

# Kiln Wood

# Management Plan 2019-2024

# MANAGEMENT PLAN - CONTENTS PAGE

ITEM Page No.

Introduction

Plan review and updating

Woodland Management Approach

Summary

- 1.0 Site details
- 2.0 Site description
  - 2.1 Summary Description
  - 2.2 Extended Description
- 3.0 Public access information
  - 3.1 Getting there
  - 3.2 Access / Walks
- 4.0 Long term policy
- 5.0 Key Features
  - 5.1 Ancient Semi Natural Woodland
  - 5.2 Secondary Woodland
  - 5.3 Connecting People with woods & trees
- 6.0 Work Programme

Appendix 1: Compartment descriptions

Appendix 2: Harvesting operations (20 years)

Glossary

# **MAPS**

Access

**Conservation Features** 

Management

# THE WOODLAND TRUST

# **INTRODUCTION**

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

# PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.

Please either consult The Woodland Trust website <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a> or contact the Woodland Trust

(wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

# WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland. Our strategic aims are to:

- · Protect native woods, trees and their wildlife for the future
- · Work with others to create more native woodlands and places rich in trees
- · Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a>. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

- 1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
- 2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
- 3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
- 4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
- 5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
- 6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
- 7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
- 8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
- 9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

# **SUMMARY**

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site - their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

# 1.0 SITE DETAILS

Site name: Kiln Wood Location: Blackboys

**Grid reference:** TQ525202, OS 1:50,000 Sheet No. 199

Area: 13.37 hectares (33.04 acres)

**Designations:** Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty

# 2.0 SITE DESCRIPTION

# 2.1 Summary Description

A precious remnant of ancient woodland, newly planted native woodland, wide open rides and fabulous glimpses into the surrounding Wealden countryside. Ancient woodland species include bluebells, wood anemones and a wild service tree.

# 2.2 Extended Description

Kiln Wood is situated to the south of Blackboys, near Uckfield, on the southern edge of the East Sussex High Weald Area of Outstanding Natural Beauty (AONB). The site was acquired by the Woodland Trust in 4 sections between 1982 and 2004, bringing the total area to 13.37ha (33 acres). The core of the site is a small ancient semi-natural woodland (Kiln Wood, Compartment 2a) along with 4 phases of tree planting and a mature roadside shelterbelt along the main road and Hollow Lane (Compartment 1a).

The most recent area of planting (Cpt 3), known as Turnmill Wood, was acquired in May 2004 following a generous donation by a single donor. Approximately 3ha of this 4.59ha compartment was planted as new native woodland during the winter 2004/05, protected by a deer and rabbit proof fence. Other planted areas date from 1984 (western part of Cpt 2a), 1987 (Cpt 2b) and 1993 (Cpt 1b).

The majority of the site is either flat or gently sloping towards the two small streams which flow southwards and meet between the entrances on Hollow Lane. The soils consist of a heavy, acidic silt loam with clay intrusions, derived from the underlying Ashdown Beds, making the site very muddy in winter. Kiln Wood makes up part of the heavily wooded (27%) landscape of the High Weald, with its mix of small fields, hedges, shaws and ancient woodland, a landscape still largely medieval in origin.

In Kiln Wood itself the canopy is dominated by mature oak with an understory of old coppice and natural regeneration including sweet chestnut, sycamore, birch, holly and a rare wild service tree. The ground flora includes ancient woodland indicator species such as bluebell and wood anemone. Ash dieback (ADB) has been present on the site since at least 2012 and is affecting almost all ash trees on the site as well as those in the wider landscape.

The site is well used by local people and has a good network of paths and rides, which integrate well with the public rights of way network including the Vanguard Way, a long distance walk of 66 miles. There is a small lay-by on Hollow Lane next to the main entrance where 2-3 cars can be parked. The site is easily accessible on foot from Blackboys.

# 3.0 PUBLIC ACCESS INFORMATION

# 3.1 Getting there

# General location:

Kiln Wood is on the southern edge of the village of Blackboys, near Uckfield, East Sussex. The wood is opposite the Blackboys Inn on the B2191.

# General overview of paths & entrances:

There are 3 main entrances in to the wood. Opposite the pub is a squeeze gap on the public footpath. Off Hollow Lane, south of the village there are 2 squeeze gap entrances. The site is crossed by 2 public footpaths, one of which is part of the Vanguard Way. Within the site there are wide rides and smaller paths through the wooded and recently planted areas. None of the paths are surfaced and can be extremely muddy after wet weather. There are some gentle gradients. The planted area of Turnmill Wood can be accessed by 2 stiles in the deer fence.

# Parking:

There is no car park at the wood but 3 cars can be parked in the gate ways off Hollow Lane. There is also on-street parking in School Lane opposite the wood.

# Public Transport:

Nearest train station: Uckfield, approx 4 miles away.

Nearest bus stop: Blackboys Inn, adjacent to the site. There are regular services from Uckfield,

Heathfield and Lewes. Information obtained from Traveline website on 18/1/2007.

Further information on public transport can be obtained from Traveline:

www.travelinesoutheast.org.uk or tel: 0870 608 2 608).

#### Public Toilets:

Information can be obtained from Wealden District Council (www.wealden.go.uk).

#### Other information:

Leaflet: Blackboys Walks, ESCC Paths to Prosperity, Route 27.

Leaflet: Explore Blackboys and Waldron areas of Wealden beauty. Defra.

# 3.2 Access / Walks

# 4.0 LONG TERM POLICY

The ancient woodland areas of Kiln Wood have a good variety of trees, shrubs and ground flora that have largely been unmanaged for many years. These areas also currently exhibit good structural diversity which lends itself to a policy of minimal silvicultural intervention in the long term, allowing the processes of natural succession to take place. Dead and decaying wood, standing and fallen, will be retained wherever it is safe to do so, for its biodiversity value and to ensure compliance with the Woodland Trust's Forest Stewardship Council (FSC) certification and the UK Woodland Assurance Scheme (UKWAS).

Past management of the ride network by short-rotation coppicing has added to the structural diversity of the wood so will be continued in both the ancient semi-natural woodland and the plantations as they develop and mature. Ash is a minor component of the ancient woodland so dealing with the impacts of ash dieback will have minimal impact on the structural and species diversity of the woodland in the long term.

Likewise the planted areas will be shaped largely by natural processes rather than silvicultural management, with the ash component succumbing to disease and being replaced by natural regeneration of other species such as oak, alder, birch, sycamore, willow and blackthorn. The need for any future silvicultural intervention across the site will be assessed by undertaking a woodland condition assessment that will be part of the management plan review process at 5-yearly intervals (next due 2024.

Open areas within the plantations will be allowed to partially regenerate with species such as blackthorn and oak but regular ride management will ensure that an element of open habitat and scrub/coppice regrowth of up to 20% across the site will be maintained.

The site will be managed for low-key, informal public access with suitable infrastructure and signage. Opportunities for educational use of the site will continue to be available for third parties such as the local primary school. Visitor numbers are likely to increase over time as housing development in Blackboys and the surrounding areas increases.

# 5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

# 5.1 Ancient Semi Natural Woodland

# Description

Kiln Wood (Cpt 2a) is a typical, small ancient semi-natural woodland of the East Sussex High Weald, with oak standards of approximately 100 years of age and an understorey of neglected mixed coppice along with younger trees and coppice regrowth resulting from the clearance undertaken after the Great Storm of 1987. To the north-west of the main ride the storm damage was not cleared and the area still contains much windblown coppice. A historic woodbank encloses the whole wood.

Understorey species include sycamore, alder, sweet chestnut, ash, birch, hornbeam, holly, hazel and hawthorn with a single coppiced wild service tree. Ground flora includes typical ancient woodland indicator species such as extensive bluebells and wood anemones. There are significant amounts of standing and fallen deadwood, retained for its biodiversity value. A small shaded stream runs inside the north-west boundary with two smaller tributaries also flowing through the wood. The central ride has had a programme of management since at least 2000.

Ash in the form of overstood coppice is an occasional species but has been affected by ash dieback (Hymenoscyphus fraxineus) since at least 2012. Sweet chestnut is being affected by ink disease (Phytophthora spp).

# Significance

Kiln Wood is important locally as an attractive mixed ancient semi-natural woodland containing a wide range of native species. It is an integral part of the mosaic of small woods linked by ancient hedges and shaws (narrow strips of woodland) that is characteristic of the High Weald AONB . The core area of ancient woodland has been buffered by strategic planting of new woodland over recent decades.

Ancient woodland now accounts for only 2% of land-use in the UK, with 40% of England's ancient woodland being in the south-east. It is an irreplaceable habitat with a very high level of biodiversity accumulated over centuries.

# **Opportunities & Constraints**

Constraints: silvicultural management is limited by the small size of the wood, power lines difficult access and ground conditions.

# **Factors Causing Change**

Tree diseases: ink disease in sweet chestnut (medium impact); ash dieback (low impact).

Grey squirrel damage: bark stripping of young trees and coppice regrowth (high impact).

Rabbit damage: browsing of young trees (low impact).

Deer damage: browsing/bark stripping (low impact).

Human impacts: desire lines created beyond the ride network leading to trampling of ground flora (medium impact).

Climate change: increase in severity of storms, rainfall and summer drought (medium impact).

# Long term Objective (50 years+)

The wood will be allowed to develop largely by the processes of natural succession and should continue to have a range of appropriate broadleaved tree species, a varied structure and associated woodland-specialist ground flora. Maintaining structural diversity will require some intervention such as short-rotation coppicing of ride-side trees to ensure an element of temporary open space and scrub habitat is retained across the site. This will also benefit public access.

Ash and sweet chestnut that succumb to disease are likely to be succeeded by sycamore, birch and hornbeam natural regeneration, slowly altering the current species composition. Long-lived tree species such as oak will begin to develop veteran tree characteristics and all standing dead and decaying wood will be retained for its biodiversity value, where it is safe to do so.

The woodland should be free of invasive non-native species and natural regeneration should not be adversely impacted by browsing rabbits and deer.

# Short term management Objectives for the plan period (5 years)

To maintain the varied composition and structural diversity of the woodland. This will be achieved by minimum intervention in the majority of the ancient woodland area and by continuing with a ride management programme (see also Secondary Woodland KF). Ride management will also take into consideration the impacts of tree pests and diseases in line with the Woodland Trust's Ash Dieback Response Plan.

- Annual ash dieback (ADB) assessment (summer).
- During the 5-year plan period a total of approx 200m of the central ride will be re-coppiced to a width of up to 8m on either side.
- Annual Zone A (roadside) and Zone B (maintained rides and paths) tree safety inspections will be undertaken.
- Remedial tree safety works will be undertaken in response to inspections to maintain the site in a safe condition. In order to retain some mature ash affected by ADB, certain permissive paths may be diverted rather than felling all affected trees (see connecting people KF).
- A full woodland condition assessment in spring 2024 will monitor the impacts of tree diseases, deer, rabbits, squirrels and human impacts in order to inform the next management plan review.

# 5.2 Secondary Woodland

# Description

There are several areas of recent secondary woodland planted in 1985, 1987, 1993, with the most recent being Turnmill Wood (Cpt 3) which was planted in 2005. These plantations are now all well established and have closed canopy except where ash dieback has affected Turnmill Wood. Subcpts 2b and 3a extend and buffer the original ancient Kiln Wood. The 3.5ha area of plantation in Turnmill Wood (Cpt 3a) was protected by a deer and rabbit proof fence at the time of planting but as of 2019 it is no longer required due to successful establishment of the original planting and subsequent natural regeneration filling the gaps created by ash dieback.

The main species in all the planted areas is pedunculate oak along with ash, wild cherry, hornbeam, birch, field maple, hazel and hawthorn. Natural colonisation of additional tree species has occurred over the years with goat willow prevalent in Cpt 1b and blackthorn, oak and hazel appearing in Cpt 3

The planted ash in Cpt 3a first showed symptoms of dieback (caused by the fungus Hymenoscyphus fraxineus) in 2012 and a year later trees across the whole site were showing signs of dieback, with symptoms varying from early to advanced. A programme of felling the badly infected and dead trees began in 2018.

Ground flora within the plantations is dominated by grasses with typical flowering species of neutral grassland such as black knapweed, red clover and the occasional common spotted orchid found on the rides. Open ground in the form of rides and glades was built into the original planting designs with the higher, northern part of Cpt 3 deliberately left unplanted to maintain views. Subsequently some of this area has developed into an important scrub habitat, mostly of blackthorn suckering from adjoining hedges, which is an important habitat and food source for birds, small mammals and invertebrates.

# Significance

New native woodland planted adjacent to ASNW helps extend the core area of woodland and buffers the wood from the effects of agricultural practices, climate change and human activity. The various cohorts of planting also add structural diversity to the woodland as a whole.

# **Opportunities & Constraints**

Opportunities:-

To allow natural regeneration of trees and shrubs to supplement the planted species mix in the secondary woodland areas.

# **Factors Causing Change**

Tree diseases: ash dieback (medium impact).

Grey squirrel damage: bark stripping of young trees and coppice regrowth (high impact).

Rabbit damage: browsing of young trees (medium impact).

Deer damage: browsing/bark stripping (low impact).

Human impacts: high visitor and dog numbers impacting on soils and ground flora; disturbance to wildlife (medium impact).

Climate change: increase in severity of storms, rainfall and summer drought (medium impact).

# Long term Objective (50 years+)

To allow a mixed, native species woodland, of varied structure, to develop naturally, with losses due to tree disease replaced by natural regeneration of other broadleaved species. Additional structural diversity will be added by targeted management to ride edges as necessary. Within the secondary woodland areas there will continue to be some open habitat in the form of rides, wayleaves and glades. The need for any silvicultural intervention within the secondary woodland areas will be assessed via a woodland condition assessment that will be part of the management plan review process at 5-yearly intervals.

# Short term management Objectives for the plan period (5 years)

To monitor the development of the secondary woodland and undertake management as necessary to deal with the impacts of ash dieback and to create and maintain structural diversity.

- Annual ash dieback assessment in June/July will be undertaken to monitor the extent and severity of ADB and subsequent regeneration within any gaps created.
- Annual removal of dead and badly diseased ash, mainly in Cpt 3, so the rides remain safe and accessible.
- Undertake annual ride management (coppicing) on a total of approximately 600m of rides in Cpts 1b and 3a.
- Remove the deer/rabbit proof fencing that was originally installed to protect the planted trees in Cpt 3a (2020).
- Monitor the impacts of tree disease, rabbits, squirrels, deer and human activity every 5 years as part of the WT's woodland condition assessment (next due 2024).

# 5.3 Connecting People with woods & trees

# Description

Kiln Wood is situated next to the small village of Blackboys and close to the towns of Heathfield (4 miles) and Uckfield (4 miles). The site is heavily used by local dog walkers and some dog walkers from further afield as it offers open access land beyond the public footpath network. Children from Blackboys primary school also use the site for regular Forest School sessions.

The site is crossed by two public footpaths, one of which forms part of a long distance path, the Vanguard Way. There is an squeeze gap entrance opposite the Blackboys Inn, on the public footpath, which allows easy access to the residents of the village. Other internal paths and rides allow for circular walks within the woodland. Wide rides have been created within the two areas of planted woodland and underneath the powerlines. Footbridges, steps and culverts are provided to facilitate public access. Due to the soil type the site is often waterlogged and therefore difficult to negotiate throughout the winter months and during periods of heavy rainfall.

There is parking for 3 cars by the entrance on Hollow Lane. The site is designated WT access category B: regular usage, 5 - 15 people using one entrance per day.

# Significance

Kiln Wood is locally important to residents of Blackboys and the surrounding area for informal, quiet recreational activities, mainly dog walking and exercise, and as a facility for outdoor education, as the wood is located within easy walking distance of the local primary school. The woodland provides a welcome contrast to much of the surrounding privately-owned agricultural landscape.

# **Opportunities & Constraints**

Constraints: limited car parking available at main entrance; rides difficult to negotiate in wet weather.

# **Factors Causing Change**

An increase in housing within the locality will lead to more visitors and higher human impact on the site.

The increase in the number of local and commercial dog walkers over recent years is impacting on the site through erosion of paths and the amount of dog faeces deposited on the site, affecting visitors' enjoyment and the ecology of the wood.

# Long term Objective (50 years+)

The wood will have a maintained network of rides, paths and infrastructure, consistent with its Access Category B usage. Ride management will improve the visitor experience by creating a variety of internal views and will help alleviate wet ground conditions.

Self-led educational opportunities will be available on site in response to requests from local schools.

Visitor numbers should be in balance with the carrying capacity of the site and not should not adversely impact on the biodiversity of the woodland.

# Short term management Objectives for the plan period (5 years)

During this 5-year plan period, the short term objective is to continue to provide public access and educational opportunities at Kiln Wood which are safe and enjoyable. This will be achieved by the following:

- Upgrade of infrastructure and signage at the existing entrances on Hollow Lane and opposite the Blackboys Inn (2020).
- Biannual ride/path cutting (early and late summer).
- Annual tree safety surveys and remedial work: annual Zone A survey (alternating summer and autumn); annual Zone B survey due to ash dieback
- Annual infrastructure survey of site hazards including footbridges, culverts and steps.
- Ride diversions to re-route public access away from concentrations of mature ash suffering from advanced dieback. Approx 200m S edge of Cpt 3a, starting 2019.

# 6.0 WORK PROGRAMME

Year Type of Work Description Due By

# APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	0.40	Mixed broadlea ves	1930	High forest	Services &	People with	Area of Outstanding Natural Beauty

Roadside strip along Lewes Road and Hollow Lane. Includes mature (P1930) Scots pine, beech, Norway maple, horse chestnut, Douglas fir, Corsican pine, along with sycamore, ash and elder (natural regeneration). Ash dieback present since 2012.

1b	2.35	Oak	1993	High forest	Diseases,	Connecting	Area of
		(pedunc		_	Services &	People with	Outstanding
		ulate)			wayleaves	woods & trees	Natural Beauty

P1993 oak, wild cherry, ash, field maple, hawthorn and hazel. Bramble and broadleaved regeneration, particularly goat willow, throughout this subcompartment. Field maple shows signs of squirrel damage. Footpath present. 2 powerlines cross the subcpt.

1c	0.80	Oak (pedunc ulate)	1993	High forest	Gullies/Deep Valleys/Uneven/	People with	Area of Outstanding Natural Beauty
					Rocky ground, Services & wayleaves		

P93 oak, ash, cherry, hazel, hawthorn and field maple along the powerline. To the west along the stream is a narrow strip with ancient woodland characteristics which has oak and ash with an understorey of hazel, willow, sycamore, hornbeam and blackthorn. Ash dieback present since 2012.

2a	3.40	Oak	1900	Min-intervention	Diseases,	Connecting	Ancient Semi
		(pedunc				· •	Natural
		ulate)			habitats/species		Woodland, Area
					on or adjacent to		of Outstanding
					site, Services &		Natural Beauty
					wayleaves		

A majority of this sub compartment is ASNW comprising derelict coppice with oak standards. Mainly sycamore, alder & sweet chestnut coppice with oak standards. Also ash, birch, hornbeam, holly, hazel and hawthorn. Ground flora includes extensive bluebells and wood anemones. Following the 1987 storm there are large amounts of fallen and standing deadwood. A woodbank is visible around a majority of the compartment. The site slopes down from the ride which runs through the centre of the sub compartment towards the stream, which runs the length of the north-western boundary. A second seasonal water course joins it, from E to W along the southern boundary. Oak, ash and alder can be found along the stream where lords and ladies, red currant and wild garlic are present.

2b	1.20	Oak (pedunc ulate)	1987	High forest	Connecting People with woods & trees	Area of Outstanding Natural Beauty

This area was donated by Desmond Gunner. Planted in 1987 with oak, cherry, field maple, hornbeam and hazel with hawthorn and blackthorn in hedges along the woodland boundary. Oak and field maple have been severely damaged by grey squirrels. A ride runs through the middle of this sub compartment on the line of the public footpath.

3a	4.81	Oak	2005	High forest	Diseases	Connecting	Area of
		(pedunc				People with	Outstanding
		ulate)				woods & trees	Natural Beauty

Turnmill Wood: new native woodland (P2005). Site acquired May 2004. Funded by single donation from Mr Graham Ouwehand and named after old family business. Previously organic grassland (Arable Reversion under CSS since approx 1993). Planting designed to maintain views from the site and from neighbouring properties.

Approx 3ha were planted under EWGS/FWPS with the remainder managed as open ground/naturally regenerating scrub. The planting area is deer/rabbit fenced. The fence will be maintained until the threat of rabbit/deer damage is minimised.

Species as planted: pedunculate oak (35%); ash (15%); silver birch (10%); wild cherry (5%); hornbeam (5%); rowan (5%); hazel (5%); hawthorn (5%). Planting density: 2500 trees/ha. Total planted: 7,500 trees.

As of 2019 the ash is all severely affected by ash dieback with many trees dead and felled. Natural regeneration of ash, alder, oak and hazel occurring in gaps.

# Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2019	2a	Ride edge Coppice	0.10	100	10

# **GLOSSARY**

#### **Ancient Woodland**

Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

### Ancient Semi - Natural Woodland

Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

# **Ancient Woodland Site**

Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

# **Beating Up**

Replacing any newly planted trees that have died in the first few years after planting.

# **Broadleaf**

A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

# Canopy

The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

#### Clearfell

Felling of all trees within a defined area.

#### Compartment

Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

#### Conifer

A tree having needles, rather than broadleaves, and typically bearing cones.

# **Continuous Cover forestry**

A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

# Coppice

Trees which are cut back to ground levels at regular intervals (3-25 years).

# Exotic (non-native) Species

Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

# Field Layer

Layer of small, non-woody herbaceous plants such as bluebells.

# **Group Fell**

The felling of a small group of trees, often to promote natural regeneration or allow planting.

# **Long Term Retention**

Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

#### Minimum Intervention

Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

# Mixed Woodland

Woodland made up of broadleaved and coniferous trees.

#### National vegetation classification (NVC)

A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

# **Native Species**

Species that arrived in Britain without human assistance.

### **Natural Regeneration**

Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

# Origin & Provenance

The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

# Re-Stocking

Re-planting an area of woodland, after it has been felled.

# **Shrub Layer**

Formed by woody plants 1-10m tall.

#### Silviculture

The growing and care of trees in woodlands.

### Stand

Trees of one type or species, grouped together within a woodland.

# **Sub-Compartment**

Temporary management division of a compartment, which may change between management plan periods.

# **Thinning**

The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

# **Tubex or Grow or Tuley Tubes**

Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

# Weeding

The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established. Either by hand cutting or with carefully selected weed killers such as glyphosate.

#### Windblow/Windthrow

Trees or groups of trees blown over (usually uprooted) by strong winds and gales.