WOODLAND TRUST

Lavethan Wood

Management Plan 2019-2024

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Lavethan Wood
Location:	Blisland, nr Bodmin
Grid reference:	SX100728, OS 1:50,000 Sheet No. 200
Area:	9.98 hectares (24.66 acres)
Designations:	Ancient Woodland Site, Area of Outstanding Natural Beauty, Planted Ancient Woodland Site

2.0 SITE DESCRIPTION

2.1 Summary Description

A picturesque wood on the edge of Bodmin Moor that is popular with locals and supports a wide range of interesting flora and fauna. There are lots of rugged paths through the wood making an ideal place to explore with children.

2.2 Extended Description

Lavethan Wood stands on the North facing slopes of a small valley which lies to the south of the village of Blisland near Bodmin in Cornwall and gets its name from the old Lavethan Estate of which it used to be a part. It stands within the Bodmin Moor National Character Area profile (No 153) an outcrop of granite rock which forms the highest ground in the county and gives rise to 5 of the county's main rivers. The Moor is characterised by high granite tors and a flatter basin like area of thin soils which due to the exposure and wet conditions supports mainly heath and peaty grassland, mires and occasional stunted oak and scrubby woodlands. Where the rivers leave the moor they have cut deeper valleys where shelter and richer soils are able to support more substantial broadleaved and conifer woodland. As such Lavethan Wood is highly representative of this. Much of the Moor is designated as An Area of Outstanding Natural Beauty, large areas designated as Sites of Special Scientific Interest (SSSI) and many Scheduled Ancient Monuments. The wood is designated as Ancient woodland. A small fast flowing gravel bedded river littered with large granite boulders runs along the woods northern boundary and soon leaving the wood it joins the river Camel. From there the river valley becomes deeper and well wooded with high amounts of Semi-natural and replanted ancient woodland as it reaches to the north Cornwall coast at Padstow. Most of the wood stands on the freely draining rich brown earths but on the lower slopes near the river small areas to the west become waterlogged while in the east end of the wood sandy deposits have accumulated as the eroding granite is washed downstream. The wood is stocked predominantly with oak, either as mature high forest or stored coppice; however some localised areas of the woodland were historically felled and restocked with Beech, Sycamore Sweet Chestnut, larch and other conifers probably for their timber and sporting benefits. Ground flora varies greatly throughout the wood due to its aspect, soils and shade and as such much of the woodland floor is covered with shade tolerant species (Lady fern, golden scaled male fern and hard fern). Woodrush and bluebell also feature in localised areas while bramble dominates close to ride sides and where higher light levels reach the woodland floor. Access into the wood from the Blisland road is good. There is adequate parking for at least two cars at the main entrance from where a management track then runs the whole length of wood. Short tracks and path loops then branch off it providing good internal access and links with public footpaths for the small number of locals who regularly walk there.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Lavethan wood stands on a north facing valley slope to the south of the village of Blisland on Bodmin Moor. Access to it by road is best gained from Bodmin along the A30 taking the junction towards Blisland and following the road to the edge of the village. At this point there is a bridge crossing the small river and just before that on the left hand side is a splayed gateway where there is parking for two cars. Blisland is about 0.25 miles further over the bridge.

Access for visitors is via a kissing gate to the side of the main gate. A spring crosses the track at this point and so the entrance can be quite muddy following regular use. The main track extends into the wood from here and for the first half of its length it is part of an old stoned estate road. Although hard underneath it can also be muddy in wet weather. The rest of the tracks are formed into the natural material and are uneven and muddy in places. A number of gates enter/exit the wood from the ends of several branching tracks but these all enter onto private land. The exception to this is where footpath 21 crosses the western end of the wood and extends out into the wider path network.

It appears that no regular public transport services run to Blisland.

3.2 Access / Walks

4.0 LONG TERM POLICY

Lavethan Wood will be managed as mixed broadleaf high forest and this will help deliver the Trust's aims and objectives of No further loss of ancient woodland and to protect native woods, trees and their wildlife for the future while maintaining informal public access will help inspire everyone to enjoy and value woods and trees and help provide woods with open access close to everyone's home, developing the recognition that trees and woods are an essential part of a healthy environment.

The Ancient woodland, and those areas of a more secondary woodland nature located within the wood will be managed as predominantly broadleaf high forest through a limited intervention continuous cover management regime. The wood will have a diverse species, age and size woodland and shrub layer structure and a rich and varied ground flora community. The canopy will be occasionally broken with lower level shrub and wood edge habitat that line glades, water courses and track sides and boundaries as well as occasional retained specimen conifers that reflect past management but should not present a threat to the ancient woodland habitat.

Invasive species such as Rhododendron, Laurel, Himalayan Balsam and Japanese Knotweed will continue to be controlled and eradicated as and when they occur in order to reduce the shading and other detrimental effects they would have on ancient woodland flora

Deadwood habitat both standing and fallen will be increased with the retention of dead trees, where safe to do so, and lying felled material.

Extensive badger setts are present throughout the wood and these will be protected by the use of licences and exclusion zones during any work likely to damage them.

Access for the public will be managed to provide for its low level, local use by controlling surface and side growth, maintaining tree safety and repairing surface erosion when necessary. The tracks within the wood are wide and accessible and required for use by third parties and so will be regularly maintained via annual cutting, clearing of debris and tree safety inspections and related works at a level adequate to provide access for these 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

Areas of predominantly stored oak coppice and mature oak high forest representative of ancient semi-natural woodland (ASNW) type within a predominantly Lowland Mixed Broadleaf Woodland of W8 type. Approximately 60% of the woodland contains high proportions of Beech, Sycamore, Sweet Chestnut and various conifers and is more characteristic of planted ancient woodland with abundant Beech and Sycamore natural regeneration under seed trees. Conifer groups have now been reduced sufficiently to allow for the woodland to be considered as restored. Where the dense natural regeneration is not present ASNW ground flora persists and consists of localised bluebells, common wood rush and rich populations of bryophytes and ferns. Past thinning operations, older trees and receding conifers provide a good level of fallen and standing deadwood. The woodland contains a large badger sett and a number of substantial satellite setts throughout. Most of the wood stands on the freely draining rich brown earths underlain with Devonian slates but on the lower slopes near the river small areas of waterlogged stagnogleys are present especially in the western end of the wood while in the east end of the wood sandy deposits have accumulated in valley bottom where metamorphosed greenstone intrudes

Large clumps of laurel and rhododendron used to persist, but have largely been removed however more recently Himalayan Balsam and Japanese Knotweed, washed downstream by flood waters, provide a new invasive risk.

Significance

The woodland has an ASNW designation but due to levels of non-native albeit mainly broadleaved species present, it is generally representative of AWS. Past management and targeting of invasive species and conifers has improved light levels and reduced competition and enabled ASNW ground flora species to develop and become more sustainable and the woodland is considered to be restored. As such the ancient woodland flora and trees species that do persist will help to meet the national and local Ancient Woodland Biodiversity and Habitat Action plan targets, help the Trust to fulfil its objectives of restoring PAWS, and preventing any further loss of ancient woodlands and enhancing woodland biodiversity as well as provide a refuge for local wildlife, enhance the local landscape and continue to provide limited access for local residents

Opportunities & Constraints

Constraints
Despite having one management track extending the length of the wood the steep slopes and narrow radiating paths limit management access throughout much of the woodland area
The site is close to woodlands identified as being infected with Phytophthora ramorum which may infect Sweet Chestnut
Poor management access due to narrow and sharply bending highways as well as poor internal management access

Factors Causing Change

Frequent wind damage but especially where it breaks up old Sweet Chestnut stools and over-mature beech
Squirrel Damage esp. to advanced BL regeneration and semi-mature trees
Natural regeneration of species likely to adversely affect light levels/regeneration so may include species like beech, sycamore and holly which although considered an acceptable part of the woodland species mix are already forming dense canopies in places and increases may be detrimental if not managed.
Diseases – Ash die-back – ash is quite prominent in groups throughout the wood with semi-mature and mature trees close to railway boundaries where ADB may have a substantial impact on the restructuring opportunities and safety liabilities for the wood.
Phytophthora Ramorum is present locally and may cause larger scale die-back of sweet chestnut and require statutory felling. High levels of inoculum may adversely affect ground flora and other species including Ash.
Chestnut Blight could also infect Sweet Chestnut and oak in the wood if it gains a foot-hold in the region
Colonisation of non-native invasive species such as laurel, Rhododendron, Japanese Knotweed and Himalayan balsam spread by floods in the water course

Long term Objective (50 years+)

A healthy predominantly native broadleaf woodland with a diverse age and size structure and a good proportion of mature trees with large spreading ‘open grown’ type crowns and a few mature specimen conifers. It will have a rich understory of woodland shrubs and support a robust and secure population of ancient woodland flora. As such it will provide and sustain a good resource of ancient woodland species. Non-native and invasive species such as rhododendron/laurel/JKW and Balsam growth will have been controlled.
Remnant conifers have reached senescence and death to form deadwood habitats that compliments existing levels in broadleaf crowns. The riparian edge of the river will be enhanced with dapple shade

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

Continue to develop and enhance the wood's age and size structure, and secure and enhance ancient woodland shrub and ground flora populations and levels of deadwood via a limited intervention continuous cover type system and tree safety works.

Monitor remnant conifers and laurel/rhododendron etc. to ensure their canopies are not shading out ground flora

Inspect trees along the tracks and within falling distance according to zoning (currently zone B due to level of usage) and maintain tree safety.

Fell/undertake work on dangerous trees to maintain 3rd party, neighbour and visitor safety. This will also enhance deadwood, increase light levels in localised areas and open the canopy sensitively so that it does not encourage windblow but does allow crown development of trees towards the 'open grown' form.

Although almost completely removed from the wood persisting Laurel and rhododendron and any new seedlings will continue to be controlled, ideally by cut and stump treatment or pulling to minimise chemical use. Control any JKW and Himalayan Balsam outbreaks if they occur.

Maintain and, as necessary, upgrade track network throughout the wood which are naturally surfaced and can suffer rutting after heavy machinery use, leading up to and following thinning operations to facilitate management access and support reinstatement of public access.

Increase levels of standing and fallen deadwood throughout the whole woodland as part of on-going thinning and tree safety operations and the retention of natural 'self-thinning' processes to benefit fungal and invertebrate species

Manage occasional misuse and abuse of the wood (e.g. unauthorised mountain bike access, fly-tipping) as necessary to protect the woodland habitat from damage

Undertake deer impact assessments as a part of the 5 yearly Woodland Condition assessment to monitor population and damage levels and to guide deer damage control measures as necessary

5.2 Informal Public Access

Description

The woodland has a good network of mainly naturally surfaced paths and tracks. A number of gates enter/exit the wood from the ends of several branching tracks but these all enter onto private land. The exception to this is where footpath 21 crosses the western end of the wood and extends out into the wider path network. Its varied structure offers pleasant woodland walks throughout the year, but especially in the spring, when there are very good localised shows of bluebells, and the autumn when the sycamore, chestnut and beech offer rich leaf colours. The wood also offers very good views out over the surrounding countryside and fields. Despite this the wood is generally only used by members from the immediate local community.

Significance

There is a substantial amount of open space and woodland in the area although some of this is not open to the public, or requires admission fees etc. Many of these sites such as the FCs Cardinham Woods provided other facilities which make them more attractive to the wider public. However the access opportunities provided by Lavethan are more suited to the local community who can walk regularly rather than drive and pay or who prefer to enjoy the wilder countryside and wildlife The low-key access, also allows the woodland to remain free from litter, rubbish tipping, vandalism and disturbance and therefore appear quiet and 'unspoiled' to its visitors. It helps deliver the Trust's objectives of maintaining informal public access and helping to inspire everyone to enjoy and value woods and trees and help provide woods with open access close to everyone's home, developing the recognition that trees and woods are an essential part of a healthy environment.

Opportunities & Constraints

Constraints
Paths and tracks are often shaded, wet and steep and therefore may reduce accessibility and general enjoyment of the woodland walks
Car parking areas are limited to two cars at each end of the wood

Factors Causing Change

Inappropriate use of wood by horse riders and mountain bikers.
Fly-tipping
Vandalism
Heavy canopy shade causing muddy tracks surfaces
Water run-off eroding tracks.

Long term Objective (50 years+)

Lavethan Wood will be managed in a way that continues to offer an attractive path and track network providing adequate access for the current low numbers of local visitors that use the wood on a regular basis. The wood will provide pleasant access routes with views across the river and form an attractive part of the landscape when viewed from outside and add alternative access potential to adjacent public and long distance paths.

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

Easily accessible and safe network of naturally surfaced and grassy tracks and paths through ancient woodland areas that will maintain the present low level of local pedestrian and restricted horse access. Ensure the horse riders stick to agreed routes and do not ride on footpaths and that horse riding does not increase and damage woodland paths

Inspect trees along the tracks according to zoning (currently zone B due to level of usage) and maintain tree safety,
Maintain the Woodland Trust ‘Welcome’ to the wood - Maintain paths annually by clearance of debris, removing low-level branches, managing tree safety, preventing scrub and coarse growth encroaching, maintain entrances and estate furniture throughout the wood as necessary to facilitate access, to deliver statutory highways obligations along PRoW and maintain user safety.
Grade and level track and path surfaces particularly after erosion or rutting as necessary.
Maintain 3rd party and visitor access

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	10.36	Oak (sessile)	1900	High forest	Housing/infrastructure, structures & water features on or adjacent to site, Sensitive habitats/species on or adjacent to site, Very steep slope/cliff/quarry/mine shafts/sink holes etc		Ancient Woodland Site, Area of Outstanding Natural Beauty, Planted Ancient Woodland Site

Compartment 1a is stocked with predominantly mixed broadleaf tree species and understory on a moderately steep north facing valley side the wood often has a shaded and wet appearance. Despite its Ancient Semi Natural designation the wood has been enriched during past management with many non-native species including sycamore, beech and sweet chestnut which now form a strong proportion of the woodland canopy, however this mixture varies across the site from areas of very intimate mix to others where coupes of single species exist. The more mature Oak and Beech may have been established around 1900 but the majority of the other trees appear to have undergone management (singling of stored coppice stools, thinning, coupe felling) during the 1940s to 1960s and show an age structure relevant to this. Interspersed throughout there are also remnant specimen conifers (Japanese Larch, European Larch, Norway Spruce, Douglas Fir and specimen Silver fir). The larch were mostly removed during a thinning operation in 97/98 but a few remain to maintain canopy cover and for standing deadwood potential. The other conifers appear to be older and were possibly planted for winter cover and aesthetic reasons as the Estate House looks onto the wood from across the valley. The understory varies throughout according to the canopy. Generally however it is interspersed with occasional clumps of holly and hazel or patches of dense beech and sycamore regeneration. Only occasional Rhododendron and laurel remain and now the greatest threat of colonisation is now posed by Japanese Knotweed and Himalayan Balsam. Ground cover is predominantly of bramble due to high light levels following thinning, but towards the western end of the wood where management access has historically been poor and the canopy has remained denser the bramble is suppressed and bluebells, ransoms and ferns dominate. There is a large badger sett half way along the southern boundary and several ‘satellite’ setts throughout the wood

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2023	1a	Thin	1.00	15	15
2026	1a	Thin	1.00	15	15
2029	1a	Thin	1.00	15	15

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.