WOODLAND TRUST

Broad Riding Wood

Management Plan 2015-2020

MANAGEMENT PLAN - CONTENTS PAGE

ITEM **Page No.**

MAPS

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Broad Riding Wood
Location:	Broxbourne
Grid reference:	TL342072, OS 1:50,000 Sheet No. 166
Area:	22.93 hectares (56.66 acres)
Designations:	Archeological Site, Candidate Special Area of Conservation, Planted Ancient Woodland Site

2.0 SITE DESCRIPTION

2.1 Summary Description

Broadriding Wood is attractive mixed broadleaf and coniferous woodland that lies just a few miles south of Hertford and forms part of the Broxbourne Woods National Nature Reserve (NNR) in southern Hertfordshire. A Planted Ancient Woodland Site (PAWS) originally thought to be sessile oak / hornbeam similar to the adjacent NNR before large areas of it were planted with exotic conifers. There is a network of path including a public bridleway, a stream running east to west and a large wildlife pond.

2.2 Extended Description

Broadriding Wood is attractive mixed broadleaf and coniferous woodland that lies just a few miles south of Hertford and forms part of the Broxbourne Woods National Nature Reserve (NNR) in southern Hertfordshire. It is 22.93ha in size and predominantly a Planted Ancient Woodland Site (PAWS) originally thought to be sessile oak / hornbeam similar to the adjacent NNR before large areas of it were planted with conifers.

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 wood lies on a chalk solid strata with drift deposits (pebbly gravels and London clay).

The wood is largely made up of hornbeam coppice, oak, Scots pine, Douglas fir and Norway spruce. There are interesting ancient wood banks to be found in the north eastern area of the wood as well as along the boundary with Pembridge Lane. There is a large pond in the south easterly corner of the wood and a stream running west to east. A public bridleway runs north to south through the site and management access is available from the southern boundary with Pembridge Lane.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

There is a public bridleway that can be accessed from Pembridge Lane or Broxbourne Common. There are also two main permissive footpaths taking in the majority of the woodland.

3.2 Access / Walks

4.0 LONG TERM POLICY

The long term intention for Broadriding Wood is to preserve and enhance the diverse woodland for the benefit of wildlife and visitors. The ancient woodland characteristics will be retained and enhanced through careful and gradual removal of the conifers allowing the site to slowly revert to native broadleaf woodland through natural regeneration. A scattering of mature specimen conifers will be retained to add to the structural diversity and aesthetics. The long term goal is to create an attractive, maturing woodland continuing to develop its ancient woodland characteristics and components.

Statutory obligations will continue to be met with respect to managing tree safety and access along the public bridleway running north to south through 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 Planted Ancient Woodland Site

Description

Structurally diverse broadleaf and coniferous woodland made up of predominantly Scots pine, western red cedar, Norway spruce and Douglas fir with coppice hornbeam and early successional birch along with more mature hornbeam visible on ancient banks and a scattering of oak. Bracken and bramble dominate under the conifers, but elsewhere ground flora is sparse, largely due to the dense canopy and high deer pressure. The stream and ride edges form the best opportunity for restoring the ancient woodland flora.

Significance

Ancient woodlands 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 structure and history of Broadriding Wood give it further importance given its close proximity to the Broxbourne Woods National Nature Reserve (designated due to sessile oak / hornbeam structure).

Opportunities & Constraints

Opportunities:
Conserve and enhance ancient woodland components.
Gradually reduce the coniferous element to protect and restore the key ancient woodland components.
Increase natural regeneration and ground flora aided by controlling deer pressure through a landscape approach with neighbouring landowners where the opportunities arise.
Seek to buffer / extend ancient woodland through adjacent land acquisition / influencing neighbouring landowners.

Constraints:
High deer pressure.
Threat to ancient woodland components from coniferous stands (shading, weed competition and coniferous regeneration).

Factors Causing Change

Deer damage

Long term Objective (50 years+)

Mainly mixed broadleaf uneven aged woodland of varying stand structure, including areas of open and dense high forest and a mixed, multi-aged understorey. Attractive maturing woodland continuing to develop its ancient woodland characteristics and components.

Natural regeneration levels and coppice regrowth should remain sufficient to ensure sustainable continuous cover management. Leaf litter, rotting wood and natural clearings will influence such regeneration.

Many of the old hornbeam coppice stools along the stream and banks will reach senescence and beyond providing numerous veteran trees and valuable dead wood habitats. A scattering of conifers will also be retained to provide visual and structural diversity.

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

Operational objective:
Conserve and enhance the ancient woodland characteristics of Broadriding Wood by gradually removing the remaining conifers and managing light levels. This will be done through halo thinning around remaining broadleaf remnants and removing approximately 20% of the conifers elsewhere.

Work programme:
Annual deer monitoring and management through culling will control deer populations in the area and reduce browsing pressure on developing natural regeneration.

2014 - Open up the ride edges by removing all conifers within 2m of the main path network, approx. 1,700m. Selectively thin a further 3m from the path removing approximately 20% of the conifers concentrating around areas of broadleaf remnants.

2015 - Thin to waste 20% of the conifer cover in PAW's zone 2, 3 and 6. Concentrate works around halo thinning around any remaining broadleaves and natural regeneration.

2016 - Thin to waste 20% of the conifer cover in PAW's zone 1, 4 and 5. Concentrate works around halo thinning around any remaining broadleaves and natural regeneration.

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	5.76	Scots pine	1970	PAWS restoration			
Predominantly Scots pine, Norway spruce, Douglas fir with only a few broadleaf remnants of hornbeam and oak. Bracken can be found interspersed mainly in the lighter areas of Scots pine. Some natural regeneration and woodland flora present particularly along the ridesides. Trackside to the east and west edges of the zone with ancient banks lining the western edge and the northern boundary. Good hornbeam coppard specimens can be found here.							
2a	8.67	Douglas fir	1970	PAWS restoration			
Douglas fir and Norway spruce surrounding a significant canopy of ancient and maturing hornbeam with occasional oak standards. Woodland flora hotspots along the rides and stream with good natural regeneration seen in these areas too. Ancient bank lining the northern area with substantial hornbeam coppards.							
3a	7.27	Norway spruce	1970	PAWS restoration			
Bands of Scots pine interspersed with hornbeam and oak and areas of Norway spruce and Douglas fir. Streamside to the northern boundary and track edged to the east and west with a linear ride running thorugh the middle of the zone. Woodland flora and good natural regeneration can be seen here.							
3b	1.23	Hornbeam	1700	Min-intervention			
The dominant feature in this compartment is a large pond surrounded by sessile oak standards, along with hornbeam standards and birch. An understorey of holly, hornbeam regeneration and some hornbeam coppice is also present.							

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.