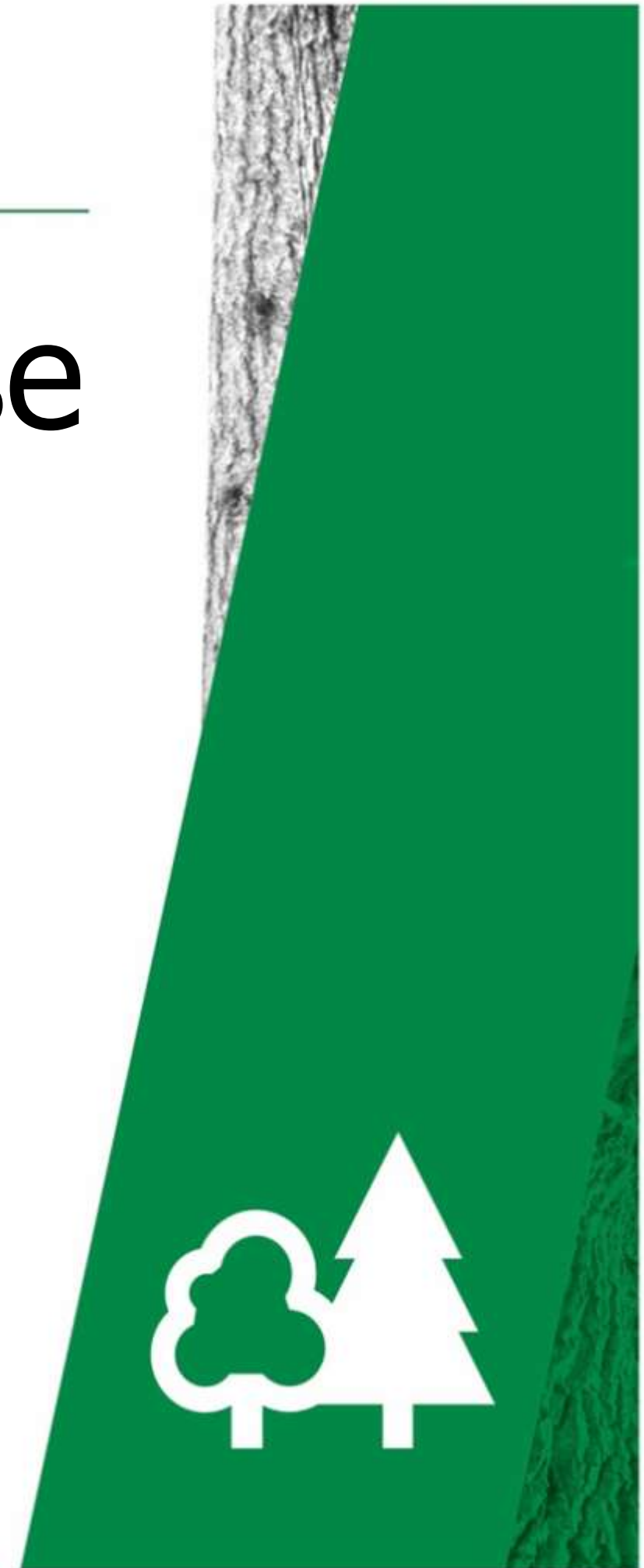


Salcey & Yardley Chase Forests Plan 2023– 2033



Forestry England
forests and woodlands
have been certified in
accordance with the UK
Woodland Assurance
Standard (UKWAS)



Summary

The Salcey and Yardley Chase Forest Plan sets out the long term management objectives for Salcey Forest and eight outlying woodlands collectively known as Yardley Chase Woods. The forest plan area covers 1,069 hectares and is dominated by oak woodland which dates back to William the Conqueror in the 11th century.

The overarching management objectives for the forest plan are to continue to balance conservation aims with marketable and sustainable timber production. This will be achieved using traditional and/or continuous cover silviculture systems that regenerate native woodland through natural processes, where possible, whilst retaining and recruiting over mature trees and deadwood. Forestry England will continue to support local businesses and contractors involved in the forest, recreation and leisure industries of which these woodlands play an important role. The restoration of ancient woodlands will continue with the gradual removal of exotic species and the establishment of a wider range of broadleaf species that will be better suited to the impacts of climate change, pests and diseases.

The woodlands contain many historical and cultural features associated to past land uses with the earliest features dating back to 800 BC (for example the Saxon Mound). Salcey Forest itself is the largest ancient woodland in Northamptonshire and is of particular importance for plants and animals. Deadwood is an important habitat within the design plan area supporting its own unique range of flora and fauna which contributes to an estimated 1/5th of all the species found in the woodlands.

Over the last two decades visitors to Salcey forest have increased dramatically and now enjoy a wide variety of recreation and leisure facilities. The outlying woodlands are leasehold woodlands managed for forestry purposes only and public access is limited to the public rights of way that cross the woodlands.

Central Forest District - Salcey & Yardley Chase Forests Plan

Contents:		Page No.
	Summary	1
1.	What are Forest Plans?	3
A	Application for Forest Plan Approval	
2.	Review of Previous Management Plan	4
	Fig 1—Current Age Structure	
3.	Management Objectives	5
3.1	Economic	
	Pic 1. Infected ash with very little leaf area in the crown of the tree	
	Table 1— Annual Production Forecast	
3.2	Nature	6
3.3	People	
	Pic 2 Grounds Café and Bike Hire – Salcey Forest	
4.	Harvesting Operations	8
5.	Intended Landuse	
	Table 2. Salcey & Yardley Chase Forest Plan Contribution towards the Central District Commitments to UWAS and UKFS	
6.	Terms of Reference	9
7.	Appendix I—Glossary	
Maps		
	Location Map	12
	Survey Data	14
	Heritage and Conservation Map	
	Current Species	15
	Analysis Map	16
	Concept Map	17
	Silvicultural Systems	18
	Felling Map	
	Intended Landuse	23

1. What are Forest Plans?

Forest Plans are produced by us, Forestry England, 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 show what we intend the woodlands to look like in the future.
- To detail our management proposals (felling and restocking), for the first ten years so we can seek approval from the statutory regulators.

We use some technical words and phrases in the text because they best describe what we are doing. These technical words are identified throughout the plan with an asterisk * and their meaning shown in a glossary (Appendix I). A Forest Plan is a ‘felling and restocking’ plan and is written at a landscape scale and 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 in which year a particular operation will take place, but we can say in which five-year period it should happen. Before operations are undertaken, Operational Plans* are written by the Beat Forester before each felling and restocking operation takes place. These detail the site specific features that need taking into account when undertaking operations. This forest plan does not deal with the management of recreation, ecological or archaeological features. The planning for these elements is in a different management cycle and is worked on by different teams. Terms of Reference (page 9) are written to set out the management objectives for the plan area, how these relate to district and national policies, and how these will be monitored.

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 the Forestry Commission.

If all the criteria are met, full approval is given for the management operations in the first ten years from the date it is approved and outline approval for the medium term vision (10 to 50 years).



All of our forests and woodlands are certified to the Forest Stewardship Council® (FSC®) and the Programme for the Endorsement of Forest Certification (PEFC) standards. All Forestry England forests and woods are independently certified as sustainably managed, to continue to benefit future generations.

Application for Forest Plan Approval

i Plan Area Identification:

Forest District:	Central Forest District
Beat:	South Northants
Name:	Salcey & Yardley Chase Forests Plan
Nearest Town:	Salcey

OS Grid Reference:

Salcey	SP 7966 5143
Little Horton	SP 8186 5238
Colliers Hen	SP 8375 5417
Denton	SP 8490 5687
Old Pond Close	SP 8768 5500
Olney Lane End	SP 8649 5431
Kilwick	SP 8609 5308
Ravenstone	SP 8476 5302
Great Wood	SP 8415 5262

Local Planning Authority West Northamptonshire and Milton Keynes

ii Designations:

Ancient Woodland (AWS), Plantation on Ancient Woodland Site (PAWS)*, Secondary Woodland*, Site of Special Scientific Interest* (SSSI), Yardley Whittlewood Ridge National Character Area (NCA) Profile No. 91.*

iii Date of Commencement of Plan

As soon as possible once approved.

	Conifers	Broadleaves
Clear Fell	5	101
Restock/natural regeneration		106
Low Impact Felling Systems (LISS)	38	771

NB - All above figures refer to the gross area to be felled and exclude thinning operations

Total clear fell area 106ha

Forest Plan maps are attached

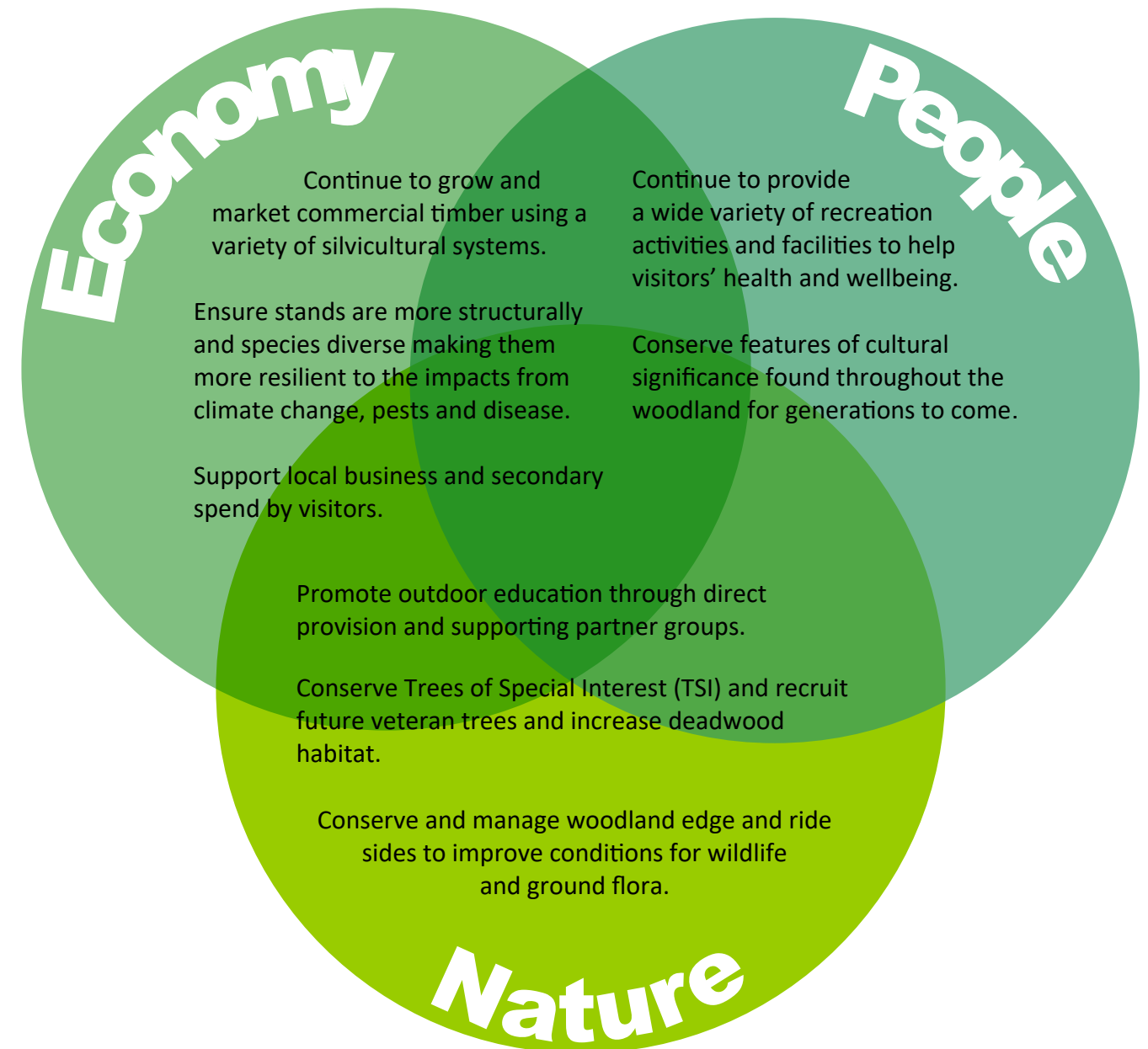
In addition to the above felling 809ha will be managed using low impact felling silvicultural systems (LISS)*. This will be done through the removal of small groups of trees, removing no more than 40% of the stems within any single management unit/compartiment over the plan period. This operation will provide sufficient light to boost growth of understorey and ground flora, allow adequate space for the development of crowns and stem form for quality timber and accelerate individual tree growth.

All of our forests and woodlands in this Forest District are certified to the Forest Stewardship Council® (FSC®) licence code FSC-C123214 and the Programme for the Endorsement of Forest Certification (PEFC) licence code PEFC/16-40-1001 standards.

All Forestry England forests and woods are independently certified as sustainably managed, to continue to benefit future generations.

3. Management Objectives

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



Forestry England has for over 100 years been growing, shaping and caring for over 1,500 of our nation’s forests for the benefit and enjoyment of all, for this generation and the next. Forests are vital for the future of our planet. They improve the health and wellbeing of everyone. With careful planning and expert management, Salcey and Yardley Chase Woodlands will continue to thrive, store carbon, produce a sustainable supply of timber and provide people of all ages and abilities with fresh air and space to breathe. We are always thinking beyond today, planning and planting forests that will help create a sustainable future balancing the economic, social and environmental benefits these woodlands provide.

3.1. Economic

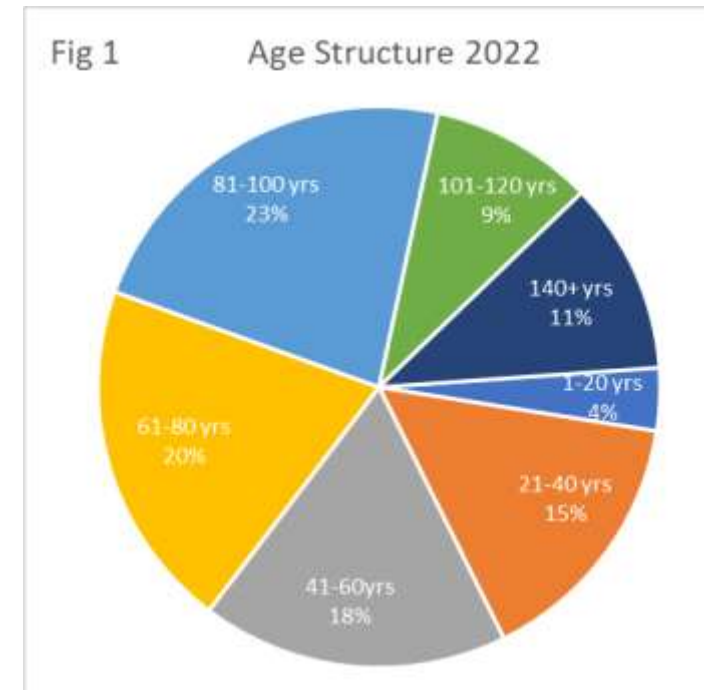
In this forest plan we will take a balanced approach to deliver sustainable land management, releasing valuable timber resources whilst supporting local businesses, developing new wood markets and public services.

Projected timber yields have been affected over the last decade due to a number of forest diseases and changing climatic growing conditions. Chalara ash dieback* is now present throughout the forest, gradually killing the ash. Since most of the ash is a minor component in mature mixed-species stands there will be no loss of woodland cover when the ash is systematically removed. However there are four areas (36ha) of pure ash which are to be clearfelled and replanted. The considerable work involved in removing all the ash from within one tree length of paths and roads and phased clear felling of ash stands will be the main focus of forestry operations over the next 10 years. The remaining forest areas will be thinned and group felling used to help release natural regeneration when it occurs. This will help diversify the forest age structure and improve forest resilience. In turn this will help manage the threat of changing environmental conditions into the future.



Pic 1. Infected ash with very little leaf area in the crown of the tree.

The oak stands that dominate the forest have a similar age structure with limited areas of young forest, fig 1. A key long term objective will be to begin restructuring the oak stands with small groups being felled and replanted which will ensure over the next 50 years the oak stands have a much wider age range. Over the last 30 years the oaks have become stunted and have shown little growth



over this period. The leaf area within the oak crowns has become sparse which has in turn reduced the trees' ability to photosynthesise. The cause is not yet known but it may be an indication of environmental changes which could mean that future rotation lengths will be reduced. Forestry England will continue to work with Forest Research to monitor the health of trees and take appropriate action where necessary to reduce stress factors affecting tree growth. Low impact silvicultural systems (LISS) will be the preferred management

systems in the woodlands. It is hoped the use of LISS will also reduce the likely impacts of more extreme weather events. LISS will also offer greater protection to soils and ground flora by reducing variation in microclimates throughout the day and between seasons. The broadleaved high forest has an understorey dominated by hazel and hawthorn, with field maple, sallow willow and wych elm also present. The understorey will be managed through a mechanical management programme ahead of the overstorey being worked, which will ensure a young understorey can be maintained.

Recreation and leisure now play an important role in the revenue generated from the forest, both to Forestry England and to the local economy. The key recreation zone is around Salcey’s visitor centre and car park where local businesses provide refreshments and leisure activities. Here LISS will be used to help maintain the aesthetic value of the forest and ensure forest operations are carried out at a scale appropriate to the internal landscape and facilities in the area.

Mammal damage from deer and squirrels is having a significant impact on tree health and rates of regeneration in the forest. This is impacting on the cost of establishment and killing many established trees which in turn is affecting projected timber yields. Without active management and

additional support from surrounding landowners the increasing levels of damage could jeopardise the health of the woodland ecosystem.

3.2 Nature

Being one of the largest remaining areas of ancient woodland in Northamptonshire 229ha have been designated as Sites of Special Scientific Interest (SSSI) due to the assemblage of birds associated to scrub and woodlands and a number of nationally rare invertebrates, notably butterflies and moths. Its stands of hazel, ash and oak high forest are considered to contain a high degree of naturalness. Black hairstreak (*Satyrion pruni*) and wood whites (*Leptidea sinapis*) which are both priority species are found in the plan area. 231 vascular plants were identified in a vegetation survey (2016) targeting the SSSI and ancient woodland components. This emphasised the importance of the active woodland and ride management being implemented by Forestry England. Forestry England will manage the SSSI in accordance with the SSSI management plan agreed by Natural England.

Deadwood is an important habitat within Salcey forest with its own unique and specialized flora and fauna, contributing to an estimated one fifth of species found within the woodland. Seven veteran trees (Milking Oak, Queen Oak, Hive Oak (now fallen), Piddington Oak, Centenary Oak, Church path Oak and Rangers Oak) can be found in Salcey Forest and these are significant cultural and ecological features. Although there are limited known veteran trees within the surrounding woodlands, mature oak trees of around 100-170 years old are common. Trees with unique character and the potential to provide valuable deadwood habitat will be recruited to become future veterans. TSI including current veteran, potential veteran and dead trees will be mapped to ensure they are conserved when forest management operations take place.

Woodland cover around ponds will be managed on rotation by pushing back the tree line at one or more locations along the eastern, southern and western edges to allow sunlight onto the open water. If these areas are occupied by mature stands with raised crowns, a heavy crown thinning operation will take place within one tree length of the ponds to create gaps in the canopy and provide dappled shade over the ponds. On the northern edge of the ponds, trees and vegetation will be maintained down to the water's edge to provide cover for wildlife.

Open habitats are an important component for a woodland ecosystem and within the plan area this is currently limited to the network of forest roads, rides and areas around recreational facilities. Forestry England will look to expand the open habitats in locations where it will deliver the greatest benefits for nature and people. Two species of butterfly of particular note are the wood white (*Leptidea sinapis*), and the black hairstreak (*Strymonidia pruni*) both UK BAP and Red Data Book 4 species. Forestry England has been working in partnership with Butterfly Conservation for a number of years to deliver a programme of ride side management and grass cutting that is sympathetic to the 28 butterfly species breeding in Salcey & Yardley Chase, including two migrants, the red admiral (*Vanessa atalanta*) and Painted Lady (*Cynthia cardui*).

To ensure conservation interests including European Protected Species (EPS) are taken into account when management operations are planned a walk over survey will be carried out to identify any key features. This will ensure that any special measures needed can be included in the more detailed operational plans that are written for every operation outlined in this forest plan.

3.3 People

The woodlands have a long history dating back to the Middle Ages with Salcey Forest first recorded by name in 1206 at which time Yardley Chase formed part of Salcey Forest. They contain a wealth of historic features with one of the earliest being an Iron Age egg ring enclosure. The woodlands were managed as coppice through much of the medieval period. Earth banks and deer lawns divided the forest that marked out the coppiced areas and remain largely intact despite the reversion to high forest in the 18th Century. In our more recent history, the woodlands and surrounding landscape were used in the World War Two campaign and the footprint of the built features still remain today. There are no scheduled monuments within the forest plan woodlands but Forestry England has mapped and surveyed these unscheduled features and will ensure that, wherever possible, they are conserved when management operations take place. Future forest management coupes will use the medieval coppice boundaries to define the working areas and it is hoped that as the forest develops over the next century the structure and composition of species will help enhance these historic features.



Fig 2. Historic Coupe Boundaries



Pic 2 Grounds Café and Bike Hire – Salcey Forest

4. Harvesting Operations

Due to the impact of Chalara ash dieback the main focus of the harvesting programme over the next 10 years will be the removal of ash from within one tree length of public highways and access routes within the forests and the phased removal of pure ash stands. Small scale mechanical harvesting will begin in part of the SSSI, creating clearings and transitional open space, as outlined in the agreed SSSI plan. This pattern of mechanical harvesting will also be introduced around the eastern side of Salcey Lawn with small areas <2h being cut on a 25-30 year rotation. The management objective is to ensure connectivity for wildlife moving between the transitional open spaces.

In addition to the above works thinning operations will take place in all the woodlands. Broadleaves will be thinned on an 8 to 10 year rotation and conifers on a 5-year rotation. When thinning takes place in areas to be managed using LISS* (88% of woodland area) the forester will take the opportunity in stands over 40 years old, where trees are producing fertile seeds or natural regeneration is present, to open up the stands using group felling operations*. This will help to begin the diversification of high forest and ensure a more varied age structure develops within management coupes.

5. Intended Landuse

Woodland Type - The Forest Plan is dominated by ancient woodland, some of which is occupied by exotic species (PAWS*) and 86.5ha of secondary woodland (8.7%). The long term objective for the ancient woodland areas will be to restore them to a largely deciduous woodland (where possible through natural processes), retaining a small percentage of conifers which will form part of mixed stands. These evergreen conifers will provide an element of diversity and are important for a

Salcey Forest and Little Horton are freehold woodlands and have been dedicated as Open Access land under CRoW 2000. The remaining areas of woodland are leasehold with no public access apart from along public rights of way, see access and heritage map, page 16. Forestry England has created 8km of equestrian trails, 7km of bike trails, 3 running routes and 15km of walking trails within Salcey in addition to the 35km of forest rides which provide informal access. There are two car parks at Salcey with the main one also featuring toilets, information point, café and bike hire. Forestry England promotes a wide range of activities through the Active Woodlands project and partner groups with the focus on physical and mental health, families, children, education and themed events [Salcey Forest Activities](#). Within this forest plan the proposed forestry operations will be designed and carried out at a scale that is sympathetic to the leisure facilities and businesses in Salcey forest.

number of birds most notably raptors, finches and tits. The secondary woodland areas will be developed as mixed stands with ‘naturalised’ species that will be more resilient to climate change. Scots pine will be planted as an intimate mixture occupying up to 40% of the canopy. A variety of alternative broadleaves will be used to enrich the natural regeneration and provide trees sourced from regions 2 to 5 degrees south of the forest. The diversity and assemblage of scrub associated to woodland edge habitats will be maintained, and where appropriate increased, for breeding birds and Lepidoptera.

Age structure – The current age structure across the plan area (Fig.1) is reasonably well distributed. However, within each woodland and management coupe the age of high forest is more uniform. Species and structural diversity will be improved over the next 50 years through the use of LISS and the removal of infected ash.

Understorey – This will be cut prior to the overstorey trees being worked. With future forest operations using the medieval management boundaries to denote the new management coupes, these medieval boundaries will be reflected in the age of the understorey with operations being staggered between coupes.

Open space - Current provision for open space is largely associated to forest roads, rides and around recreational facilities. Some of the most important open habitats and ground flora are associated to the grass rides and shrubs (blackthorn) that form a buffer between the short grassed rides and high forest. Moving forward, Forestry England will aim to maintain the continuity of open sunny rides, with grass or scrub margins that are lightly shaded by surrounding trees.

	Forest Plan Area	Forest Plan Percentage	Forest District Area	Forest District Percentage
Total Area	986	100	27,147	100
Total Wooded Area	926	87.6	23,461	86
Open Habitat (>10%)	51	5	3,235	12
Natural Reserves - Plantation (1%)	0	0	251	1.57
Natural Reserves - Semi Natural (5%)	5.7	0.6	380.9	4.81
Longterm Retentions & Low Impact Silvicultural Systems (>1%)	809	88	14,637	55.2
Area of Conservation Value (>15%) including LISS	809	88	17,582	64.8

Table.2 Salcey and Yardley Chase Forests Plan Contribution towards Central District commitments to UKWAS and UKFS

6. Terms of Reference

National Strategy	District Strategy	Forest Plan Objective	Monitoring
<p>Economy:</p> <p>1) Maintain the land within our stewardship under UKWAS certification,</p> <p>2) Improve the economic resilience of our woods and forests,</p> <p>3) Encourage and support business activity on and around the Estate.</p>	<p>1) Adapting our management practices to suit the character and requirements of local woodlands whilst satisfying national standards and business requirements.</p> <p>2) We will use the opportunity presented by additional, unscheduled clear felling as a result of disease control to accelerate the diversification of both conifer and broadleaf species appropriate to each local area and site type, and in some areas trialling species which may not have been previously planted in forest conditions, using a range of silvicultural systems.</p>	<p>Continue to grow commercial timber using a variety of species that will be more resilient to the impacts of climate change, pests and diseases to maximise yields.</p> <p>Use a variety of silvicultural systems based around the light requirements of the trees to be established and reduce the encroachment of invasive vegetation.</p> <p>Ensure felling operations are planned at a scale that is appropriate to the recreational facilities. Ensure stands are more structurally diverse through active management to help diversify the age and species within stands.</p>	<p>All forestry operations and restocking will be recorded in the sub compartment database and monitored at the 5 year mid term review and as part of the 10 year forest plan renewal.</p> <p>Strip felling will be recorded in the subcompartment database.</p> <p>Review the landscape impact of proposed felling through 3D modelling and landscape perspectives. Monitor at the 5 year mid term review and as part of the 10 year forest plan renewal.</p>
<p>Nature:</p> <p>1) Improve the resilience of the natural environment of the Estate under our Stewardship,</p> <p>2) Realise the potential of the Public Forest Estate for nature and wildlife,</p> <p>3) Maintain and improve the cultural and heritage value of the Estate.</p>	<p>1) Adapting more sensitive timber harvesting arrangements and adopting recent FC guidance on forest operations to reduce the impact of forest operations on soils and ground vegetation on sensitive sites.</p> <p>2) Contributing to and undertaking control programmes to limit the impact of deer and other species on woodland habitats in order to reduce the adverse impacts of grazing and disturbance to native habitats and their flora and Fauna</p> <p>3) Where possible, work with interested parties to explore ways to maintain or improve features of cultural or heritage value to the local community.</p>	<p>Restore AWS by the gradual reduction of exotic species and establish a wide distribution of deciduous species that will be better suited to the impacts of climate change, pests and disease.</p> <p>Identify key species and habitats and make appropriate provision for their requirements.</p> <p>Manage the SSSI in accordance with the agreed management plan. Demonstrate appropriate management to enhance and maintain the ecological value of the non-designated priority habitats and reduce the impact from invasive species.</p> <p>Management operations will be planned to take into account the habitat requirements of European Protected Species associated with Forestry England’s land.</p> <p>Manage open and woodland edge habitat for the benefits of flora and fauna and helping to link trophic levels.</p> <p>Identify existing locations of TSIs and demonstrate appropriate management to recruit future veteran trees and increase the volume and distribution of deadwood.</p>	<p>Monitor as part of the 10 year forest plan renewal.</p> <p>Monitored by the ecologists as part of the operational plan process and through the SSSI management plan review with Natural England.</p> <p>Monitored by the ecologists as part of the operational plan process.</p> <p>No monitoring required.</p> <p>TSI’s to be recorded on the conservation database, reviewed as part of operational planning process and as part of the 10 year forest plan renewal.</p>

6. Terms of Reference

National Strategy	District Strategy	Forest Plan Objective	Monitoring
<p>People:</p> <p>1) Encourage communities to become involved in the Estate, its management and direction, 2) Provide high quality woodland-based recreational opportunities for people and business, 3) Enable everyone, everywhere to connect with the nations’ trees and forests so that they understand their importance and act positively to safeguard forests for the future.</p>	<p>1) Provide safe and accessible woodlands.</p> <p>2) Offering opportunities for quiet recreation and adventurous activities, to enable people to experience the potential health and wellbeing benefits.</p> <p>3) Developing partnership with private businesses and public bodies to expand and improve recreational opportunities across the estate.</p> <p>4) Creating a wide variety of opportunities for schools, groups, families and individuals to engage with and learn about trees and forests in accordance with the National and District Strategies.</p> <p>5) Encouraging third party environmental educators and other partners to offer learning opportunities on the public forest estate</p>	<p>Diversify species composition and structure, and plan sympathetically designed and appropriately scaled interventions to improve and maintain the visual integration of the forest boundaries into the wider landscape.</p> <p>Continue to work with local businesses to provide a wider range of services and facilities on site.</p> <p>Continue to develop and run a programme of events and activities at Salcey Forest based around education and learning. Provide and extensive network of promoted trails for walkers, horse riders and cyclists.</p> <p>Conserve features of cultural significance including earthworks and World War II features. Promote the Active Forests Programme aimed at creating a sporting habit for life for visitors through communication, partnership and engagement.</p>	<p>Monitor at the 5 year mid term review and as part of the 10 year forest plan renewal.</p> <p>No monitoring required.</p> <p>No monitoring required.</p> <p>Monitored by the ecologist at the operational planning stage.</p> <p>Reviewed as part of the national Active Forest Project.</p>

Appendix I

Acute Oak Decline

Oak decline is a complex syndrome in which several damaging agents interact and cause a serious decline in tree condition, and can kill oak trees within four to six years of the onset of symptoms. The agents can be abiotic or biotic; the latter often include insects and fungi which are not capable of invading healthy trees but which can be very destructive to stressed oaks.

Ancient Woodland

Areas of semi-natural native woodland that have had continuous woodland cover since at least 1600. They are particularly rich in biodiversity and this is often notable in their characteristic ground flora.

Aspect

The direction a slope faces. This can have a strong influence on the microclimate, ground vegetation, soils and hydrology.

Canopy

The mass of foliage and branches formed collectively by the crowns of trees. The shade it casts has a strong influence on the plants, trees and shrubs beneath it.

Carr Woodland

A wet woodland area, usually dominated by willow, birch and alder species.

Chalara Ash Dieback

Ash dieback is a highly destructive fungus killing native ash trees across the UK. Young and coppiced trees will die quickly once infected, more mature ash may survive for a number of years once infected. Causes the timber to lose strength, become brittle and trees to start dropping limbs.

Clearfell System

Cutting down of an area of woodland (if it is within a larger area of woodland it is typically a felling greater than 0.25 ha). Sometimes scattered or small clumps of trees may be left standing within the felled area.

Climax Species

Tree species that will eventually dominate the forest canopy, maximising their exposure to sunlight and out-competing other species.

Coppice

Coppicing is a Lower Impact Silvicultural System (LISS) based on regeneration by regrowth from cut stumps (coppice stools). The same stool is used through several cycles of cutting and regrowth. Coppice can also refer to an area of woodland in which the trees or shrubs are periodically cut back to ground level to stimulate growth and provide wood products. 'Coppice with standards' refers to coppice with a scatter of trees grown on a long rotation to produce larger-sized timber and to regenerate new seedlings to replace worn out stools.

Coupes

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

Dothistroma Needle Blight (DNB)

DNB is a fungal disease affecting mainly pine species. The fungus affects the needles of the infected tree, which are eventually shed. This can continue year on year and gradually weaken the tree, significantly reducing timber yields. It can also eventually lead to mortality.

Ecological Site Classification (ESC)

ESC is an online tool developed by Forest Research to help a forester choose tree species that are suited to a specific site. It models how well each species is likely to grow using information on climate and soil properties. It can also be used to forecast how climate change may impact suitability.

Ecosystem

An ecosystem is an interconnected network formed of all the living things in a given area (plants, animals and organisms) and their interactions with each other and their non-living environments (eg: weather, earth, sun, soil & climate).

Ecosystem Services

Ecosystem services are the goods and services that people depend on that arise from ecosystems. They are usually categorised into Provisioning (eg: timber, water, food production), Regulating (eg: regulation of climate and diseases), Cultural (eg: recreational opportunities, aesthetic value) and Supporting services that underpin these (eg: crop pollination).

England Trees Action Plan

Sets out the Government's long-term vision for the treescape it wants to see in England by 2050 and beyond.

Forestry England

Forestry England is the executive agency of the Forestry Commission that is responsible for managing Public Forest Estate woodlands in England.

Forests and Water Guidelines

One of seven sets of guidelines that support the United Kingdom Forestry Standard (UKFS). The UKFS and guidelines outline the context for forestry in the UK; set out the UK Government's approach to sustainable forest management; define standards and requirements; and provide a basis for regulation and monitoring, including national and international reporting.

Forest Plan (FP)

An FP is primarily a landscape-scale felling and restocking plan. It provides a holistic, long-term approach to planning and forest design, detailing felling operations over a 10 year period for the purposes of licencing felling and outlining proposals over the next 50 years. FPs 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.

Group Selection

A method of managing irregular stands in which regeneration is achieved by felling trees in small groups. Group selection involves felling groups of trees (generally <0.25 ha per group)

Historic Environment

The physical remains of every period of human development starting from 450,000 years ago and including earthworks, buried remains, structures and buildings.

Landscape Character

England is renowned for its rich, diverse and beautiful landscapes which have their own distinct local characters. 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

Individual, stable stands and clumps of trees retained for environmental benefit significantly beyond their normal economic age or size.

Lower Impact Silvicultural Systems (LISS)

Silvicultural systems including group selection, shelterwood or under-planting, small coupe felling, coppice or coppice with standards, minimum intervention and single tree selection systems which are suitable for windfirm conifer woodlands and most broadleaved woodlands.

Minimum Intervention

Management with no systematic felling or planting of trees. Operations normally permitted are fencing, control of exotic plant species and vertebrate pests, maintenance of paths and rides and safety work. Management only involves the basic inputs required to protect the woodland from external forces or ensure succession of key habitats and species.

National Character Area (NCA)

Broad divisions of landscape form the basic units of cohesive countryside character, on which strategies for both ecological and landscape issues can be based. There are 159 Character Areas, each of which is distinctive with a unique 'sense of place'.

National Nature Reserve (NNR)

NNRs were established to protect some of our most important habitats, species and geology, and to provide 'outdoor laboratories' for research. Most NNRs offer opportunities to the public to experience wildlife first hand and learn more about nature conservation.

Native

Native tree species colonised Britain without human assistance at the end of the last ice age, before the English Channel cut Britain off from mainland Europe.

Nation's Forests

The woodlands managed by Forestry England. These include both freehold and leasehold land.

Naturalised

Naturalised trees have colonised Britain since the land divide with mainland Europe and are growing and reproducing successfully within their natural climatic range without human intervention.

Natural Regeneration

The growth of new trees from seed found in the soil or cast from adjacent trees. Regeneration only occurs where suitable seed sources and conditions are present.

Natural Reserve

Natural Reserves are predominantly wooded, usually mature and intended to reach biological maturity. They are permanently identified and in locations which are of particularly high wild-life interest or potential. They are managed by minimum intervention unless alternative interventions have higher conservation or biodiversity value.

Nest Planting

Trees planted in small groups which are distributed across the restock site with remaining unplanted areas left to naturally regenerate. A useful way to introduce new species or provenances to a site.

Notifiable Disease

Some tree pests and diseases are notifiable, which means that, in England, they must be reported to the Forestry Commission or Animal & Plant Health Agency. Notifiable tree pests and diseases are typically those with the potential to cause greatest damage to our trees, woods and forests.

Open Grown Trees

Trees that have been given space to develop a large crown and natural shape. In comparison trees planted closely in a plantation managed for timber or biomass tend to have a more uniform shape.

Open Space

Areas within a forest without trees, such as glades, stream sides, grass or heathland, water bodies, rocky areas, roads and rides.

Operational Plans

Detailed site plans prepared in advance of all major forest operations providing guidance to Forestry England staff and contractors. They identify site constraints, opportunities and areas requiring special treatment or protection.

Phytophthora ramorum and *P.pluvialis*

P.ramorum is a very destructive pathogen affecting over 150 plant species, particularly larch trees. Some broadleaved plants (such as sweet chestnut and rhododendron) can also host *P.ramorum*. *P.pluvialis* was first recorded in the UK in 2021 and affects a range of species including Douglas fir and western hemlock.

Plantation on Ancient Woodland Site (PAWS)

Ancient Woodland areas where semi-natural woodland has been cleared and replaced by plantation, often including non-native species. PAWS sites can include both broadleaved and conifer woods and often retain remnant ancient woodland features like species-rich ground flora or undisturbed soils. Also known as Ancient Replanted Woodland.

Pollarding

A form of pruning where the upper branches of a tree are removed, promoting a dense head of foliage and branches. Cutting is usually around 2.4 metres above ground – the height that wild animals or domesticated stock could reach. Traditionally, trees were pollarded for fodder or for wood. Fodder pollards are generally pruned every two to six years, wood pollards at longer intervals, usually of eight to 15 years, to produce upright poles for eg: fence rails and posts.

Production Forecast

The projected volume of biomass that the forest will produce each year. Calculations are based on species, age, net area and yield class.

Public Rights of Way (PROW)

Access routes open to the public through legal designation. These include footpaths, byways and bridleways.

Respacing

Thinning of dense natural regeneration at a young age (generally when trees are 2-5m tall) to produce a more consistent crop, focus available resources on the remaining trees and promote good development.

Restocking

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

Ride

Forestry term for unsurfaced roads, paths and tracks within a woodland which provide access for management and other activities.

Scheduled Ancient Monument (SAM)

A scheduled monument is a site that is legally protected because of its historical importance.

Secondary Woodland

Woodland that has been established on land formerly used for another purpose (eg: as pasture, arable fields, quarries, etc.). Unlike ancient woodland it has not been continuously wooded in the past.

Seed Trees

Trees with good shape and growth rates chosen to produce seed for restocking. Seed trees need to be of an age and size where they produce fertile seeds in large quantities.

Selective Felling (Regeneration Felling)

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

Shade Tolerant Species

Trees that have adapted to lower light levels and will regenerate and establish freely under the shade of the surrounding tree canopy, as opposed to light demanding species which require full sun/high light levels to establish and grow.

Silvicultural Systems

Silviculture is the process of tending, harvesting and regenerating a forest. Different patterns of felling and regeneration form distinct 'silvicultural systems'. Different systems may be suitable for different management objectives (eg: conservation in an ancient woodland vs timber production in a conifer plantation).

Site of Special Scientific Interest (SSSI)

A SSSI is a formal conservation designation. Usually, it describes an area that is of particular interest to science due to the rare species of fauna or flora it contains - or even important geological or physiographical features that may lie in its boundaries.

Small Coupe Felling

A small-scale clearfelling system. The system is imprecisely defined but coupes are typically up to 2 ha in extent, with the larger coupes elongated in shape so the edge effect is still high.

Strategic Plan

Forestry England's guide to the management of woodland in Central England Forest District. It divides the district into zones for the purpose of management and ensures forestry activities reflect the local ecological, social and cultural individuality of each woodland.

Strip Felling

Strip felling involves removal of some trees in rows, leaving strips of mature trees in place rather than clearfelling a crop in one operation. This creates space between remaining trees suitable for planting new trees (especially species that require sheltered growing conditions) and maintains woodland cover while new trees are established. The width of strips may vary and multiple strips are removed from one stand at a time.

Sub-compartments

Areas of forest that form a homogeneous crop in terms of age, species composition and condition. They may be split across several locations and their boundaries may change as the forest develops after felling and restocking.

Thinning

The removal of a proportion of trees in a forest after canopy closure, usually to promote growth and greater value in the remaining trees.

Trees of Special Interest (TSI)

Trees that are of interest biologically, aesthetically or culturally because of their age, or trees that are in the ancient stage of their life, or trees that are old relative to others of the same species. Also referred to as Veteran or Ancient trees.

UK Forestry Standard (UKFS)

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

UK Woodland Assurance Standard (UKWAS)

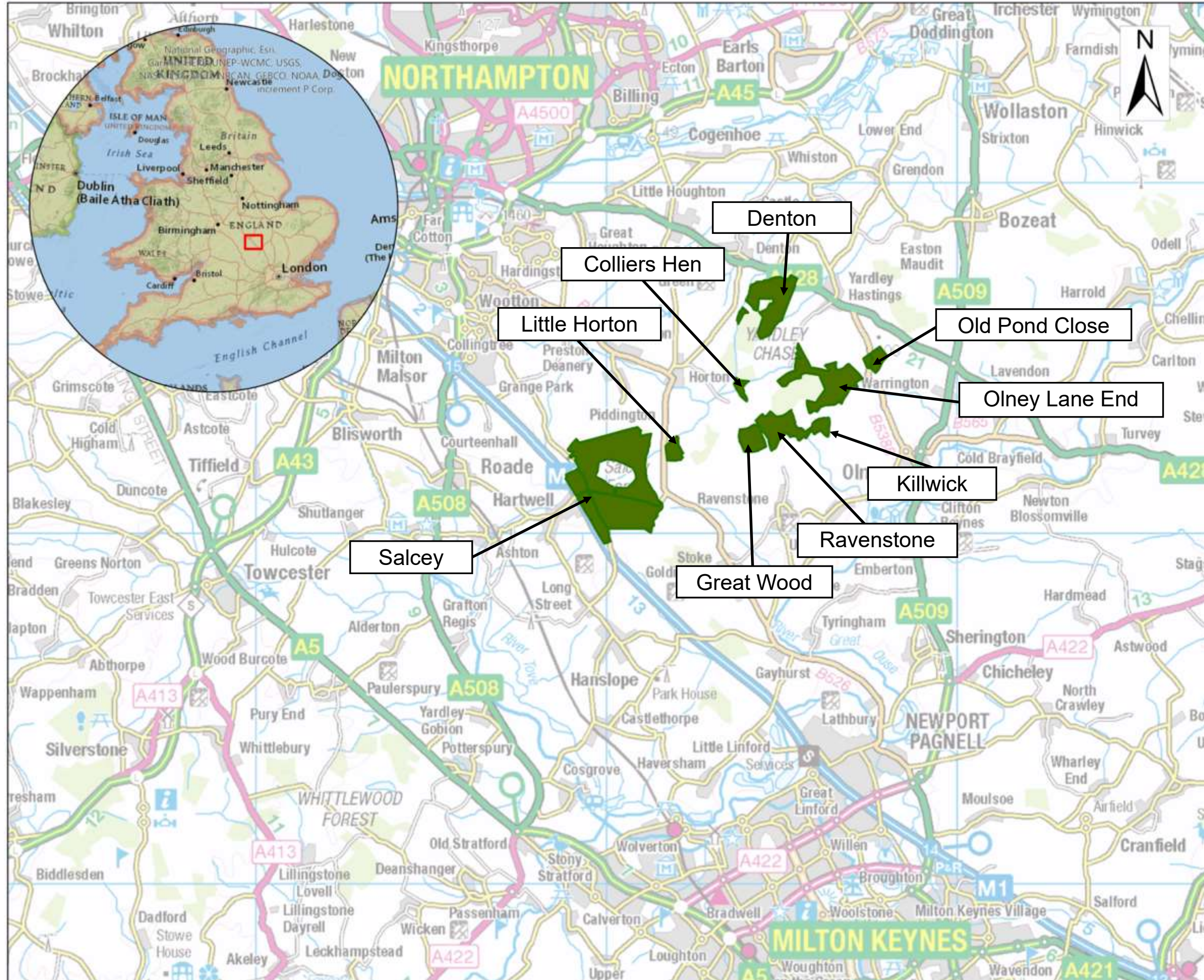
A voluntary scheme for the independent assessment of sustainable forest management in the UK. The Scheme has been developed by a partnership of forestry and environmental organisations in response to growing consumer demand for timber products from sustainably managed forests.

Understorey Woodland Species

Minor tree species that live under top canopy trees or are 'pioneer' species that arrive in clearings before climax species become established. Once the overstorey is established understorey species are more common on woodland edges and clearings where light levels are higher.

Yield Class

Yield class is a measure of the growth rate of a tree crop on a given site. It describes the maximum average volume increase that a particular crop can achieve on 1 ha of land each year. For example, a crop capable of a maximum annual growth of 14 m³ per hectare has a yield class of 14. Yield Class varies depending on factors including the species, how it is managed and local site conditions.



Central Forest District

Location Map

The woodlands lie at the western edge of the Rockingham Forest and have been actively managed for centuries to provide wood products, fuel and food.

The woodlands are dominated by oak high forest planted in the 19th century with a diverse range of secondary woodland species, flora and fauna.

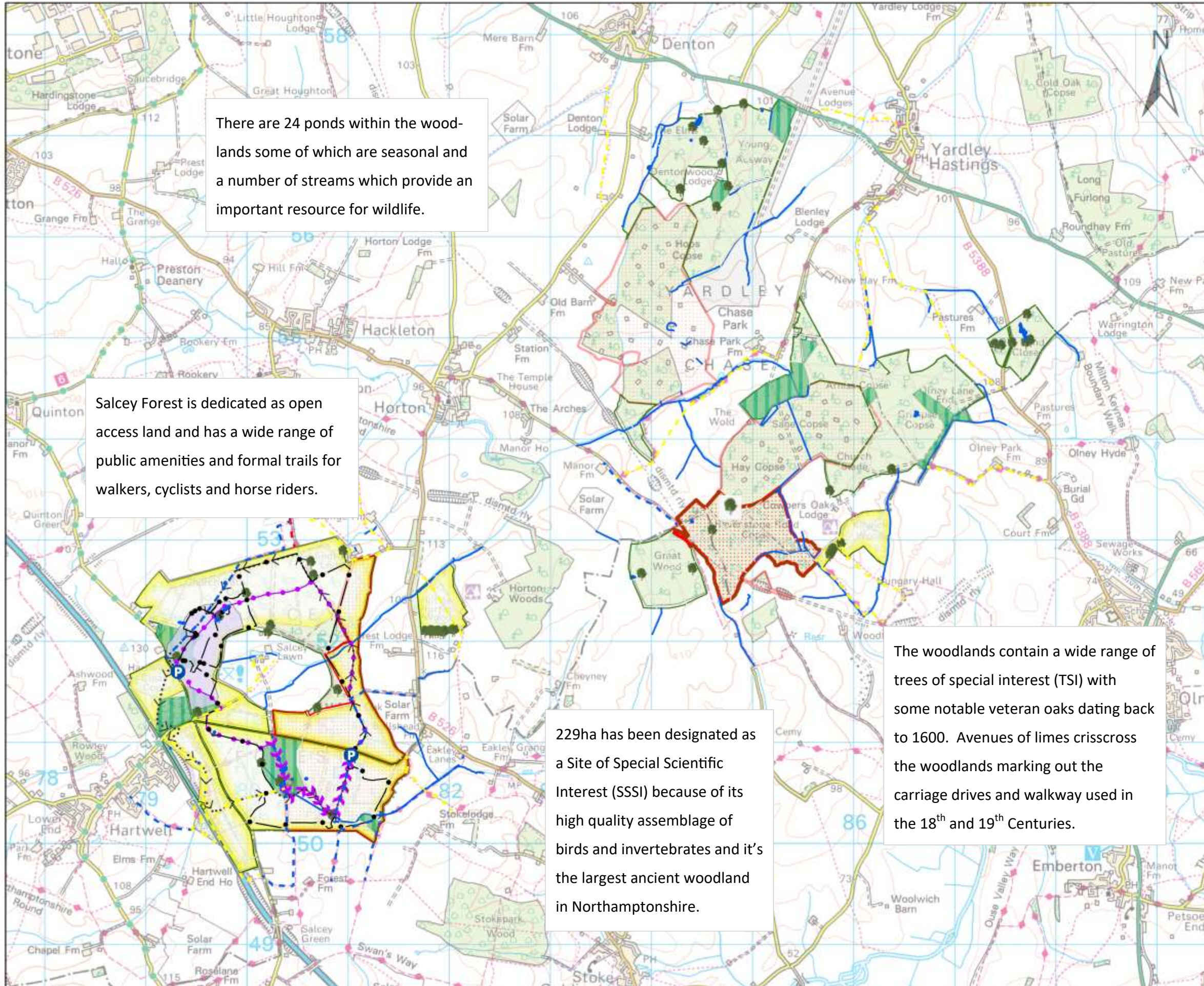
The woodlands have preserved a wide range of historical features that depict the woodlands uses dating back to the Roman occupation through till the First World War.

With the extensive development of residential areas in the region over the last 30 years Salcey Forest now sees up to 300,000 day visitors annually.

Scale: 1:100,000



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There are 24 ponds within the woodlands some of which are seasonal and a number of streams which provide an important resource for wildlife.

Salcey Forest is dedicated as open access land and has a wide range of public amenities and formal trails for walkers, cyclists and horse riders.

229ha has been designated as a Site of Special Scientific Interest (SSSI) because of its high quality assemblage of birds and invertebrates and it's the largest ancient woodland in Northamptonshire.

The woodlands contain a wide range of trees of special interest (TSI) with some notable veteran oaks dating back to 1600. Avenues of limes crisscross the woodlands marking out the carriage drives and walkway used in the 18th and 19th Centuries.

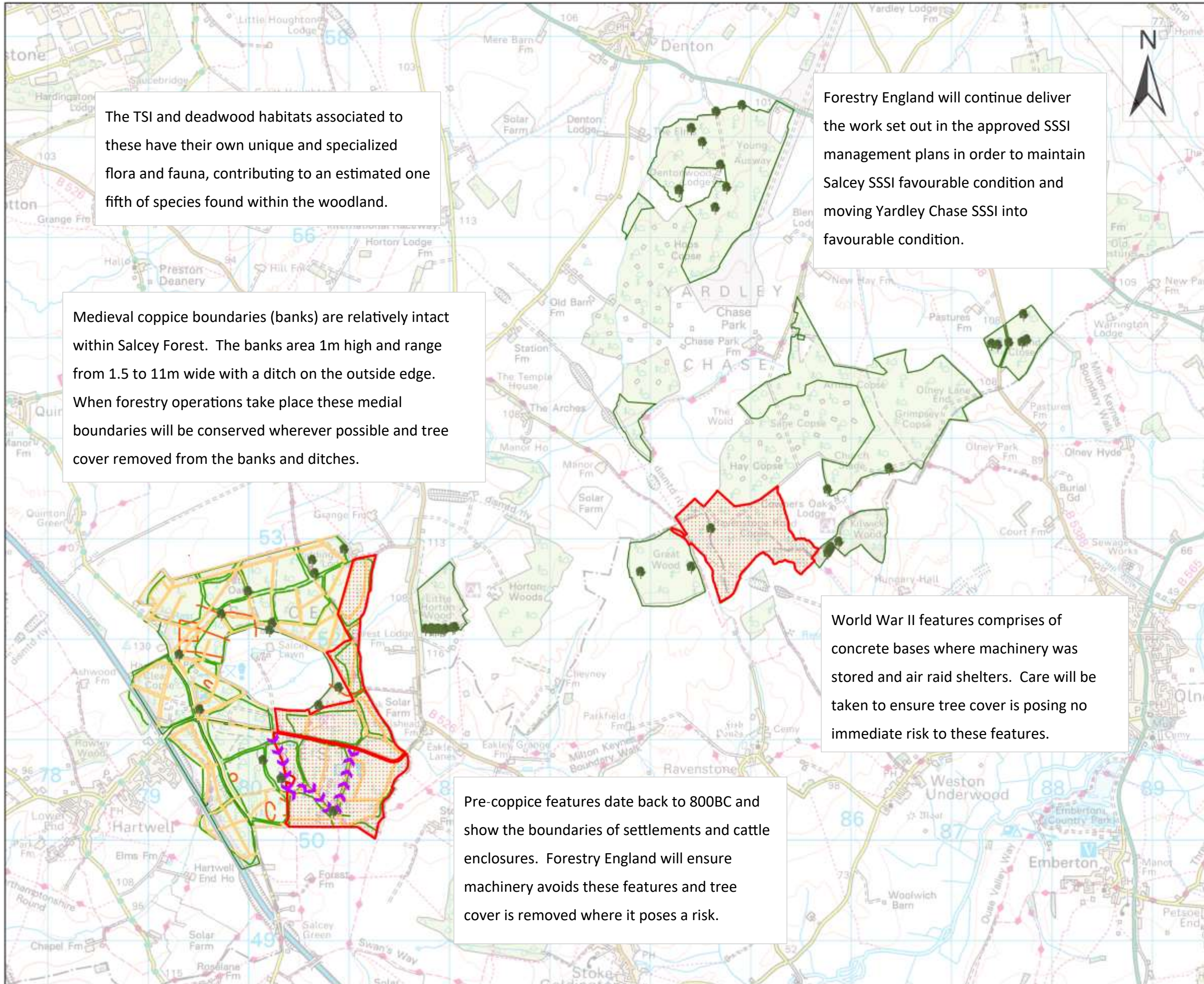
Central Forest District

- Survey Details**
- Car Parks
 - Trees of Special Interest
 - Butterfly Management
 - Water Courses
 - Ponds
 - Recreation Hub
 - Sites of Special Scientific Interest
 - Secondary Woodland
 - Forest Roads & Rides
 - Open Access Land - CROW 2000
 - Equestrian Routes
 - Bridleway
 - Byway
 - Footpath
 - Walking Routes
 - Cycling Routes
 - Woodland Boundary

Scale: 1:35,000



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Central Forest District

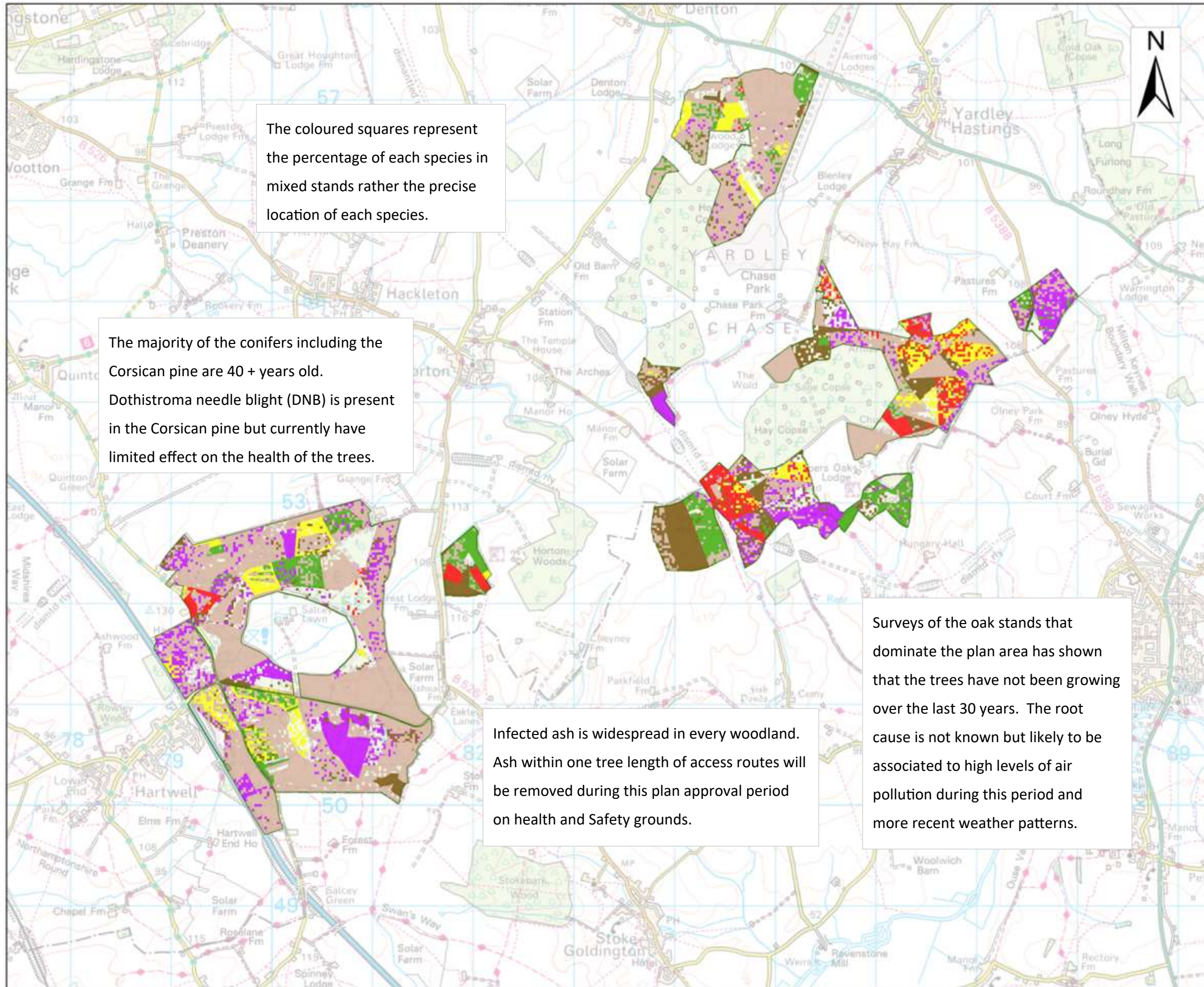
Heritage and Conservation

-  Trees of Special Interest (TSI)
-  Butterfly Management
-  Sites of Special Scientific Interest (SSSI)
-  Pre Coppice
-  Medieval coppice
-  19th Century Ditches
-  Management Boundary

Scale: 1:35,000



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The coloured squares represent the percentage of each species in mixed stands rather the precise location of each species.

The majority of the conifers including the Corsican pine are 40 + years old. Dothistroma needle blight (DNB) is present in the Corsican pine but currently have limited effect on the health of the trees.

Infected ash is widespread in every woodland. Ash within one tree length of access routes will be removed during this plan approval period on health and Safety grounds.

Surveys of the oak stands that dominate the plan area has shown that the trees have not been growing over the last 30 years. The root cause is not known but likely to be associated to high levels of air pollution during this period and more recent weather patterns.

Central Forest District

Current Species

- Open Ground
- Oak
- Ash
- Broadleaves
- Corsican pine
- Scots pine
- Evergreen Conifers
- Management Boundary

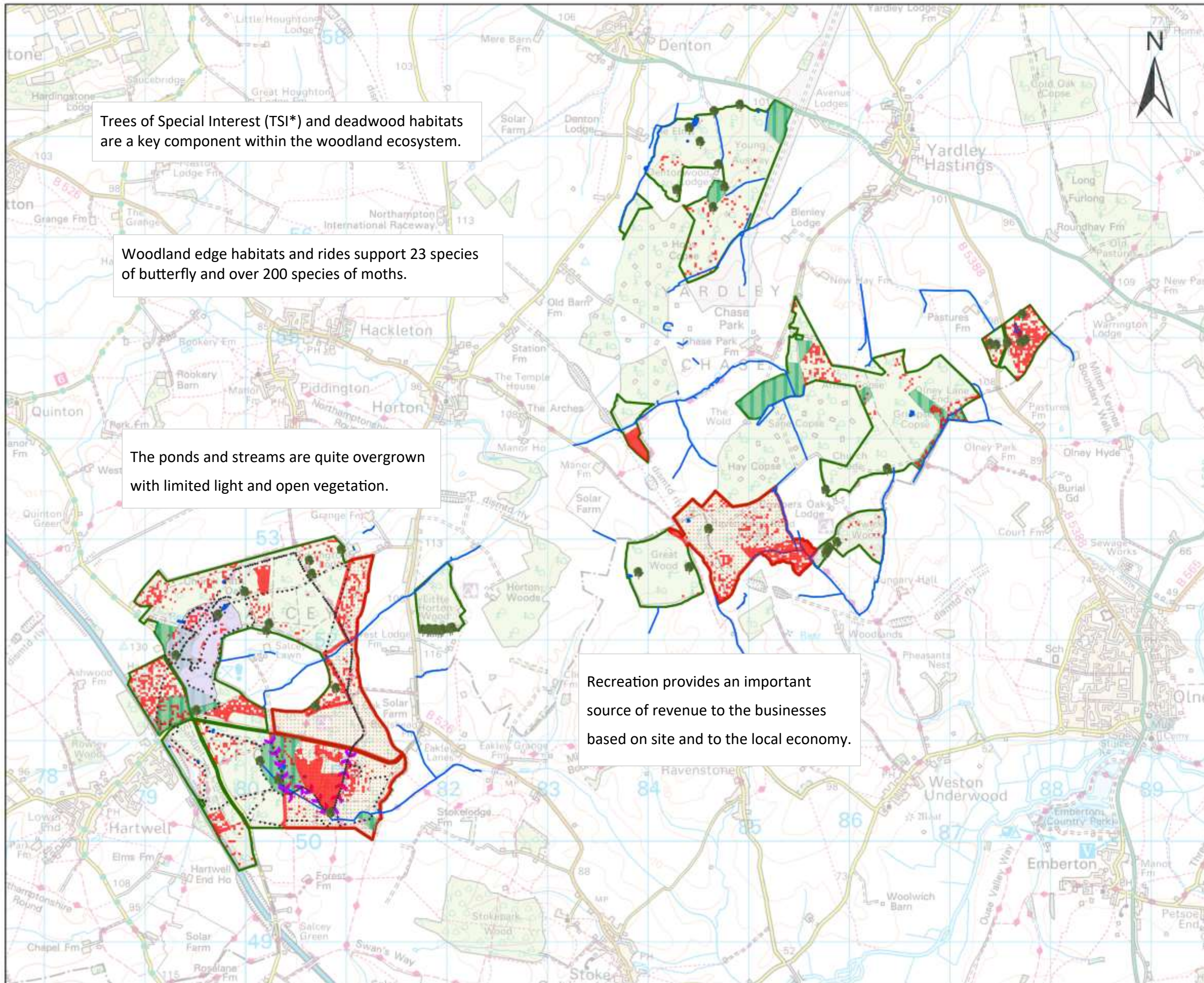
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Forestry England forests and woodlands have been certified in accordance with the UK Woodland Assurance Standard (UKWAS)



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Trees of Special Interest (TSI*) and deadwood habitats are a key component within the woodland ecosystem.

Woodland edge habitats and rides support 23 species of butterfly and over 200 species of moths.

The ponds and streams are quite overgrown with limited light and open vegetation.

Recreation provides an important source of revenue to the businesses based on site and to the local economy.

Central Forest District

Analysis Map

- Trees of Special Interest
- Butterfly Management
- Water Courses
- Ponds
- Recreation Hub
- Sites of Special Scientific Interest (SSSI)
- Secondary Woodland
- Ash
- Recreation Routes
- Management boundary

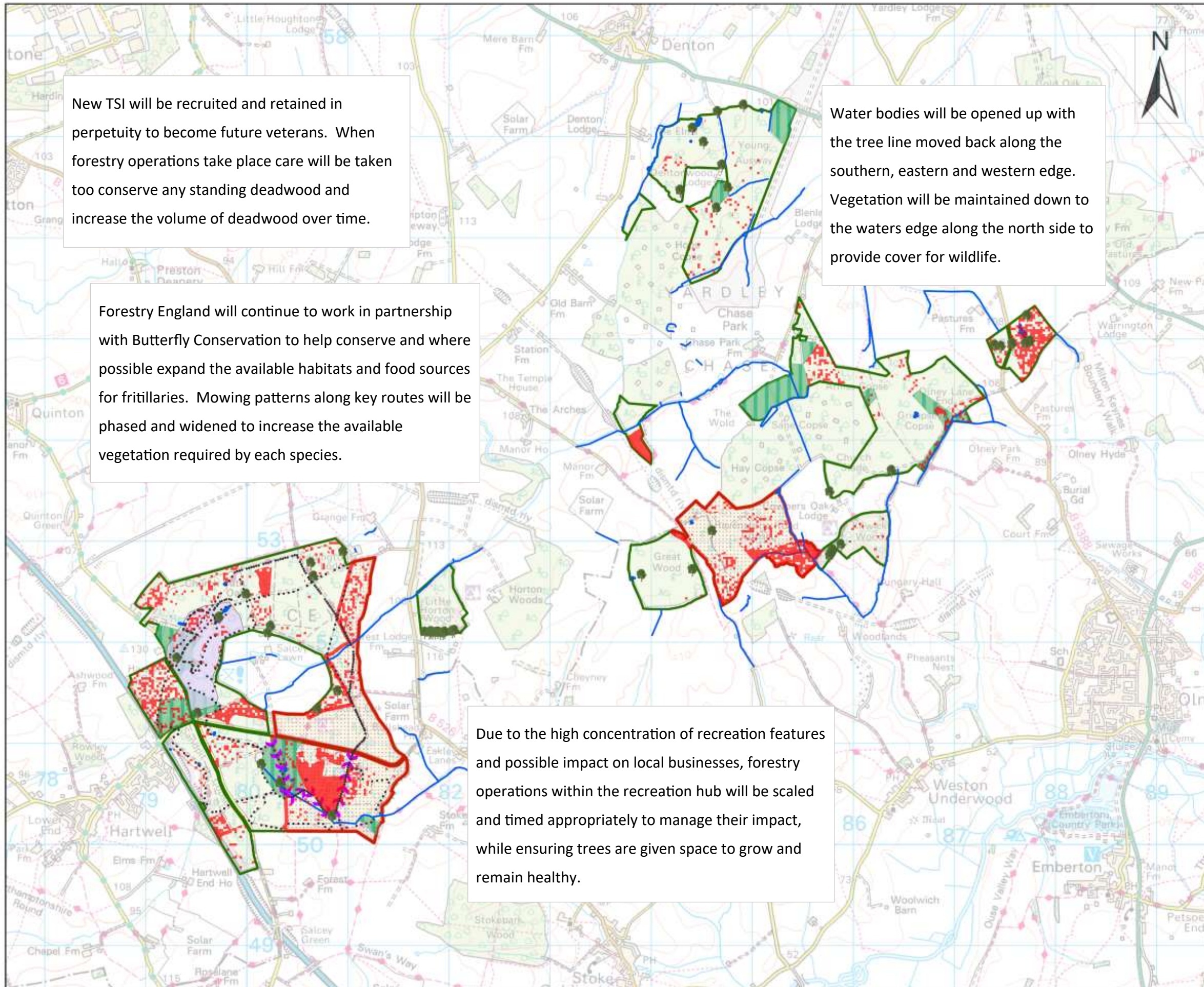
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New TSI will be recruited and retained in perpetuity to become future veterans. When forestry operations take place care will be taken too conserve any standing deadwood and increase the volume of deadwood over time.

Forestry England will continue to work in partnership with Butterfly Conservation to help conserve and where possible expand the available habitats and food sources for fritillaries. Mowing patterns along key routes will be phased and widened to increase the available vegetation required by each species.

Water bodies will be opened up with the tree line moved back along the southern, eastern and western edge. Vegetation will be maintained down to the waters edge along the north side to provide cover for wildlife.

Due to the high concentration of recreation features and possible impact on local businesses, forestry operations within the recreation hub will be scaled and timed appropriately to manage their impact, while ensuring trees are given space to grow and remain healthy.

Central Forest District

Concept Map

- Trees of Special Interest
- Butterfly Management
- Water Courses
- Ponds
- Recreation Hub
- Sites of Special Scientific Interest (SSSI)
- Secondary Woodland
- Ash
- Recreation Routes
- Management boundary

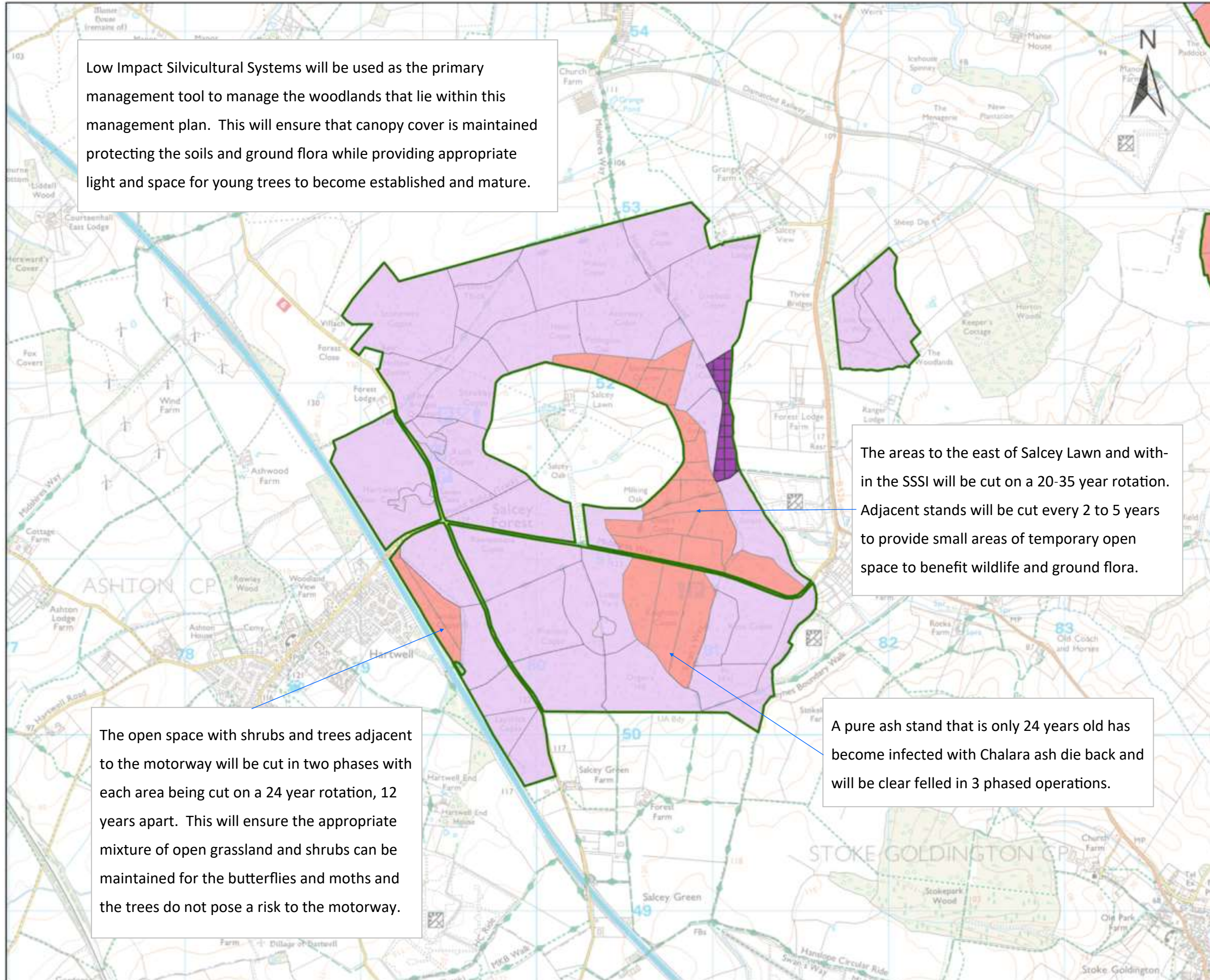
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Low Impact Silvicultural Systems will be used as the primary management tool to manage the woodlands that lie within this management plan. This will ensure that canopy cover is maintained protecting the soils and ground flora while providing appropriate light and space for young trees to become established and mature.

The areas to the east of Salcey Lawn and within the SSSI will be cut on a 20-35 year rotation. Adjacent stands will be cut every 2 to 5 years to provide small areas of temporary open space to benefit wildlife and ground flora.

The open space with shrubs and trees adjacent to the motorway will be cut in two phases with each area being cut on a 24 year rotation, 12 years apart. This will ensure the appropriate mixture of open grassland and shrubs can be maintained for the butterflies and moths and the trees do not pose a risk to the motorway.

A pure ash stand that is only 24 years old has become infected with Chalara ash die back and will be clear felled in 3 phased operations.

Central Forest District

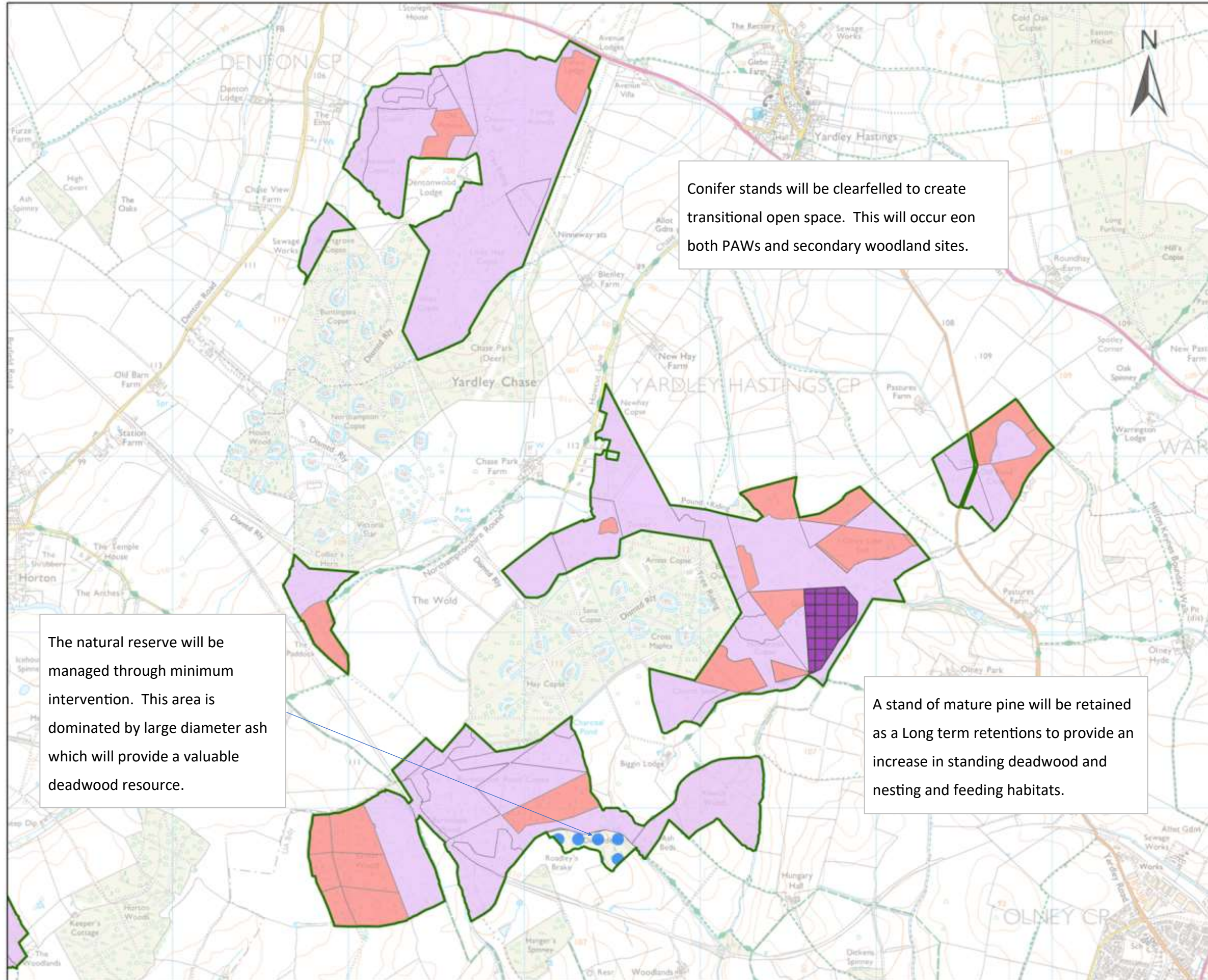
Silvicultural Systems

- Clearfell
- Low Impact Silvicultural Systems (LISS)
- Cut as Bio Fuel 20-25 rotation
- Natural Reserves
- Long Term Retention (LTR)
- Management boundary

Scale: 1:20,000









Designed by Alastair Semple



Central Forest District

Silvicultural Systems

-  Clearfell
-  Low Impact Silvicultural Systems (LISS)
-  Cut as Bio Fuel 20-25 rotation
-  Natural Reserves
-  Long Term Retention (LTR)
-  Management boundary

Scale: 1:20,000



Designed by Alastair Semple

Central Forest District

Felling Period and Management Type

-  Open
-  2022-2026
-  2027-2031
-  2032-2036
-  2037-2041
-  2042-2046
-  Beyond 2062
-  Low Impact Silvicultural Systems (LISS)
-  Long Term Retention (LTR)
-  Natural Reserves
-  Forest Roads
-  Management Boundary

The LISS areas will be managed through a group felling system. Broadleaved stands will be thinned every 10 years with group felling being introduced once trees become semi mature. This phased introduction of felling in the later half of the crops rotation will help restructure the uniform stand structure ensuring a more diverse age range can be maintained in perpetuity.

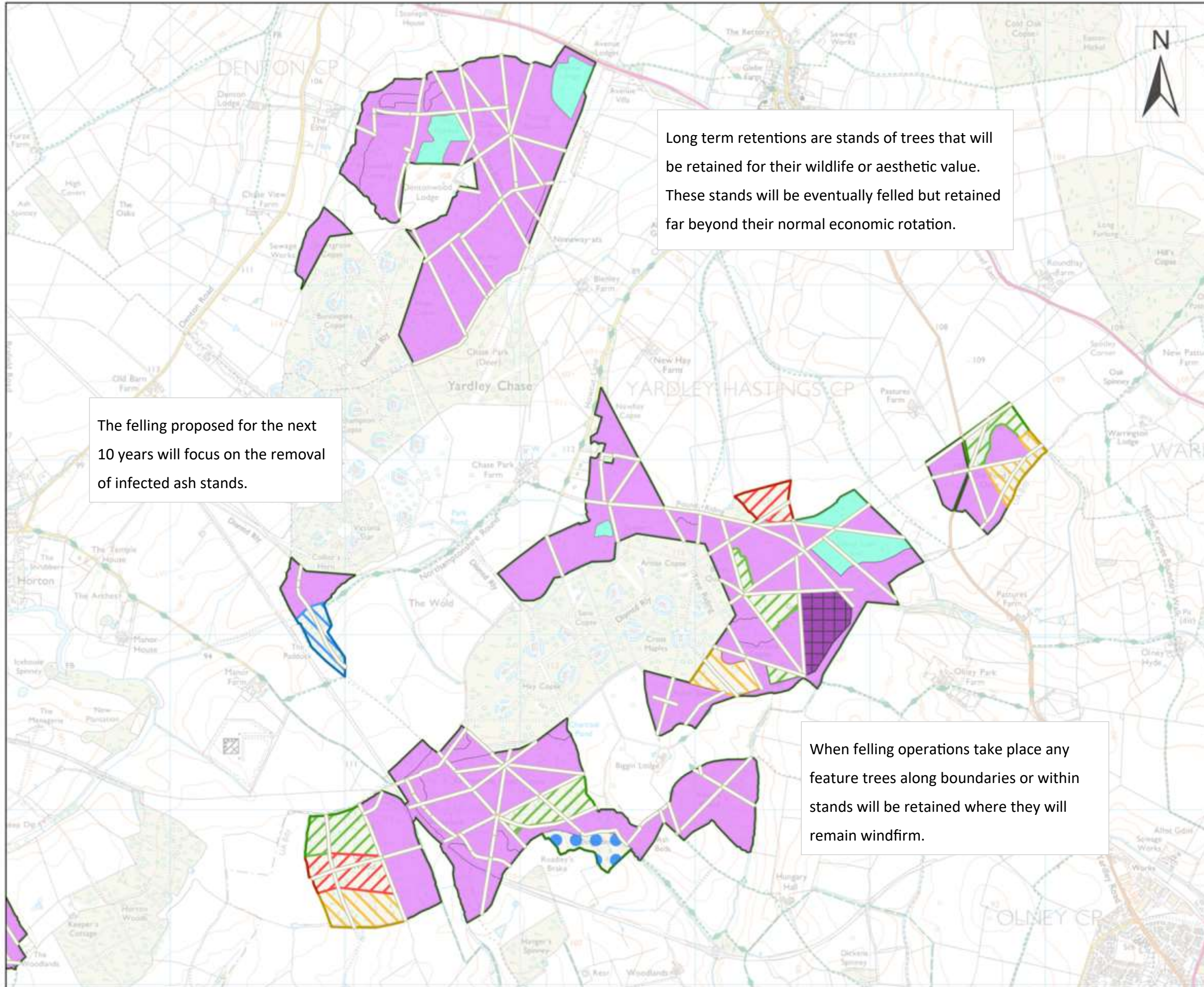
The clear fells have been designed for the benefit of wildlife ensuring the adjacent stands are felled before the previous felled area becomes full established. This will provide continuity of transitional open space with permanent links via riverside management and Salcey Lawn to all areas.

When felling or thinning operations take place adjacent to any key habitats care will be taken to conserve shrubs along the woodland edge. Where the tree line is tight against the hedges the woodland edge will be pulled back to open up the inside of the blackthorn/shrubs to increase the light and available habitats.

Scale: 1:20,000



Designed by Alastair Semple



Central Forest District

Felling Period and Management Type

- Open
- 2022-2026
- 2027-2031
- 2032-2036
- 2037-2041
- 2042-2046
- Beyond 2062
- Low Impact Silvicultural Systems (LISS)
- Long Term Retention (LTR)
- Natural Reserves
- Forest Roads
- Management Boundary

The felling proposed for the next 10 years will focus on the removal of infected ash stands.

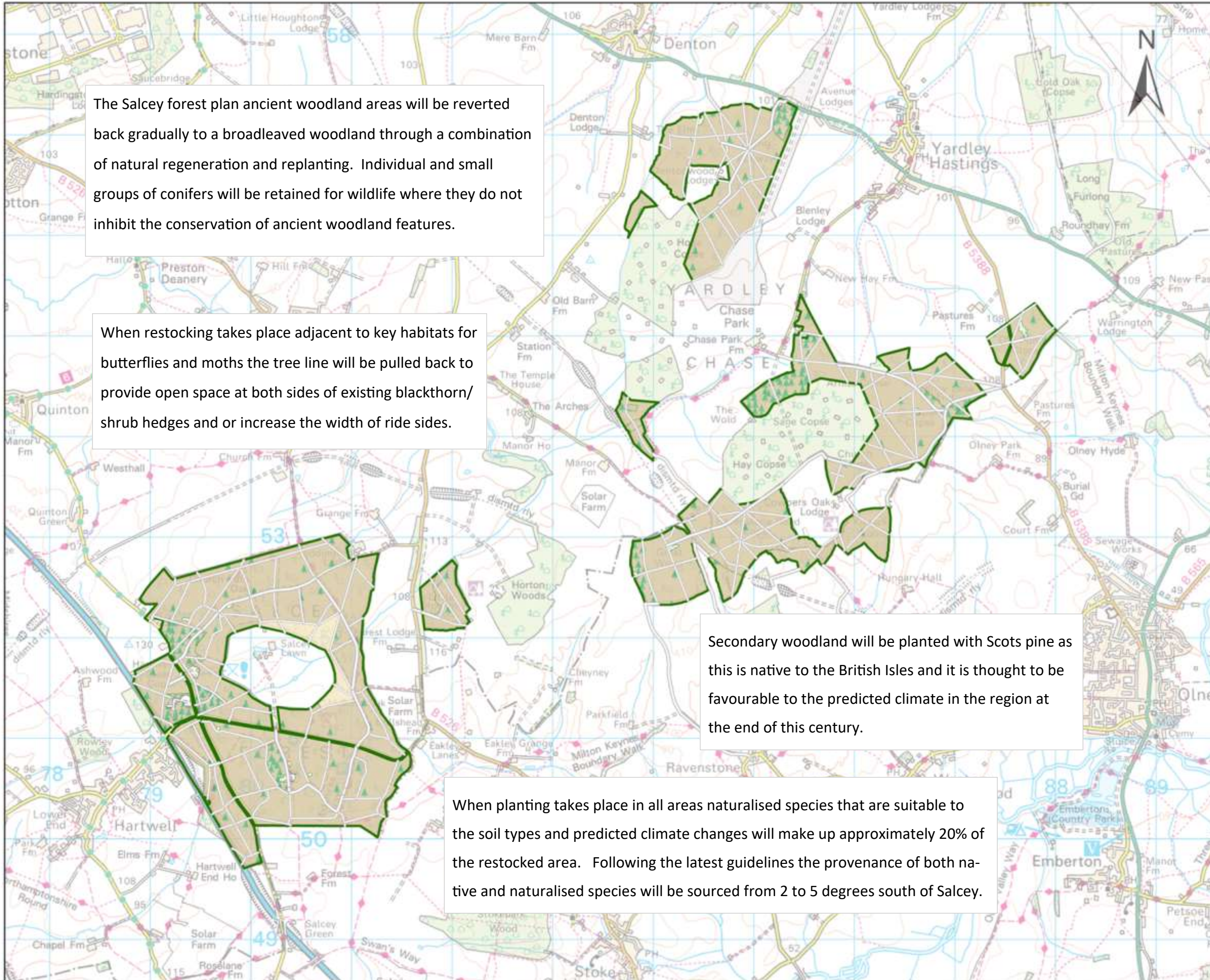
Long term retentions are stands of trees that will be retained for their wildlife or aesthetic value. These stands will be eventually felled but retained far beyond their normal economic rotation.

When felling operations take place any feature trees along boundaries or within stands will be retained where they will remain windfirm.

Scale: 1:20,244



Designed by Alastair Semple



The Salcey forest plan ancient woodland areas will be reverted back gradually to a broadleaved woodland through a combination of natural regeneration and replanting. Individual and small groups of conifers will be retained for wildlife where they do not inhibit the conservation of ancient woodland features.

When restocking takes place adjacent to key habitats for butterflies and moths the tree line will be pulled back to provide open space at both sides of existing blackthorn/shrub hedges and or increase the width of ride sides.

Secondary woodland will be planted with Scots pine as this is native to the British Isles and it is thought to be favourable to the predicted climate in the region at the end of this century.

When planting takes place in all areas naturalised species that are suitable to the soil types and predicted climate changes will make up approximately 20% of the restocked area. Following the latest guidelines the provenance of both native and naturalised species will be sourced from 2 to 5 degrees south of Salcey.

Central Forest District

Intended Landuse

- Open
- Broadleaves with some conifers
- Young broadleaves
- Conifer and broadleaves mixed
- Forest Roads
- Management boundary

Scale: 1:35,000



Designed by Alastair Semple