WOODLAND TRUST

Hoddesdon Park Wood

Management Plan 2015-2020

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 www.woodlandtrust.org.uk 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 www.woodlandtrust.org.uk. 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.
10. 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:	Hoddesdon Park Wood
Location:	Lord Street, Hoddesdon
Grid reference:	TL351085, OS 1:50,000 Sheet No. 166
Area:	61.95 hectares (153.08 acres)
Designations:	Ancient Semi Natural Woodland, Designated Watercourse, Green Belt, National Nature Reserve, Scheduled Ancient Monument, Site of Special Scientific Interest, Special Area of Conservation

2.0 SITE DESCRIPTION

2.1 Summary Description

A delightful wood with a decidedly majestic feel due to the grandeur of its mature oaks and beautiful hornbeam. Steeped in history the woodland sits next to the historic Roman road, Ermine Street and also hosts a medieval moated enclosure. Visit in summer and be greeted by the heady scent of honeysuckle which festoons many of the trees, a draw for white admiral butterflies.

2.2 Extended Description

Hoddesdon Park Wood is a superb 62ha Ancient Semi-Natural Woodland located a few miles south of Hertford. It is part of the Broxbourne Woods National Nature Reserve (NNR), one of the largest and most northerly expanses of sessile oak / hornbeam woodland in Europe. Its structure and comparative rarity has given it European importance and has been designated a Special Area of Conservation (SAC), qualifying as sub-Atlantic and medio-European oak or oak-hornbeam forest of the Carpinion betuli (Oak-hornbeam forest). The present oak and hornbeam standards were established from between 1850 and 1920 across much of the site, with compartment 3a having some mature hornbeam regeneration from around 1960. The woodland as a whole has a fairly well developed understory consisting of hornbeam coppice and natural regeneration with species such as hornbeam, holly and hazel found throughout the site, along with birch, ash, oak and occasional wild service tree towards the south-east of the site. Thinning operations were carried out in all

compartments between 2001 and 2004, removing oak and hornbeam which has allowed an increase of light down on to the woodland floor through what was a very dense, closed canopy.

The wood is usefully divided into four quarters by two main rides, one running north-south and the other east-west. The whole wood has an abundant array of mosses, ferns, honeysuckle and an impressive spring flora, especially wood anemones and later common cow-wheat. The site is also designated a Site of Special Scientific Interest (SSSI) due to its varied woodland structure, wide habitat diversity and a correspondingly rich flora.

Hoddesdon Park Wood sits as part of the wider Broxbourne Woods National Nature Reserve (NNR) and as such is surrounded by similar habitats in the wider landscape. When looking specifically at Hoddesdon Park Wood we can see privately owned planted ancient woodland directly to the east, along with a smaller area on the northern boundary. An area of ancient semi natural woodland managed by the Wildlife Trust can be found to the south-west and the southern and eastern boundary are predominately made up of arable fields. The southern boundary of the woodland is also defined by Spital Brook which meanders its way from west to east.

Glancing against the urban sprawl of London's northern suburbs, the Broxbourne Woods and immediate area has a surprisingly rural feel; heavily wooded and interspersed with varied agriculture covering the gently undulating Hertfordshire plateau. The site has a mild south-easterly aspect with soils predominantly characteristic of chalky boulder clay and London clay.

Public access is relatively high and there are several waymarked walks, including the Broxbourne Woods NNR Trail, connecting with local amenities. Management access is directly off Lord Street at the north of the wood. The woodland can also be accessed from Martin’s Green car park located off Cock Lane, Hoddesdon, via a short walk north following the old roman road, Ermin Street.

Hoddesdon Park Wood has a long and deep history. First mentioned in 1277, it was created by the Brassingburn family who owned much of Hoddesdon during the middle ages. In 1494 Thomas Brassingburn passed it on to William Say, his wife's brother before it became the property of the manor of Baas and remained in the property of the Cecil's who owned most of the woodland in the area. Much of the landscape however is older still, probably Roman or even pre-Roman and shares its western boundary with one of the great Roman Roads, Ermine Street. There is also an ancient moated site designated as a Scheduled Ancient Monument (SAM) by English Heritage, dating back to around the 13th century, along with a number of historic parallel ditch lines running west from the moat into the neighbouring Wildlife Trust Danemead reserve.
There are some surprisingly complete historical records available for Hoddesdon Park Wood. We know for instance that in 1595 a lease was offered which prescribed the rotational felling of the woodland. The 'Underwood' was to be coppiced every ten years with sixteen of the best and fairest trees or saplings being maintained on every acre. This coppice-with-standards system was practiced for many centuries with the underwood being offered to local villagers and the standard trees being used by the estate or sold to city timber merchants. There is evidence that local people would not only cut wood from their areas but also turn out their cattle to graze. Some of the retaining wood banks are still evident today and recent research suggests that some of these wood banks, especially those aligned N-S or E-W may well date back to the late Iron Age. The cutting rotations became more sporadic during the agricultural recession of the 1880's and had almost disappeared by the 1920's.

In general tree health is good, however Acute Oak Decline has been identify within the woodland, predominantly towards the south-eastern area of the site. Acute Oak Decline mainly affects native oak trees, causing decay and loss of vitality, leading to some trees dying 4-6 years after the onset of symptoms. While the disease is still present and affecting numerous trees, in recent years, the spread of infected trees seems to have halted, with many wounds beginning to callous over.

Key features for the site include Historic Features, Ancient Semi Natural Woodland and Informal Public Access as briefly outlined above and further information for which can be found in section 5.0: Key Features.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Hoddesdonpark Wood makes up a significant part of the Broxbourne Woods NNR. Lying a few miles west of Hoddesdon the area is generally characterised by small country villages. There are numerous access points to the wood, primarily from the north directly off Lord Street or from the south via Ermine Street bridleway. A public footpath cuts diagonally across the site with kissing gate entrances into the wood directly off the highway. The site is gently undulating with some steps and footbridges and a substantial network of paths and a waymarked trail are found within the wood. Ground conditions are normally good but can be seasonally wet and muddy in places.

Nearest car park: Ermine Street Goose Green, on the corner of Lord Street and Elbow Lane, 50m away over the road from the NW corner of the wood.

Nearest toilet: Approximately 2 miles away at Sainsbury's supermarket - Brewery Road, Hoddesdon. Baby changing facilities and disabled toilet in main block. Open Mon-Fri 7am - 10pm, Sun 10am - 4pm, as checked March 2015.

Nearest railway station: Hoddesdon (Broxbourne Rail Station), off Station Road - 3 miles away along busy country / town roads.

Nearest bus stop: 1 Hayllar Court, Lord Street, Hoddesdon,- 1 ½ miles east along busy country / town road generally without pavement.
Information checked March 2015.

Further information about public transport is available from www.nationalrail.co.uk or www.traveline.org.uk or phone 0870 608 2 608.

3.2 Access / Walks

4.0 LONG TERM POLICY

In 5o years' time, Hoddesden Park will be more species and structurally diverse making it more resilient and robust in the face of threats such as climate change, pollution, pests and diseases. High forest areas will be diverse with a mixture of native species and varying ages and structures with a well-developed shrub and field layer. Much of the high forest is currently even-aged with low species diversity resulting in a low level of resilience. Phased intervention is therefore required to improve the condition of these areas through selective group felling coupes allowing more light to penetrate the woodland floor encouraging greater species diversity and quantity of native broadleaved regeneration.
As deer are present in the area and browsing pressure at significant levels, silvicultural intervention will only be undertaken once adequate deer control methods are in place across the woodland and will continue to be monitored to ensure acceptable levels of regeneration are secured.

Aging oak scattered throughout the site will be left to senescence resulting in a large number of veteran trees. Standing and lying deadwood will be retained throughout the wood where safe to do so. Graded edge zones with scalloped ride edges to create wide open areas bursting with light, encouraging a wider range of plant and insect species more associated with such early successional habitats will also be created adding further to woodland biodiversity.

The ancient moated site will remain clear of vegetation and in a state of good repair, providing an excellent visual reminder of the wood's character and historical links. An interpretation feature will be maintained next to the moated site, providing detailed information for visitors on the history of the site.

The Trust's corporate objective of increasing people's awareness and enjoyment of woodland is furthered by the maintenance of the path infrastructure and entrances across the site.

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 Historic Features

Description

An ancient moated site designated by English Heritage as a Scheduled Ancient Monument (SAM). A rectangular enclosure measuring some 60m by 55m with a partially water-filled moat up to 10m wide and 3m deep. Dating back to the 13th century it is the likely location of the medieval park keeper's lodge. Mature oak now grow on the platform but the site remains clearly visible.

Significance

Feature is recognised by English Heritage and is under a legal management agreement with them. Earthworks and stubs reflect past management, helping to form a picture of previous management activities. It forms an integral part of the wood's history as well as providing an attractive and interesting addition to the area.

Opportunities & Constraints

Constraints:
Interference by tree roots / branches and windblow of existing trees.
No vehicular access to site.

Opportunities:
Continue and expand programme of regular coppicing on moat platform and outer banks to prevent trees reaching maturity and thereby reducing the risk of windthrow.
Maintain interpretation board to provide visitors with information about the moat.

Factors Causing Change

Regenerating Woodland, Wind-blow of existing trees on structure.

Long term Objective (50 years+)

Vegetation on the ancient moated site to be maintained allowing clear view of the structure and prevent further encroachment of woody vegetation. Moat platform and outer banks to be clear of coppice regrowth so the form and size of the moat can be clearly identified.

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

Operational objective:

All vegetation on the platform of the moated site to be strimmed once per year, only retaining mature oak trees. Moat area to be strimmed and coppiced once per year ensuring boundary and ditches are clearly visible by cutting all vegetation..

Work programme:
Annual communication and site visits with English Heritage over management works.
Annually cut vegetation and coppice regrowth from platform and outer banks to retain appearance of the site only retaining mature oak trees.

5.2 Ancient Semi Natural Woodland

Description

Superb, rare sessile oak / hornbeam ASNW, which is predominantly a central European habitat type. Classed as Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli, Hoddesdon is part of the larger Broxbourne Woods NNR, also designated SSSI and SAC. It falls outside the typical ancient woodland National Vegetation Classifications. Hoddesdon has stands of almost pure hornbeam Carpinus betulus (former coppice), with sessile oak Quercus petraea standards. Bluebells (Hyacinthoides non-scripta) are rare, but elsewhere there are stands of great wood-rush Luzula sylvatica with carpets of mosses, some more typical of continental Europe such as Dicranum montanum and D. tauricum. However, the magnificent spring display of wood anemonies (Anemone nemorosa) is the real crowd pleaser. Locally rare common cow-wheat can also be seen in a number of areas across the site.

Significance

ASNW's have been in existence for many hundreds of years and unfortunately are a declining resource. As well as being a traditional feature in the landscape they support an abundance of plants, mammals, birds, insects and fungi. It is one of the Trust's main objectives to ensure no further loss of ASNW. They take centuries to evolve and are irreplaceable. The unique woodland habitat has resulted in Hoddesdon Park (as part of the Broxbourne Woods NNR) being designated a SSSI and SAC.

Opportunities & Constraints

Constraints:
Browsing of young natural regeneration by deer.
Abuse of site by motocross bikes and potential damage to woodland ground flora.
Further spread of Acute Oak Decline across the site.

Opportunities:
Manage deer population to reduce levels of damage.
Create diversity in stand structure and species diversity through regeneration felling and under-planting of native mixed broadleaves.

Factors Causing Change

Deer Damage
Increase spread of Acute Oak Decline
Other pathogens and tree diseases
Climate change, pollution impacts

Long term Objective (50 years+)

A robust and resilient mixed broadleaf woodland with a diverse range of native species such as hornbeam, oak, birch, cherry hazel and wild service tree. A wood with a diverse age range and structure, a healthy understorey and plentiful natural regeneration. Healthy ground flora and ancient woodland characteristics evident throughout the wood.

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

Operational objective:

A structurally and species diverse oak / hornbeam native woodland with a developing understory of diverse native broadleaf species and regeneration throughout the wood. Continue to provide conditions suitable for the regeneration of native broadleaf species including Sessile oak, through adaptation of light levels at the woodland floor being sufficient to promote tree regeneration, with an appropriate number of hornbeam coppice stools actively rejuvenating. A well-managed deer population across the site and wider landscape area through close partnership working with adjacent land owners.

Work programme:

Vegetation and coppice regrowth on ride edges will be cut in varied scallops of up to 15m deep and approx 100m per year along the east-west ride to provide habitat for invertebrates and maintain a varied open feel along the main paths. Coppice stools are to be protected from browsing by using cut brash to cover the stools and regrowth to be monitored annually through woodland condition and key feature observations.
Ensure deer management on the site is adequate through annual deer impact assessments and investigate working with partners on a wider landscape scale to ensure deer management has a joint approach between adjacent landowners.
Installation of deer exclusion plots within each compartment to assess success level of deer management.
To encourage more species and structural diversity in the woodland through selective group fell hectare plots, favouring good form in canopy structure for seed production. Carry out 4 hectare plots every plan period (5 yrs), after the initial plan period (2015-2019) where work will start with 2 plots from 2018/19. Remove up to 50% of the canopy and coppice any understory retaining regeneration that will make future standards. Under plant with species such as oak, lime, cherry, wild service, and hazel (seek advice from Natural England). This thinning work will be programmed to start from 2018/2019, but will be dependent upon the level of success achieved through deer management, shown via annual deer impact assessments.

5.3 Informal Public Access

Description

As part of the larger Broxbourne NNR the wood is well used for quiet and informal recreation, primarily by locals, visitors from Hoddesdon and those enjoying a walk after a visit to the adjacent public house. There are several access points around the perimeter leading into a vast network of paths. Several waymarked walks meander through all parts of the wood.

Significance

Hoddesdon Park's size and location make it a natural attraction for the local population who can enjoy and appreciate the varied woodland and its associated habitats.

Informal Public Access raises people's awareness and enjoyment of woodland, fulfilling one of the Trust's four corporate objectives.

Opportunities & Constraints

Constraints:
A recent trend of motocrossing in the wood threatens to detract from the public's enjoyment as well as threatening woodland flora.

Opportunities:
Maintain existing information boards, entrance signs, waymarked walks and links with all aspects of the NNR.
Potential to increase partnership working with other organisation within the Broxbourne Complex to promote the NNR.

Factors Causing Change

Increased motorbike use within the woodland.

Long term Objective (50 years+)

The whole wood will remain open to the public for quiet informal recreation predominantly by locals from the surrounding villages and Hoddesdon. The waymarked walks and recreational links with the Broxbourne NNR will be maintained and the information boards and leaflets will be retained / enhanced in line with public use and demand.

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

Operational objective:

Easily accessible, attractive, well maintained and safe woodland regularly used by the public. Path network, waymarkers, fences and entrances remain in good condition and are appropriate for level and type of use and in accordance with access category A.

Work programme:

Cut paths 3-4m throughout woodland twice a year
Annual inspection of all gates, bridges, waymarkers and information boards and constant monitoring of path surfaces.
Zone A tree safety inspection to be carried out every 18 months and Zone B inspections every 36 months with arboricultural work undertaken as required.
Carry out ditching along main track sides where the ditches have become silted up/blocked and public access along main track ways has become impeded due to water not running off via the ditches. Monitoring will take place through key feature (Informal Public Access) observations.
Provision of Broxbourne Woods NNR leaflets in local outlets in and around Hoddesdon to promote and inform of history, conservational value and recreational facilities.
Replace and enhance Woodland Trust signage at entrances where needed in accordance with WT best practice guidance.
Maintain and enhance fence lines when needed.

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	14.60	Oak (sessile)	1900	High forest	Archaeological features, Mostly wet ground/exposed site	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Green Belt, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation
Compartment 1a borders Lord Street to the north and the Roman Road Ermine Street to the west. The canopy consists almost entirely of Sessile oak of average form, established around 1920 together with the occasional hornbeam standard and the odd birch. An understorey of hornbeam coppice is prevalent with oak, hornbeam and holly regeneration, prolific on ride edges and where light levels are greater. The compartment was thinned in 2001 with approximately 35 m3 / ha of oak and hornbeam removed. Ground flora is very variable, sparse in some of the old coppice and richer on the base-rich soils. Bracken flourishes in some of the more open areas Many dead trees have been left standing and all dead wood has been retained. Several wood banks are also present, particularly on the western side, which could at one time have been boundaries. Two low valley streams run in a north to south-east direction through the compartment adding to the diverse habitat. A number of paths run across the compartment and there is access to Ermine Street to the west via a kissing gate and steps and to the north allows access onto Lord Street.							
2a	18.10	Oak (sessile)	1890	High forest	Archaeological features, Mostly wet ground/exposed site	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Green Belt, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation

Occupying the northeast section, compartment 2a is similar to the rest of the wood, but slightly more varied in terms of stand density and composition. The canopy consists almost entirely of oak (1880-1920) with the occasional hornbeam (1920), birch and very occasional beech. Hornbeam again dominates the understorey along with a considerable amount of holly and a touch of birch, hazel and sycamore. Gaps in the canopy lead to areas of more vigorous ground flora, mainly bracken, grass, bramble, honeysuckle and wood anemones which are particularly impressive in the north east section. The stand was thinned in 2002 and approximately 35m3 / ha of timber was removed.

Natural regeneration is prolific in this compartment with both oak and hornbeam seedlings prevalent almost everywhere, with some regeneration now reaching a few metres tall. Near the centre of the compartment is an open canopied area covered with 10 year old regen and coppice regrowth. Deer damage is very low but noticeable.

Ride edges have been scalloped to encourage more light demanding plant groups together with their associated insect species. Wood banks are present at the edges of the main rides and there are two shaded streams running diagonally across the compartment.

There is a public footpath running NW-SE across the compartment together with a number of other paths and waymarked walks meandering through the woodland.

3a	16.90	Oak (sessile)	1880	High forest	Mostly wet ground/exposed site	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Green Belt, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation

Compartment 3a again consists of oak high forest with occasional hornbeam standards established around 1920. Some mature hornbeam regeneration on the southern side, established around 1960, is also present and is beginning to reach canopy height. Thinned in 2003 where approx 27m3 / ha were removed.

An understorey of over-mature coppice exists in places reducing the prevalence of natural regeneration. Ride edges have abundant hornbeam coppice and regeneration, occasional oak and birch, and rare ash, beech and hazel.

Ground flora includes bramble in canopy gaps and honeysuckle on trees. Spring flora is impressive with a thick, almost unbroken, carpet of wood anemones.

It borders Ermine Street to the west and slopes down to a winding stream on the southern boundary.

3b	0.30	Oak (sessile)	1920	Coppice	No/poor vehicular access to the site	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Green Belt, National Nature Reserve, Scheduled Ancient Monument, Site of Special Scientific Interest, Special Area of Conservation
An ancient moated site designated by English Heritage as a Scheduled Ancient Monument (SAM). A rectangular enclosure measuring some 60m by 55m with a partially water-filled moat up to 10m wide and 3m deep. Dating back to the 13th century it is the likely location of the medieval park keeper's lodge. Mature oak now grow on the platform but the site remains clearly visible with annual coppicing of vegetation.							
4a	12.00	Oak (sessile)	1850	High forest	Mostly wet ground/exposed site	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Green Belt, National Nature Reserve, Site of Special Scientific Interest, Special Area of Conservation
Similar to the remainder of the wood, comprising sessile oak high forest of average form established around 1920 with a hornbeam coppice understorey. Birch are noticeable as well as a few wild service tree. Hazel and holly are commonplace and ground flora consists of wood anemones, bracken, grass, bramble and honeysuckle, plentiful in the southern area alongside Spittal Brook. Under a Forest Research silviculture programme, the compartment was thinned in 2004 with about 28m3 / ha of timber removed over 12 plots given different prescriptions. This has resulted in a varied structure and vastly differing ratios of oak high forest to hornbeam understorey. Deer browsing to young natural regeneration is obvious in open areas. A stream runs in a north to southeast direction through the centre of the sub-compartment and a shaded and stagnant pond lies in the southwest corner of the sub-compartment.							

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2020	1a	Selective Fell	1.00	50	50
2021	2a	Selective Fell	1.00	50	50

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.