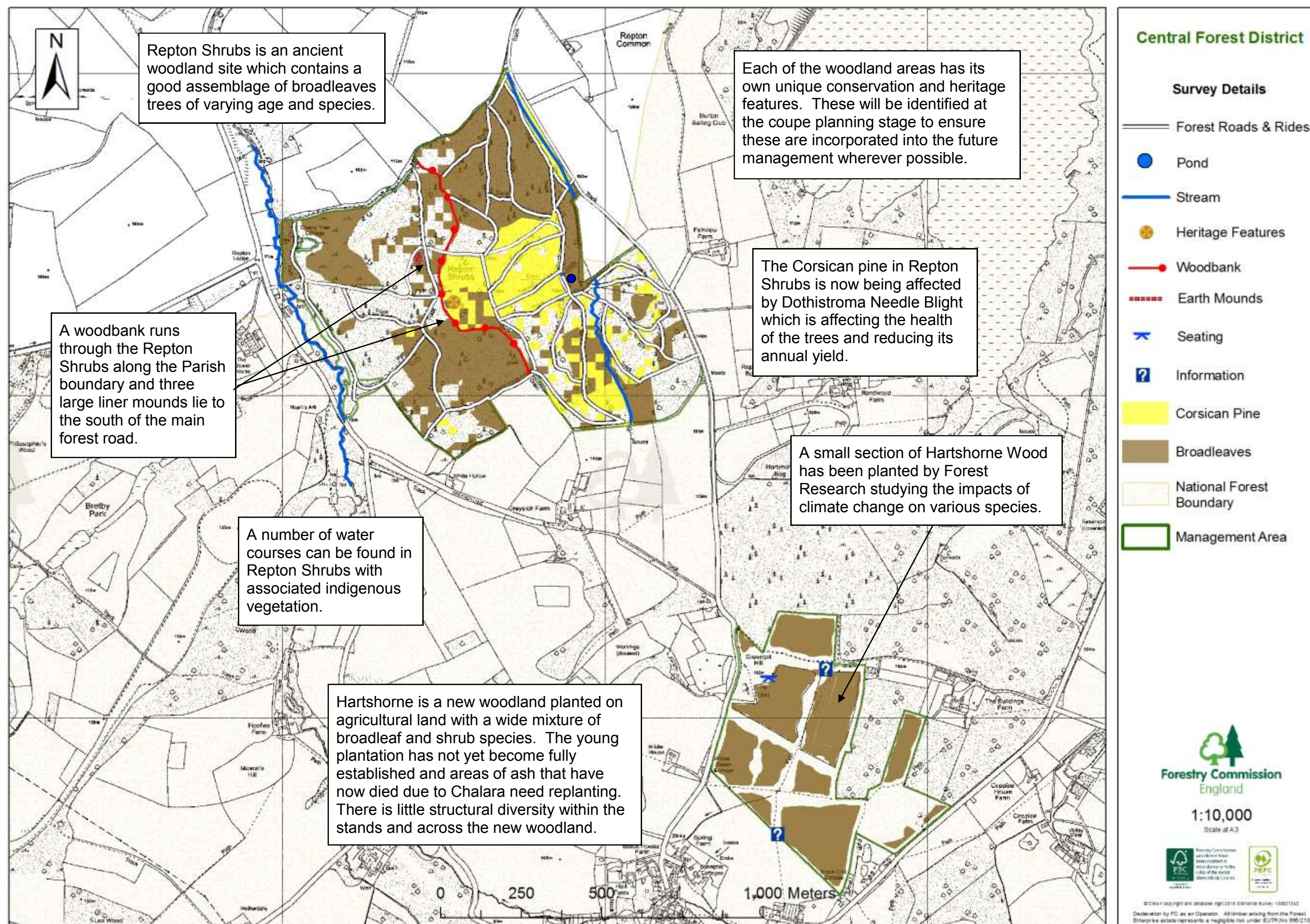
Location Map

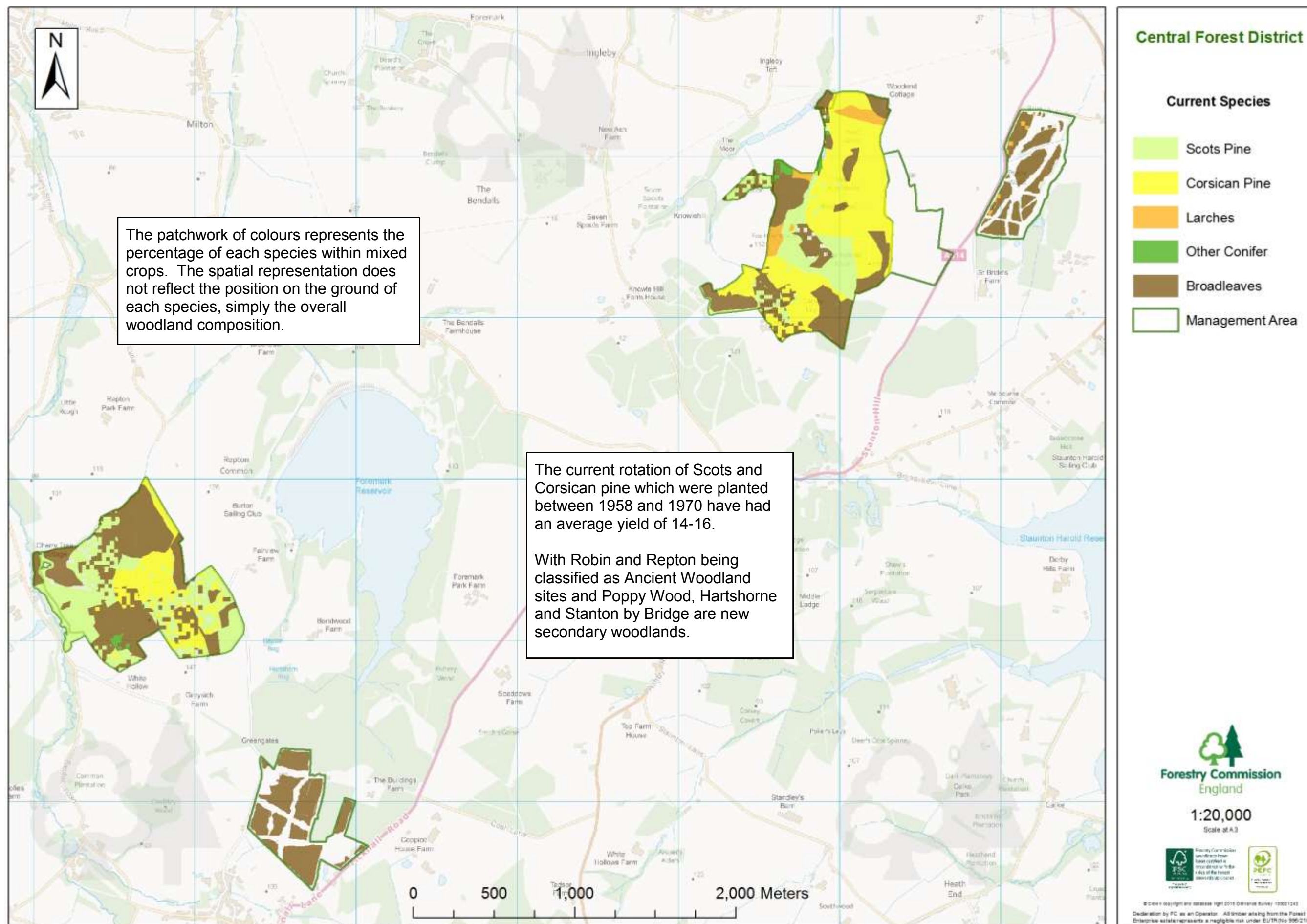
The Woodlands lie within the National Forest, Derbyshire covering 259ha. Robin and Repton are former Ancient Woodland sites now covered in mature conifers and areas of hardwood. Hartshorne and Poppy Wood are new broadleaved woodlands planted between 2007 and 2015. Stanton by Bridge is a new site yet to be planted in a level open landscape.

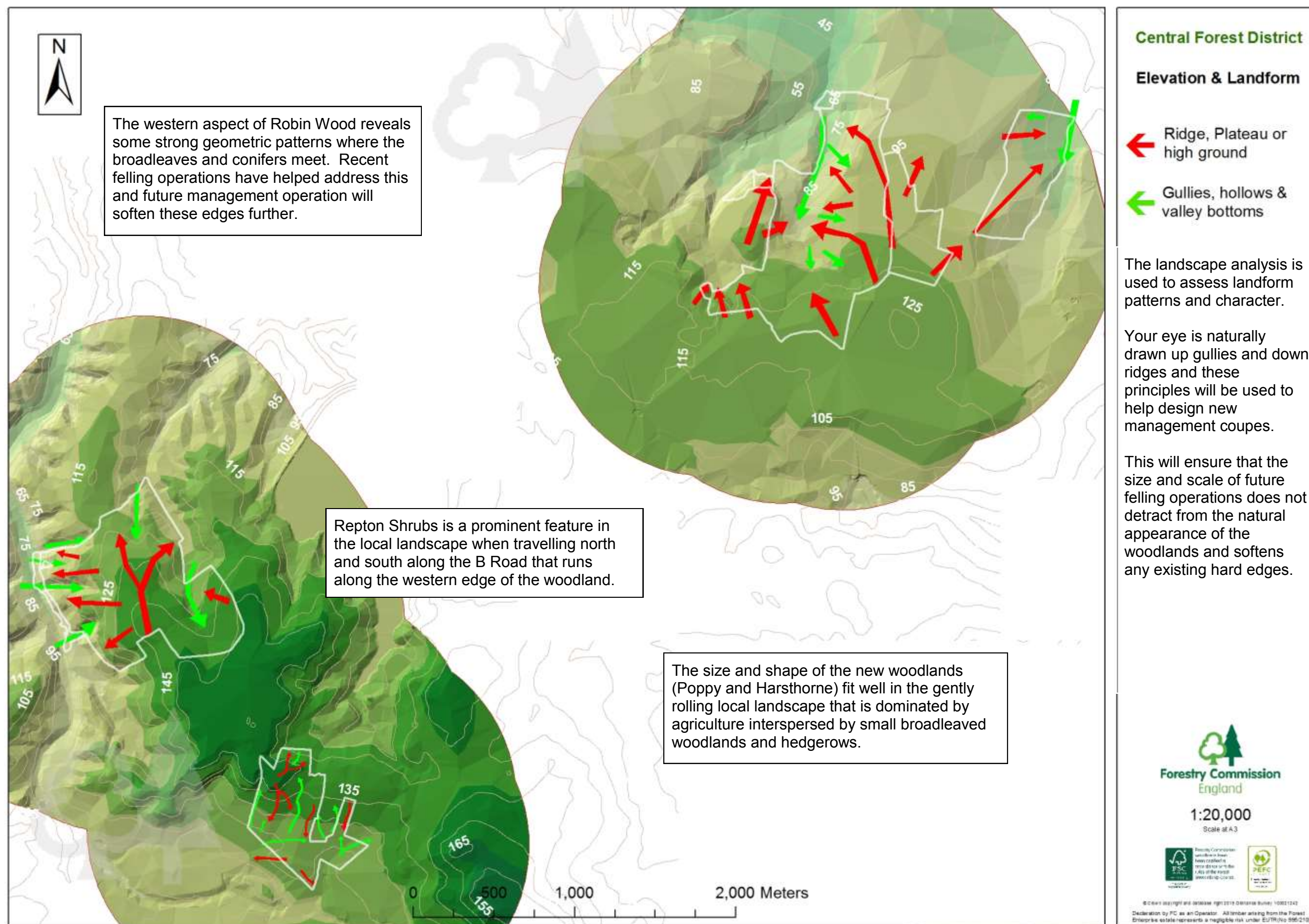
The surrounding landscape is rolling farmland with ancient and plantation woodland predominantly rural, often abrupt contrasts with the urban areas. The new woodlands in The National Forest are playing an important role in ecological and social benefits. The size and age of Robin and Repton Woods make them significant features in the landscape.

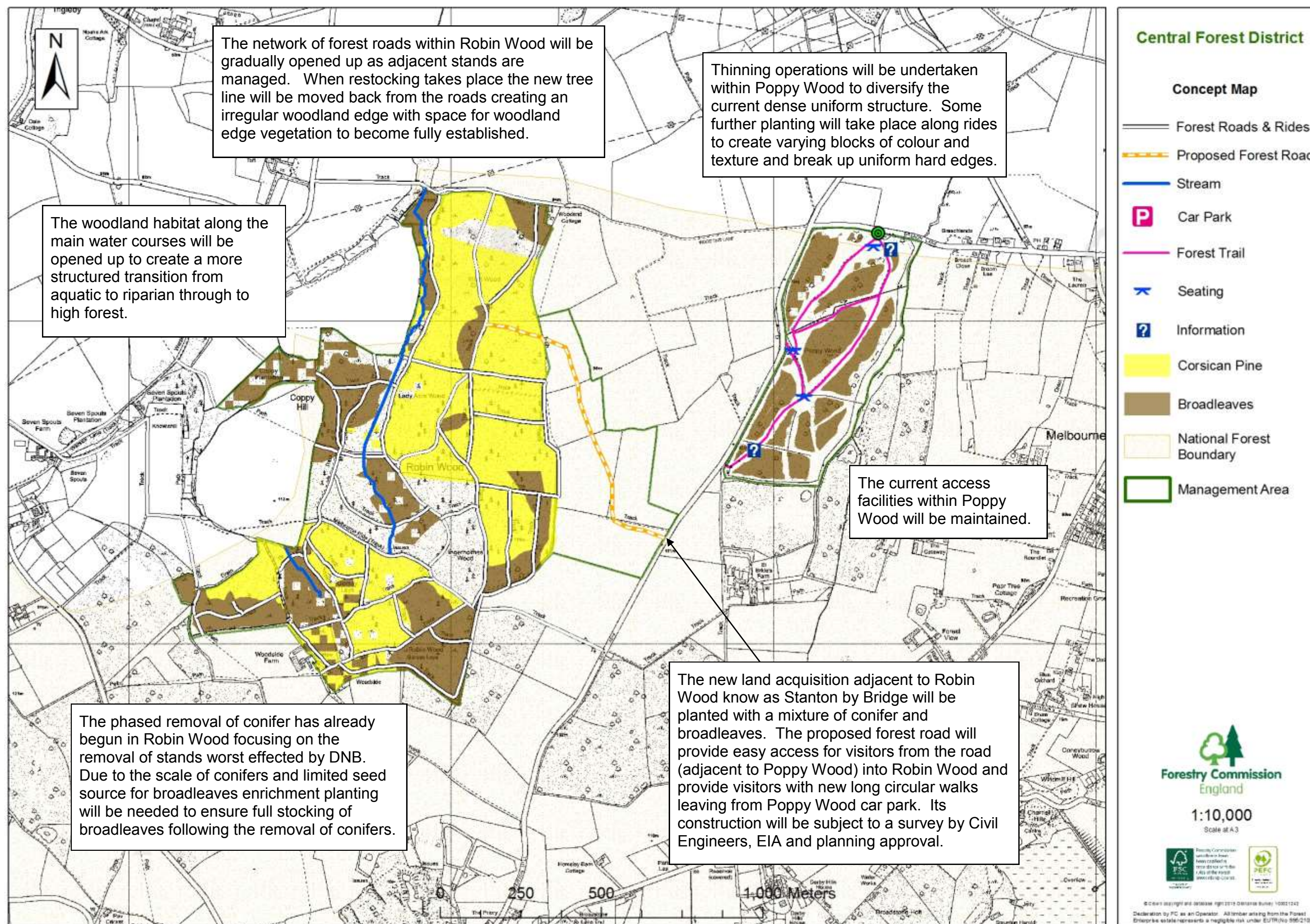


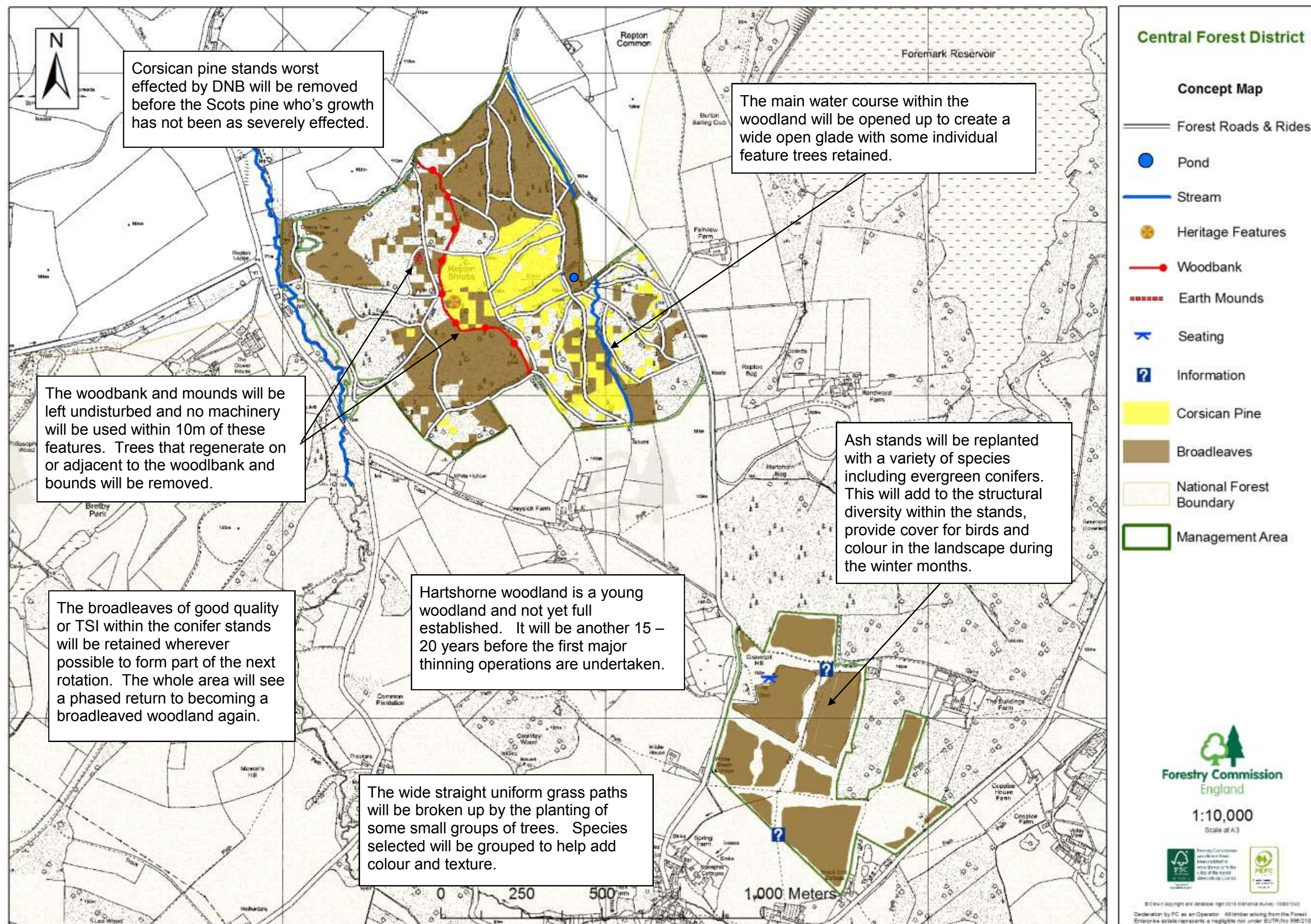


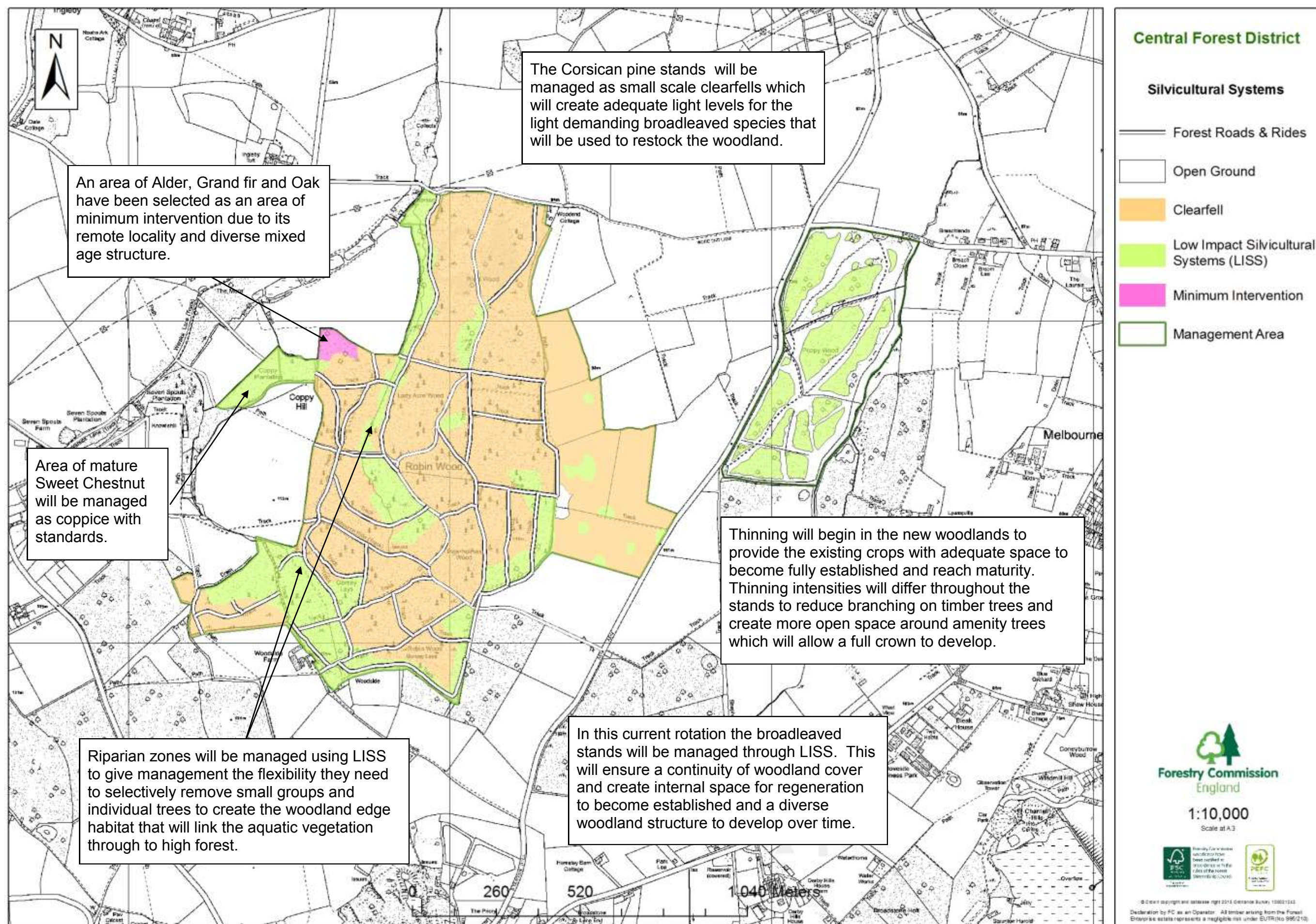


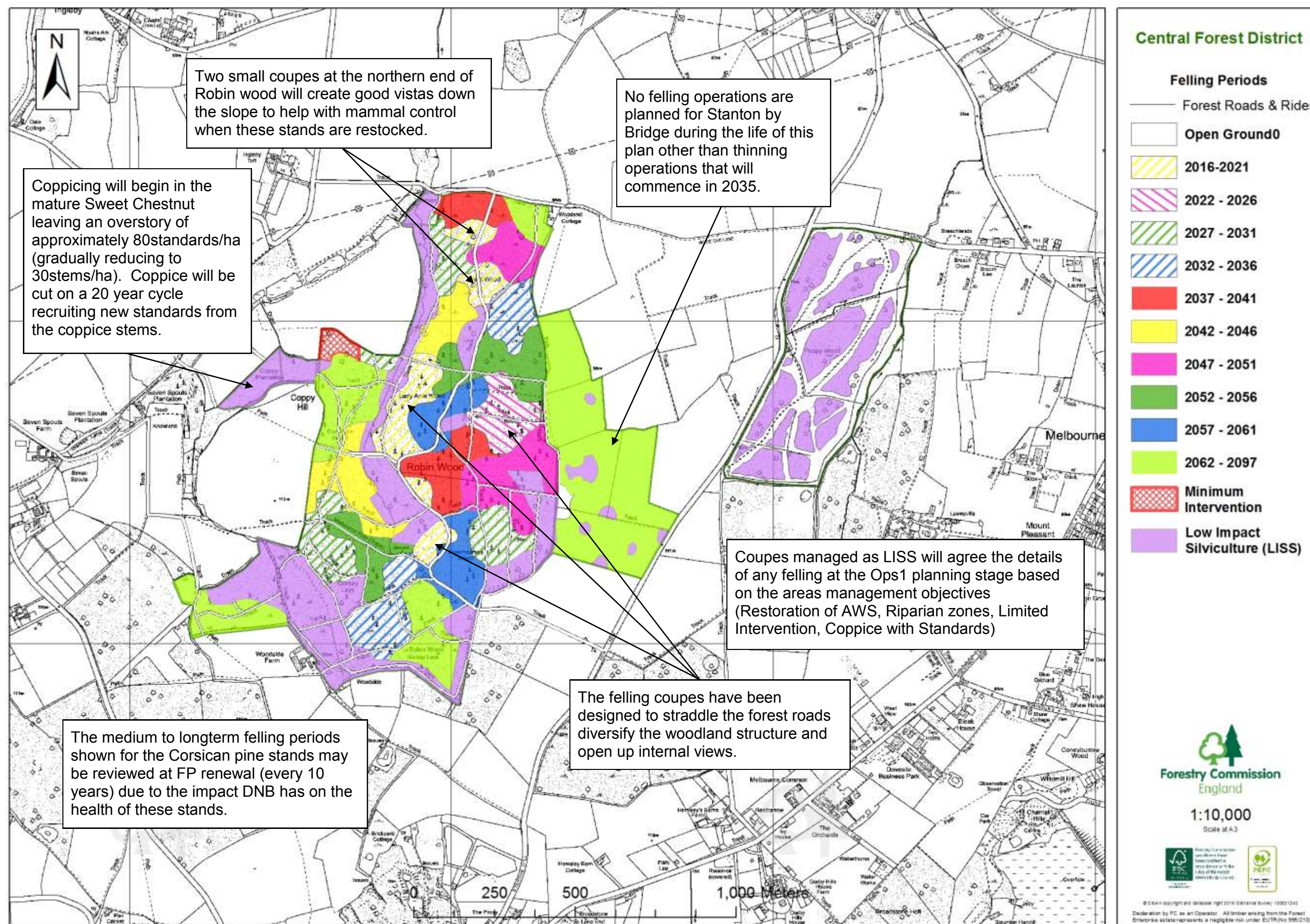


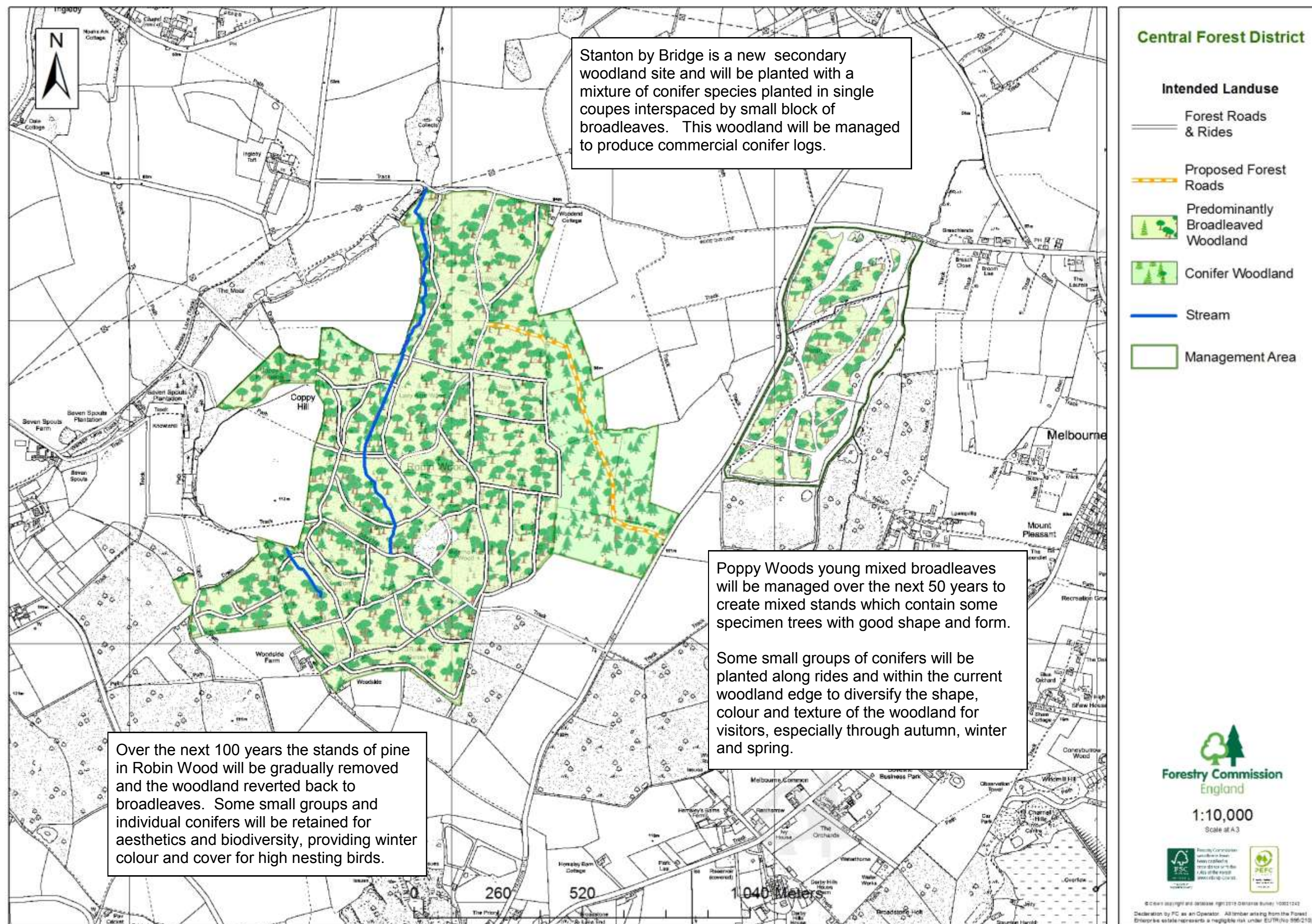




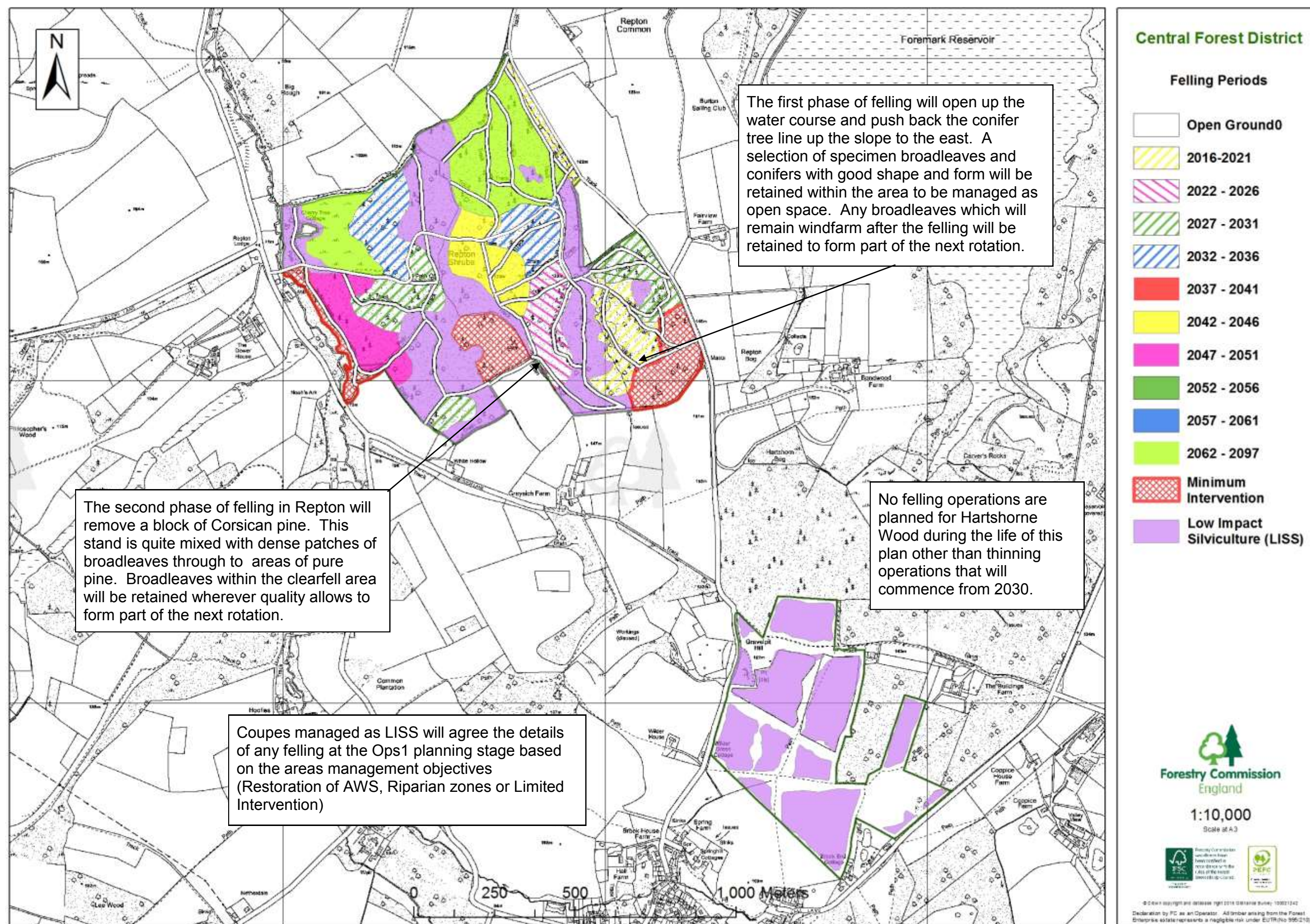


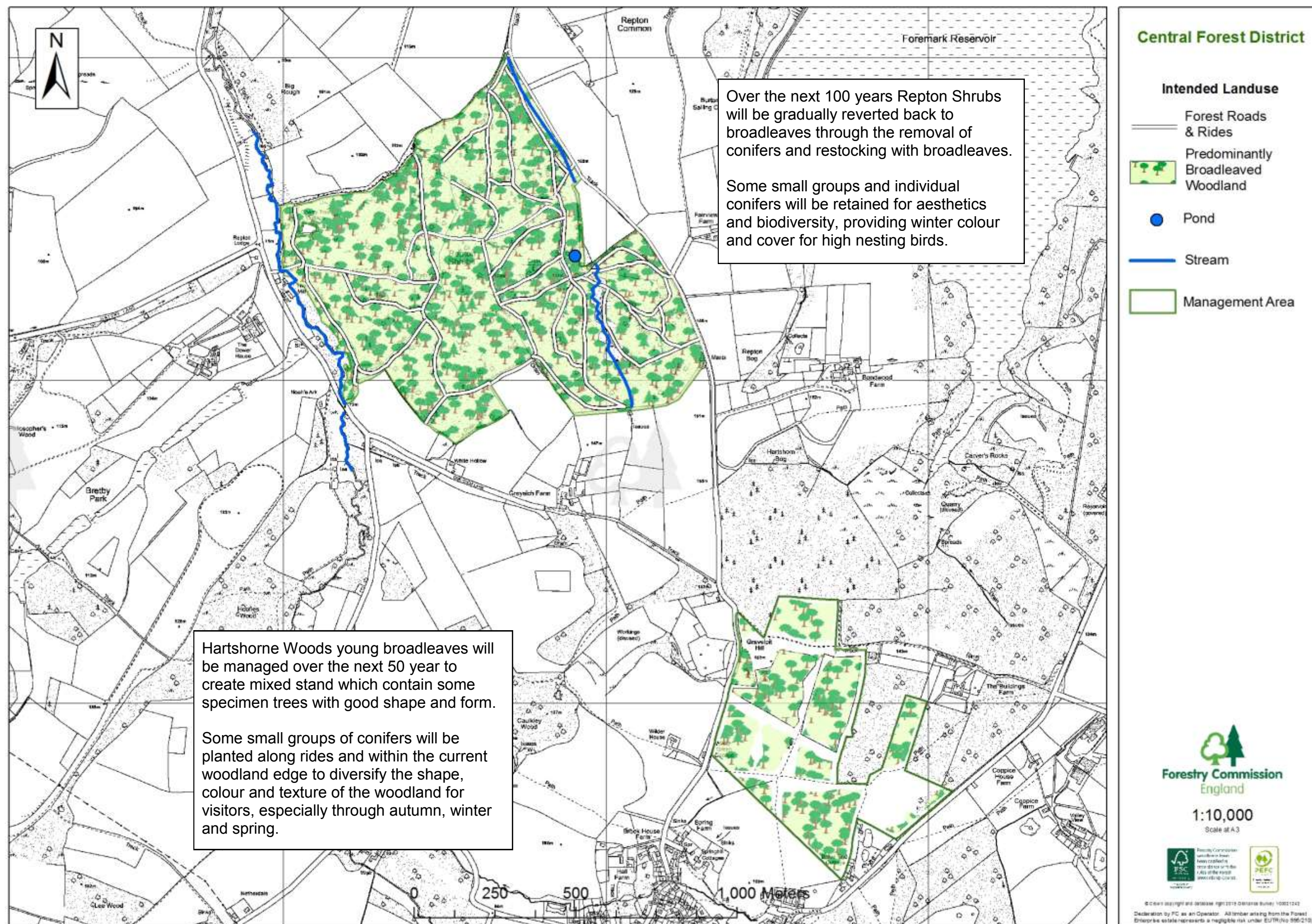












Appendix I

The Robin and Repton Forest Plan Brief

Introduction

This Forest Plan (FP) summaries proposals by the Forestry Commission for the management of five woodlands, Robin (98.1ha), Repton (83.4ha), Hartshorne (31.7ha), Poppy (26.6ha) and Stanton by Bridge (19.2ha) which lie in the National Forest, South Derbyshire. The plan area of 259.1ha lies 10km south of Derby, 7km east of Burton on Trent and have easy access from both the M1 and A38.

Landscape setting

The plan area comprises of mature plantation on ancient woodland sites (PAWs) and new secondary woodland Situated in rolling, predominantly arable, countryside rising from the flood plain on the southern side of the River Trent. The area has a long history going back to when Repton village was the capital of Mercia in AD653 with many of the fields having ancient names handed down through the century's. Principal views of Robin, Poppy, Hartshorne and Stanton by Bridge are from the A514 that runs between Swadlincote north to Derby. Repton Wood is more remote and only clearly visible from a few minor roads west of Repton village.

Economic

The woodlands are all situated on fertile free draining soils producing high yields. Repton and Robin wood were planted between 1958 and 1968 with 50% pure conifer crops and 50% mixed conifer and broadleaves. Corsican and Scots pine were the main species planted and now at the end of their economic rotation, harvesting operations have now commenced. The plan will phase in the harvesting over the next 50 years to ensure a continuity of woodland cover which will mean retaining some stands past their economic rotation. This will ensure a sustainable harvesting programme can be delivered in the mature woodlands throughout the life of this plan.

Poppy and Hartshorne Wood were recently planted (2002 onwards) with a mixture of broadleaved species. The first thinning operations will begin in the next 10 year period to help restructure some of the more densely planted area. Stanton by Bridge is due to be

planted in the next year and their will now be income generated through harvesting operations of these new woodland sites over the next 20 years.

The is no income regeneration through recreation at this time although opportunities for events may generate some revenue to offset management costs in the future.

Environmental

The woodland structure in both the mature and new woodlands is quiet uniform which has limited the diversity of woodland habitats available. The new plan will diversity the structure through a combination of phased clearfell operations and Low Impact Silvicultural Systems. The forest plan will address the fact that there is limited deadwood habitats and no ecologically mature trees within the plan area. This will be achieved through the retention of some trees of special interest (TSI) in perpetuity and leaving some areas of woodland unmanaged and to evolve naturally. Water courses have not been managed and the plan will begin to restructure the dominant mature stands that have prevented an understory developing in the riparian zone. Ride side management is taking place in the new woodlands and this is having a positive effect on the butterfly population that is monitored annually.

3.3 Social

The FC will continue to promote access into its freehold woodlands (Robin, Poppy, Hartshorne and Stanton by Bridge) but due to the lease restriction under which Repton Wood is managed for forestry purposes the FC is prevented from allowing public access into Repton Wood. There is a car park in Poppy Wood used regularly on a daily basis by dog walkers and it is hoped that through the acquisition of Stanton By Bridge this will help link paths that lead from Poppy Wood into Robin Wood creating circular walks.

Consultation

The consultation period will run from Oct 2016 through to Nov 2016 after which time the Forest Pan will be finalised and submitted onto the public register for approval.

Appendix I—Glossary

Biological Diversity

The richness and variety of wildlife and habitats.

Canopy

The mass of foliage and branches formed collectively by the crowns of trees.

Clearfell System

The removal of all trees in one operation >0.5ha.

Coupes

Areas of forest that have been or will be managed together.

Ecosystems

An ecosystem includes all of the living things (plants, animals and organisms) in a given area, interacting with each other, and also with their non-living environments (weather, earth, sun, soil, climate).

England Forestry Strategy (now England's Trees Woodlands and Forests)

Describes how the Government will deliver its forestry policies in England and sets out the Government's priorities for the next five to ten years.

Forestry and Water guidelines 5th edition 2011

Forests and Water is one of a series of seven Guidelines that support the United Kingdom Forestry Standard (UKFS). The UKFS and Guidelines outline the context for forestry in the UK, set out the approach of the UK governments to sustainable forest management, define standards and requirements, and provide a basis for regulation and monitoring including national and international reporting.

Forestry Commission Guidelines

Outline the principles and standards of good management practices in forests and woodlands for landowners, land managers and their advisors.

Forest Plan (FP)

An approved plan that outlines felling operation over a 10 year period, outlining proposals over the next 50 years. The FDP's are reviewed every 5 years and redrawn and approved every 10 years.

Forest Stewardship Council (FSC)

An internationally recognised body made up of non-government organisations promoting sustainable forest management to the forest industry and consumers.

Historic Environment

These are the physical remains of every period of human development from 450,000 years ago and include earthworks, buried remains, structures and buildings.

Landscape Character

England is renowned for its rich, diverse and beautiful landscapes which have their own distinct local character. These have been shaped over many thousands of years by natural influences such as soil and landform and by generations of human activity.

Long Term Retention

Trees that are being retained beyond their economic rotation.

Low Impact Silvicultural Systems (LISS)

Describes a number of felling systems (shelterwood, group felling, selection systems) which avoid large scale felling coupes and the forest canopy is maintained at one or more levels.

Natural Character Areas (NCAs)

England is divided into 159 distinct natural areas. Each is defined by a unique combination of landscape, biodiversity, geodiversity and cultural and economic activity.

Natural regeneration

The growth of trees from seed found in the soil or cast from adjacent trees and shrubs.

Operational Plans (Ops1)

Detailed site plans that are prepared in advance of all major forest operations and identify site constraints, opportunities and areas requiring special treatment or protection.

Origin

The geographic locality within the natural range of a species where the parent seed source or its wild ancestors grew.

Provenance

The geographic locality of a stand of trees from where the seed was collected.

Public Rights of Way (PROW)

Access routes open to the public through legal designation.

Restocking

The re-establishment of trees where felling has taken place. Restocking may be achieved through natural regeneration but as a term, it is more usually associated with replanting.

Ride

Forestry term for unsurfaced roads, paths and tracks within a woodland.

Scheduled Monuments

Nationally important archaeological sites which are protected under the Ancient Monuments and Archaeological Areas Act, 1979.

Secondary Woodland

Woodlands that have been established on land that was formally used as pasture, meadows, arable, quarries etc and has not continually been wooded

Selective Felling

Where individual trees of varying sizes are selected and removed from a stand. The whole stand is worked and its aim is to maintain full stocking of all tree sizes and ages, from seedlings to mature trees, in any one area.

Silvicultural Systems

Techniques of managing a forest through a variety of cutting / felling patterns and time scale.

Sub-compartments

Areas of forest comprising a more or less homogeneous crop in terms of age, species composition and condition. Their boundaries may change as the forest develops after felling and restocking.

Strategic Plan

Serves as a guide to the management of woodlands within Central England Forest District. It divides the district into zones for the purpose of management and ensures that forestry activities reflect the local ecological, social and cultural individuality of woodland. Strategic objectives for each zone are presented within the context of the Government's strategic priorities for forestry in England (e.g. forestry for rural development; forestry for economic regeneration; forestry for recreation, access and tourism and forestry for the environment and conservation).

Thinning

The removal of a proportion of the trees in a sub-compartment to improve the quality of the remaining trees, accelerate individual tree growth and provide income.

UK Forestry Standard (UKFS)

Outlines the Government's criteria and standards for the sustainable management of forests in the UK.

UK Woodland Assurance Scheme (UKWAS)

A voluntary scheme for the independent assessment of forest management in the UK. The Scheme has been developed by a partnership of forestry and environmental organisations in response to the growing consumer demand for timber products from sustainably managed forests. It has been designed to ensure that it reflects the requirements of both the Government's UK Forestry Standard - and through this the guidelines adopted by European Forestry Ministers at Helsinki in 1993 - and the Forest Stewardship Council's (FSC's) GB Standard.

Trees of special interest (TSI)

A tree that is of interest biologically, aesthetically or culturally because of its age, or a tree that is in the ancient stage of its life, or a tree that is old relative to others of the same species.

Yield Class

Yield class is a measure of the growth rate of a tree crop and is the maximum average rate of volume increment (increase) that a particular crop can achieve. For example, a crop capable of a maximum annual increment of 14 m³ per hectare has a yield class of 14.

Perspective No. 1 – View of the north west side of Repton Wood 2016



Perspective No. 1 – View of the north west side of Repton Wood 2003



Perspective No. – View of the western side of Repton Wood 2016



Perspective No. – View of the western side of Repton Wood 2003



Perspective No. 3 – View of the southern side of Repton Wood 2016



Perspective No. 4 – View from picnic benches overlooking Hartshorne Wood 2016



Perspective No. 5 – View of the west side of Hartshorne Wood 2016



Perspective No. 6 – View of Open wildflower meadow on the Southern side of Hartshorne Wood 2016



Perspective No. 7 – View of the south side of Robin Wood 2016



Perspective No. 7 – View of the south side of Robin Wood 2003



Perspective No. 8 – View of the east side of Robin Wood 2016



Perspective No. 8 – View of the east side of Robin Wood 2003



Perspective No. 9 – View north over Poppy Wood 2016



Perspective No. 10 – View west over Poppy Wood 2016



Perspective No. 11 – View of from car park onto Poppy Wood 2016

