

# Giggle Alley Forest Plan 2025 – 2035

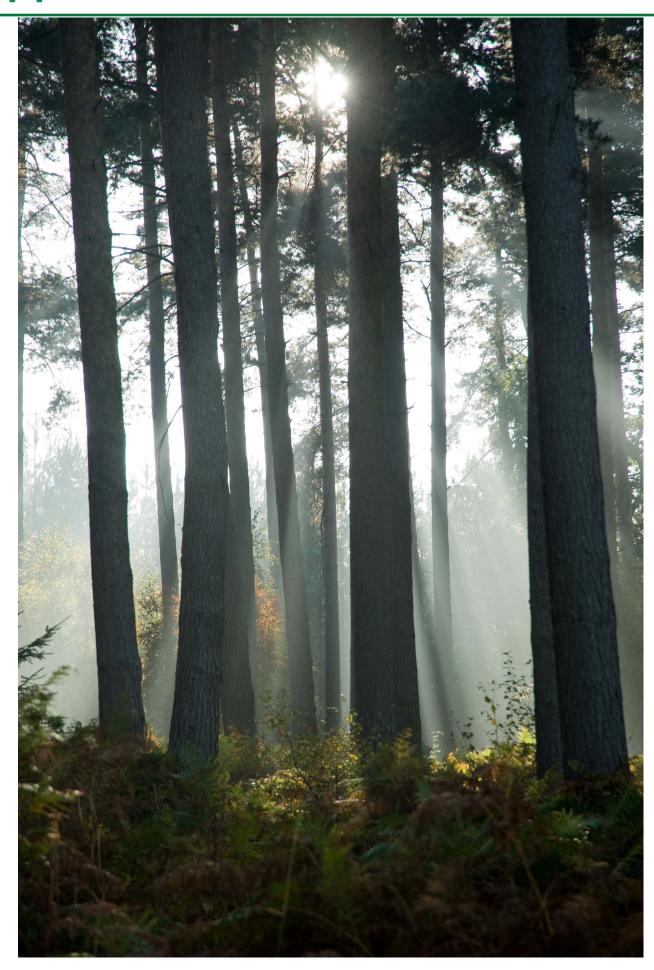


The mark of responsible forestry

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







#### Summary

Giggle Alley forest as it is today was acquired in 1961. It lies to the northern edge of the village of Eskdale Green, and is mostly used for recreation by the local occupants, who enjoy the presence of a Japanese Garden within the woodland.

Forestry England's management objectives for the forest are to balance the production of quality timber with maintaining and enhancing Giggle Alley's biodiversity, improving the resilience of the forest to climate change, conserving heritage features and facilitating recreation. In doing so Forestry England will continue to support local businesses and contractors involved in the forestry, recreation and leisure industries in which Giggle Alley, as part of the West Cumbria Beat, plays an important role.

The woodland is currently subject to a Statutory Plant Health Notice (SPHN), with a significant component of Larch and Rhododendron within the site. The SPHN is a legal notice issued following the identification of a plant health threat, in this occasion being *Phytophthora ramorum*, which has been identified upon larch trees present on the site. Therefore, control measures for the targeted removal of all larch within the site are to be enacted.

The woodlands contain many historic and cultural features associated with past land uses dating back centuries; these include a significant Japanese Garden, a former farmstead, and multiple quarry/ charcoal activities.

Giggle Alley forest today provides a wide variety of ecosystem services to the region through its timber production and the diverse range of habitats and recreational opportunities it supports while still retaining the feeling of a 'wild landscape'.





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#### 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 next ten years so we can seek approval from the statutory regulators.
- To evidence that our proposals are economically, environmentally and socially sustainable in accordance with the UK Woodland Assurance Standard\*, supporting FSC\* & PEFC\* 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 North 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 relevant standards and statutes lies with the Forestry Commission. If all criteria are met, full approval is given for management operations in the first ten years from the date the plan is approved and outline approval for the medium term vision (ten to fifty years).

Table 5 (page 11) sets out our management objectives for the plan area, how these relate to district and national policies, and how these will be monitored. A Forest Plan is a 'felling and restocking' plan and is written at a landscape scale. It 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 felling and restocking operations are undertaken, Operational Plans\* are written by the Beat Forester. 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. Planning for these elements follows a different management cycle and process.

The woodlands of the district are currently arranged in 58 management areas, and their management is covered by individual ten-year Forest Plans that identify local issues and the broad silvicultural management of the woods. Forest Plans are reviewed every five years.





## Planning and District Context

The Strategic Plan for the Nation's Forests outlines the delivery of forest policy at a national level. At a regional level there are six Forest Districts covering the country that directly oversee the implementation of policy actions in the nation's forests. North Forest District (NFD) is an extensive area encompassing 9 county or unitary authority areas from the Scottish border to Durham and Lancashire.



Our task is to realise the potential of each of the forests in our care for sustainable business opportunities, wildlife and nature conservation, and the enjoyment and well-being of local people and visitors. Each of our forests supports the economy through local jobs, sustainable timber production and the provision of recreation and tourism opportunities. All are funded by revenue from timber sales and recreation provision.

We use some technical words and phrases in the text because they best describe what we are doing. These are identified throughout the plan with an asterisk \* and their meaning is shown in a glossary.



# 2. Giggle Alley Plan

Previously sitting under a plan running from 2010-2020, extended into August 2024, Giggle Alley sits as a standalone block, within the West Cumberland Beat.

#### Plan Area identification

Forest District: North Forest District

Beat: Miterdale

Name: Giggle Alley Forest Plan Nearest Town: Eskdale Green

OS Grid Reference: NY140 002

Local Planning Authority: Westmorland and Furness Council

#### Introduction

Located to the south of Miterdale, on the western side of Cumbria, Giggle Alley covers 8.9 ha. It is owned freehold, acquired in 1961. It sits to the northern edge of the village of Eskdale Green and is mostly used for recreation from the local occupants, alongside the presence of a Japanese Garden within the woodland.

# 3.1 Current woodland composition

Total Area: 8.9 ha 100%Woodland: 8.82 ha 99%Open Space: 0.08ha 1%

LISS: 5.6 ha 63.3% (to be increased to 100% within plan timeframe)

Currently comprising of a mixture of broadleaf and conifer species, with a significant component of Larch species. There is a historic Japanese inspired garden within the site. The majority of the woodland was planted in 1965, though with an element of historic broadleaf present.

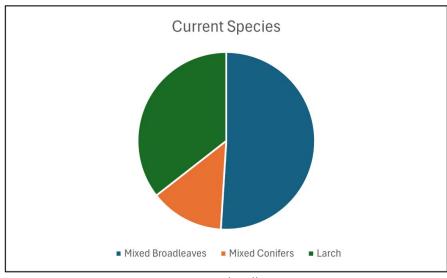


Figure 1- Giggle Alley Current Species

With 3.4 ha planted in 1890 (approximate age, as some of the woodland area has been dated to 1865), and the remaining 5.4 ha planted in 1965, there remains a clear divide in age classes present throughout the woodland. This will be remedied as part of the restocking schedule within this plan, helping to create a more resilient woodland through a variety of age classes.

With an average yield class across all species of 6, the majority of the conifer species are achieving yield class 12 and above, representing a high timber growing potential.

The wind hazard class of the site is 1, (very low) with a DAMS score of 12. This lends Giggle Alley to the potential for increased LISS in the future, as crops should be relatively windfirm.

## 3.2 Designations:

Giggle Alley (8.9 ha) lies within the National Character Area Profile 8 - Cumbria High Fells. The site lies within the Lake District National Park, 5.89 km from the western boundary. 1.14 km to the South East is Milkingstead Wood, the closest SSSI. This lies on the opposite side of the valley (The River Esk), so any proposed operations should have minimal impact. Milkingstead Wood is an ancient woodland site, with the main pressures being grazing/browsing, as identified by the site feature condition (Natural England website: Site feature condition (naturalengland.org.uk) ). The distance to the site, and the lack of aggressive seeding species, should present minimal risk.

Rigg Wood, the northernmost portion of the existing woodland, has been recorded as woodland from 1865 98. Kendal. (oldmapsonline.org), with the wider Giggle Alley being planted in the 20th century.

#### 3.3 Historic Environment

Whilst there are no designated sites within the woodland, there are a variety of sites of interest. These include the Japanese Gardens, historic boundary walls, charcoal burning platforms, a former bloomery (Charcoal fired furnace), an artisan quarry and the Porterthwaite farmstead. These represent a history of coppice working and primary industry, culminating in the creation of an amenity woodland in the early 20<sup>th</sup> century.

The Japanese Gardens lie centrally to the woodland, being established in 1913. Through a careful program of restoration, this is being brought back into a managed condition.

#### 3.4 Natural Environment

The habitats of Giggle Alley are mostly coniferous forest, with some broadleaf areas to the South East. Red squirrels have been recorded in the wood, and recorded within the wider environment.

An appraisal of the carrying capacity (measure of how large a potential population could be achieved) has been undertaken for Giggle Alley, estimating it to be between 2.4 and 4.6 individuals. Whilst this is not in of itself a sustainable population density, the plan will allow for the creation and maintenance of suitable habitat in the wider landscape achieved) has been undertaken for Giggle Alley, estimating it to be between 2.4 and 4.6 individuals.



Felling operations will follow the latest Red Squirrel guidance (Ops note 65) published at: Red squirrels and forestry operations in England - operations note 65 - GOV.UK

Table 1: EPS, BAP Species and Actions Supported by this Forest Plan				
Species	Objective	Actions supported by this Forest Plan		
Red Squirrel	Protection of Dreys, and provision of suitable habitat	Provision of small-seeded conifers, for habitat and feed source.		
Badger (Wildlife and Country- side Act 1981)	Protection of the setts during Operations, and management of woodland to allow for a suitable woodland habitat	Ops will follow Forest Practice Note 9, Badgers and Forest Operations		
Bat (All species) (WACA 1981, Conservation of Habitats and Species Regs, 2017)	Protection of potential roost trees.	Potential roost trees will be identified, and works planned in proximity to be undertaken with ecologist input		
Gaultheria shallon (invasive non -native plant)	Removal of Regeneration	Through a careful management of the Japanese garden, in con- junction with management of the wider woodland, a control over regeneration is to be managed.		

## 3.5 Communities and recreation

3.21 ha of the forest is dedicated as Open Access Land under the Countryside and Rights of Way Act 2000, though the woodland as a whole is open for access on foot. Sitting behind the village of Eskdale Green, it is used for informal recreation by local residents. Parking is not provided within the woodland, with a small (6-8 cars) layby in the village being the closest public parking.

### 3.6 Pests and diseases

The woodland is currently subject to a Statutory Plant Health Notice (SPHN), with a significant component of Larch and Rhododendron within the site. The SPHN is a notice issued following the identification of a plant health threat, in this occasion being *Phytophthora ramorum*. This pathogen has been identified upon larch trees present on the site, therefore control measures of a targeted removal of all larch within the site are to be enacted.

Rhododendron are also subject to the SPHN, being required to be removed. Only specimen rhododendron within the Japanese Garden (i.e. non-Ponticum varieties) will be retained. Due to the SPHN, Larch will be precluded from being an option to replant, with alternative conifers chosen to maintain woodland cover and a similar aesthetic.



All larch will be felled when within two tree lengths of a public path, or boundary, with any remaining larch being killed and left standing (utilising Eco-Plugs, to minimise environmental contamination). These will be removed via subsequent felling operations, spread over the life of the plan. However, as the overall action will result in the loss of larch cover across the site, it is still to be described as a clear-felling operation, within the lifespan of the plan.

Table 2: Proposed clear-felling operations as a response to the Statutory Plant Health Notice			
Item	Conifers (ha)	Broadleaves (ha)	Total area (ha)
Clear-felling	3.26	0.00	3.26

Additional felling will take place within the remaining woodland, as part of a transformation to a LISS management approach.

# 3.7 Access and roading

There is limited access to the woodland, with Smithybrow Lane having access to the corner of Eskdale Green, where a turning area/primary stacking area was created in 2023. The lane is not suitable for timber lorry usage, though can be utilized by a tractor/trailer to bring the timber to the nearby Miterdale forest for subsequent transport.

There is also a right for timber access over neighbouring fields (to the northwest), though this is restricted during wetter months due to ground conditions.



# 4. Review of Previous Plan Objectives

Table 3- Assessment of previous objectives		
Objective	Has objective been met?	Comments
Manage Giggle Alley for the benefit of the local community as a place of recreation and as part of a wider project to deliver local employment, tourism and sustainable tourism.	Yes	Managed for benefit of local community, footpaths kept open when storm damaged, i.e. by Storm Arwen, November 2021.
Continue to maintain the Japanese Garden and look for opportunities to sustainably expand this important feature.	Partially	New plan for Japanese Garden created- See Annex 1, Southern Green Japanese garden Feasibility Study
Manage the woodland through Continuous Cover (regular thinning) to encourage the woodland to regenerate naturally and develop large specimen trees for their amenity value.	No	Storm Arwen dictated interventions, windblow was treated as a natural thinning intervention. SPHN issuance has now negated any hope for a rotational thin of the woodland. Specimen trees to be retained where possible.
In the Japanese Garden investigate options to restore water to the ponds, control Gaultheria and Sasa Grass and continue shrub planting.	Yes	See Annex 1, Southern Green Japanese garden Feasibility Study.
Complete a thinning of the woodland including creating gaps in Stag Wood and opening up views from Castle Rock east of the Japanese Garden.	No	Storm Arwen dictated interventions.
Start a process of rhododendron control in Stag Wood	No	SPHN requires removal of Rhododendron concurrently with Larch. Specimen Rhododendrons within the Japanese Garden to be retained (non- <i>R.Ponticum</i> varieties).
Continue to involve the local community and work with the Parish Council to maximise befits to the local area	Yes	Well maintained relationship with Parish Council- Open to implications of SPHN.

# 5. Analysis and Concept

	Table 4- Analysis of opportunities and issues				
Factor	Opportunities	Issues			
Management type	SPHN provides firm direction for operations, dramatically speeding up pace of planned felling operations.	SPHN moves from gradual transition to forceful intervention - dramatic change.			
Biodiversity and heritage	Japanese Garden Restoration Plan (Annex 1) presents an opportunity to enhance the heritage feature of the woodland.	Existing heritage features present constraints for operations. Restocking following SPHN to include an element of small-seeded conifers, to provide a seed source.			
Access/ Roading	Internal footways allow for the movement of small (1-2m max) width machinery across much of the site.	Archaeological features preclude unrestricted movement across the site.			
	Turning/Primary stacking point created at top of access along Smithybrow Lane allows for greater access potential	Gateway entrance to Smithybrow lane presents an obstruction to timber access, being approximately 3m wide, with limited opportunity to expand.			
Pests and disease	A wider species selection post intervention should present a greater opportunity to withstand future pests and disease, helping provide a more resilient woodland.	SPHN forced a reaction to <i>P.ramorum</i> .			
Current species	The SPHN allows for the expansion of current species within the woodland, including the restocking with Oaks collected from trees present within the site, grown on in a nursery setting to provide suitable stock.	The removal of larch reflects the removal of a high proportion of the standing timber in the woodland.			
Future Species	Restocking following the SPHN will al- low for the introduction of a range of species, including a mixture of broad- leaf and conifer species.	stocking. Planting choice must not include larch,			
Landscape	The SPHN presents an opportunity to radically restructure the woodland, achieving a long term vision over a shorter timeframe than originally anticipated. It also presents an opportunity to maintain the deciduous conifer element in the landscape, if Dawn Red-wood/similar are utilised.	The largescale felling will present a significant landscape change, posing issues both with suitable species (i.e., the high percentage of Larch, a deciduous conifer), alongside a significant restructure in the age distribution of the woodland.			
Public access	The reduction in Rhododendron cover- age across the site will allow for in- creased public access across the site.	During harvesting operations, there is likely to be significant impact across the woodland. The use of signage, coupled with the phasing of operations to allow for access, will be a major component in managing public access in a safe and open fashion.			



## 6. Appraisal of Opportunities and Constraints

- The SPHN presents a significant opportunity to restructure the woodland, in line with previous plans, though over a much shorter timeframe.
- The freedom in restocking choices offered to the forester will allow for a resilient woodland, comprising of a mixture of broadleaf (native and upcoming) and conifer species. The majority of the species available in ecological site classification (ESC), have soil nutrient regime as their limiting factor, regardless of scenario. As such, the below list (Table 5) is purely an indication of what could be successful, and should not be viewed as a purely restrictive list.
- The Japanese Garden presents an opportunity to restore and enhance the woodland for future generations, allowing for biodiversity and heritage enhancement.
- Access remains a major operational constraint, coupled with a dispersed array of historic features and badger setts.

Table 3: Potential future species, various climate scenarios				
Scenario Broadleaf Cor		Conifer		
Baseline 1960-1990	Silver Birch. Rauli Beech, Alder sp., Shining Gum,. Cider Gum, Rowan.	Pine sp., Pacific Fir, Western Hemlock, Dawn Redwood		
Medium-High 2050	Silver Birch, Rauli Beech, Alder sp., Shining Gum, Cider Gum, Rowan.	Pine sp., Pacific Fir, Western Hemlock, Dawn Redwood.		
Medium-High 2080	Silver Birch, Italian Alder, Shining Gum, Rowan.	Pine sp., Pacific Fir		

#### 7. Forest Plan Outcomes

In the Giggle Alley plan we aim to achieve the following management objectives that are summarised below and in Table 5 (pages 10, 11):

#### 7.1 Economic

Giggle Alley provides minimal timber in comparison with the wider Miterdale Beat, though the SPHN works will provide a one-off timber yield of circa 400 m3. This will then be followed by a lull in production, as part of a transition towards a Low Impact Silvicultural System (LISS) approach, yielding 18-25m3/ha each thinning operation (every 5 years).

To help mitigate the impacts of climate change, pests and diseases on the future health of the forest, Forestry England has begun introducing a much wider variety of tree species. New timber markets have also been established to build economic resilience, including shorter rotation biomass production. Deer and rabbit populations are currently at a level that browsing damage is not preventing regeneration or planting stock becoming established. Populations will be monitored and active management carried out where necessary.

## 7.2 Restructuring and Landscape

Through careful restructuring and restocking following the SPHN works, an enhanced habitat for both biodiversity and resilience will be created. Small seeded conifers have been selected to restock with, to allow for a suitable feed source for red squirrels. The removal of invasive non-native species, and the creation of a diverse woodland structure, will offer a chance to create and maintain a woodland in a shorter timeframe than previously anticipated.

# **7.3 Future Species**

The future species indicated in figure 2 represents how the composition could be in 20 years' time, based on the restock proposals contained in this plan. It represents the shift towards a greater proportion of broadleaved species which will require a lower frequency of management inputs.

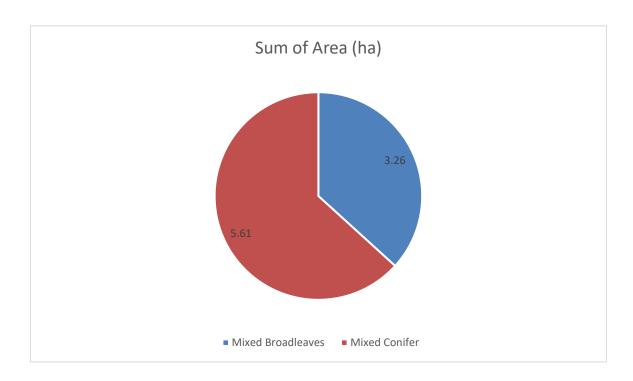


Figure 2- Indicative Future species composition in 2064

# 7.4 Longer Term Management Proposals

The proposals in this plan continue to build on the success of previous plans to support the management of Giggle Alley. It is acknowledged that the current plant health issues in the forest will have a short-term negative impact on the landscape. Future management will focus on the conversion of the forest to a LISS managed, majority native broadleaf and conifer mixed woodland.

Public access will continue to be a feature of the forest into the future, with CRoW access and the re- stored Japanese Garden allowing for quiet exploration and appreciation of the landscape. Visitor numbers to the Lake District National Park have increased over the previous plan period, and this trend is expected to continue. While Giggle Alley will always be an extremely quiet woodland owing to access, it is expected that less busy woodland areas in more remote settings such as Giggle Alley will becoming increasingly important to local communities seeking to escape from busier tourist centres.

Table 4 - UKWAS Compliance Table				
				Forest District Percentage
Total area	8.9	100 %	85,888	100 %
Total wooded area	8.82	99 %	58,069	67.61 %
Area of conservation value*	5.61	63 %	11,322	13.18 %
Long-term Retentions and Low Impact Silvi- cultural Systems	5.61	63 %	10,449	12.17 %
Open space	0.08	1 %	27,819	32.39 %
Natural Reserves	0	0 %	873	1.02 %



# 8. Monitoring Plan

The outcomes from this plan will be monitored (Table 5).

Table 5: Management Objectives and Monitoring Plan				
National Strategy	District Strategy	Forest Plan Objective	Monitoring	
Economy:  1) Maintain the land within our stewardship under UKWAS and UKFS certification,  2) Improve the economic resilience of our woods and forests,	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 clear felling as a result of disease control to accelerate	Continue to grow commercial broadleaves and conifer crops using a variety of species that will be more resilient to the impacts of climate change, pests and diseases to maximise yields. Ensure no one species dominates the forest in future rotations.	Record changes in the sub compartment data base (SCDB).	
3) Encourage and support business activity on and around the nation's forests.	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.	Use a variety of silvicultural systems based around the light requirements of the trees to be established.  Ensure stands are more structurally and species diverse through the use of varying silvicultural systems to link trophic levels both horizontally and vertically.  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 ecoservices.	Record the Silvicultural systems used in the GIS.  Review the landscape impact of proposed felling through 3D modelling and landscape perspectives. Monitor operations that have taken place at the 5 year review and 10 year forest plan renewal.  No monitoring required.	
1) Improve the resilience of the natural environment of the nation's forests under our Stewardship,  2) Realise the potential of the Nations Forests for nature and wildlife,  Maintain and improve the cultural and heritage value of the nation's forests.	<ol> <li>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.</li> <li>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</li> <li>Where possible, work with interested parties to explore ways to maintain or improve features of cultural or heritage value to the local community.</li> </ol>	Introduce a wide variety of deciduous and coniferous species that will be better suited to the impacts of climate change, pests and disease.  Operations will consider potential impacts on protected species and their associated habitats, including European Protected Species (EPS) and Schedule 1 birds. Where required, suitable mitigation will be implemented in line with relevant legislation, guidance and policy.  Implement the Japanese Garden Restoration Plan, subject to viability.	Restoration will be monitored at the 5 year and 10 year review of the species composition recorded in the SCDB.  Monitored as part of the operational planning process.  Monitored as part of the 10-year forest plan renewal.  Monitor as part of the 10-year forest plan renewal.	



Table 5 part 2: Management Objectives and Monitoring Plan				
National Strategy	District Strategy	Forest Plan Objective	Monitoring	
People:	Provide safe and accessible woodlands.     Offering opportunities for quiet recreation and	Promote Giggle Alley as a key amenity site for local residents.	No monitoring required.	
1) Encourage communities to become involved in the nation's forests, its management and direction,	adventurous activities, to enable people to experience the potential health and wellbeing benefits.	Conserve features of cultural significance including earthworks above ground features	Monitored as part of the operational planning process.	
Provide high quality woodland-based recreational opportunities for people and	3) Developing partnership with private businesses and public bodies to expand and improve recreational opportunities across	Continue to work with local businesses to provide a wide range of services and facilities on site.	No monitoring required.	
<ul><li>business,</li><li>3) Enable everyone, everywhere to connect with the nation's trees and forests so that</li></ul>	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.	Promote the Active Forests Programme aimed at creating a sporting habit for life for visitors through communication, partnership and engagement.	Monitored as part of Forestry England national active forests programme.	
they understand their importance and act positively to safeguard forests for the future.	<u> </u>	Diversify species composition and structure, and plan sympathetically designed and appropriately scaled interventions to improve and maintain the visual appearance of the forest.	Review at the 10-year forest plan renewal stage.	



# **Glossary**

#### **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.

#### 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.

#### Clear-fell 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 trees 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 outcompeting 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 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.

#### DAMS

Detailed aspect method scoring: a measure to assess growing potential, taking into account wind hazard classification and aspect (slope).

#### 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 (e.g.: weather, earth, sun, soil & climate).

#### **Ecosystem Services**

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

A 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 licensing 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.

#### Geographic Information System (GIS)

A computer system for capturing, storing, checking and displaying data related to positions on the Earth's surface. The internal system is ForesterWeb.

#### **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



#### 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. LISS are generally compatible with windfirm conifer woodlands and most broadleaved woodlands.

#### M3/m3

Growing timber is measured in metres cubed (m3), and is often displayed as m3/ha (the growing volume in metres cubed, per hectare). Felled timber is often referred to as a weight (tonnes) rather than a volume.

#### 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 Landscapes

There are 46 National Landscapes in the UK. These are places with national importance, protected for the nation's benefit, but cared for by local teams with a deep understanding of the distinctive web of interconnecting factors that make these places special.

#### 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 wildlife 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 a 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.

#### **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 (e.g.: 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 (e.g.: conservation in an ancient woodland or 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 lie in its

boundaries. SSSIs are protected under the Wildlife and Countryside Act 1981.

#### 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.

#### 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 a 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.

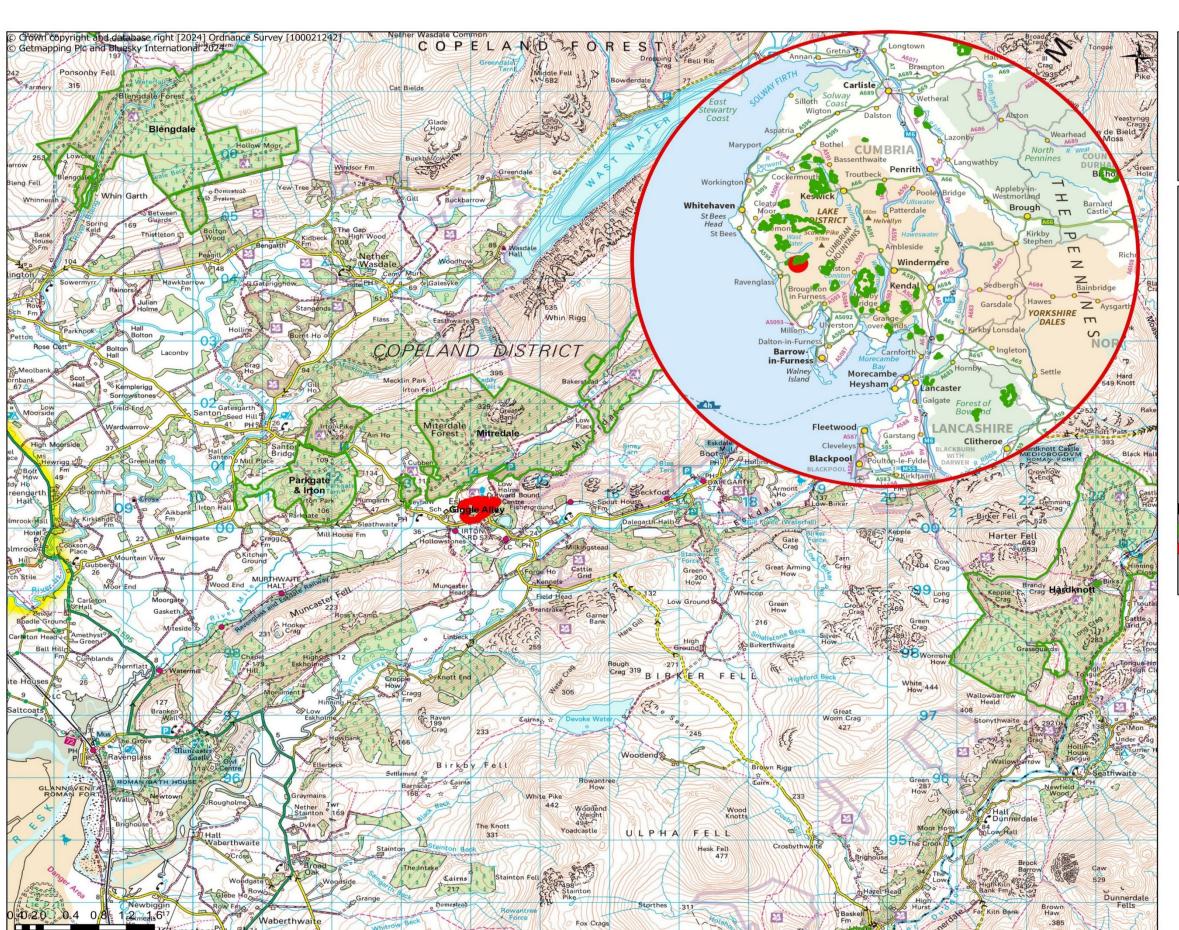
#### **Understorey Woodland Species**

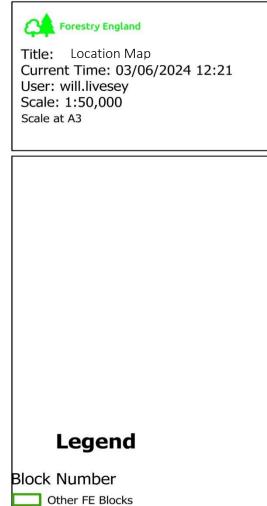
Minor tree species that live under top canopy trees or are 'pioneer' species that arrive in clearings before climax species become established. Once the overstorey is established, understorey species are more common on woodland edges and in clearings where light levels are higher.

#### **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.

Figure 3: Location Map

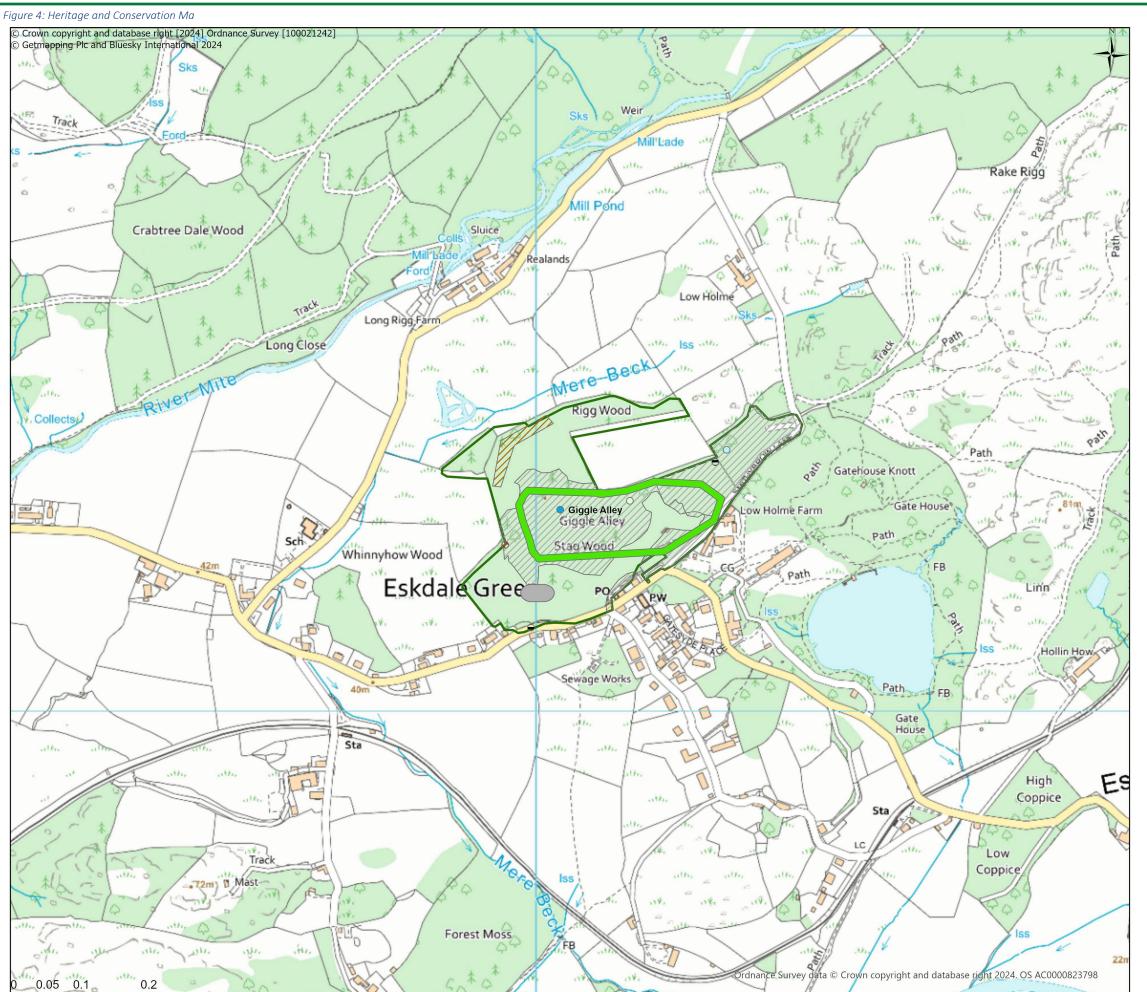


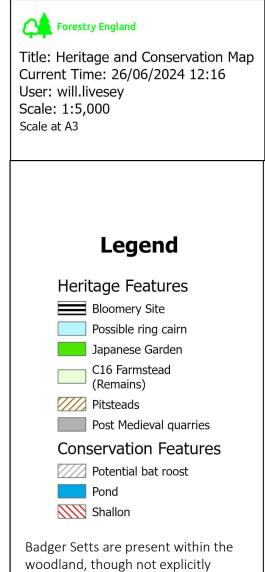




Giggle Alley



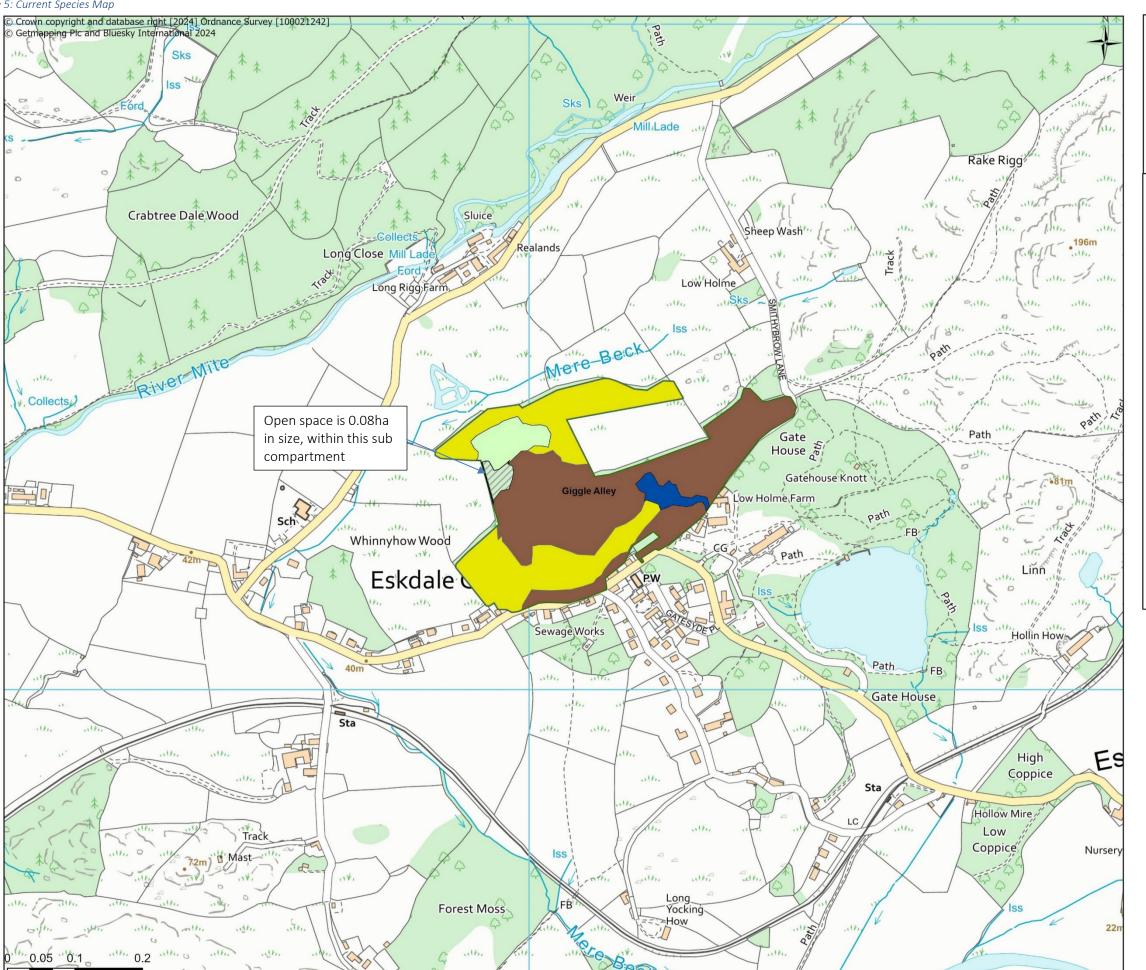






identified on this map

Figure 5: Current Species Map



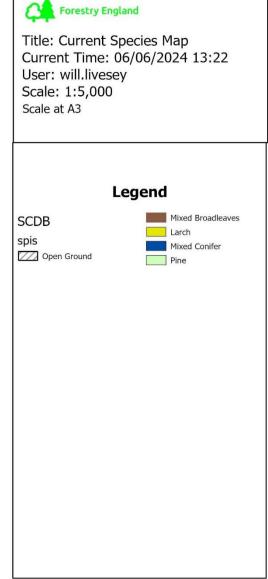
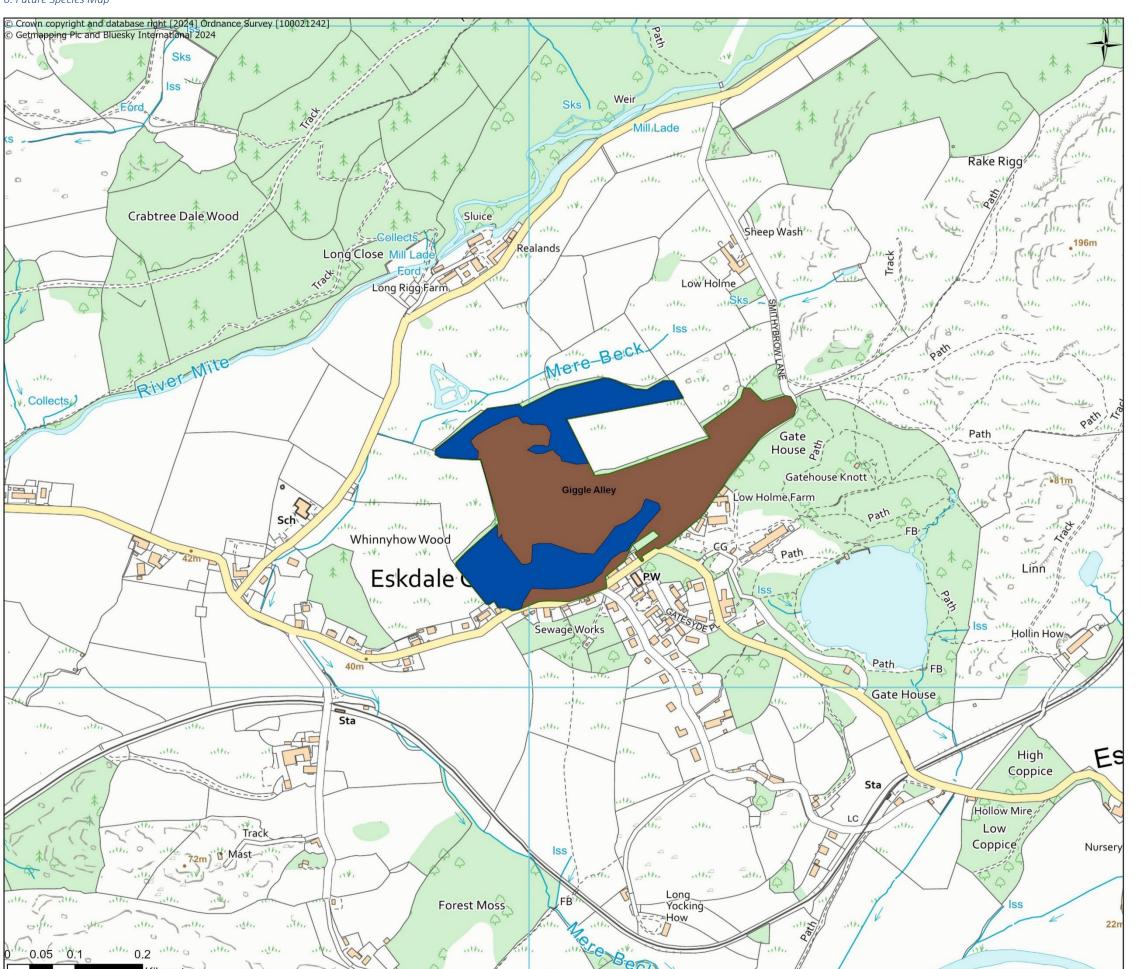






Figure 6: Future Species Map



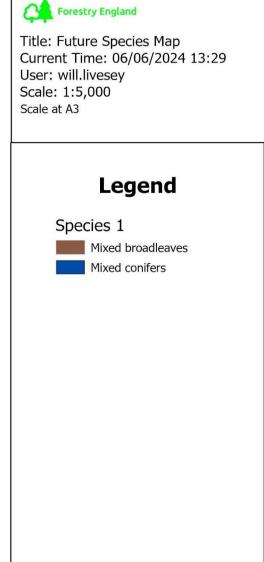
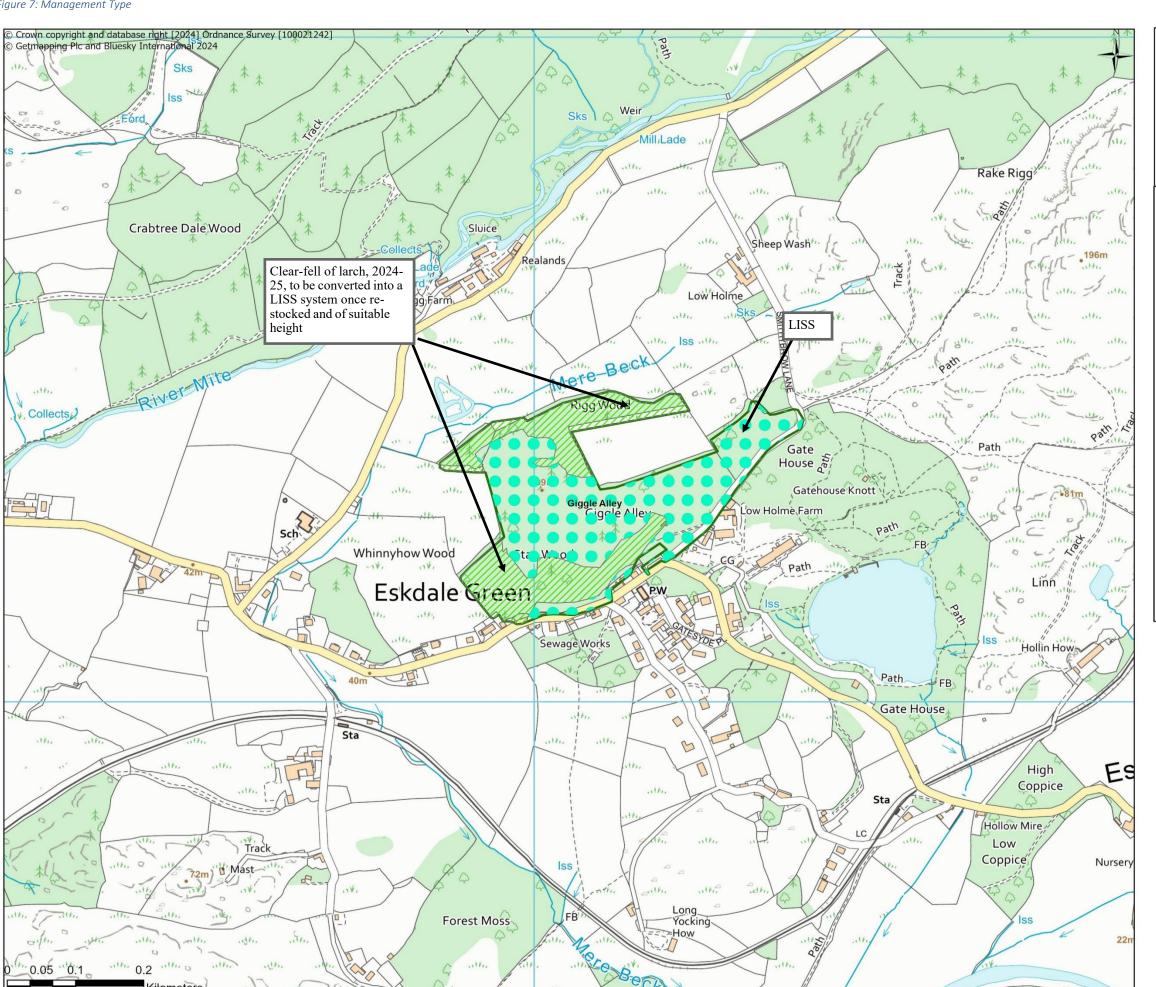


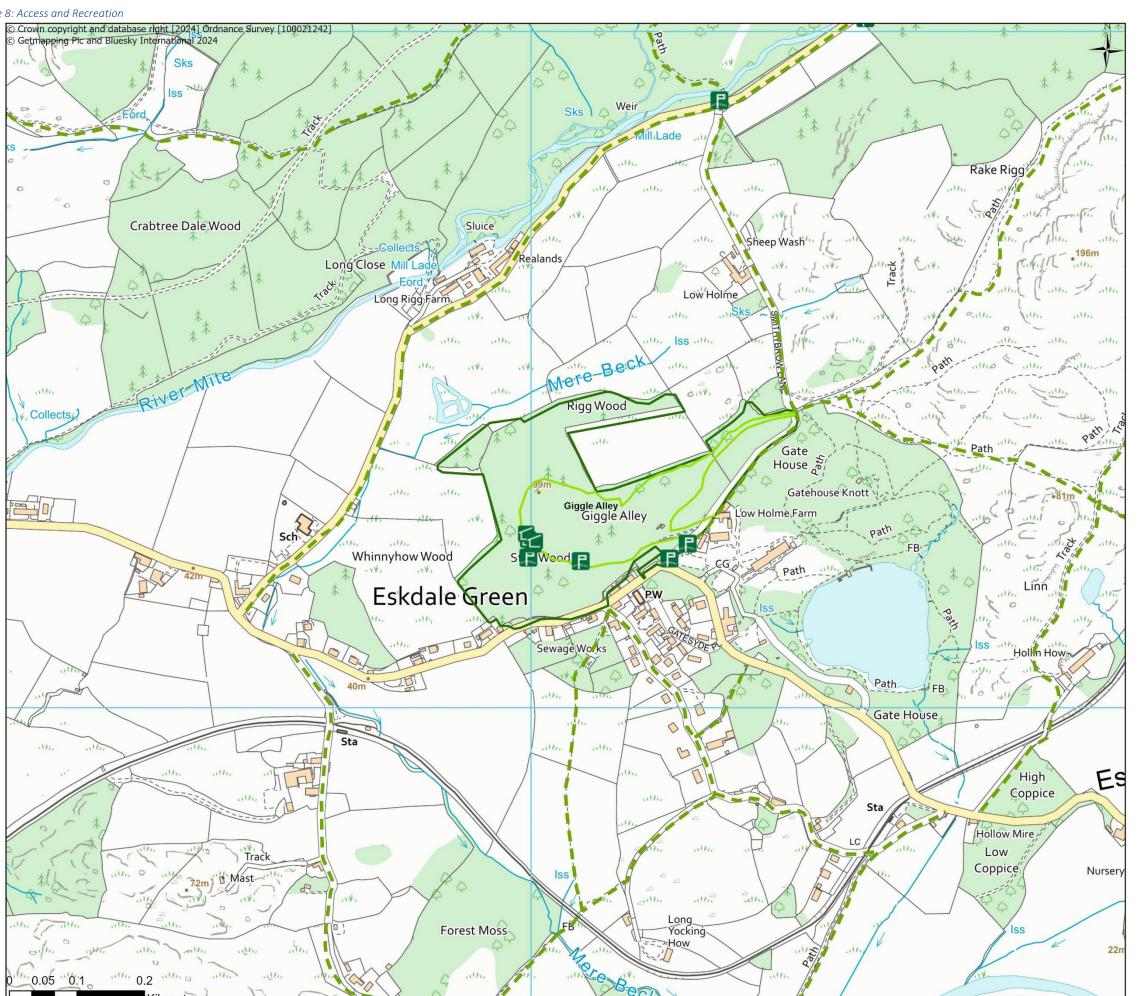


Figure 7: Management Type







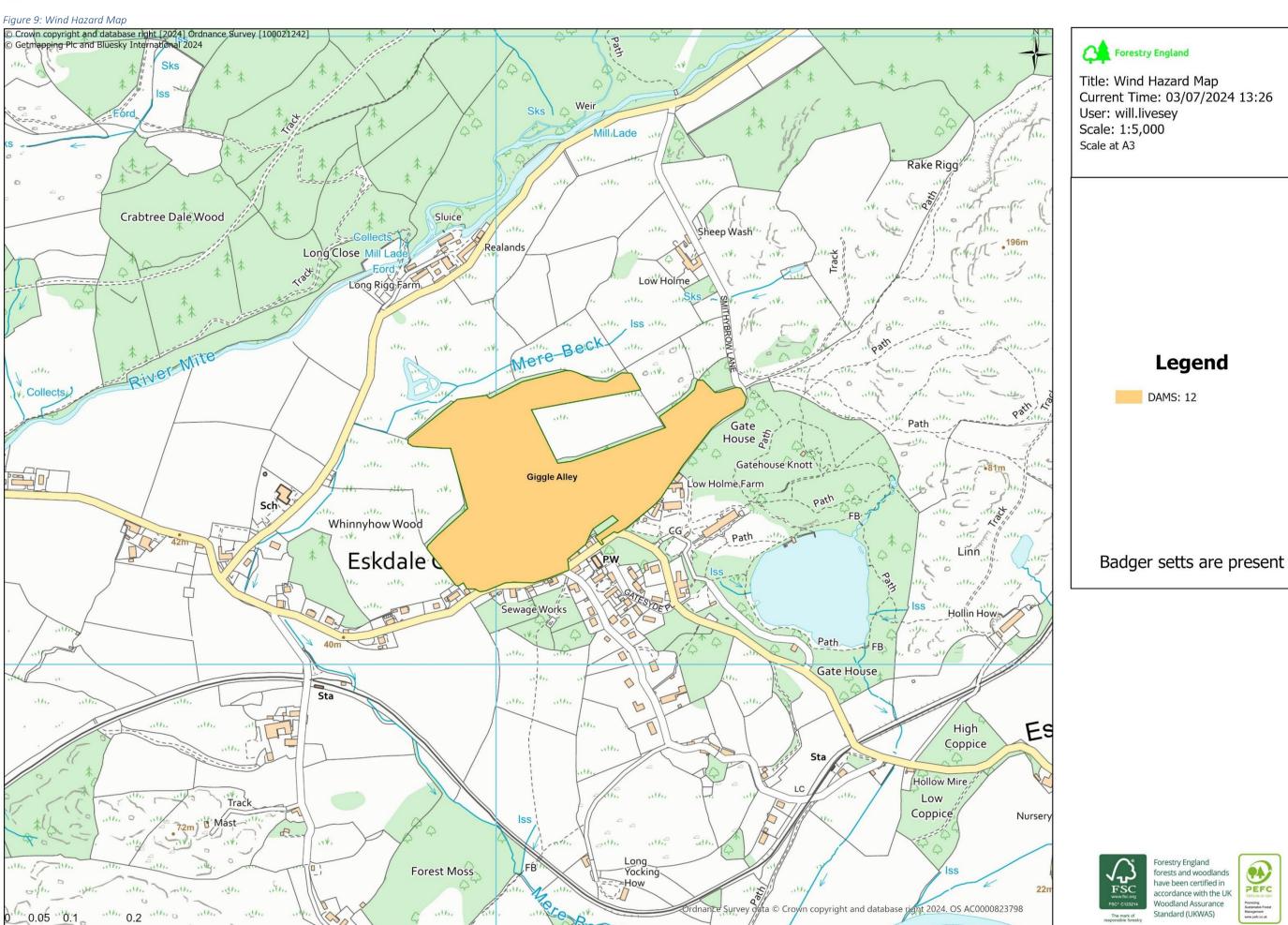








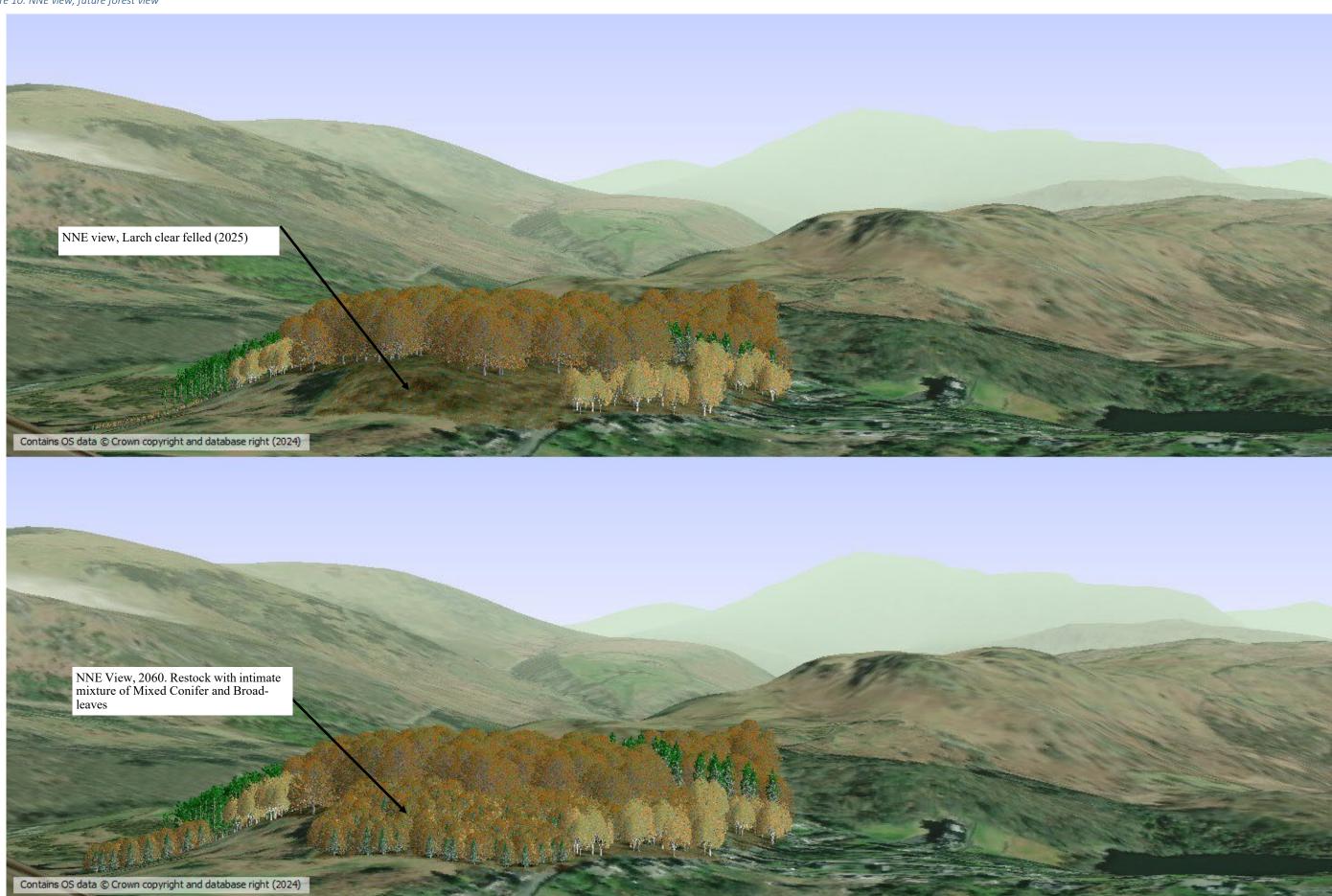




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# Giggle Alley Future Forest View Point.

Figure 10: NNE view, future forest view



# Giggle Alley Future Forest View Point.

