COED CADW
WOODLAND
TRUST

Abertreweren

Management Plan
2019-2024

MANAGEMENT PLAN - CONTENTS PAGE

ITEM Page No.

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Abertreweren
Location:	Defynnog, Sennybridge
Grid reference:	SN920260, OS 1:50,000 Sheet No. 160
Area:	7.54 hectares (18.63 acres)
Designations:	Ancient Semi Natural Woodland, National Park, Planted Ancient Woodland Site

2.0 SITE DESCRIPTION

2.1 Summary Description

Abertreweren is an ancient woodland located on a steep west-facing slope overlooking a deep, wide valley of mostly improved pasture. It's a significant feature in the local landscape and one of several blocks of ancient woodland running along the hillside. The southern half is mature ancient semi-natural woodland of mostly sessile oak, downy birch and rowan, while the northern section was clear-felled in the l980s and re-planted with native broadleaves and hybrid larch. In spring a carpet of bluebells adds to the rich colour within the wood. Access to and within the site is difficult due to the steep slope and wet western end. There is no parking along the busy A4067.

2.2 Extended Description

The site is located 1 mile south of the small village of Defynnog, close to the northern boundary of the Brecon Beacons National Park. Situated on a steep west-facing slope that overlooks a deep, wide valley of mostly improved pasture, Abertreweren is a significant feature in the local landscape and is one of several blocks of ancient woodland running along the hillside.

The key features comprise of Ancient Semi-natural Woodland (ASNW) as well Plantation on Ancient Woodland Site (PAWS). The northern section of this ancient woodland was clear felled in the early 1980's, with one area being restocked with native broadleaves and the other part planted with hybrid larch. The southern half consists of mature ancient semi natural woodland, mostly sessile oak, downy birch and rowan, with ash and alder on spring lines, and a scattered under storey of hazel and hawthorn.

In spring a carpet of bluebells and other specialist woodland plants adds to the rich colour within the wood. The gradual restoration of the areas planted with larch to predominantly broadleaved woodland presents an opportunity to benefit biodiversity and bolster the existing ASNW. The Woodland Trust will continue the process of restoring these areas through the progressive removal of the larch to promote natural regeneration..

Access to and within the site is difficult due to the steep slope and wet western end. There is no parking along the busy A4067.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

3.2 Access / Walks

4.0 LONG TERM POLICY

In 50 years' time Abertreweren will primarily be dominated by native broadleaved trees, in the form of a semi-natural mixed woodland. Managed as high forest, there will be diversity in both species and age composition, with a well-developed shrub and field layer and young trees developing in the understorey. The areas already dominated by broadleaves will be allowed to develop naturally, with limited intervention. The area planted with larch will be progressively thinned to secure and improve ancient woodland remnants and to allow space for natural regeneration to take place. Planting with native species suitable for the site will be considered where these progressive thinnings do not result in sufficient levels of natural regeneration. Managing the level of deer browsing in this wood is vital in order to realise this long term vision and this will be achieved through the implementation of a joint programme of deer control in association with neighbouring landowners.

The single existing management track is to be kept open and free of obstruction, but whilst the site will remain available for public access, no specific provision will exist.

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 Semi Natural Woodland

Description

The area of mature broadleaved woodland occupying the southern half of the site has existed as oak woodland with wet flushes since ancient times. The woodland is a complex of woodland types, possibly W9 and W11 with some alder. Ground flora is also fairly typical of this woodland type and is dominated by grasses. Several other tree species have been introduced to this area by the previous owner, including wild cherry, small leaved lime and beech.

Significance

Upland Oakwood, the Ancient Semi Natural Woodland type present at Abertreweren, is a priority habitat covered by the UK and Brecon Beacons National Park Biodiversity Action Plans. The UK has a significant proportion of the species that characterise this habitat type.

Opportunities & Constraints

The site is prominent within the local landscape and visible from the A4067, and thus woodland management needs to take this into account.
Natural regeneration within this area is severely constrained by the grazing of seedlings by deer.
Access is difficult, being across neighbouring fields and is only usable in dry weather.
The site also has a third party right to access water from an onsite well – so control of pollution within the woodland is an important constraint.

Factors Causing Change

Deer damage (predominantly fallow), squirrel damage. Phytophthora ramorum is suspected to be present on site - currently, this only poses a risk to the larch. Ash Dieback may be present on site and the extent and impact of this deasese will be monitored. There may be changes in coarse vegetation that could impact the site if the adjacent stand of larch on neighbouring land is clear-felled. Other potential factors causing change include ingress from neighbouring livestock.

Long term Objective (50 years+)

The area continues to develop naturally as semi natural mixed woodland and managed as high forest with a diverse species and age composition. Oak continues to be the dominant canopy species and sufficient natural regeneration of canopy and shrub level species occurs.

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

Minimal intervention during the plan period except where to aid adjacent PAWS restoration work or tree safety. Monitoring undertaken of the effect of deer browsing on natural regeneration has concluded that regeneration of canopy species is being severely restricted. By 2021, a revised programme of deer control will be explored and implemented as part of a landscape scale effort that involves neighbouring landowners. Fences will be maintained to ensure the site is stock proof. This may involve the replacement of stock fencing along the entire boundary within the plan period.

5.2 Planted Ancient Woodland Site

Description

The replanted areas of Abertreweren (compartments 1a and 1b) contain remnants of Ancient Woodland components and are classified as PAWS. The site has been actively managed in the past with the planting of Oak and Larch in 1981, following the clearfell of native broadleaves. The ground flora under the planted oak and birch is robust and for this reason has been removed from the PAWS restoration strategy. The area of planted larch (compartment 1b) has a small number of pre-plantation broadleaves and very poor ground flora. Significant areas beneath the larch canopy have no ground vegetation. The small area of pre-plantation mature oaks and associated ancient woodland indicator species in the centre of the larch has been thinned to remove the threat posed by shading from the larch canopy. In 2019 the larch was line-thinned to increase light levels at ground level, thereby increasing the opportunity for natural regeneration of native species within the felled rows. Compartment 1b is currently the only area under PAWS management.

Significance

PAWS areas have the potential for restoration primarily to native upland oak wood, a priority habitat subject to a UK habitat action plan.

Opportunities & Constraints

Since Ancient Woodland cannot be created once lost, there is the opportunity to expand the area of semi natural woodland on site and create continuous broadleaved high forest by progressively thinning the planted larch and allowing native broadleaves to regenerate, or planting local stock if this does not occur. The main threat is to the remnant ancient woodland flora. Whilst the pre-plantation broadleaves have been secured by halo thinning in the past, the ground level of the rest of the compartment is subject to significant shading from the planted larch.

Natural regeneration of native broadleaves is also significantly constrained by the presence of grazing deer on site. Management access is constrained by the permanently wet status of the lower (western) end of the site, the moderate slope and the only access being across wet fields.

Factors Causing Change

Shade, Deer Damage, Squirrel Damage. Phytophthera ramorum is suspected to be present and impacting on the health and longevity of the larch, which could alter the pace of restoration. There may be changes in coarse vegetation that could impact the site if the adjacent stand of larch on neighbouring land is clear-felled. Other potential factors causing change include ingress from neighbouring livestock.

Long term Objective (50 years+)

All remnant ancient woodland components will be secure and improving in condition. Following the long-term and progressive removal of the hybrid larch the site will be restored to native woodland dominated by predominantly site native trees and shrubs with a typical ground flora.

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

Woodland specialist flora are threatened by the dense shading from the larch canopy. The process of reducing this threat level and securing the ancient woodland remnants will continue through repeat thinning of the larch within this plan period to focus on breaking up the matrix of the stand. Further halo thinning of pre-plantation broadleaves will be carried out if needed. Sub compartment 1b will be planted with native broadleaves of local provenance if natural regeneration is not successful in the next plan period.

The oak in sub compartment 1a will be monitored for stability. No thinning is planned in this plan period.

Monitoring undertaken of the effect of deer browsing on natural regeneration has concluded that the regeneration of canopy species is being severely restricted. By 2021 a revised programme of deer control will be explored and implemented as part of a landscape scale effort that involves neighbouring landowners. Whilst the presence of Phytophthora Ramorum on the larch is suspected, it is not an immediate cause for concern since the spread of infection amongst the stand of larch will only serve to lighten the canopy – something which the PAWS restoration process in seeking to achieve.

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	1.98	Oak (sessile)	1981	High forest	Mostly wet ground/exposed site, No/poor vehicular access to the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc		National Park, Planted Ancient Woodland Site
Moderately sloping, west facing sub compartment of mainly planted broadleaves, established in 1981 following clearfell of previous broadleaf woodland. In addition to this, several large hazel stools have produced shoots. Sessile oak is the most commonly planted species. An understorey of hawthorn exists, but is fairly sparse due to the dense oak canopy. Ground flora is robust with good populations of Bluebell with moss, grasses, foxglove, bracken and some bramble present. The main entrance to the site is located on the western boundary of this sub compartment and a track follows the boundary southwards from this point. This area is a broadleaf planted ancient woodland and its remnant AW features are considered secure and has been excluded from the PAWS strategy map.							
1b	1.59	Hybrid larch	1981	PAWS restoration	Mostly wet ground/exposed site, No/poor vehicular access to the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc		National Park, Planted Ancient Woodland Site
Moderately to steeply sloping, west facing sub compartment with a canopy comprised entirely of hybrid larch, planted by the previous owner in 1981 following clearfell of previous broadleaf woodland. The larch has a poor yield class and moderate to poor form. All areas with remnant ancient woodland flora have been halo thinned. The entire crop has been pruned to five feet to increase light levels. The ancient woodland flora remains very poor and has yet to respond to the management work undertaken. The remnants comprise of scattered broad leaf trees of birch and hazel with poor ground flora mainly comprising of non-flowering bluebell. Lichen is present on many trees, along with several species of fungus. An access track runs through the western end of this sub compartment.							

1c	3.87	Oak (sessile)	1900	High forest	Landscape factors		Ancient Semi Natural Woodland, National Park
Moderately sloping, west facing sub compartment of Upland Oakwood ancient semi natural woodland. Sessile oak forms the majority of the canopy, with downy birch and rowan also present in quantity. Alder and ash can be found in wetter areas. A small number of native trees including wild cherry and small leaved lime have been planted by the previous owner. Sessile oak, ash, hazel and field maple have also been planted at the northern end of the sub compartment by The Woodland Trust. Frequent hazel coppice, in addition to hawthorn, forms the understorey. Ground flora is dominated by grasses and also includes foxglove, bracken and bramble.							

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2019	1b	Thin	1.59	19	30
2024	1b	Thin	1.59	19	30
2025	1a	Thin	1.98	15	30
2029	1b	Thin	1.59	19	30
2030	1a	Thin	1.98	18	35
2034	1b	Thin	1.59	19	30
2035	1a	Thin	1.98	20	40

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.