



West Wood

Management Plan 2014-2019

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	West Wood
Location:	Calverley
Grid reference:	SE197373, OS 1:50,000 Sheet No. 104
Area:	7.58 hectares (18.73 acres)
Designations:	Ancient Semi Natural Woodland, Ancient Woodland Site, Tree Preservation Order

2.0 SITE DESCRIPTION

2.1 Summary Description

Once the woodland garden of an imposing Victorian house, West Wood is a fascinating oak wood with lots of quirky secrets to discover. As you explore this hillside woodland, look out for an old walled garden, hidden grottoes, a stone arch a flight of stone steps - some made from millstones, a tennis court and even an outdoor swimming pool complete with islands!

2.2 Extended Description

The site was acquired by the Trust on the 31st January 1995. The woodland is located in the Aire Valley approximately 1 mile from the village of Calverley and on the edge of Greengates, a suburb of Bradford. However the wood is just within Leeds City Council boundary. Access to the wood from the south is via Clara Drive, which runs off the main road between Shipley and Leeds (A657). Access from north is via Parkin Lane and Eleanor Drive which link to the main road at Apperley Bridge, the A658.

The wood lies on a northwest-facing slope, which is quite steep in places and includes some small rock outcrops of Millstone Grit. A variety of large to small rough gritstone boulders lay all over the woodland floor. Mudstone and shale is also present on the site.

The wood contains two springs, housed in small stone built grottoes which link into a large man made pond, which is reputed to be a Victorian outdoor swimming pool which is now silted up.

The wood extends to 7.58ha and links directly into the larger Calverley Wood and Lodge Wood to the east. This combined woodland area makes up one of the largest areas of woodland cover in the Aire Valley.

There are no definitive rights of way within the wood but the site is exceptionally well used with many paths throughout the whole site as well as large areas where people tend to wander at will. The site has a history of misuse, by motorcycles, four wheel drive vehicles and horses.

The wood is on the site of ancient woodland, but the present tree stock appears to have been planted. The site was shown wooded on the 1810 Ordnance Survey map. Small-scale quarrying operations have been undertaken in the past, some of which might have been for local walling or building material. The wood formed part of the grounds of Champion House, a Victorian property situated on the southern edge of the wood. The woodland garden contained a number of features, the remains of which can be seen today. These included, a walled kitchen garden, (Now compartment 1b) a cottage, a large pond (swimming pool), grotto, springhouse and a number of pathways and steps. The house was once owned by the Garnett family.

The wood contains a rich mixture of species of both fauna and flora. A high proportion of the wood is open mature oak woodland with limited under storey shrubs. However, rhododendron had taken a hold, particularly of the steeper slopes, rock outcrops and the eastern boundaries to the wood, though cleared in 2011 - 2013, clearance and management of regrowth and regeneration is ongoing.

The wood is bordered on the south-eastern boundary by Clara Drive, a private road. To the northeast is Calverley Cutting, a deep sunken lane, it was to shield the house owner from having to look at people walking to work. To the northwest is Eleanor Drive a cobbled tree lined lane, which is bordered by open grazing land and a narrow strip of woodland, which runs down to Carr Beck. The boundaries to the woodland, are not clearly defined on the ground and often confused with neighbouring property.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By bus:

A number of bus services run along Carr Road (A657) and stop in Calverley, which is a short walk from West Wood. For further information contact Traveline on 0871 200 2233 or go to traveline.org.uk

By train:

The nearest railway station is New Pudsey, which is about 2.5 miles (4km) to the south of West Wood. The station is on the Calder Valley Line, which connects Leeds and Manchester. For further information contact Traveline on 0871 200 2233 or visit traveline.org.uk

By car:

From Leeds, follow Woodhouse Lane (A660) for about three miles (5km) to a roundabout. There, take the first exit onto Ring Road West Park (A6120). Continue along the A6120 for about three and a half miles, passing straight on at two roundabouts. At a third roundabout, take the fourth exit onto Rodley Lane (A657) and carry on for close to one mile (1.6km) to Calverley. West Wood and Calverley Wood are to the north of the village. There is roadside parking at Apperley Bridge and at Parkin Lane.

3.2 Access / Walks

Access to the wood from the south is via Clara Drive, which runs off the main A657 road between Shipley and Leeds. Access from the north is via Parkin Lane and Eleanor Drive (pedestrian and bridleway use only), which link to the A658 at Apperley Bridge where there is space to park at the roadside.

A bridleway called Parkin Lane leads to the wood about 270 yards (250m) to the south, at the junction of Calverley Cutting and Eleanor Drive. A number of small tracks radiate into West Wood from this point, which is to the east of Eleanor Drive. There's also a small parking area.

A 62-mile (100km) trail called the Leeds Country Way passes through West Wood. For further details visit the parks and countryside area of Leeds City Council's website leeds.gov.uk

A visit to West Wood can also be combined with a walk along the towpath of the Leeds & Liverpool Canal, which passes close by at Apperley Bridge. Find out more at canalrivertrust.org.uk

Within West Wood there are no Rights of Way, but there are many paths throughout the woodland that are well-used by the public. There is no circular path - the main path runs through the wood east-west. Some of the paths have steep sections and there is a flight of stone steps, which can be slippery when wet.

4.0 LONG TERM POLICY

The long-term intention is to develop and maintain a predominantly native broadleaved high forest dominated by oak. Natural regeneration of both native tree and shrub species will be encouraged to ensure the continuity woodland and to create a mixed shrub layer and diverse age structure. To achieve this aim will involve different management prescriptions for each of the compartments which will include control of non-native trees and shrubs.

Public access will be will be maintained and encouraged along specific paths to enable natural regeneration to establish in selected areas of the wood. The historical features on the site will also be maintained to reflect the past use of the wood and provide interest to visitors.

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 is exceptionally popular all year round, predominantly used by locals as part of a longer route taking in Calverley Woods from the many paths and roads, which surround the site. Given the open nature of some of the site visitors also wander at will across it.

Significance

West Wood, and the adjacent Calverley and Lodge Woods, form a large area of woodland, immediately adjacent to the cities of Leeds and Bradford. The woods are therefore especially important in providing opportunities for informal public access to woodland to a huge local population.

Opportunities & Constraints

The historical features within the wood are fairly interesting and attractive to visitors although they are beginning to be lost beneath scrub growth. Control of the rhododendron is essential to encourage natural regeneration and the recovery of woodland ground flora and shrub layer, and to ensure paths and routes remain open and inviting.

The lack of ground flora in the northeastern section of the wood is of concern. The erosion to the ground is not helped by the high visitor numbers. In an effort to encourage natural regeneration selective oaks will be felled to create light and space for seedlings to develop. Branch wood will be left around small areas to discourage pedestrian access and erosion.

Factors Causing Change

The site has a history of misuse, by motorcycles, four-wheel drive vehicles and horses. Mountain bikers are also digging holes and creating jumps, which are currently damaging the site, and this action needs to be deterred. Gates and barriers to the north and south west of the woodland are managed by LCC and therefore dependent upon a good working relationship with the neighbouring landowner.

Long term Objective (50 years+)

The level of public access to the site to be maintained with areas protected to allow natural regeneration to develop in certain areas. The rhododendron on the site to have been maintained at a very low level where it does not affect public access within the site. Where possible access for vehicles and bikes will have been reduced. The Victorian garden features will be maintained to add interest to the site and ensure the continuity of these historical features.

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

Maintenance of main footpath routes and welcome signs will be undertaken on at least one occasion annually . The main historical features such as steps, ponds, follies will be assessed for condition and remedial work on at least one occasion per plan period. A planned program of consultation with LCC regarding access and anti-socials issues should be undertaken within this planned period. Good ride management should be undertaken with a planned thinning of track side trees to enable clear access.

5.2 Ancient Semi Natural Woodland

Description

The wood is listed by the West Yorkshire Biological Data Bank as an ancient woodland site, although the area has clearly been changed by its past use, including that of a Victorian woodland garden. It is likely that the tree species now present have been planted, but fortunately they are mainly native, dominated by oak, which provides the character of natural woodland.

Significance

The site is interesting in that it is on an ancient woodland site, maintains a predominately native tree species composition, yet at one point has been a Victorian garden. The tendency for Victorians to introduce more unusual exotic species to gardens could have produced a very different character to the wood. The woods links directly into the much larger Calverley Wood to the north east, a very large ancient woodland site. The two areas complement each other by forming a very substantial area of woodland habitat in a largely urban environment area and a prominent landscape feature. Two small meadow areas to the north west and south east help to buffer the wood from urban development ..

Opportunities & Constraints

The opportunity exists to maintain the woodland with predominately native tree species, by encourage natural regeneration of oak and control non-native species. The small percentage of non-native species within the wood is not a concern reflecting the history of the site. However, the shrub layer will require careful management to control the spread of rhododendron. Where possible native shrub species such as holly and hazel will be encouraged which may be of more beneficial wildlife value. If shrubs cannot be established through natural regeneration, then new planting may be considered.

Factors Causing Change

Invasive Rhododendron, Natural Regeneration Of oak and other species, Senescence of oaks and other species

Long term Objective (50 years+)

The aim of the next 50 year period is to ensure a divers species mix and age group. Perhaps more importantly, given the current ages of trees, would be ensuring the success of natural regeneration that will help to create a more varied age class structure within the wood, especially in compartment 1a, which has a very limited amount of younger trees. A target area of over 5% natural regeneration, consisting of well established young native trees has been set, which if achieved would improve the age structure and help ensuring the continuity of the woodland.

In addition to the management of tree species, the extent of rhododendron will be controlled so that it occupies less than 1% of the woodland area and other shrub species will be encouraged.

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

To undertake the control of Rhododendron regrowth and regeneration on one occasion per plan period, to include cutting and spraying of cut stumps/ regrowth. To monitor the development of the coupes cut in the last plan period within compartment 1a and assess the need for the control of non native regeneration within these coupes by the end of the plan period. . Possible thinning and ride management should be a consideration to promote regeneration and ground flora whilst also enabling clear access for the public/management.

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	5.87	Oak (pedunculate)	1800	High forest		Ancient Semi Natural Woodland, Informal Public Access	Ancient Woodland Site, Tree Preservation Order
<p>Compartment 1a contains approximately 80% mature oak with other tree species including, birch, holly, chestnut, sycamore, Norway maple, beech, lime and rowan. The majority of trees are mature with the number of younger trees and seedlings being fairly limited, especially oak, although, rowan, birch and sycamore can be found. Indeed, the northeastern half of the compartment 1a alongside 'Calverley Cutting' is almost completely devoid of ground vegetation with large areas of bare earth. This is no doubt due to a number of factors including, shallow soils, high acidity level, shading and erosion due to high levels of public access.</p> <p>The southeastern boundary of the site is Clara Drive, which is flanked by an avenue of mature beech trees. The Trust is responsible for the avenue trees on the woodland side of the drive. Shrubs species tend to be concentrated in the central section of the compartment around the old pond and to the north west of the house. Rhododendron has been the dominant shrub, though the majority has been removed between 2011 and 2013. Rhododendron can still be found in small pockets which is to be expected due to the volume cleared, however planned cutting and herbicide treatment to these small areas planned over the coming management period. Holly and laurel also present.</p>							
1b	0.58	Mixed broadleaves	1850	High forest		Ancient Semi Natural Woodland, Informal Public Access	Ancient Woodland Site, Tree Preservation Order
<p>Compartment 1b is situated in the old kitchen garden of the house and contains a mixture of trees many of which have no doubt developed from natural regeneration, others, such as the weeping ash, have no doubt been planted as part of the house grounds. Tree species include, 40% oak, 20% sycamore, 20% birch, 20% other species including cherry, willow, lime, and yew. Natural regeneration of species is good, with oak and rowan doing well. The trees tend to be younger than compartment 1a, perhaps 40-60 years, no doubt equating to the time when the garden was stopped being used for the production of vegetables etc. The shrub species were again dominated by rhododendron controlled between 2011 and 2013. The ground cover consists mainly of a large carpet of ivy with some bramble and nettle. Rhododendron can still be found in small pockets which is to be expected due to the volume cleared, however planned cutting and herbicide treatment to these small areas planned over the coming management period.</p>							

1c	1.13	Birch (downy/silver)	1970	High forest		Ancient Semi Natural Woodland, Informal Public Access	Ancient Woodland Site, Tree Preservation Order
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The compartment 1c to the northeast of Champion House, comprises of 90% birch, which appears to have developed by natural regeneration over the last 30 years, together with oak and rowan saplings accounting for the other 10%. The shrub layer was heavily dominated by rhododendron, although no evidence of rhododendron regeneration has been found in this area, small pockets have been found elsewhere and a programme of control planned for the coming years. The ground flora consists of ivy, grasses, bluebells and bare earth.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2024	1a	Selective Fell	5.82	26	150
2024	1b	Selective Fell	0.58	26	15
2024	1c	Selective Fell	1.13	27	30

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.