



Twig & Bog Woods

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Twig & Bog Woods
Location:	Warrington
Grid reference:	SJ592898, OS 1:50,000 Sheet No. 108
Area:	2.93 hectares (7.24 acres)
Designations:	Ancient Semi Natural Woodland, Community Forest, Local Wildlife Site

2.0 SITE DESCRIPTION

2.1 Summary Description

This mature broadleaf ancient woodland consists of beech, oak, sycamore and alder with a wetland area of willow and alder. The woodland ground flora includes bluebells, lords and ladies and dogs mercury in the spring. A surfaced footpath network runs through the woodland and links into the wider Sankey Valley Park.

2.2 Extended Description

Twig and Bog Woods are located next to Sankey Valley Park in the Old Hall area of Warrington. The park has a mosaic of habitats including mature woodlands, wetlands, streams, ponds and areas of managed grassland with surfaced footpaths throughout. The surrounding landscape around the park is urban, mostly housing and roads, apart from to the east which is the old St. Helens Canal and Sankey Brook with an area of scrub and unmanaged open ground. The landscape is mostly flat, low lying land with predominantly clay subsoil and relatively heavy top soils which results in the wood remaining wet throughout most of the year.

The woodland was originally part of open farmland and was acquired by the Warrington and Runcorn Development Corporation in the early 1970's. In 1989 the woodland became the responsibility of the Commission for New Towns until June 1992 when it was given to the Woodland Trust to manage along with several other small urban woodlands nearby including Ladies Walk wood, Bewsey Farm wood and Twenty Acre wood which are within a mile radius of the site.

The site is designated as Ancient Semi Natural Woodland (ASNW) and has a high forest canopy of mature beech, oak, sycamore and alder with an understory of planted mixed broadleaved trees and shrubs. Rhododendron has dominated the shrub layer in the northern part of the wood but in recent years this has been controlled and removed from most parts of the wood. The ground flora is indicative of ASNW indicator species including bluebells in the drier areas and marsh marigolds, flag iris and lords and ladies in the marshier parts of the wood. In recent years the woodland ground flora has been invaded by Himalayan Balsam which has spread from areas beyond the wood.

To the east of the wood there has been extensive edge planting of mixed broadleaved trees and shrubs on land owned by Warrington Council. The wet areas of the wood contain mature and semi-mature willow and alder which has been coppiced in the past. There is a network of man-made ditches which drain into Callands Brook as it flows through the wood.

The wood is well used by local people due to its proximity to nearby residential estates in this part of Warrington and the footpaths in the wood that link it into Sankey Valley Park which attracts visitors from a wider area.

A notable man-made feature bordering the site is the St Helens Canal, now disused and partly drained, which creates a green corridor for wildlife and a recreation route linking the wood to other green spaces in the area. Gulliver's World Theme Park is located on the northern boundary to the wood.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

The wood has surfaced footpaths through it which should be accessible for all of the year. It forms part of the more extensive Sankey Valley Park which has a network of surfaced paths. There is no official parking immediately adjacent to the wood although it may be possible to park on the Maltings Pub car park which is located just off Old Hall Road on Bewsey Close. It is then a short walk from here along the rough track past Bewsey Old Hall itself until you come to a gap in the hedge line on the right adjacent to a hedged maze. Go through this gap and head down and left following the well surfaced paths towards the canal and pond that adjoins the site. There are two entrances over wooden bridges in this area on the western boundary around the edge of the pond. There is a third entrance on the north western tip of the woodland that leads out onto the car park for Gulliver's World Theme Park and a fourth access point can be found leading onto the canal towpath at the south eastern tip of the woodland.

The nearest bus stop is on Old Hall Road just next to and opposite the turning onto Bewsey Close. For directions to the woodland from here see above. For more information on bus stops, routes and timetables visit the traveline website <http://www.traveline.org.uk/index.htm>.

The nearest toilets can be found at the Westbrook Shopping Centre that is about 5 minutes drive north on the A574 Cromwell Avenue.

3.2 Access / Walks

4.0 LONG TERM POLICY

The long term intention for Twig and Bog Woods is to maintain a high forest of mixed native broadleaves with a diverse species and age structure. The wood will be managed primarily as a recreational and landscape feature.

The site will be subject to minimal intervention and the wood allowed to develop through natural processes, however it may be necessary to undertake woodland operations for public access, tree safety and to encourage a more diverse and resilient woodland for the future capable of withstanding pressures from climate change, pests and diseases

The wood should retain a diverse mix of species and age structures along with natural regeneration and suitable ground flora species within the ancient semi-natural woodland. Rhododendron should be removed or reduced to a rare component in the wood to retain the ASNW indicator ground flora species.

The footpaths on site will be suitably managed along with four entrance points and infrastructure to ensure the site is welcoming and safe for visitors to use and enjoy.

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 wood has surfaced permissive footpaths which link into the wider network of paths in the adjoining Sankey Valley Park and St Helens canal. There are four entrance points into the wood: two entrances are via footbridges that cross over Callands Brook from the adjoining Sankey Valley Park on the western boundary. There is an entrance on the eastern side of the wood from the St Helens canal towpath and a fourth entrance on the northern boundary near to the car park for Gulliver's World Theme Park. There are three wooden bridges owned by the Woodland Trust that cross the stream within the site. The site is well used by the public, mainly local dog walkers and families. There is several small public car parks located within Sankey Valley Park which can be used by visitors to the wood.

Significance

The site links into Sankey Valley Park which is a linear green space that links the NW of Warrington to St Helens along the towpath of the now disused St. Helens Canal and Sankey Brook. This is a popular recreational area attracting a significant number of visitors from the local area and further afield who could visit the wood.

Opportunities & Constraints

Opportunities may arise to work with neighbouring landowners (Warrington BC, Land Trust) to work jointly to improve public access within the wider Sankey Valley Park area. Complicated ownership of adjoining land means that management access to the site is very limited/difficult for undertaking work which is a major constraint. Wet ground conditions, watercourses, ditches and sensitive ASNW ground flora makes undertaking access work difficult and potentially damaging.

Factors Causing Change

Occasional vandalism to signs and site infrastructure but not a significant issue. Motorbikes have caused damage to the footpaths in the past although this is not currently a problem. Future development of land to the east of the wood and/or expansion of Gulliver's World Theme Park could have an impact on the adjoining green space and visitors using the footpaths in the wood.

Long term Objective (50 years+)

The site should be used and appreciated by local people and visitors to the area. The footpaths will be maintained along with signage and infrastructure so that people can visit and enjoy the site safely. Inappropriate uses of the site such as by motorbikes will be controlled if necessary.

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

Vegetation along footpaths will be cut back and entrance points, signs and footbridges will be inspected and maintained annually.

Accumulations of litter and rubbish will be removed annually.

An assessment will be undertaken of the condition of footpaths, entrances and access fixtures (WSP audit) during the plan period.

5.2 Ancient Semi Natural Woodland

Description

The woodland is Ancient Semi-Natural Woodland of mixed broadleaf species including beech, oak, sycamore, alder and willow with occasional ash, hornbeam and sweet chestnut. It was planted in the 1980s with an understorey of mainly holly, hazel and elder. Ancient woodland ground flora indicator species are present throughout the wood including bluebells and dogs mercury with marsh marigolds, flag iris and lords and ladies in the wetter parts. Rhododendron covered much of the wood, although in recent years this mostly been cleared. Along the eastern boundary of the wood (outside the Woodland Trust's ownership) there has been extensive edge planting of mixed broadleaved trees and shrubs. The wetter areas of the wood contain mature and semi-mature willow and alder, some of which have collapsed and there is a significant volume of dead wood, both standing and fallen, on the site.

Significance

The amount of ASNW and AWS within Cheshire is extremely low. Less than 2% of woodland in the UK is Ancient Woodland and this is therefore a rare habitat and is particularly scarce in urban areas. The site has been designated a Local Wildlife Site because Ancient woodland is a Biodiversity Action Plan priority habitat for Cheshire.

Although this woodland is only small in size, it is part of the larger Sankey Valley Park green space which provides an important local landscape amenity and wildlife habitats.

Opportunities & Constraints

Ownership of neighbouring land is complicated with several other landowners in this area (Warrington BC, Land Trust, Gulliver's World) means that attempts to control invasive species (rhododendron and Himalayan balsam) needs to be done jointly across landownership boundaries for it to be successful.

Limited/ difficult management access to the site is a major constraint.

Wet ground conditions, watercourses, ditches and the sensitive ASNW ground flora makes undertaking silvicultural operations difficult and potentially damaging.

Factors Causing Change

Rhododendron is re-growing in some areas in the wood and needs controlling to stop it spreading. Himalayan balsam is invasive and spreading within the wood. It is also widespread on the adjoining land at Sankey Valley Park and Gulliver's World and unless it is controlled in these other areas it will spread back in from these areas.

Occasional anti-social behaviour (fires, vandalism and damage to trees) but not presently causing any significant impact on the wood.

Future development of land to the east of the wood and/or expansion of Gulliver's World Theme Park could have an impact on the adjoining green space that buffers the site.

Long term Objective (50 years+)

To maintain the ASNW high forest canopy of native broadleaves with a varied structure in terms of species and age class distribution. Where safe to do so, the development of stand structure, species mixture and the rise and decline of mature trees will be allowed to develop naturally. Management will aim to provide an on-going amenity to the local population and ensuring continuity of the Ancient Semi-Natural woodland habitat. Tree safety will be a priority and may provide opportunities to further enhance structural variety, areas of natural regeneration and the ASNW ground flora. Invasive rhododendron and Himalayan balsam will be controlled within the wood.

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

Tree safety inspections will be undertaken on a biannual basis to ensure the wood is safe for visitors.

Health of trees will be monitored for diseases and pests during the plan period.

Rhododendron within the wood will be cleared and monitored for signs of regeneration during the plan period.

Himalayan balsam will be controlled during the plan period followed by an assessment to consider the long term sustainability of removing it from the wood.

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	1.00	Beech	1910	High forest	Mostly wet ground/exposed site, No/poor vehicular access to the site	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Community Forest, Local Wildlife Site

This small compartment of ASNW forms the northern part of the wood with Callands Brook passing through the eastern edge. It is mostly mixed broadleaved species dominated by beech, oak, sycamore and alder, with single specimens of ash, hornbeam and sweet chestnut. Hawthorn, elder, willow and elm regeneration make up the shrub layer with occasional gorse and broom bushes on the stream banks. The ground flora is dominated by Himalayan Balsam in the summer. Bluebells are found frequently across the drier areas of the woodland with marsh marigold, yellow iris and lords and ladies thriving in the marshy areas.

The compartment is bounded by the Gulliver's World theme park to the north, a ditch/ drain to the west and south, and a permissive path in the wood forms the eastern boundary next to compartment 2a.

2a	1.96	Mixed broadleaves	1910	High forest	Mostly wet ground/exposed site, No/poor vehicular access to the site	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Community Forest, Local Wildlife Site
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This compartment forms the eastern and southern part of the wood and is mostly flat, low lying and in places marshy ground. It is mixed broadleaved ASNW with dominated by oak, beech, sycamore and alder with single specimens of ash, hornbeam and sweet chestnut. The shrub layer in the northern half of the compartment was dominated by rhododendron although much of this have been cleared in recent years but there is some rhododendron regenerating. Hawthorn, elder, willow and elm regeneration also make up the shrub layer in the compartment with some gorse and broom on the ditch banks. ASNW indicator species including bluebells carpet the drier areas of the woodland floor with marsh marigold, yellow iris, lords and ladies in the marshier areas. In recent years the ground flora has become dominated by invasive Himalayan Balsam which covers between 50-75% of the wood in summer.

The compartment is bounded to the north by a fence alongside Gulliver's World theme park, to the west by a permissive footpath in the wood and compartment 1a. Callands Brook at this location is just outside the Trust's ownership. A large pond (outside of WT ownership) forms the south western boundary to the compartment with a feeder channel for the canal being the south eastern boundary. The main part of the eastern boundary is not easily visible since the land to the east (owned by Warrington Council) was planted with broadleaved trees and shrubs in the 1980s/early 1990s to create a woodland buffer which has merged into the wood.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2024	2a	Ride edge Coppice	0.04	75	3

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.