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WOODLAND
TRUST

Coed Dyfodol Sarnau

**Management Plan
2015-2020**

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THE WOODLAND TRUST

INTRODUCTION

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

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

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

PLAN REVIEW AND UPDATING

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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

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

WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland. Our strategic aims are to:

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

All our sites have a management plan which is freely accessible via our website

www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

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

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

The following guidelines help to direct our woodland management:

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

SUMMARY

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

1.0 SITE DETAILS

Site name:	Coed Dyfodol Sarnau
Location:	Sarnau
Grid reference:	SO022325, OS 1:50,000 Sheet No. 160
Area:	10.23 hectares (25.28 acres)
Designations:	Ancient Semi Natural Woodland, Ancient Woodland Site, Woods on your Doorstep

2.0 SITE DESCRIPTION

2.1 Summary Description

A varied woodland site incorporating ancient woodland, new woodland, hay meadow and rush pasture. A stream runs along the southern boundary, providing damp habitat, whereas the trees themselves are a mixture of broadleaf and coniferous.

2.2 Extended Description

Coed Dyfodol Sarnau lies just outside Brecon Beacon National Park and is a combination of ancient semi-natural woodland, recently planted woodland on a former ancient woodland site, and has open grassland habitats. The site therefore has many semi-natural habitats that creates great habitat diversity in a small area. A small, birch-dominated, wedge of ancient woodland lies to the north of the highway and is therefore separated from the rest of the site.

The broadleaved woodland areas are being managed as minimum intervention, and will self-perpetuate through natural regeneration. The grass pastures that are both dry and damp is managed by winter pony grazing to maintain both floral diversity and prevent it turning back into woodland. A diverse flora occurs in the grassland, indicating that it has never been intensively managed.

A hedge has been planted along the northern boundary of the grassland pasture.

The mature oak woodland area is ancient semi-natural that has been grazed in the past. More recently gaps were created to encourage natural regeneration and diversify age structure that can now be seen. To the south of this oak area is an area of new mixed broadleaf woodland that was planted in 1999, thus restoring it to woodland on a former planted ancient woodland site, that was previously maintained as grassland. This, with some naturally regenerating new woodland, creates a continuum woodland that links the mature ancient woodland both inside and outside the site. The stream on the southern boundary provides some streamside woodland habitat that includes mature willow and alder.

The site is bordered on the east and south by ancient woodland that is a mixture of broadleaf and conifer plantation. To the west and north the site is bordered by improved pasture.

Other features of interest on this site include the old sunken track which approximately follows the route of the public footpath in compartment 3, crossing the site north to south. In the southwest corner of sub-compartment 2b the concrete foundation of a building remains visible.

Public access to the site is possible via a public footpath joining the site from the south and two access point from the highway at the northern end, creating a near circular walk through the site. The Key Features of this site are: Ancient Semi-Natural Woodland, New Native Woodland, Semi-natural Open Ground, and Public Access.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

General location:

Coed Dyfodol Sarnau is located near Sarnau, about 2.6 miles north of Brecon, just outside the Brecon Beacons National Park. The wood itself is about 0.8 miles from Sarnau itself. Sarnau is reached by heading north out of Brecon on the B4520. After taking the left turn signposted Sarnau, travel approximately 0.6 miles and just after a sharp right bend take a left turn uphill (signposted towards holiday cottages May 2007). After a short distance the woodland is found on the left hand side of the road.

General overview of paths & entrances:

There are two entrances off the road through unlocked gates. The second (following the instructions above) at the northwest corner of the site is the main entrance to the woods, where there is an information board. There are number of permissive footpaths running through the site, as well as the public footpath, which leaves the woods at the southern boundary by the stream, via a stile. Just outside the southern boundary of the wood a millennium bridge has been installed on the public footpath. The footpaths are gently sloped and un-surfaced, although uneven and wet in places, particularly near the stream.

Parking:

There is no car park at the site, which is located off a very narrow lane. There is room for one car to informally pull in off the lane onto the verge at the entrance, however in muddy weather this should not be done. The nearest public car park is at Brecon: Brecon Car Park, George Street - grid reference 304589/228674. This is approximately 3.4 miles away.

Public Transport:

There is no public transport service to the site. The nearest bus routes run through Brecon approximately 3.4 miles away (www.traveline.org.uk, or telephone 0870 608 2 608).

Public Toilets:

The nearest public toilets are approximately 3.4 miles away - Brecon Public Toilets, Lion Yard - grid reference 304602/228639 (information from Powys County Council, December 2006). This includes a designated toilet for disabled people (RADAR key required)

3.2 Access / Walks

4.0 LONG TERM POLICY

It is the intention of the Trust to protect the existing semi-natural habitats and maintain the low-key public access.

Along with all of the woodland, the newer (1999 planted) mixed broadleaf woodland will mature and be managed through minimum intervention. The woodland areas will be kept livestock-free to enable natural regeneration. The wide rides will remain open through coppicing and mowing. The open grassland pasture habitats will be floristically diverse and this maintained as open pasture by continued grazing.

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 ancient semi-natural woodland area is divided into three areas. Compartment 1, separated from the rest of the site by the road, was a Planted Ancient Woodland Site until 1999 when the conifer crop was clearfelled. Birch has come to dominate this area. Sub-compartment 3a is even aged oak ASNW that has been grazed in the past and has little deadwood habitat or natural regeneration at present.

On the southern boundary of the site is area 3b and 3c that consists that are planted and naturally regenerating woodland respectively. The stream on the southern boundary provides streamside woodland habitat.

Significance

Ancient semi-natural woodland is an irreplaceable and threatened habitat type in Britain. Protection and restoration of ancient woodland is one of the Woodland Trust's objectives.

Opportunities & Constraints

Although there is very little regeneration of oak in the oak wood, the removal of grazing pressure and creation of canopy gaps has increased natural regeneration of other species and a shrub layer is now established in these gaps. Greater species diversity and age structure overall has been created through gap creation in the existing mature oak woodland.

Factors Causing Change

Maturity of the woodland will lead to an increase in deadwood, and gap creation will lead to subsequent natural regeneration and diversification of woody species.

Long term Objective (50 years+)

The ASNW sub-compartments 1 and 3a will be a high forest of native broadleaves dominated by oak in 3a.

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

Allow natural development within the ancient semi natural woodland of compartments 1 and 3a. Continue to exclude livestock.

5.2 Semi Natural Open Ground Habitat

Description

Compartment 2 is comprised of unimproved grassland/pasture of two different types: damp pasture and dryer grassland, both likely only semi-improved. The damp pasture contains numerous characteristic wet meadow species, including *Valeriana dioica*, *Caltha*, *Succisa pratensis* and *Pedicularis palustris*, however, this area is dominated by soft rush. The dryer grassland has a diverse flora and is typical of managed unimproved grassland.

There is a permissive pathway going north-south through the site, with associated open rides and glades, that is creating linear open grassland habitats through the newer woodland and linking it with the grassland in compartment 2 at the northern end of the site.

Significance

Managed semi-improved pasture is a habitat of conservation concern in the UK. Damp semi-improved pasture managed through grazing is an important wildlife habitat and is generally scarce due to agricultural improvement or neglect. Conservation of semi-natural non-woodland habitats is a key Woodland Trust objective.

Opportunities & Constraints

Managing the rushes by winter grazing may allow the development of more diverse flora and improved habitat quality. Wet ground conditions are a constraint on grazing for prolonged periods in the winter. Soft rush dominance may limit the development of a more diverse flora. Difficulties of sourcing contractors to make hay in the dry and damp pasture is likely preventing it delivering best conservation outcomes. Sustainable conservation management of rides and glades is possible through annual 'extended' path access works (I.E. alternating years cutting regimes along ride sides and in the created open glades).

Factors Causing Change

Dominance of rush in damp pasture, reduction in floral diversity in dry pasture, natural succession to scrub or woodland in all open habitats.

Long term Objective (50 years+)

Both dryer and damp pastures to be open and floristically rich and structurally diverse. Rides to be open, wide and floristically diverse with open-ground linkage across the N-S axis of the site.

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

The pasture areas will be cut and/or grazed to maintain openness and maintain floral diversity. The rides/glades network along the footpath edges will comprise of open grassland with no woody plants. Develop an appropriate annual cutting regime (likely maintained through annual and bi-annual alternating ride edge/glade management as part of the footpath maintenance) that is appropriate to meet this objective.

5.3 Informal Public Access

Description

The Public Right of Way provides access across the site, and a permissive path leads off of the main path. Access is through the gate at the north-west corner, directly off of the public highway, and through the gate or stile on the public footpath on the southern boundary. There is an information board next to the gate at the north-west corner. Just outside the southern boundary of the wood a millennium bridge has been installed on the public footpath.

Significance

Public access to woodland is a corporate objective of the Woodland Trust. Maintenance of the path network provides the additional benefit of habitat diversity in the wood with the potential for wildlife benefits.

Opportunities & Constraints

Constraints to public access include the lack of nearby parking.

Factors Causing Change

Natural succession in the ride edges/glades obscuring views and creating shade.

Long term Objective (50 years+)

Existing access provision of permissive paths, open views and the Public Right of Way will be maintained so that the site can be enjoyed at a low level of use.

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

Maintain existing provision of permissive paths and the Public Right of Way within the wood by strimming the central 2m annually and alternate strips every two years.

5.4 New Native Woodland

Description

To the south of the mature oak in 3a is an area that was Planted Ancient Woodland until the conifers were clearfelled in the 1960s or 1970s. Between 1960/70 and 1999 the area was maintained as grassland. In 1999 a mixture of broadleaves, dominated by oak, was planted in what is now sub-compartment 3b in order to extend and link the area of mixed broadleaf on and off the site. 3c is young mixed broadleaf woodland that came about through natural succession.

Significance

Creation of new native woodland is one of the Woodland Trust's primary objectives.

Opportunities & Constraints

Establishing broadleaf woodland in the area south of the mature oak wood has increased the extent of broadleaf woodland on the site, has created greater canopy species diversity and age structure, and developed a more complex woodland habitat overall. Coppicing of ride-side trees and shrubs will create a managed linear shrub layer and help maintain open grassland habitat.

Factors Causing Change

Maturing of this semi-natural broadleaf new woodland will lead to species community change and a reduction of a shrub layer within the stand. Stock grazing if fencing is not maintained. The spreading of new woodland areas through natural regeneration into the glades that would come about through the cessation of mowing.

Long term Objective (50 years+)

Management for sub-compartments 3b and 3c is intended to develop a high forest of native broadleaves dominated by oak.

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

Allow development of semi-natural broadleaf woodland in the newly planted area by maintaining stock exclusion and allowing processes of natural succession. Coppice ride-edge trees and shrubs to support maintenance of open grassy habitats and to create within-stand structural diversity.

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	0.15	Birch (downy/silver)	1990	Min-intervention		Informal Public Access	Ancient Semi Natural Woodland
<p>This compartment is a very small triangle of secondary woodland that is separated from the rest of the site by the minor road heading towards Brecon. The area is fenced on all sides and bordered by pasture land on the north, the road to the south, and conifer plantation to the east. The area was planted with conifers and these were felled in 1999. There is abundant natural regeneration of broadleaves, primarily birch.</p>							
2a	0.18	Open ground		Non-wood habitat	Management factors (eg grazing etc)	Informal Public Access	
<p>This sub-compartment is semi-improved pasture that is managed through winter grazing that is enclosed by stock fencing. The pasture is bordered to the north by the council maintained road, by pastureland on the west and by pasture to the south. There is a hedge along the northern roadside boundary, protected by stock fencing on both sides. A public footpath runs through the middle of the compartment.</p>							
2b	1.42	Open ground		Non-wood habitat	Mostly wet ground/exposed site	Informal Public Access	
<p>This area is mostly semi-improved pasture and managed by winter grazing with ponies. The pasture is wet and hosts a number of damp grassland species, including <i>Valeriana dioica</i>, <i>Caltha</i>, <i>Succisa pratensis</i> and <i>Pedicularis palustris</i>, the area is often dominated by soft rush, <i>Juncus effusus</i>. There is a hedge along the northern roadside boundary, protected by stock fencing on both sides. To the east is oak woodland, with pasture to the southwest and north. Within northern section of the sub-compartment are a large group of ancient oaks. Stock fencing surrounds this compartment. The concrete foundation of a building remains in the south-west corner of the sub-compartment, next to the public footpath that runs through the middle of the compartment.</p>							
3a	2.85	Oak (sessile)	1940	Min-intervention		Informal Public Access	Ancient Semi Natural Woodland, Woods on your Doorstep

This area of ancient semi-natural woodland lies to the south west of the open pasture. It has been extensively grazed in the past. Due to this management the high oak canopy is uniform in age structure and there is little natural regeneration, dead wood habitat, or ground cover. The area now has stock fencing on the north, east and west. In 1999/2000 two gaps were created in an effort to encourage natural regeneration. The gaps have saplings of ash, hazel and holly. The higher, dryer gap is developing some scrub and ground flora and rowan and oak are returning. An old sunken lane runs along the public footpath in 3a and 3b. In addition to the public footpath is a permissive path that leads to the highway and makes a circular path as joins the public footpath in 3b. There is a commemorative grove post near the public footpath.

3b	3.82	Mixed native broadleaves	1999	Min-intervention	Gullies/Deep Valleys/Uneven/Rocky ground	Informal Public Access	Ancient Woodland Site, Woods on your Doorstep
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This compartment lies to the south of the ancient semi-natural woodland of compartment 3a. This new native woodland is former ancient semi-natural woodland. The area was planted with conifers and then clear-felled in the 1960s or 70s and then maintained as grassland. In 1999/2000 the site was planted with mixed broadleaves, dominated by oak but also including alder, hazel, hawthorn, ash, and rowan. In the northeast corner a glade has been created and is maintained by mowing. From the glade there is an excellent view across the valley. There is a ditch crossing both 3b and 3c north to south, which is bordered by gorse. An old sunken lane runs along the public footpath in 3a and 3b, the public footpath leaves the site south of 3b via a stile. This compartment has a permissive footpath running north back towards the highway.

3c	1.49	Mixed native broadleaves	1980	Min-intervention		Informal Public Access	Ancient Woodland Site, Woods on your Doorstep
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This sub-compartment had a similar history to that of sub-compartment 3b but prior to 2000 had been allowed to scrub over. This then developed into semi-natural secondary woodland where willow spp, ash, alder predominate. Some areas have become blackthorn scrub. The southern boundary is formed by the east flowing stream. There are no paths within this sub-compartment.

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.