



Worms Wood

Management Plan 2016-2021

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Worms Wood
Location:	Middleton on Sea
Grid reference:	SU969010, OS 1:50,000 Sheet No. 197
Area:	13.28 hectares (32.82 acres)
Designations:	

2.0 SITE DESCRIPTION

2.1 Summary Description

A large new native woodland site including oak, ash, maple, birch and cherry. A good path network and grassy ridges run throughout. Extra habitats have been provided by watercourses and ponds, and there is a central glade with a wooden bench.

2.2 Extended Description

Worms Wood is a 33 acre native broadleaf woodland created in early 2000 as part of the Trust's Woods on Your Doorstep (WOYD) Millennium Project. It is situated on the northern edge of the village of Middleton-on-Sea, Bognor Regis, on the West Sussex coastal plain. The land was formerly Grade One arable farmland. The site is currently held on a 99 year lease granted by Arun District Council. The wood was designed and named after public consultation involving local communities and in conjunction with Felpham and Middleton-on-Sea Parish Councils and Arun District Council.

The trees planted at Worms Wood are a mixture of native broadleaved trees and shrubs including sessile oak, ash, field maple, birch, wild cherry and small stands of beech. The harsh maritime conditions and high rabbit numbers have meant that some of the trees have taken some time to establish however, the site now has a true woodland feel.

A network of wide, grassy rides and narrower paths allows good public access to most parts of the wood and provides circular walks of varying lengths. Other habitats have been created with scrapes and ponds being excavated close to existing seasonal watercourses. Two earth bunds have been raised and partially planted to give extra height and possible views in an otherwise flat area. In the central glade there is a wooden bench commemorating the Millennium.

Being close to Bognor Regis and next to the large residential area of Middleton-on-Sea, Worms Wood provides an important amenity in an area with very little accessible woodland. The local community enjoy visiting the wood and the Trust co-ordinate a small group of local volunteers who carry out conservation activities to help manage the wood...

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

General location:

Worms Wood is on the northern edge of Middleton-on-Sea, near Bognor Regis. The wood adjoins the north side of Larks Field Recreation Ground. This can be reached via the Flansham Park estate: from the A259 (Worms Lane) take the B2132 Yapton Road towards Middleton; turn right at the roundabout into Silver Birch Drive/Moraunt Drive; turn right into Merlin Way; turn right into Montgomery Drive; entrance to Larks Field is ahead.

General overview of paths & entrances:

There are 2 entrances into the wood with wide kissing gates. One is from Larks Field and the other in the SW corner, off the public footpath. There are various wide grassy rides and smaller paths allowing for various circular walks. The site is level. Ground conditions can be muddy underfoot during the winter.

Parking:

There is no car park at the site. Cars may be parked safely on the streets approaching the site.

Public Transport:

Nearest train station: Bognor Regis, approx 3 miles away.

Nearest bus stop: Montgomery Drive, Middleton-on-Sea, approx 400m from the wood. There are regular services throughout the day from Bognor and Littlehampton. Information obtained from Traveline website on 5/2/07. Further information on public transport can be obtained from Traveline: www.travelinesoutheast.org.uk or tel: 0870 608 2 608).

Public Toilets:

Nearest public toilets: car park next to Shrubs Field, (B3132) Middleton-on-Sea, approx 1 mile from the site.

3.2 Access / Walks

4.0 LONG TERM POLICY

In 50 years time Worms Wood will have a high forest structure comprised mainly of native broadleaf trees, with the canopy consisting mainly of oak and birch, with alder, willow and poplars in the wetter areas, supplemented with sycamore throughout. The understory will be comprised of a variety of smaller tree and shrub species, such as field maple, hawthorn, holly, and cherry, with hazel featuring prominently.

The wood will be structurally diverse, from mature trees to regenerating saplings and everything in between. This diversity will be achieved through a combination of management such as coppicing, the effects of disease creating space for natural regeneration, and natural thinning of trees as they compete for light and space.

Some of the mature trees, particularly those around the perimeter, will be starting to develop veteran characteristics and there will be an increased volume of deadwood, both standing and fallen.

There will be open areas - primarily grasses with a variety of other herbaceous plants and wetland areas/ponds.

The site will be well used by the local community and the infrastructure and access will be suitable for a high level of use...

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 Secondary Woodland

Description

The site was planted in early 2000 with approx. 25,000 native broadleaved trees and shrubs, with 20% of the site left as open ground in the form of rides, glades and seasonal ponds which the Environment Agency created out of 3 shallow scrapes along the southern boundary. The spoil from these was used to create two bunds within the site to break up the flat terrain.

Many of the trees failed prematurely due to rabbit browsing and vandalism, however, this is hardly apparent today with the abundance of trees growing through the establishment phase. With the trees thriving well, reaching a height of five metres or more, the site has a wooded aesthetic and atmosphere even at this early stage in its development.

Rabbits continue to browse, however, as the majority of trees are through the establishment period this will have an inconsequential impact on the main structure of the developing woodland. The impact on developing ground flora, understory species and tree regeneration may be more significant and will be monitored. The impact of rabbits is most evident in the closely cropped grass of the main rides which look mown, but are in fact kept this way through their browsing.

A significant and ongoing influence on the wood is Ash Dieback, a disease which has already begun to adversely affect many of the young ash at the site and will continue to do so over the plan period. The outcome is likely to result in ash no longer featuring as a canopy tree species, as was originally intended at the time of planting. Conversely, the original composition and quantity of planted trees has also been supplemented with natural colonisation of birch, oak, alder and goat willow and poplars from the surrounding area. In fact some trees both naturally regenerating and planted are doing so well, that some of the narrower rides are beginning to close over in some areas, meaning that management will be necessary to keep these valuable wildlife corridors and access routes open.

Open space is still plentiful at the widest rides and central glade which are mown annually, however, this is likely to diminish if surrounding trees are left unmanaged, as is most evident around the ponds which have begun to close over. Certain plant species such as ragwort, nettle and bramble require management as they are also at risk of reducing open space and dominating other plant species, no doubt fuelled by the nitrification of the soil prior to the Trust taking over the site.

Significance

The UK is the least wooded country in Europe (11.8% compared with a European average of 44%). Trees have been described as the lungs of the Earth, absorbing and storing carbon dioxide which would otherwise contribute to global warming. Woodland creation sites rapidly attract insects on vegetation between growing trees. These in turn attract birds such as skylarks, meadow pipits and linnets. As a habitat native woodland contains more threatened species than any other habitat in the UK. By creating new woods in the right places - alongside existing wildlife habitats - we can protect and connect our fragmented woods. These trees will help us reforest the UK, and by creating larger woodland habitats, will also benefit people and wildlife to adapt to climate change.

The South Coast Plain National Character Area (NCA 126) is a flat, coastal landscape with an intricately indented shoreline lying between the dip slope of the South Downs and South Hampshire Lowlands and the waters of the English Channel, Solent and part of Southampton Water. There are stretches of farmed land between developed areas, often with large arable fields defined by low hedges or ditches. Along the exposed, open coastal plain and shoreline, tree cover is limited to isolated wind-sculpted woodlands and shelterbelts. The area has significant urban development, with settlements along the coastline dominated by the Portsmouth conurbation, suburban villages and seaside towns including Bognor Regis, Littlehampton and Worthing linked by major road and rail systems.

There is very little woodland in this area and the creation of Worms Wood has provided a haven for wildlife. Whilst there are few other woodlands, the site is linked to the wider landscape by hedges and small copses.

Opportunities & Constraints

Constraints:

Exposed site close to the sea, vandalism.

Opportunities:

To assess whether improvements can be made to the ponds.

To increase volunteer activity to deliver conservation tasks such as coppicing.

Factors Causing Change

Natural succession to high forest, competition from vigorous or invasive plants such as bramble, nettle and ragwort, rabbit damage, Ash Dieback.

Long term Objective (50 years+)

Native broadleaved woodland with high forest structure, including a diverse understorey with approximately 20% open ground in the form of rides, glades and ponds. Oak and birch will be the main canopy species, interspersed with sycamore, with alder and willow dominating the wetter areas. Areas of denser tree cover will be present, particularly on woodland margins where natural regeneration will be most prevalent. Wild cherry, goat willow, field maple, hazel, hawthorn and holly will be plentiful in the understorey, and a mosaic of more open woodland and scrubby coppice are likely to be present where tree disease and/or animal browsing have affected species regeneration. Dead wood will be plentiful on the woodland floor, with some standing dead wood present where it does not present any health and risk to neighbours or visitors to the site.

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

To enhance the structure of the woodland. This will be achieved in the plan period with the following:

- Annual ride widening and selective felling of trees along approximately 500m (100m per year) of the main path network and adjacent plantation block edges.
- Retention of cut material on site to increase dead wood habitat.
- Removal of tree shelters where they are no longer required
- Pulling of ragwort by the volunteer group (or control by contractors using organic herbicide in spring and autumn, if required) to prevent it from dominating other plant species and from spreading to neighbouring land.
- An assessment of the woodlands condition, including open space and the impact of animal browsing in 2022.

5.2 Connecting People with woods & trees

Description

Worms Wood is part of the Welcoming Sites Programme (WSP), a Woodland Trust initiative which aims to improve recreation and access provision at our key sites. The WSP will lead to a series of lasting upgrades that will improve the visitor experience and will likely increase the number and range of visitors to this site. An attractive and serviceable network of tracks and paths will further encourage the appreciation of the woodland, both on the site and in the locality. The site will be managed to meet the required high standards of WSP and will provide a clear welcome: well-maintained entrances, furniture, signs and other infrastructure as well as sustainable path and track surfaces across the variable ground conditions where appropriate. Improved access will better facilitate use by a wider range of visitors. An engagement plan will set out a plan for engagement activities, further enhancing public visits to the site.

Worms Wood is located at the edge of Middleton-on-Sea, a village on the outskirts of Bognor Regis with a population of approximately five thousand residents. The village itself has few amenities but is a short distance from Bognor Regis.

The wood is located between the A259 'Worms Lane' on the north boundary (which runs along the south coast from Folkestone, Kent in the east to Emsworth, Hampshire in the west) and Larks Field recreation ground on the south boundary. The large residential area of Middleton-on-Sea to the south has one primary school, less than 1km from the wood, and two public houses situated within 1km.

Public access to the site is via two kissing gates on the south boundary and one open access point in the north west corner. On the south boundary one gate is accessible from Lark's Field recreation ground to the south and the other is in the southeast corner of the site where a path leads from the public footpath between Lark's Field and Sheepwash Barn. There are wide, grassy rides around the western, southern and eastern boundaries, linked by two further rides that cross the site, intersecting at a large clearing with a bench. There are other smaller paths that cross the site through the planted trees.

The site is well used by local people for dog-walking and enjoying the surroundings and its wildlife, and has a high footfall due to the surrounding residential area.

Significance

It has been proven that access to woodland provides an improved quality of life with benefits to both mental and physical health. Increasing public enjoyment of woodland is one of the main aims of the Trust and allowing free access is crucial to this. The creation of new woodland on the site was the preferred option of the local population. There is no other woodland in the area, with or without public access. The site also provides the public with the opportunity to observe the establishment and development of a new woodland.

Opportunities & Constraints

Constraints: Parking is limited to the residential roads nearby; access is difficult for people of all abilities due to the distance from roads and the limitations of access points; anti-social/illegal activities.

Opportunities: To improve access for people of all abilities; to increase the involvement of local people in caring for the site; to improve the overall appearance of the site as current signs and infrastructure are dated.

There is currently a small volunteer group that meet weekly to carry out conservation based tasks along with site monitoring and litter picking. Developing the volunteer group will provide another opportunity to increase local engagement and activity in the wood.

Events at the site could increase community engagement and awareness of the work of the trust and the value of woodland.

Forest schools are welcome by arrangement with the Site Manager to provide educational activities.

A quarterly community magazine is delivered to residents by Middleton-on-Sea parish council, and the area is also home to a scout group and a community sports group, all of which could potentially be engaged to promote volunteering opportunities and events.

Factors Causing Change

Further housing development in the area is likely to increase visitor numbers; prolific tree growth and self-sown trees are beginning to close over paths and rides, potentially affecting access throughout the wood.

Long term Objective (50 years+)

A network of well maintained, wide grassy rides and smaller paths and appropriate entrances and signage will allow access throughout the wood. Continued high level of use and active involvement of local people.

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

To improve access and infrastructure and to maintain a high level of use and active involvement of local people, the following will be carried out in the plan period:

- Following an entrance audit, new signage and infrastructure will be installed (in winter 2017 and spring 2018) which will bring a much needed refresh and facelift to the site, and will allow access into the site for people of all abilities.
- To mark the updates, and to help to increase engagement with local people, an event will be held in summer 2018, with the aim of introducing the wood to new visitors and communicating our Protect message, as well as involving the existing volunteer group in supporting the event.
- An inspection of the sites infrastructure will take place annually.
- Litter and redundant tree shelters will be removed by volunteers.
- Vegetation at rides and entrances will be mown and cut back annually.
- Low branches overhanging paths and rides will be pruned as required by volunteers to enhance paths through planted areas.
- Ride widening and selective felling of trees along approximately 500m (100m per year) of the main path network and adjacent plantation block edges will be carried out every winter by volunteers.
- An assessment of the woodlands infrastructure and signs will be carried out in 2022.

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	13.28	Oak (sessile)	2000	High forest	Site structure, location, natural features & vegetation	Connecting People with woods & trees, Secondary Woodland	
<p>P2000 mixed native broadleaves: mainly sessile oak, ash, birch, lime, field maple, rowan, wild cherry, and understorey shrubs including hazel, hawthorn, dogwood, spindle, blackthorn, holly. Poplar, aspen, goat willow, sycamore and Turkey oak are also present on site and have self-sown from the surrounding area. Ex Grade 1 arable field. Approx 25,000 trees at 2m x 2m spacing protected with 0.6m shelters. 20% open ground in the form of rides, glades and seasonal ponds/scrapes.</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.