WOODLAND TRUST

Loxley Wood

Management Plan 2017-2022

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MAPS

THE WOODLAND TRUST

INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.
Please either consult The Woodland Trust website www.woodlandtrust.org.uk or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland.

Our strategic aims are to:

- Protect native woods, trees and their wildlife for the future
- Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
10. Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site – their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

1.0 SITE DETAILS

Site name:	Loxley Wood
Location:	Shapwick
Grid reference:	ST408375, OS 1:50,000 Sheet No. 182
Area:	21.17 hectares (52.31 acres)
Designations:	County Wildlife Site (includes SNCI, SINC etc), Planted Ancient Woodland Site

2.0 SITE DESCRIPTION

2.1 Summary Description

Loxley Wood lies on a gentle north facing slope of the Polden Hills between Bridgwater and Street. The wood is almost entirely an ancient woodland site which was planted with conifers in the 1960s.

2.2 Extended Description

Loxley Wood is on the Polden Hills, situated between the Somerset Levels, on the north side of the A39 between Bridgwater and Glastonbury. It forms the major part of a slightly larger area of woodland. It is within The Mid Somerset Hills National Character Area (NCA) 143.

The site was acquired by the Woodland Trust in 1999 and is a mixed broadleaved Ancient Woodland Site with planted conifers. PAWS). The previous native broadleaved canopy - most likely oak - was cleared and replanted in 1967. The majority of the site (compartment 2) now consists of a mix of mostly regenerated ash, oak and field maple, a hazel understorey in places, and a proportion of planted larch and Norway spruce throughout the stands, occasionally dominant. Through the Woodland Trust's gradual restoration approach, the proportion of conifiers has been reduced through thinning interventions between 2002-4 A band of mature broadleaf wood which was seemingly not felled with the rest of the wood remains along the roadside, part of thihs area is classifed as Ancient semi-Natural Woodland (ASNW).

There are many old banks within the wood thought to indicate historical ownership and boundary changes. There is a major ditch and bank system around the edges of the wood, and the one on the edge of the A39 may have been along the route of the old roman road.

Records of rare invertebrates, generally species associated with deadwood, are held. These have declined over the last 60 years due to changes in habitat. The main ride and some other parts of the wood have a rich ground flora and many invertebrate associates. There are two small ponds on the northern boundary.

The site has slowly permeable seasonally waterlogged clay soils over Jurassic and Cretaceous clay.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Parking
Parking for up to four cars exists in the management gateway from Wood Lane. There are 2 lay-bys on the A39 from which unauthorised access to the wood is obtained by crossing land owned by Somerset County Council.

Public Transport
The closest frequently used bus stop is at Church Rd in Shapwick, which is 1.2 km away via road. Alternatively a less well serviced stop is 1 km away in Greinton which is 1 km away via public footpath.

3.2 Access / Walks

Access

Public access is available from the Wood Lane running along the western boundary and from the public footpath on the eastern boundary. A route has now been opened incorporating the main woodland ride and linking with an adjacent footpath, and a circular route can be found along the northern boundary. The main track through the wood is unsurfaced and can be muddy in places. Other informal tracks exist within the wood.

Parking

Parking for up to four cars exists in the management gateway from Wood Lane. There are 2 lay-bys on the A39 from which unauthorised access to the wood is obtained by crossing land owned by Somerset County Council.

4.0 LONG TERM POLICY

Ancient Woodland Site - In 50 years' time the PAWS area will have been restored through gradual thinning and selective felling to promote a broadleaved canopy with a diverse structure favouring ancient woodland features and semi-natural flora and vegetation; composition will be largely composed of native and honorary native broadleaved species, although some conifer trees will be retained in reference to the plantation history of the site and to improve long term resilience. The woodland will be managed through a Continuous Cover Forestry based approach to develop and maintain a mixed age and species structure, to promote healthy, species-rich and resilient woodland. The main ride edges will have a varied structure maintained through 2-zone management. All historic features will remain in good condition and be protected during harvesting operations.

Public Access - In 50 years' time the importance of the wood as a local recreational resource will have been maintained and improved, so the site is valued by local users and visitors, both as a through route and a recreational and interesting resource in its own right. Access will continue to work towards the Trust's objectives of inspiring everyone to value woods and trees, and appropriate access infrastructure will be installed and maintained to support 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 Ancient Woodland Site

Description

Loxley Wood is a mixed broadleaved Ancient Woodland Site which was planted with conifers (larch and Norway Spruce) in 1967 when most of the ancient woodland broadleaved trees (mostly oak) were felled. The site was acquired by the Woodland Trust in 1999 and restoration through the thinning of conifers began between 2002 – 2004. It now has a mixed canopy of mostly ash, with some oak, field maple, and willow, with a hazel, spindle and dogwood understory as well as approxmately 50% remaining planted larch and Norway spruce. A strip of semi-natural ancient woodland remains along the south-eastern roadside boundary which is predominantly mature oak, with mature horse chestnut, ash and sycamore trees over a hazel understory with a rich ground flora. Part of the area is owned by Somerset County Council, ownership over a small section at the eastern end is unknown.

The central ride running West-East along a central track has been coppiced on rotation in 2013, 2014, 2015, and 2016 into scalloped glades. It has a diverse understory including hazel, ash, dogwood, spindle, willow sp, field maple and alder with a species rich ground flora including Early purple, common spotted and butterfly orchids, wood millet and other species indicative of ancient woodland. It also supports a huge range of invertebrates.

Management access is gained from a small side road directly into the wood, and from a field gate on the A39 in the south of the wood. The site has slowly permeable seasonally waterlogged clay soils over Jurassic and Cretaceous clay. There are two small ponds on the northern boundary which can dry up.

Significance

The wood is a mainly a Plantation on Ancient Woodland (PAWS) site with a small strip of ancient woodland. It has a Local Wildlife Site due to its Ancient Woodland Site status and associated ecology.

Although the Mid Somerset Hills feel fairly wooded, only 5% of the area is covered in woodland and Loxley is the only Ancient Woodland Site within a 5 mile radius, although much of this also includes areas of the Somerset Levels. Past records show the wood had a very rich invertebrate fauna, particularly those associated with dead wood. It is in a largely agricultural landscape and is large enough to sustain viable populations of woodland species acting as a reservoir for their future spread.

The Woodland Trust's aim is to protect and restore all ancient woodland and the ownership of Loxley Wood helps contribute to this through the use of the site to demonstrate PAWS restoration.

Opportunities & Constraints

Opportunity
Due to the spread of ash dieback in the region it is likely much of dominant ash canopy may be affected and eventually succumb. Depending on how quickly this occurs, stand collapse in terms of ecological functioning is a very real risk given the high proportion of ash. In order to mitigate against this; growth and development of overshaded alternative broadleaved species including oak, cherry, birch and other understory species should be promoted. In practical terms this would mean respacing/thinning ash to promote these alternative species where present. Most are currently suppressed by the ash's typical vigorous growth and this process would halt trees' further decline and promote the development of a future canopy.

Constraints
Dumping and litter from the users of lay-bys introduce litter and invasive non-native plant species.

Factors Causing Change

-The current dominance of closely spaced ash in the canopy means there is little opportunity for the natural regeneration of other species due to light conditions.
-Deer browsing affecting recruitment of natural regeneration, of increased importance in light of pests and diseases, also limiting the success of rotational rideside coppicing to create and maintain transitional habitat
-Squirrel damage preventing some broadleaf trees from reaching maturity, notably of future concern (beyond scope of this plan) given the likely increase of oak (susceptible to squirrel damage) as a canopy tree with the demise of ash.
-Pests and tree diseases – ash dieback and Phytophthora ramorum in larch leading to a potential stand collapse (ecological functioning) if trees succumb quickly which could also cause a flush of bramble leading to the suppression of natural regeneration of tree and flora species.

Fly Tipping/litter primarily along the A39 road edge but also around the main entrance.

Long term Objective (50 years+)

In 50 years' time the PAWS areas will have been restored through gradual thinning and selective felling to promote a broadleaved canopy with a diverse structure favouring ancient features and semi-natural flora and vegetation; composition will be largely composed of native and honorary native broadleaved species, although some conifer trees will be retained in reference to the plantation history of the site and to improve long term resilience. The woodland will be managed through a CCF based approach to develop and maintain a mixed age and species structure, to promote a healthy, species-rich and resilient woodland.

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

Maintain the area of ASNW in its current condition with maturing trees, a rich shrub layer and small amounts of regeneration, and extensive ASNW ground flora.

As part of holistic silvicultural strategy maintain PAWS restoration programme across cpt 2 using gradual approach to move composition towards a predominantly broadleaved composition, selectively thinning stands by removing approximately 20% basal area across the compartments every 5 years, promoting existing broadleaved trees and remnant features including veteran trees; a proportion of felled timber should be left in situ to create deadwood habitat.

As part of the above PAWS restoration interventions, ash (as well as larch) will also be targeted for selective thinning to promote other (often suppressed) broadleaved species notably oak. Thinning the ash will also enable retained healthy trees to develop larger canopies providing better growing conditions and vitality, better enabling them to resist ash dieback for as long as possible while providing better natural regeneration opportunities.

To enhance the quality of transitional woodland habitat, maintain and extend 2-zone ride management across the main ride (between 2a and 2b), extending cyclical cutting and mowing to the main track running N-S.

Deer management will be implemented to reduce the impact of browsing and support natural regeneration processes and ensure success of ride management. Maintain monitoring through deer impact assessments.

5.2 Informal Public Access

Description

Loxley Wood is close to the village of Shapwick approx 1km away, and is located 10km west of Glastonbury. Parking for up to four cars exists in the management gateway from Wood Lane. There are 2 lay-bys on the A39 from which unauthorised access to the wood is obtained by crossing land owned by Somerset County Council. Public access from Wood Lane runs through the central ride running West-East along central track and connects with the public footpath on the eastern boundary to Shapwick Village. A route has now been opened incorporating the main woodland ride and linking with an adjacent footpath, and a circular route can be found along the northern boundary. The main track through the wood is unsurfaced and can be muddy in places, and other informal tracks exist within the wood. All paths throughout the wood are relatively flat.

It lies on a gentle north facing slope of the Polden Hills that rise up from the Somerset Levels, with the popular Shapwick Heath NNR approximately a mile north of the wood.

Significance

Provision of public access and increasing people's enjoyment of woodland is a key aim of the Woodland Trust, and it is furthered by ownership and management of Loxley Wood. The wood is the only open access wood for miles in all directions. A successful fundraising campaign highlighted local interest in opening the wood for public access.

Opportunities & Constraints

Constraints
The A39 on the southern boundary is a very fast road which may discourage visitors to visit. Accessing or exiting the wood via this route would not be in the interest of public safety.
Lay-bys along the main road and the small car park on Wood Lane receive some anti-social activity and fly-tipping.

Factors Causing Change

Fly Tipping and litter

Long term Objective (50 years+)

In 50 years' time the importance of the wood as a local recreational resource will have been maintained and improved, so the site is valued by local users and visitors, both as a through route and a recreational and interesting resource in its own right. Access will continue to work towards the Trust's objectives of inspiring everyone to value woods and trees, and appropriate access infrastructure will be installed and maintained to support visitors.

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

The short term objective is to maintain and improve the site as easily accessible, attractive, well maintained and safe woodland in accordance with access category C. This will be done by:

Main paths are to be cut and maintained as necessary twice each year in June and September, and cleared of litter and obstructions such as fallen branches.

Litter clearance around entrances and parking areas will take place every quarter in March, June, September, and December. Targeting main gate from Wood Lane and both road laybys on A39. Litter pick at least 5m into the wood at each location.

Entrance furniture will be maintained to keep them welcoming and in good condition, and maintained during path cuts to improve access.

Legal responsibilities – Cut along the two roadside edges on West and Southern boundaries with tractor mounted flail or similar. NOTE part of the A39 roadside does not belong to the Trust so please check map carefully.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	0.64	Oak (pedunculate)		High forest	Archaeological features	Ancient Woodland Site, Informal Public Access	County Wildlife Site (includes SNCI, SINC etc), Planted Ancient Woodland Site
A thin roadside strip of mature pedunculate oak over a hazel understorey. Occasional ash, sycamore and horse chestnut. Rich ground flora including wood anemone, yellow archangel, early purple and common spotted orchids. (reduced in 2017 to cover only the ASNW area to the east of the strip).							
2a	12.98	Ash	1967	High forest	Archaeological features	Ancient Woodland Site, Informal Public Access	County Wildlife Site (includes SNCI, SINC etc), Planted Ancient Woodland Site
Naturally regenerated ash with P67 larch and Norway spruce. Conifers were thinned 2002/4 resulting in over 50% semi-natural composition of ash over hazel coppice. Scattered regeneration of oak, field maple and woody shrubs including hazel, dogwood, wild privet, honeysuckle and spindle, and ground flora including wood anemone, yellow archangel. Bounded on northern edge by margin of more natural vegetation including ash, field maple, scattered oak and woody shrubs of a wide range of ages including some very old individual trees. Rich flora along main ride inc early purple, common spotted and butterfly orchids, and wood millet. There are two small ponds on the northern boundary.							
2b	7.55	European larch	1967	High forest		Ancient Woodland Site, Informal Public Access	
Northern section above ride. Ash, larch and spruce.							

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2020	1a	Thin	0.64	8	5
2020	2a	Thin	12.98	19	250
2020	2b	Thin	7.55	20	150
2023	1a	Thin	0.64	8	5
2023	2a	Thin	12.98	19	250
2023	2b	Thin	7.55	20	150
2028	1a	Thin	0.64	8	5
2028	2a	Thin	12.98	19	250
2028	2b	Thin	7.55	20	150
2033	1a	Thin	0.64	8	5
2033	2a	Thin	12.98	19	250
2033	2b	Thin	7.55	20	150

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.