

Coed Llanelltyd

Management Plan 2016-2021

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <u>www.woodlandtrust.org.uk</u> 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 <u>www.woodlandtrust.org.uk</u>. 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.
- 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 Llanelltyd
Location:	Llanelltyd, Dolgellau
Grid reference:	SH721201, OS 1:50,000 Sheet No. 124
Area:	3.52 hectares (8.70 acres)
Designations:	National Park, Tree Preservation Order

2.0 SITE DESCRIPTION

2.1 Summary Description

Coed Llanelltyd is a narrow woodland, dominated by oak, sweet chestnut and beech trees. It is home to many species of birds, as well as bats, fungi and mosses.

2.2 Extended Description

Coed Llanelltyd is a narrow linear woodland comprising 3.5 ha situated on steep sloping ground with an east facing aspect, sandwiched between the A470 (T) along the western boundary and the Afon Mawddach along the lower side of the slope to the east. The southern section of the woodland is within the village of Llanelltyd and is bounded by a high retaining wall to the road. Steps lead down to the woodland from the roadside pavement but there is no footpath. The terrain does not facilitate formal public access. The southernmost boundary comprises a dry stone wall, in a poor state of repair adjacent to the river. The boundaries to the north and adjacent to the road are not formally delineated and Coed Cadw's mutual boundary with the Highways Authority is not easily detected on the ground.

Adjacent to the river the ground levels out so that there is a fairly broad riparian edge in some sections. It is prone to flooding with silt banks creating areas of wet ground and occasional small pools. The northern tip of the woodland is extremely narrow and in parts the steep ground is sheer down to the river edge. The roadside verge, containing young trees (both planted and natural regeneration), extends down a steep bank to the woodland. The mature woodland canopy comprises mixed broadleaves with oak, sweet chestnut and beech the major components: the former conifer component, notably Douglas fir and larch, has been more or less removed over time. Sycamore and ash are also represented with alder and some willow along the river's edge. Holly tends to be the dominant under storey species. Invading rhododendron is being controlled. A small area at the northern end of the woodland was illegally felled prior to Coed Cadw ownership and was replanted in 1986. The planting has largely failed and has been overtaken by dense natural regeneration and coppiced re-growth of ash, birch, sweet chestnut and hazel, interspersed with the typical natural regeneration across the woodland of sycamore, beech and conifers which was respaced in 2005. The shallow soils overlying shale support a generally sparse field layer with bramble and ivy, moss species and ferns with occasional wavy hair grass and bilberry. Illegal dumping of garden waste has led to the proliferation of Lonicera nitida in the southern section close to the wall. On the richer silt laden soils near the river great wood rush is prominent with tussock grass and sporadic patches of Japanese knotweed.

The fairly sheltered location has resulted in some enormous mature trees. Two noted oaks have the characteristics of veterans. Storm damage and structural defects in many large heavy limbs and high crowns have resulted in canopy gaps, deadwood habitat and potential bat roost and bird nesting sites. Fungi species and bryophytes are prominent on decaying stumps and the fallen trunks of the felled trees.

Coed Llanelltyd is a prominent feature within the local landscape. It is visible alongside the A470 and from the popular Precipice Walk above the upper Mawddach valley.

Afon Mawddach, the river adjacent to the woodland, is part of the Aber Mawddach SSSI and included within the Afon Eden - Cors Goch Trawsfynydd SAC.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

Access can be gained directly from the public road adjacent but the steep terrain is not conducive to public access and no formal provision is made.

3.2 Access / Walks

4.0 LONG TERM POLICY

Coed Llanelltyd is a prominent landscape feature and the management objectives will accordingly be to maintain the woodland as continuous cover high forest with a diverse mix of broadleaved tree species and a dynamic range of age classes, including young and veteran trees. As a general principle, minimum intervention management is envisaged other than that necessary to reduce the likelihood of exotic conifer succession and reduce tree safety risk along adjacent roads and footpaths. Natural processes (storm damage and the collapse of old trees and trees with structural defects) will create canopy gaps suitable for natural regeneration. Dead wood both standing and fallen will be abundant.

While sweet chestnut and beech will be accepted as a component of the wood, locally native species will ideally comprise at least 50% of the canopy and conifers will be rare. The understorey will comprise of holly, hazel and regeneration of broadleaved canopy trees. Ground flora will be diverse and site-typical.

Invasive non-natives, in particular Rhododendron and Japanese knotweed will be rare or absent. The woodland habitat alongside the Afon Mawddach will be favourable for otters, with good levels of shrub cover and undisturbed root plates and hollows suitable as holts or resting places.

Provision of public access facilities is not anticipated. This provides the opportunity to retain the many large and old trees with structural defects and cavities suitable as bat roosts (Daubenton's bats are know to forage on the river) and bird nesting sites (pied flycatcher, woodpecker, tree creeper). Foraging bats will also use the woodland.

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

Coed Llanelltyd is a mature woodland with a diverse mix of canopy species comprising native oaks and planted trees, predominantly beech and sweet chestnut. Sycamore, ash, birch, alder and conifer species (Douglas fir, larch and Scots pine also occur). Many of the old mature trees have attained a significant size. The shrub layer was formerly dominated by holly and a significant amount of rhododendron. The field layer is sparse with affinities to W17 type. Bramble and ivy are dominant with moss species, occasional wavy hair grass, fern species (hard fern, male fern and broad buckler fern), wood sorrel, honeysuckle and wood sage. Natural regeneration occurs in canopy gaps (created by storm damage and the collapse of limbs on large old trees) and in a felled area: it includes beech, ash, sweet chestnut, holly, sycamore, conifers, birch - but little or no oak.

Significance

The wood is an important and prominent landscape feature (visible from Precipice Walk and from the A470), containing large and old trees (potential veterans). The site was identified as RAWS in the 2011 Ancient Woodland Inventory: ancient woodland is a highly bio-diverse yet rare habitat. The mature trees offer potential for bat roost sites (with Daubenton's bats known to forage on the river). The site provides valuable woodland riparian habitat: Afon Mawddach is part of the Afon Eden - Cors Goch Trawsfynydd SAC and is likely to support a population of otters. Badgers use the woodland.

Opportunities & Constraints

Constraints include the steep, unstable terrain and lack of management (or public) access. Landownership boundaries with Highway verges/embankments are indistinct. Little or no in situ regeneration of oak occurs which could to form successor canopy, despite areas where storm damage and felling have created canopy gaps for natural regeneration. Otters are present on the Afon Mawddach and could be disturbed by large-scale operations.

However, the terrain challenges which preclude formal public access also offer an opportunity to retain standing deadwood and over-mature/ veteran trees, providing varied habitat niches for bats/ birds etc and an undisturbed area for species such as otter to use as a refuge.

Factors Causing Change

Substantial local conifer populations are a seed source for conifer encroachment/ regeneration. Rhododendron re-invasion is always possible given the extent of the species in the local wider landscape. Sources of Japanese knotweed probably occur upstream as small plants are often found along the flood line alongside the Mawddach. Flytipping, especially of garden waste, has the potential to introduce other invasive species. At present, the most abundant naturally regenerating site native tree is ash, however, ash dieback is present in the vicinity and may impact on the species mix and % of locally native trees going forward. Natural processes and periodic flooding act especially on the river bank, changing local features such as sand/ gravel banks and pools. Some squirrel damage occurs, especially to young sycamore and beech, although it is not to be preventing recruitment of young trees to the canopy as yet.

Long term Objective (50 years+)

At least 85% high canopy cover will be maintained, with the canopy made up of a diverse mix of tree species. Locally native species will comprise at least 50% of the canopy and conifers will be rare. Structural diversity will increase with a range of age classes, including a significant proportion of old and veteran trees providing niches for species such as bats and nesting birds, as well as a locally abundant shrub layer. Dead wood, both standing and fallen, will be abundant (30 cu per ha. optimum). Natural processes will create canopy gaps suitable for natural regeneration and as glades. Invasive species such as ferns, mosses, honeysuckle and species such as dog's mercury on milder ground: ideally the flora will become more diverse and increase in coverage at the expense of bare ground, as shading canopy trees are lost to windblow. The riparian edge habitat will remain undisturbed and provide favourable conditions for otters. The mature woodland will continue to be an important landscape feature but will not present a safety risk to traffic on adjacent roads and walkways.

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

Rhododendron and Japanese knotweed should be rare and subject to regular control, with no reproductive specimens tolerated. Other potentially invasive species including conifer and bamboo will be monitored and controlled if felt to be expanding/ increasing.

The site will maintained free of dumped waste and any tree work required to maintain safety alongside adjacent roads and public paths will be carried out promptly.

Aside from this, there will be a regime of minimum intervention, with trees retained to senescence and natural processes such as storm damage and flooding relied upon to create canopy gaps and increase the volume of deadwood over time. There will be frequent natural regeneration including some locally native species; pests and diseases will not prevent some new trees being recruited to the sub-canopy and canopy where suitable gaps exist. The riverbank will be left relatively undisturbed.

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	0.15	Sessile oak	1850	High forest	Landscape factors, No/poor vehicular access within the site, Sensitive habitats/species on or adjacent to site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Woodland Site	National Park, Tree Preservation Order

The north end of Coed Llanelltyd is irregular in shape and at its northernmost tip extends to a very narrow strip of woodland adjacent to the river. The roadside verge (in Welsh Govt ownership, maintained by the Highways Authority) extends down a steep bank and includes a level 'track' above the mature woodland (the latter in Coed Cadw ownership) but there are no features that easily delineate the boundaries on the ground. The ground is very steep in places with a precipitous drop down to the river's edge. The woodland comprises large mature trees of mixed species and is similar in character to compartment 1c. Large mature oak, beech and sweet chestnut are the dominant canopy species with a mixture of sycamore, ash, several larch and with alder on the riverbank. Holly is the dominant understorey species: this was thinned in 2005 and ongoing control commenced of scattered rhododendron (particularly alongside the river). Regeneration of ash, beech and occasional conifers occurs (the latter two were both subject to control in 2005), with a follow up for conifer in 2015. The field layer includes ivy with moss species, hard fern and wavy hair grass. Japanese knotweed growth recurs on occasion along the riverbank.

1b	0.35	Mixed broadlea	1986	High forest	Landscape factors, No/poor	Ancient Woodland Site	National Park, Tree
		ves			vehicular access within the site, Sensitive habitats/species on or adjacent to		Preservation Order
					site, Site structure, location, natural features & vegetation, Very		
					steep slope/cliff/quarry/ mine shafts/sink holes etc		

This compartment occupies the small section of the woodland that was subject to illegal felling c1980. No mature trees remain within this compartment. The large trunks of felled trees lie in situ, which adds to access difficulties. The area was replanted in 1986 with oak, ash and sweet chestnut but many have failed and regeneration is profuse and has overgrown the planted trees. Species include ash, sweet chestnut, beech, bird cherry, birch, sycamore, hazel, goat willow and holly with coppice regrowth of ash, sweet chestnut, hazel and oak, together with conifers, all selectively respaced in 2005 to favour native species. The field layer is sparse comprising predominately bramble and ivy and includes moss species, ferns and occasional patches of wood sage. The fallen trees provide abundant dead wood habitat and are covered with ivy, moss and liverwort species and fungi. At the base of the steeply sloping roadside verge is a level 'track' above a steep slope to flatter ground along the river's edge. Alder and willow with birch are the dominant riparian edge trees. Japanese knotweed growth periodically recurs along the riverbank.

1c	3.00	Sessile oak	1850	High forest	Landscape factors, No/poor vehicular access within the site,	Ancient Woodland Site	National Park, Tree Preservation Order
					Sensitive habitats/species on or adjacent to site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc		

On steeply sloping ground with an easterly aspect this sub-compartment occupies the southern three-quarters of the woodland as far as the southern boundary stone wall. It is mature woodland containing many large trees and comprising a diverse mix of canopy species - predominantly oak, sweet chestnut and beech with sycamore, ash, birch, alder alongside the river; the remaining mature conifer on WT land were ringbarked in 2015 alongside clearance of conifer regen. Hazel, holly as dense understorey in some parts, and young conifers are also present. Regeneration in canopy gaps comprises beech, ash, sweet chestnut, sycamore, wych elm and holly but rarely oak. A programme of selective re-spacing to favour native species and reduce holly dominance in the understorey commenced in 2005, and also included some ring barking of semi-mature beech and sycamore. Rhododendron invasion was dense in some areas but control was instigated in 2005. The field layer is generally sparse: bramble and ivy are dominant with moss species and ferns (hard fern, male fern and broad buckler fern), honeysuckle, wood sorrel and occasional wavy hair grass and scarce bilberry. Flat ground along the river bank of sand and silt supports a more lush flora and species include greater wood rush and tussock grass. Japanese knotweed also recurs periodically. The southernmost section is opposite Llanelltyd village and litter and garden rubbish are frequently dumped over the roadside retaining wall, so that garden escapes (cotoneaster, buddleia, Lonicera) are present. Steps down from the roadside pavement exist but there is no footpath and no formal public paths are maintained.

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.

The Woodland Trust, Kempton Way, Grantham, Lincolnshire NG31 6LL.

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