



Wheatley Wood

Management Plan 2014-2019

MANAGEMENT PLAN - CONTENTS PAGE

ITEM	Page No.
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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 Informal Public Access

5.2 Semi Natural Open Ground Habitat

5.3 Secondary Woodland

6.0 Work Programme

Appendix 1: Compartment descriptions

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 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:	Wheatley Wood
Location:	Rayleigh
Grid reference:	TQ788911, OS 1:50,000 Sheet No. 178
Area:	33.66 hectares (83.18 acres)
Designations:	Tree Preservation Order

2.0 SITE DESCRIPTION

2.1 Summary Description

Occupying the site of old agricultural fields, it has now been planted with semi-natural trees and scrub and incorporates open areas. Very good site for wildlife, with reptiles, amphibians, small mammals, birds and insects all thriving here.

2.2 Extended Description

Wheatley Wood occupies nine old agricultural fields sandwiched between housing and a railway on the edge of Rayleigh in Essex. The fields, which were separated by old blackthorn hedges, have been either planted with semi-natural trees (mainly in the 1990s), left to revert to scrub or have been kept open by annual hay cuts (mainly in areas underneath overhead electricity lines). The site currently consists of roughly 70% new native woodland and 30% open grassland. This large site is a quiet and natural place within a relatively busy and developed part of Essex, providing a haven for wildlife and a valuable resource for local residents. Between 2012 and 2014 the overhead electricity lines and six support pylons that stretched across the eastern end of the site were removed. Two new pylons were installed and new electricity cables laid underground to a sub-station to the west of the site.

Ecologically, Wheatley Wood is notable for the dense and spreading old hedgerows which divide the site, for its old boundary trees, and for the diverse range of early successional habitats which are provided by its mosaic of open ground, scrub and young woodland. Together with a small stream (running south to north), balancing pond and wet ground found in the centre of the site, these conditions provide valuable habitat for a range of birds, insects, small mammals, amphibians and reptiles. The old boundary trees within the eastern section of the site are covered by Tree Preservation Orders (TPO's)

The site is surrounded by large residential areas to the north and east, a railway line to the south and is heavily used by the local population. Local residents and youngsters from local schools and the adjacent Rayleigh Grange Community Centre were involved in much of the planning and establishment of the site, and a small number of voluntary wardens provide on-going support in the management of the site. Many more people use the site informally, mostly for walking and outdoor games, especially in the summer. There are numerous access points onto the site along the northern boundary via the housing estates. A public footpath cuts across a small part of the site on an east to west axis and a substantial network of permissive paths are found within the site. Entrances onto the site are primarily through medium size kissing gates, directly from the neighbouring housing estates. The site is generally flat with some sections of boardwalk and several squeeze stiles (put in place to inhibit illegal motorbike use). Ground conditions are normally good but can be seasonally wet and muddy in places.

Traditionally there has also been a low level of permitted use by local horse riders, however, it now appears that other horse riders are also accessing the site without permission. Most visitors are local, but some people come from further away to visit areas of tree planting which are dedicated to them or to people they know. The site suffers from intermittent but serious vandalism and abuse by motorcyclists. This is dealt with in liaison with local police, the fire brigade and the local voluntary wardens.

The key features for this site are:-

- Informal Public Access
- Semi-natural Open ground
- Secondary woodland

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Wheatley Wood is an oasis of green sandwiched between the urban sprawl of Rayleigh and a busy railway line. There are numerous access points into the site along the northern boundary via the housing estates. A public footpath cuts across a small part of the site on an east to west axis and a substantial network of permissive paths are found within the site. Entrances into the site are primarily through medium size kissing gates, directly from the neighbouring housing estates. The site is generally flat with some sections of boardwalk and several squeeze stiles (put in place to inhibit illegal motorbike use). Ground conditions are normally good but can be seasonally wet and muddy in places.

Nearest car park: Rayleigh Station - 1 mile away along suburban / roads.

Nearest toilet: Approximately 1.5 miles away at Sainsbury's supermarket - Rayleigh Weir, Stadium Way, Rayleigh. Baby changing facilities and disabled toilet in main block. Open Mon- Sat 7am - 11pm, Sun 10am - 4pm, as checked Jan 2007.

Nearest railway station: Rayleigh - 1 mile away along suburban roads.

Nearest bus stop: Anywhere along Bardfield Way, 30 - 100m from NE entrances along small housing estate roads with pavements.

Information from National Rail and Traveline websites as at Sept 2014.

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 fifty years time Wheatley Wood will be a well-structured, species diverse native broadleaved secondary woodland covering 80% of the site. Small scale periodic thinning will be carried out to aid improvement of the woodland structure and species diversity. In addition, species selection through this thinning will also help ensure that canopy and regeneration layers do not become dominated by only one or two species. Old boundary trees with significant and associated cultural, biodiversity and historical value will be retained and monitored for any health and safety implications.

Areas of semi-natural open ground will be retained but proportionally only covering 20% of the site. This reduction in area of open ground has been made possible following the removal of the overhead electricity pylons and a resulting reduction in forced clearance of vegetation beneath them. Instead, the linear edges to the open ground, previous beneath the pylons, will be allowed to naturally regenerate creating a more graded and biodiversity rich successional woodland edge habitat.

The site will continue to be visited and enjoyed by local people remaining open to the public and managed in a way that secures and enhances the positive experience people have of the site. This will be achieved through three areas of work: on pathways and entrances, on securing the attractively diverse habitats on-site and on reducing the impacts of vandalism and inappropriate usage of the site. There will be a well maintained network of paths and existing on-site facilities will be maintained and enhanced to suit the existing local demand, which is classed as Grade A - High usage, responding reactively with changes and in demand or threats by way of anti-social behaviour.

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 Informal Public Access

Description

The site is well used by the local population, mainly for walking but also for games and picnics, especially during the summer. Some visitors come from further afield, often to access tree and grove dedications associated with donations to the Woodland Trust. A network of permissive paths is maintained throughout the site and areas managed as open ground are especially good for outdoor games/activities.

Significance

The provision of informal public access to woodland is one of the Woodland Trust's core objectives. Wheatley is particularly well placed to deliver this objective, surrounded as it is by a large population and providing a quiet and natural place in an otherwise busy and developed part of Essex.

Opportunities & Constraints

The presence of a large local population has provided the opportunity in the past for community participation in planning and establishing trees on the site. While this phase is largely complete, locals are still keen to be involved in voluntary wardening and will come to meetings when problems arise on site.

The site suffers from intermittent but serious vandalism, dumping and motor biking. This intimidates people and spoils their enjoyment of the site.

Factors Causing Change

Motor biking, vandalism, dumping of garden waste, unpermitted horse riding

Long term Objective (50 years+)

Wheatley Wood will remain open to the public and will continue to be managed in a way that secures and enhances the positive experience visitors have of the site. This will be achieved through three areas of work: on pathways and entrances, on securing the attractively diverse habitats on site and on reducing the impacts of vandalism and inappropriate usage of the site.

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 and entrances to remain in good condition and are appropriate for level and type of use and in accordance with access category A. Path surfaces will be cut 4 times a year and edges cut once a year on an alternating light/heavy rotation to maintain a width of at least 2m. Some access & path works will be improved/upgraded by the end of 2015 (Cutting back Blackthorn by 2m along the length of the boardwalks (next to railway line and crossing/alongside stream). Excavate stream under and upstream of northern bridge, near St Johns Cottage, to improve flow capacity and reduce instances of flash flooding. Cutting back path side vegetation at pinch points along boundary path east of Langham Drive to create a more inviting 3m access point).

Fly tipping, vandalism and misuse of the site by motorcyclists will continue to be reduced by introducing new barriers to entrances in 2015 (Access improvements: New entrance signs (design, produce and install 5 small signs), repair/replace entrance gates/posts (including squeeze gates in/out of Hawthorn wood) & install a ladder sign. Remove redundant WT posts, replace broken or install new entrance gates.)

Work Programme:

Invest in new entrance signs and interpretation board

Cut path surfaces and maintain entrances 4 times a year.

Path edges cut once a year on an alternating light/heavy rotation

Remove litter and tipped debris as required.

Annual tree safety inspection.

Restrictive barriers and fences will be maintained to reduce motorbike use.

Repair/replace broken or install new entrance gates/posts

5.2 Semi Natural Open Ground Habitat

Description

There are extensive areas of open ground on site, found mainly under the historic location of the overhead electricity pylons. The grassland is semi-improved.

Significance

Whilst the open ground is not especially species rich, it does provide valuable open ground habitat for invertebrates, birds and reptiles. Open ground is also good for people's recreational use of the site. Both the biodiversity value and the recreational value are enhanced by the way the open ground is combined with young woodland and scrub.

Opportunities & Constraints

Management of the open ground is hampered by vandalism and arson, which causes direct damage to the habitat and prevents traditional hay-making.

Factors Causing Change

Natural succession to scrub

Long term Objective (50 years+)

Extensive areas of open ground will be maintained on the site through active intervention.

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

Operational objective:

Maintain a reduced area of open ground and prevent widespread succession to scrub and woodland by undertaking an annual cut in late summer.

Identify and establish a sinuous natural regeneration area along the historic location of the overhead electricity cables (southern woodland area currently with a straight woodland edge on an east-west orientation) for introduction in 2015 and on-going thereafter.

Work programme:

Mow open areas once a year in late summer

5.3 Secondary Woodland

Description

Wheatley Wood has secondary woodland arising from three main sources: natural succession on unmanaged open ground; the spreading of existing hedgerows and the establishment of broadleaf plantations, mainly in the late 1990's. Planted species include oak, ash, hornbeam, sweet chestnut, field maple, willow, rowan, walnut, alder and small-leaved lime. Shrubs include hawthorn, buckthorn, guelder rose, hazel, dogwood, blackthorn and spindle.

Significance

Early successional woodland, especially when it has a diverse structure, provides biodiversity benefits, and in combination with paths and open ground is pleasant for the public to explore and walk in.

Opportunities & Constraints

The different ways in which land has become secondary woodland at Wheatley means that there is a diverse age and canopy structure to the woodland across the site. This enhances the site's potential value for biodiversity, and provides aesthetically pleasing visual diversity.

Factors Causing Change

Natural succession, fire, vandalism, Ash Die Back

Long term Objective (50 years+)

Within 50 years there will be a range of woodland on site, including patchy and low-growing scrub, dense thicket and taller, more open, broadleaf woodland of plantation origin. Some small scale thinning will take place to ensure successful establishment and maturity of an attractive and structurally diverse secondary woodland that is positively integrating into the existing habitats and landscape. Where possible, the range of scrub, thicket and young woodland habitats will be allowed to develop and diversify through natural processes

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

Operational Objective:

To initiate an on-going programme of small scale thinning within the establishing woodland to create both structural and species canopy diversity and identify and establish a sinuous natural regeneration area along the historic location of the overhead electricity cables (southern woodland area currently with a straight woodland edge on an east-west orientation) for introduction in 2015 and on-going thereafter.

Work Programme:

Identify and undertake small scale thinning (10% thin) to encourage resilience and structural diversity in five locations across the site annually (a different five locations will be selected year on year) covering a total annual area equivalent to 50m²

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
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APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	9.72	Hawthorn species	1980	Min-intervention	People issues (+tve & -tve)	Informal Public Access, Secondary Woodland, Semi Natural Open Ground Habitat	
<p>Compartment 1 is the western section of the site and is made up of three old fields separated by old double hedgerows / green lanes. The northernmost field is a dense area of naturally colonised scrub woodland. The other two fields are semi-natural tree and shrub plantings, established in the 1990's. The planted areas incorporate wide rides and areas of open ground.</p>							
2a	6.54	Ash	1998	High forest	People issues (+tve & -tve)	Informal Public Access, Secondary Woodland, Semi Natural Open Ground Habitat	
<p>Four small old fields in the centre of the site, divided by old hedgerows. The north-western field is a narrow open field. The north-eastern field is part open ground, part 1990's semi-natural tree and shrub planting and has a balancing pond in it. The south-western field was planted with trees in 2003 and the south-eastern field is a planting from the 1990s.</p>							
3a	17.57	Ash	1997	High forest	People issues (+tve & -tve)	Informal Public Access, Secondary Woodland, Semi Natural Open Ground Habitat	
<p>The eastern section of the site. Most of the area is open grassland lying under the historic route of overhead electricity cables. The easternmost section of the compartment is part natural succession scrub woodland and part 1990's broadleaf plantation.</p>							

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.