

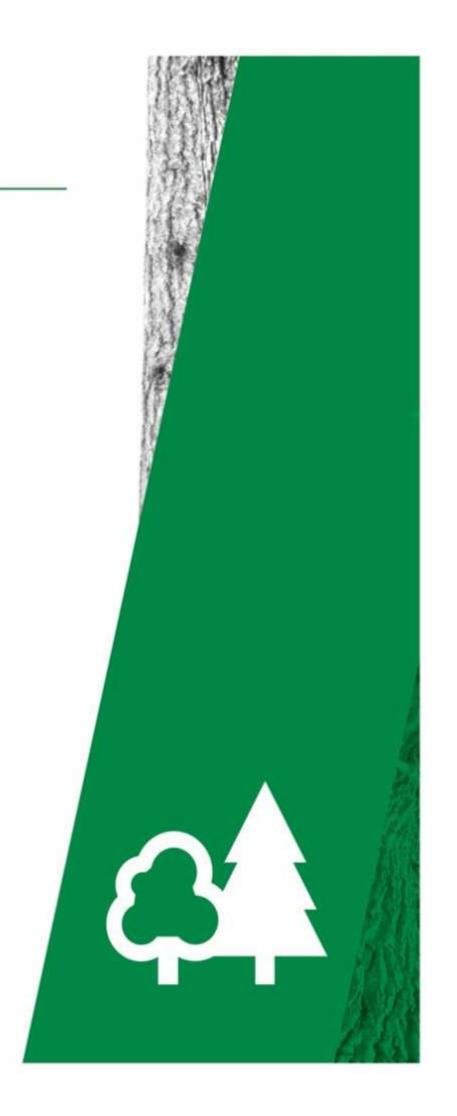
# Heart of the Forest

Forest Plan 2025 - 2035











#### **Summary**

The forest plan covers 398ha and comprises 6 individual woodlands; Tunnel Wood 77ha; Seale Wood 19ha; Hicks Lodge 158ha; Alistair's Wood 33ha; Bignalls Wood 40ha; and Jaguar Lount 72ha, collectively known as the Heart of the Forest. The woodlands are largely new woodlands established in the last 23 years as part of the regeneration of the former industrial landscape that lies in South Derbyshire and North-west Leicestershire. Each of the woodlands play an important role, providing habitats for wildlife, public access and supporting economic regeneration.

Forestry England's primary management objectives for the woodlands are to: maintain and where possible improve habitats; improve the resilience of the woods to climate change; support rare and threatened species; facilitate public access; sustainably produce wood products and support the local economy and businesses.

The woodlands are popular with walkers, cyclists, horse riders and wildlife watchers and a network of paths provide good access through each of the woods. Hicks Lodge has the greatest provision for access and public facilities and welcomes over one hundred and sixty thousand visitors each year.

The health of the existing woodlands is now being impacted by ash dieback and Dothistroma Needle Blight (DNB) which is present in all six sites, killing the ash and defoliating the Corsican pine. Larch is also at risk from Phytophthora ramorum, a disease which is present in many areas locally. The loss of these species will have the greatest impact in Hicks Lodge, Alistair's and Bignalls woods where they dominate some areas of the forest. Squirrel damage is also very high in all broadleaved species, which is weakening the trees and in some case killing them.

The young woodlands are now at an age where thinning operations will commence in the next ten years and this will present opportunities to diversify the species and remove diseased and damaged trees.

### Central Forest District - Heart of the Forest Forest Plan

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All of our forests and woodlands are sustainably managed, ensuring they will continue to benefit future generations. Our management meets best practice standards summarised in the UK Woodland Assurance Standard (UKWAS) and is independently certified under UKWAS to Forest Stewardship Council® (FSC®) and Programme for the Endorsement of Forest Certification (PEFC) standards. (Licence codes FSC-C123214 and SA-PEFC-FM-006972).







#### 1. What are Forest Plans?

Forest Plans are produced by us, Forestry England, for each local forest area to set out how we aim to manage the woodlands in our care over the next 30 or more years and to communicate this to a range of stakeholders. They:

- Provide a description of the woods as they are now
- Outline the main points considered when deciding what is best for the woods
- Describe how the forest will develop over time
- Give specific information about approved tree felling, replanting and regeneration over the next ten years
- Help ensure our plans are economically, environmentally, and socially sustainable, supporting certification of our forest management and timber products

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, means that the Forest Plan is the best way to apply for this licence. Responsibility for checking that the plan meets all relevant standards and statutes lies with the Forestry Commission. If all criteria are met, full approval is given for management operations in the next ten years from the approval date and outline approval is granted for our medium-term vision (ten to fifty years). Plans are reviewed every ten years to renew our felling licence and check we are on track to deliver this vision. 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, p8).

A Forest Plan is a 'felling and restocking' plan written at 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. Forest Plans do not detail the management of recreation, ecological or heritage features. Planning for these elements is taken into account but follows a different management cycle and process. This includes Operational Plans\* written by the Beat Forester before each operation takes place. These outline the site-specific features that need to be considered when we undertake felling and restocking.

Terms of Reference (page 6) are agreed at the start of the planning process to set out our management objectives for the plan area, how these relate to Forestry England's District and national priorities, and how these will be monitored.

#### **Application for Forest Plan Approval**

#### i Plan Area Identification:

Forest District: Central Forest District

Beat: National Forest

Name: Heart of the Forest Forest Plan

Nearest Town: Ashby-de-la-Zouch

OS Grid Reference: Tunnel Wood SK 2934 1735

Seale Wood SK 3024 1423

Hicks Lodge SK 3289 1551

Alistair's Wood SK 3768 1872

Jaguar Lount Wood SK 3797 1950

Bignalls Wood SK 3772 2039

Local Planning Authority South Derbyshire and North West Leicestershire

#### ii Designations:

Lount Meadows Site of Special Scientific Interest (SSSI), National Character Areas (NCA) Profile: 71. Leicestershire and South Derbyshire Coalfield (NE535), NCA Profile: 70. Melbourne Parklands (NE384).

#### iii Date of Commencement of Plan—on approval

Proposed felling and restocking summary for 10 year FP period:

	Conifers	Broadleaves	Total area
Clearfell	0	47 ha	47 ha
Restocking	20 ha	27 ha	47 ha
New planting	14.9 ha	0	14.9ha

Total felled area 47 ha — Forest Plan maps are attached

The above figures refer to the gross area and exclude routine thinning operations.

Restocking refers to natural regeneration and planted stock.



In addition to the above felling 224 ha will be managed using Lower Impact 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/compartment 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.

# We're Forestry England — We live and breathe forests

- We're using our scale and expertise to grow the nation's forests to make a positive difference for you and the environment.
- We're creating amazing places and experiences for you to enjoy, providing vital homes for wildlife and producing home-grown sustainable timber.
- We're able to share and care for amazing places and incredible wildlife because of the timber we produce.
- We sustainably manage forests to produce over a million tonnes of timber a year to support UK industry.

### 2. Management Objectives

Establish economically and ecologically sustainable crops that are more resilient to the impacts of climate change, pests and disease.

Support recreation and leisure businesses on site and in the local area by creating a diverse forest that will deliver a wide range of ecosystem services.

Plan for the impact of Chalara Ash Dieback\*, DNB and Phytophthora ramorum\*.

Encourage the development of an understory and shrub layer associated with woodland edges as the woodlands mature to benefit birds and help link trophic levels. Continue to provide open access to help visitors' health and well being.

Promote the Active Forests
Programme to visitors, creating a sporting
habit for life.

Continue to work with local businesses to provide a wide range of services.

Work with volunteers to help deliver land management.

Manage riparian zones, open water and grassland habitats for the benefit of wildlife.

Continue to work with local wildlife groups to conduct bird, butterfly and reptile surveys.

Retain and recruit future Trees of Special Interest (TSI) to become veteran trees and increase deadwood habitats.



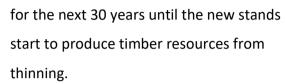
#### 2.1 Economic

Currently the only income generated from these woodlands is through the visitor centre, car park and farm business tenancies. Over the next ten years most woodland areas will be managed by respacing the trees (thinning\*) and the removal of diseased/dead ash and Corsican pine which will release timber to the market, generating income. Forestry England will explore new approaches to facilitate harvesting on sites where large-scale timber production using specialist forestry machinery isn't viable.

38 ha of ash are now badly infected with a pathogen called Chalara ash dieback which is killing ash across Europe. This disease kills the young ash before it matures and will have a major impact on future



timber yields and the British countryside. To address this ash will be removed in groups when thinning takes place and these areas will be restocked with more resilient tree species. This will temporarily reduce the woodlands productive capacity





Pic.4 Visible signs of Chalara ash dieback in young and mature ash trees

Opportunities to increase the area of woodland cover slightly will be taken where possible to introduce a more diverse mixture of species that may be better suited to the predicted climate at the end of this century. Tree planting in specific areas will also enlarge and link existing stands and diversify woodland structure and habitats.

While some broadleaved species will be planted evergreen conifers will dominate the new woodland areas and pockets of open space left by ash removal. Conifers are less susceptible to browsing by deer and bark stripping by squirrels, which has already caused extensive damage to the young broadleaf woodlands.



Pic.2 Squirrel damaged trees

Increasing woodland cover and diversifying species will also make ongoing management more economically sustainable.

# Heart of the Forest - Forest Plan 2025—2035

# 2.2 Nature

The Heart of the Forest woodlands now support a wide variety of species, partly due to the variety of habitats available in the young woodlands, open habitats and water bodies. Five specially protected bird species, listed on Schedule 1 of the Wildlife and Countryside Act, have been recorded at Hicks Lodge (Whimbrel, Little Ringed Plover, Greenshank, Mediterranean Gull, Black Tern ) and many species are associated with the numerous ponds, the largest of which has a bird hide. With the help of volunteers Forestry England built two Sand Martin walls and between March and September visitors can watch the busy Sand Martins from the path that surrounds the main pond as well as the bird hide. The smaller ponds also support amphibians such as Great Crested and Smooth Newt.

Other key areas of habitat at Hicks Lodge include shrubby scrub which supports a notable population of reptiles, including grass snake and common lizard. This area will be managed to ensure open, sunny glades are retained as the trees mature, maintaining favourable habitat for the reptiles. A small area of heathland remains in the northwest corner of Hicks Lodge and this is managed by volunteers removing trees and woody shrubs that encroach into the heathland.



Pic.3 Lount Meadows SSSI

The woodland edge has the potential to be one of the most important habitats for wildlife. Structural diversity is currently limited but measures will be introduced to ensure that a herbaceous shrubby edge is allowed to develop which will link the tree canopy to the shorter grassland vegetation as the trees mature. This will help link the food chains associated with each habitat and provide valuable shrubby habitat for birds, a habitat that is in decline across the British countryside. Small openings within the canopy will also be created within stands and along currently enclosed rides to increase ground flora and insects population.

Of the open grassland areas, Lount Meadows, which lies in Alistair's Wood, was designated as a



SSSI\* as it contains some of the best examples of slightly acidic neutral grassland in Leicestershire and is representative of such grasslands in the English Midlands.

# 2.3 People

The woodlands are situated between Swadlincote and Ashby—de-la-Zouch with over 50,000 people living with 2km of the woods. Hicks Lodge visitor centre was opened in 2011 and is Forestry England's key gateway site in the National Forest, receiving over 160,000 visitors in 2023. The surrounding woodlands do not have any formal parking and visitors arrive on foot from surrounding conurbations. With nearly 17km of surfaced multi-user paths, each of the woodlands is accessible to the public all year round. At Hicks Lodge the facilities include a Cafe, bike hire, toilets, play area, forest schools, 8.8km of purpose built bike trails, 5.4km of equestrian trail and 7.4km of multi-user routes.



Pic.4 Path around main pond at Hicks Lodge.

Forestry England staff based at Hicks Lodge organise a wide range of public activities throughout the year based around education, exercise, mental health and wellbeing. A well established volunteer group helps actively manage the woodland habitats and supports the local team caring for the community woodland sites.



Pic.5 Brash fences and birch respacing by volunteers.

#### 3. Harvesting Operations

Thinning operations will commence in each of the woodlands in the next ten year period where the trees will be respaced to give them room to develop and mature. During thinning operations diseased ash and Corsican pine will be targeted. There are number of stands where groups of ash and Corsican pine will be clearfelled and their removal will create small clearings within the remaining woodland. These clearings will be restocked through natural regeneration and enrichment planting where necessary to reach the required stocking density (See Table 1). Woodland resilience will be improved by diversifying the tree species, reducing the likely impact of future pests and diseases. Coppice management in the northern area of Seal Wood will be expanded into an area of sweet chestnut with groups of trees being cut and individual chestnuts and oaks being left to become standards.

Two areas of mature woodland will be managed as long term retentions at Hicks Lodge. The primary objective here will be to let the trees reach biological maturity, increasing their ecological value. They contain a good mixture of broadleaved species including mature hawthorns, but currently very little deadwood. To ensure the volume of deadwood gradually increases across all woodland areas some standing snags will be left after forestry operations. Furthermore individuals and small groups of trees will be selected to become veteran trees and provide deadwood habitat.

#### 4. Intended Landuse

If resources allow current areas of woodland will be expanded within the plan period, linking up the existing woodlands (see Analysis and Concept maps, p17 & 18). This will increase woodland cover by 18ha whilst still retaining 115ha of open habitats, 30% of the plan area. The new woodland areas will largely be comprised of conifer species, chosen for their suitability to the local soils and predicted climate (Table 2). Conifers and non-native broadleaves will also be used to restock areas of existing woodland that have died due to disease and squirrel damage. Introducing these non-native species by planting will diversify species faster than natural colonisation, helping ensure the community woodlands can deliver robust ecosystem services in future. The proposed future woodland composition will change to 84% broadleaf woodland and 16% evergreen conifers / non-native broadleaves from the current 95% /5% split.

Without intervention significant areas of the woodlands may not survive or reach maturity due to



deer and squirrels that has in some cases killed trees or left them so damaged they are increasingly at risk from insect or fungal attack. As the woods are thinned any badly damaged trees will be removed and the small openings created left to regenerate or be replanted.

Sudden Oak Death, Acute Oak Decline, Chestnut Blight and Phytophthora ramorum\* are now present in the region and will pose an additional risk to woodland habitats over the next century. To increase forest-scale resilience to current and future pests, diseases and climatic changes we aim to introduce a wider range of tree species during restock where appropriate. This forms part of our portfolio approach to restock, which also includes accepting natural regeneration and using planting stock of local provenance and/or from 2 to 5 degrees south where possible.

Open habitats will be managed sympathetically for the benefit of flora and fauna. Mowing patterns will be varied, leaving uncut areas around woodlands allowing woody shrubs and a herbaceous layer to develop. This will help link the food chain from the short vegetation to the tree canopies as the

Table.1 Heart of the Forest Forest Plan Contribution towards Central District

	Forest Plan Area	Forest Plan Percentage	Forest District Area	Forest District Percentage
Total Area	397.74	100	27,402	100
Total Wooded Area	259.15	65.2	23,525	85.9
Open Habitat (>10%)	105.4	26.5	3,243	11.8
Natural Reserves - Plantation (1%)	0	0	198.5	1.3
Natural Reserves - Semi Natural (5%)	0	0	3807.5	4.8
Longterm Retentions & Low Impact Silvicultural Systems (>1%)	227.4	57	14,648	53.5
Area of Conservation Value (>15%) including LISS	229.7	57.6	17,666	64.5

woodlands begin to mature. Management of open habitats, the SSSI and water bodies is not detailed in the forest plan and will be managed by Forestry England's local staff and environment team.

Broadleaves	Conifers	
Hornbeam	Oriental Spruce	
Pedunculate oak	Western red ceder	
Black poplar	Scots pine	
Small leaved lime	Macedonian pine	
Red oak	Serbian spruce	
Sweet chestnut	European silver fir	
Willow	Coast redwoods	
Common alder		

# Table.2—Species likely to be most suited under predicted 2080 climate conditions.

N.B. species in bold are less susceptible to squirrel damage

The above list was derived from Forest Research's Ecological Site Classification Tool (ESC). This suggests that soil moisture content will become the most limiting factor for tree growth for the majority of species in this area. ESC is a useful broad guide but does not account for all aspects of suitability. Species choice for restock will be determined by the Forestry England Beat team and conform to the requirements of any underlying land designations. Consideration will also be given to site-specific factors including hydrology, browsing pressure, pests and diseases, competition from ground vegetation, planting stock provenance and availability.



# 5. Terms of Reference

National Strategy	District Strategy	Forest Plan Objective	Monitoring
Climate:  1) Maintain the land within our stewardship under UKWAS certification,  2) Improve the economic resilience of our woods and forests,  3) Encourage and support business activity on and around the Estate.	1) Adapting our management practices to suit the character and requirements of local woodlands whilst satisfying national standards and business requirements. 2) We will use the opportunity presented by additional, unscheduled clearfelling 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.	<ul> <li>Grow commercial timber and other wood products using a variety of species that will be more resilient to the impacts of climate change, pests and diseases to maximise yields and ensure the woodlands can be managed sustainably.</li> <li>Carefully plan the regeneration of stands impacted by Chalara ash dieback and other pests and diseases.</li> <li>Support the recreation and leisure businesses on site and in the local area by creating a diverse forest that will deliver a wide range of ecosystem services.</li> </ul>	<ul> <li>All forestry operations and restocking will be recorded in the Forestry England subcompartment database and monitored at the 5-year mid-term review and 10-year renewal.</li> <li>Monitored as part of the operational planning process and recorded on the Forestry England subcompartment database.</li> <li>No monitoring required.</li> </ul>
Wildlife:  1) Improve the resilience of the natural environment of the Estate under our Stewardship,  2) Realise the potential of the Public Forest Estate for nature and wildlife,  3) Maintain and improve the cultural and heritage value of the Estate.	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.  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  3) Where possible, work with interested parties to explore ways to maintain or improve features of cultural or heritage value to the local community.	<ul> <li>Identify key species and habitats and make appropriate provision for their requirements. Maintain the ecological value of the priority habitats and SSSI.</li> <li>Management operations will be planned to consider the habitat requirements of managed open and woodland edge habitats for the benefit of flora and fauna.</li> <li>Continue to work with local wildlife groups to conduct bird, butterfly and reptile surveys.</li> <li>Identify existing locations of TSI and demonstrate appropriate management to recruit future veteran trees and increase the volume and distribution of deadwood</li> </ul>	<ul> <li>Monitored as part of the operational plan process.</li> <li>Monitored as part of the operational plan process.</li> <li>No monitoring required.</li> <li>No monitoring required.</li> <li>Record TSI on the conservation database, reviewed as part of operational planning process, at the 5 year and 10 year forest plan reviews.</li> </ul>
People:  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.	<ol> <li>Provide safe and accessible woodlands.</li> <li>Offering opportunities for quiet recreation and adventurous activities, to enable people to experience the potential health and wellbeing benefits.</li> <li>Developing partnership with private businesses and public bodies to expand and improve recreational opportunities across the estate.</li> <li>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.</li> <li>Encouraging third party environmental educators and other partners to offer learning opportunities on the public forest estate.</li> </ol>	<ul> <li>Continue to work with local businesses, volunteer groups and members of the public to provide a wider range of public services and educational activities.</li> <li>Promote the Active Forests Programme aimed at creating a sporting habit for life for visitors through communication, partnership and engagement.</li> <li>Provide access to all six woodlands on foot, horseback and bike. Promote Hicks Lodge visitor centre as a gateway site into the National Forest.</li> <li>Support volunteer led activities.</li> <li>Conserve features of cultural significance and record on the conservation database.</li> </ul>	<ul> <li>No monitoring required.</li> <li>Review as part of Forestry England's national active forests project.</li> <li>No monitoring required.</li> <li>No monitoring required.</li> <li>Monitored as part of the operational plan process.</li> </ul>



# Appendix I

#### **Glossary**

#### **Acute Oak Decline**

Acute 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. Symptoms include characteristic weeping cankers/lesions in the bark.

#### **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. It differs from acute oak decline (above), which causes a much faster, and usually fatal, decline in tree health.

#### **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 the Nation's Forests 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)



# **Glossary continued**

#### **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.

#### The Nation's Forests

The woodlands managed by Forestry England. These include both freehold and leasehold land. (Previously referred to as the Public Forest Estate.)

#### **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.

#### **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 areas which 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.



# **Glossary continued**

#### **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 pillared 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 egg: 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, by-ways 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 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 (egg: 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.

#### Semi-natural woodland

Those woodlands which are comprised mainly of locally native trees and shrubs, and have some structural characteristics of natural woodland.

# **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 (egg: 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 clear-felling 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.

# **Special Area of Conservation (SAC)**

SACs are protected areas in the UK designated under the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales. These areas form an internationally important network of high-quality conservation sites that make a significant contribution to conserving Annex I and Annex II habitats and species.

#### **Special Protection Area (SPA)**

SPAs are protected areas selected to protect one or more rare, threatened or vulnerable bird species listed in Annex I of the Birds Directive, or specific regularly occurring migratory species. They form an internationally important network of high-quality conservation sites that make a significant contribution to conserving important habitats and species.

#### **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 clear-felling 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.



# **Glossary continued**

#### **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.

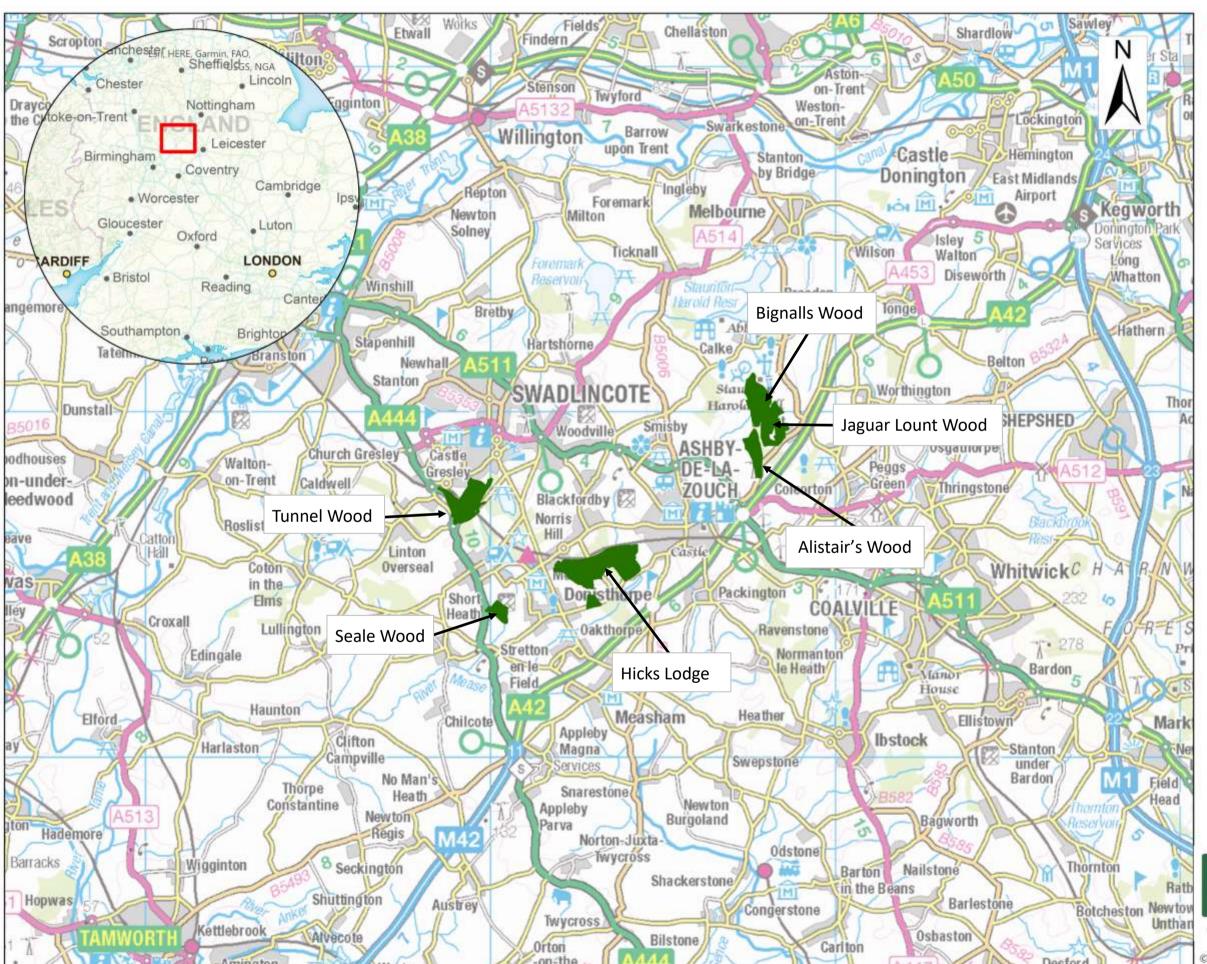
#### **Wood Pasture**

Wood pasture is derived from the traditional practice of managing trees in tandem with grazing, characteristically combining at least some open grown or pollarded veteran trees or shrubs and diverse and dynamic open and open-woodland habitats.

#### **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 in the heart of the National Forest with Hicks Lodge being one of Forestry England's main visitor centres. The woodlands were planted in 2002 to support the economic, social and environmental regeneration of the countryside around land formally used for opencast mining. The woodlands today support a wide range of plants and animals and are enjoyed by thousands of people each year. Forestry England continues to expand these woodlands and deliver a wide range of ecosystem services.

Scale: 1:100,000



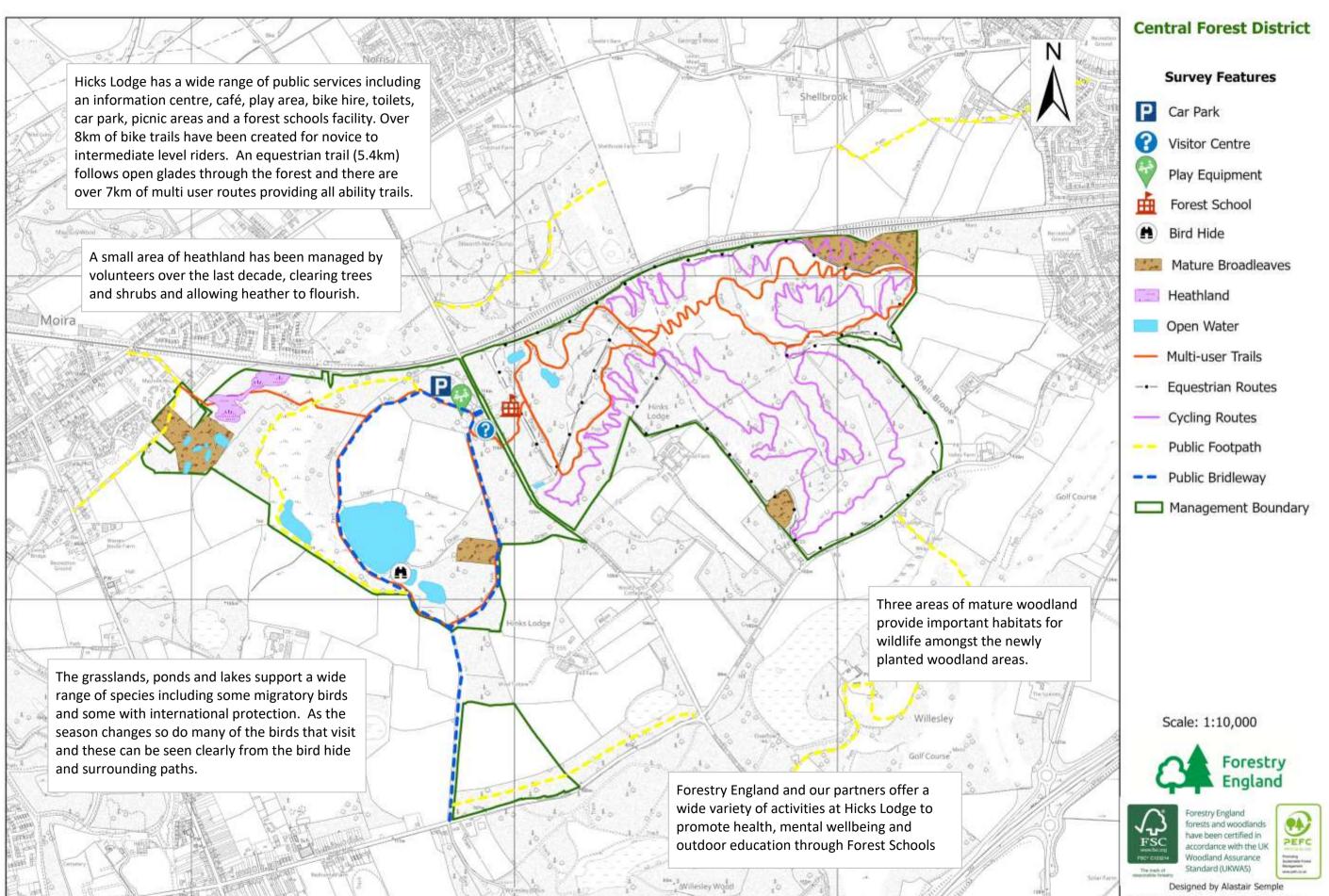


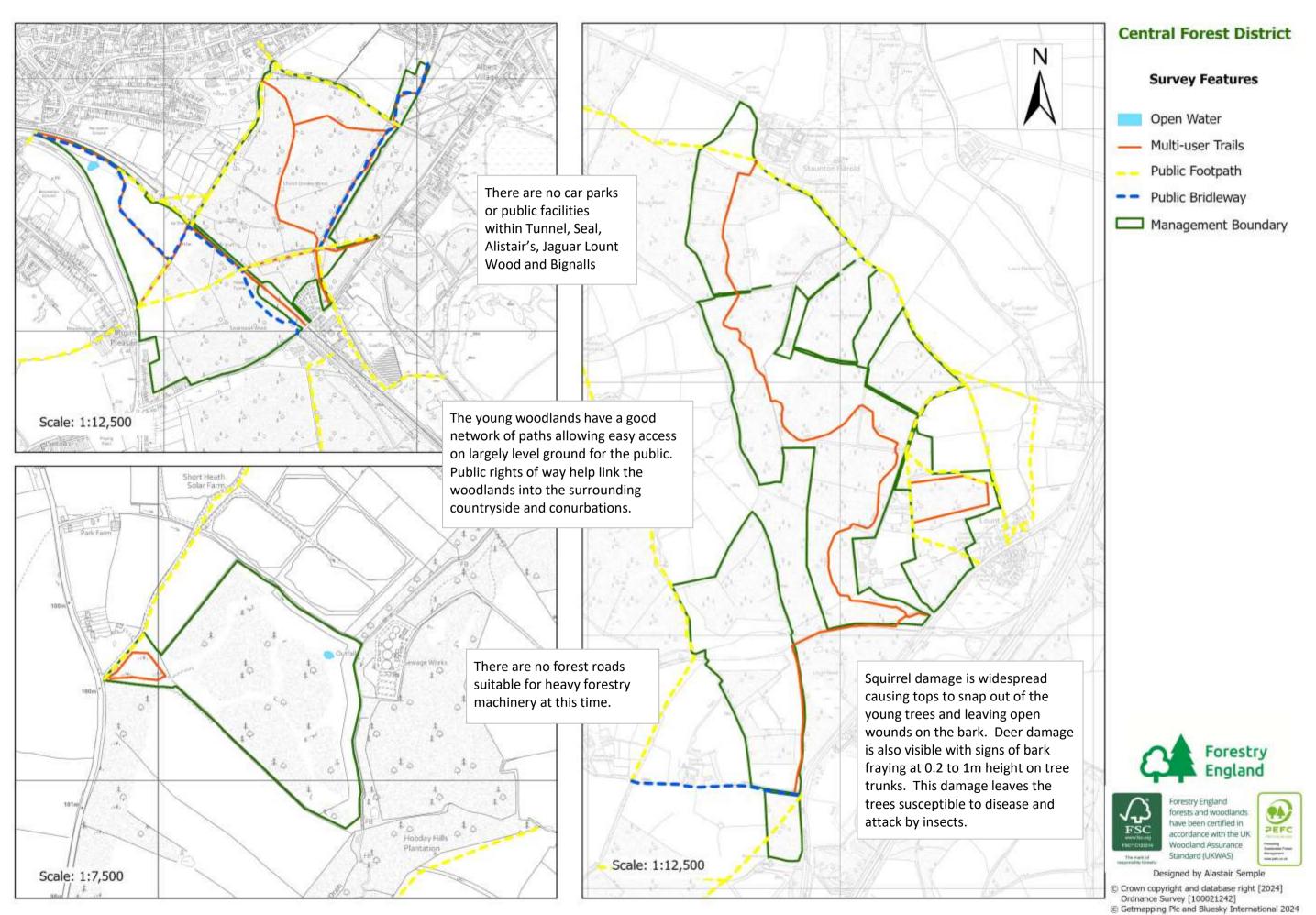
Forestry England forests and woodlands have been certified in accordance with the UK Woodland Assurance Standard (UKWAS)

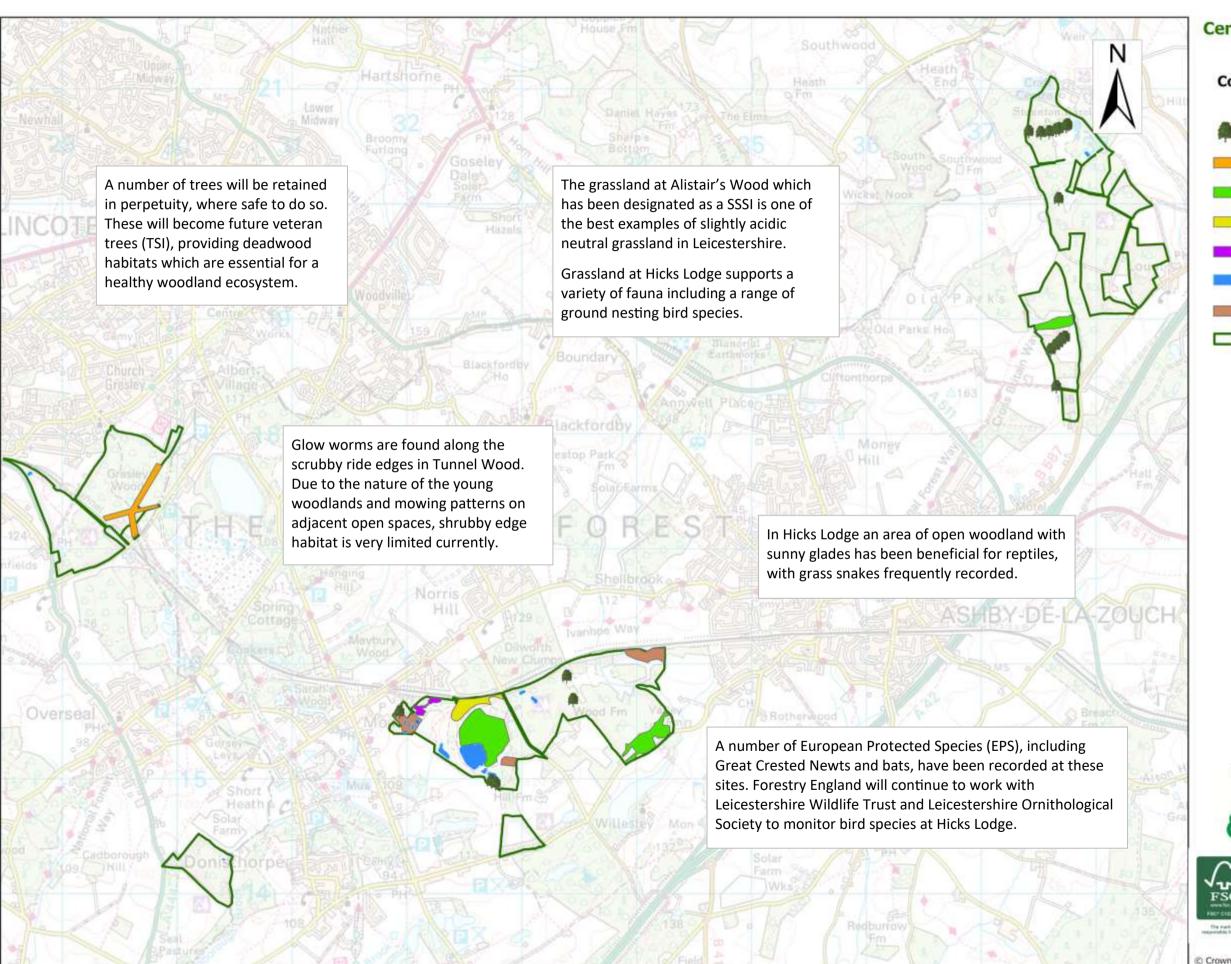


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# Central Forest District

#### **Conservation Features**

Trees of Special Interest

Glow worm habitat

Grassland

Reptile habitat

Heathland

Open Water

Mature Broadleaves

Management Boundary

Scale: 1:30,000





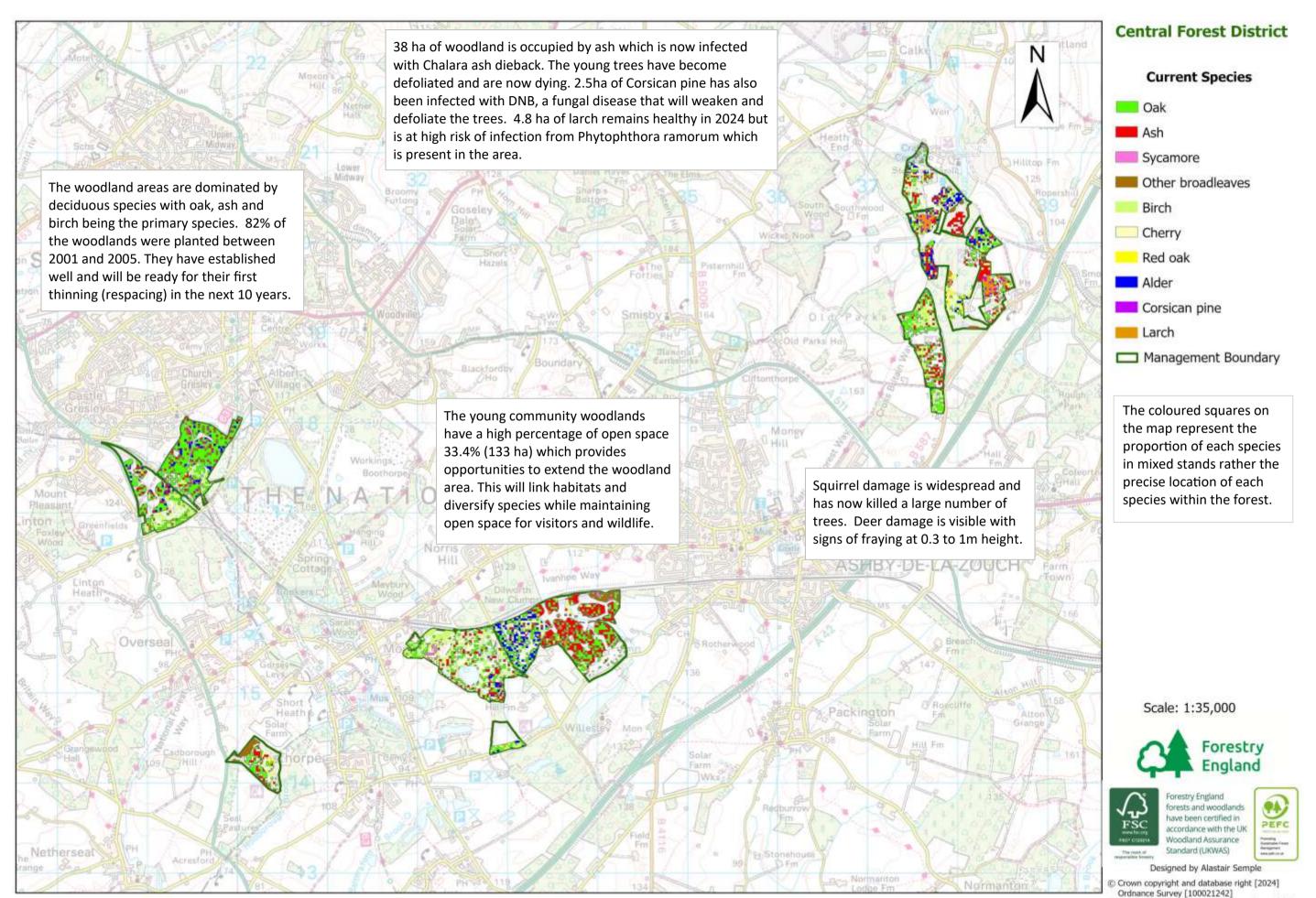
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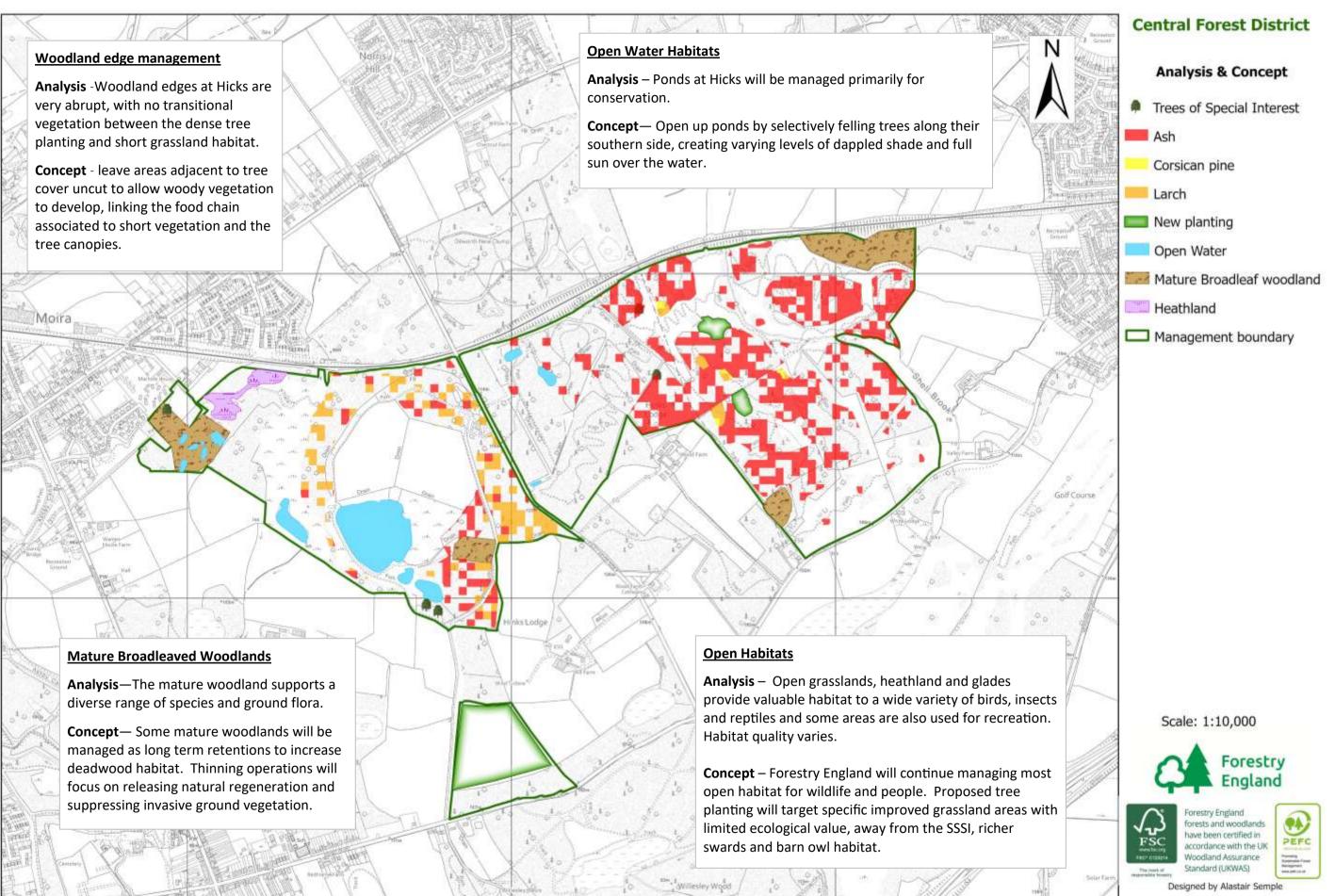
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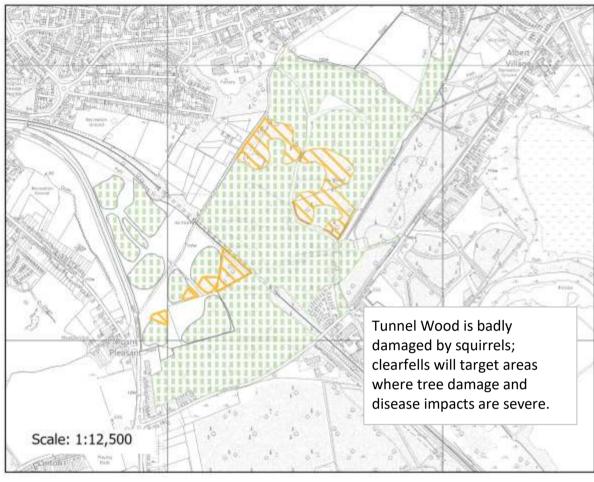


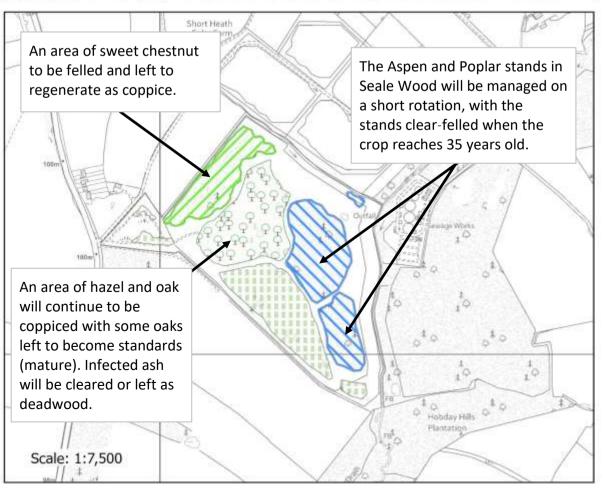


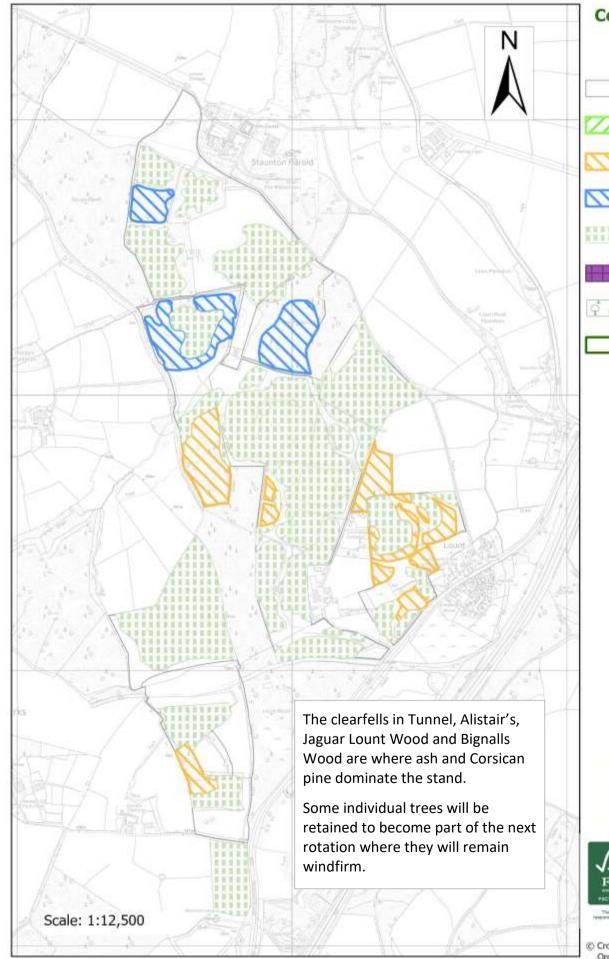














# **Forestry Operations**

Open habitats

2022-2026

2027-2031

2032-2036

Lower Impact Silvicultural Systems (LISS)

Long Term Retention

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Management Boundary



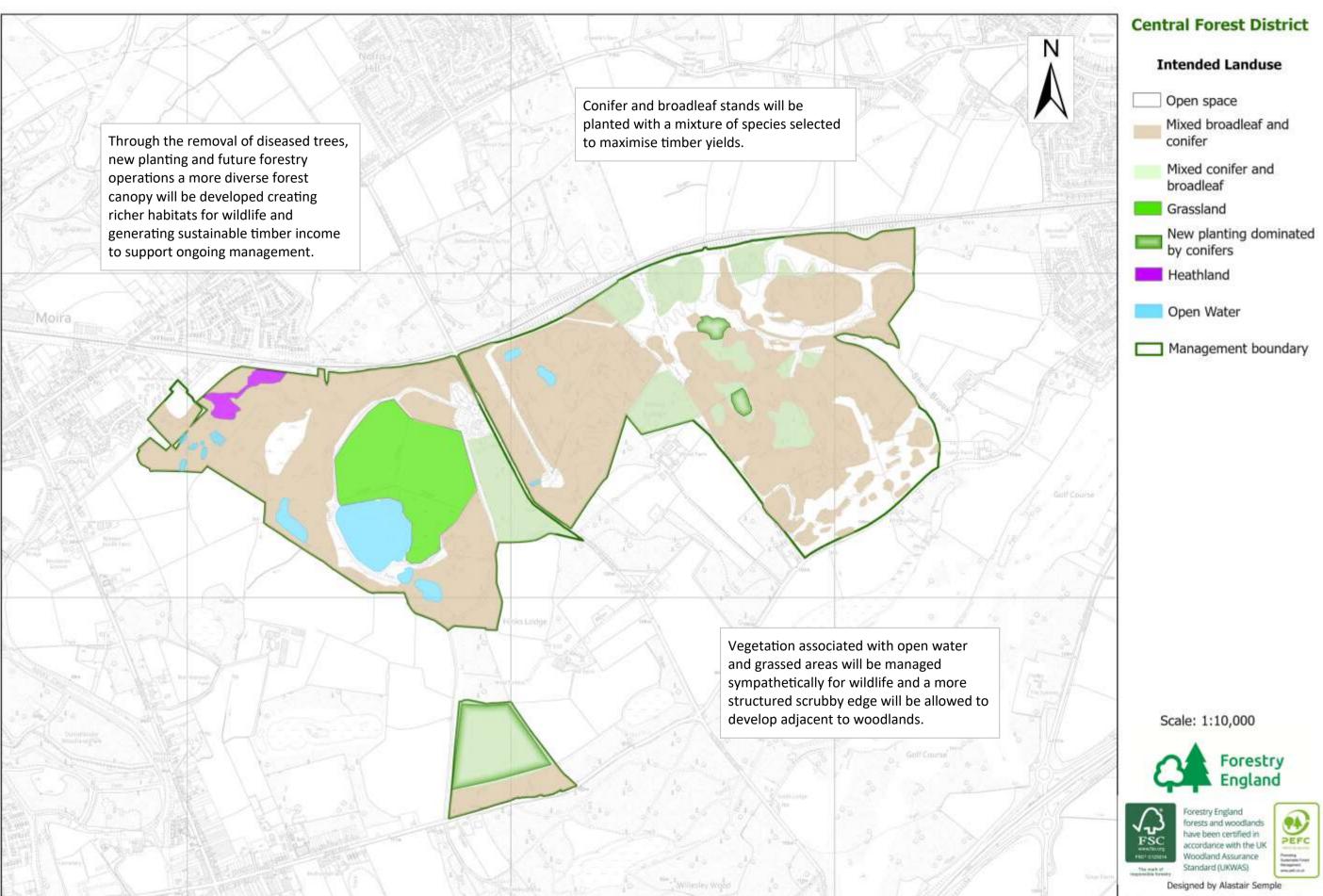


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