



Coed Cadnant

**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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 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 Cadnant
Location:	Maesincla, Caernarfon
Grid reference:	SH489627, OS 1:50,000 Sheet No. 115
Area:	3.82 hectares (9.44 acres)
Designations:	Tree Preservation Order

2.0 SITE DESCRIPTION

2.1 Summary Description

This young woodland is right on the edge of Caernarfon and was planted as an amenity for the local community. It is easily accessible by bus from the Llanberis Road, or on foot from surrounding housing estates.

2.2 Extended Description

Coed Cadnant is a new native woodland created from five fields of rough grazing, bounded by hedge-banks of conservation interest for their woodland flora, on the gently sloping valley side of Afon Cadnant. It is situated amidst housing estates and near a primary school on the edge of Caernarfon and bounded to the south by the Llanberis Road, the A4088.

The fields were planted with native trees under the "Woods On Your Doorstep" project in 1999 with participation from the local community. Meadow areas on the valley bottom were retained unplanted and a small community orchard established as a Millennium Feature. New entrances and footpaths for public access have been created, providing access to an area previously not open to the public.

The Key features of the site are New Native Woodland and Informal Public Access.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

General location

Coed Cadnant is in the Maesincla area of Caernarfon. It is located on the A4086 Llanberis road, less than a mile from the centre of the town, the western end being adjacent to the fire station and accessible from a footpath leading from here to Ysgol Maesincla. On-road parking is available near the small Spar shop and access can be gained from several entrances along the A4086.

Overview of paths and entrances

A public highway (A4086) runs along most of the southern boundary, and a public footpath passes along both the western ("Lôn Plas") and eastern ("Lôn Maesincla") boundaries. There are no public rights of way crossing the site but public access can be gained from all of the adjoining routes: all 5 entrance are via squeeze posts. The site is located in a river valley so that whilst all routes into the site descend moderately steeply, and there are accordingly timber steps in places, the main spinal route along the valley is fairly level. All the paths are grassy and unsurfaced; occasional sections can be rather muddy at some times of the year.

Parking

Vehicles may be parked on the Llanberis road outside the woodland, most safely near the Spar shop. The road has a wide pavement, off which there are 3 entrances into Coed Cadnant, the nearest being 150m from the shop.

Public transport

The nearest train station is 9 miles away at Bangor. Bus service 5/X5 travels between Bangor and Caernarfon. Service 92 ("Clipa Caernarfon") plies the short route between Caernarfon town centre and the Maes Barcer estate opposite the woodland.

For up to date and more detailed information about public transport, please see the Traveline website www.traveline-cymru.org.uk or phone 0871 200 22 33.

Public toilets

The nearest public toilets are in the centre of Caernarfon, including 4 sites of RADAR accessible toilets (all only open in daytime).

3.2 Access / Walks

4.0 LONG TERM POLICY

Coed Cadnant will develop as a new native woodland with a diverse shrub understorey, enhanced by the spread of typical woodland flowers from the existing hedge-banks. Open space in the valley bottom will be maintained for a diversity of habitat and internal landscape. A network of paths will provide public access and the local community will enjoy the landscape benefits and recreational amenity of the wood on their doorstep.

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 New Native Woodland

Description

A 'Woods on your Doorstep' site planted in 1999 with local community involvement in design and planting. Planted species are oak and ash as principal trees, together with birch, alder, aspen, hazel, rowan, holly and hawthorn. A small mixed orchard of 10 fruit trees (6 apple, 2 pear, 2 damson) was also established by community demand at the eastern end of the site. Old hedgebanks divide the original fields and also form the riverside boundary; they also contain scattered mature trees (oak, ash, sycamore) - most under a TPO. The hedges themselves are derelict and overgrown but they contain a remnant woodland ground flora. The planted woodland has established well and canopy closure has been achieved.

Significance

Creation of a native woodland and meadows on previously improved grassland in an urban area will increase biodiversity and public access opportunities in the immediate area.

The orchard is a community-suggested feature.

The presence of mature trees and the woodland flora seedbank in the hedgebanks increases the biodiversity value of the site.

Opportunities & Constraints

The existing woodland flora in the hedgebanks was seen initially as a good opportunity and has colonised the new woodland as predicted, helping the planting to take on characteristics of native woodland more rapidly.

There is the opportunity for community groups to utilise the timber e.g. for small scale coppice activity as the woodland develops. However, there has been a history of vandalism to the planted trees and local social factors may constrain the type of community woodland management that might take place.

Factors Causing Change

Invasive species may impact on woodland flora and biodiversity: re-invasion by knotweed and balsam especially along the stream corridor is of particular concern.

Tree diseases such as ash dieback could cause the loss of a significant proportion of the original planting and could impact on the few mature ash within the wood.

On-going firesetting and vandalism could curtail woodland development and be detrimental to wildlife.

Long term Objective (50 years+)

In the long term, Coed Cadnant will develop to become a diverse native woodland with several age classes of tree, a developed shrub understorey including a number of fruit trees and a colourful woodland ground flora resembling that of a long-established broadleaf wood. The woodland will replenish itself through natural regeneration/ regrowth and senescence of mature trees. The woodland will contain a number of open, grassy glades providing niches for species such as butterflies. Invasive species will be absent.

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

Woodland ground flora species will establish a robust and expanding presence within the new woodland. Invasive species will be rare or absent. There will be a diversity of locally native species in the developing canopy and understorey, with natural regeneration of broadleaved species starting to occur. Negative impacts such as fires, vandalism and tree disease will not significantly reverse canopy closure or constrain woodland flora establishment. Open glades will be maintained by cutting.

5.2 Informal Public Access

Description

Five public entrance points with c800m of linking paths have been created. Most of the paths are unsurfaced and can become slippery in wet weather. A public road (A4086) runs along the property's southern boundary and two public footpaths off it abut the western and eastern ends of the site; there are entrances into Coed Cadnant from each route. Flatter areas on the valley bottom have been left unplanted and are retained by annual cutting to provide a varied internal landscape.

The site is used by local walkers and is regularly visited by unaccompanied youths for play/ camp fires etc. Unfortunately the wood also attracts some less desirable activities such as drug-taking and vandalism/ fly-tipping.

Significance

The wood is situated close to large housing estates and was created specifically as a new local amenity, allowing people in a deprived area to benefit from easy access to woodland. Retention of open areas was identified as important during community consultation as these increase walkers' sense of security: open ground is also worthwhile for biodiversity. The woodland lies adjacent to Ysgol Maesincla, the local primary school, being part of the landscape along one of the main pedestrian routes to the school and one of the main public green spaces in the ward. As a Woods on Your Doorstep wood, the intention was that the local community would maintain a close involvement with the site.

Opportunities & Constraints

Meadow areas in the semi-improved fields at the eastern end retain some floristic interest, and others have the potential to develop interest with a sustained mowing regime. These should provide pleasant areas for informal play. The site is in close proximity to a sizeable population within walking distance and also benefits from easy local parking. The site is adjacent to a primary school so would in principle be readily accessible for educational use. As the woodland develops, there may be opportunities for small scale woodland management activities such as coppicing and Forest School, which would make the site of value to any local community group that might have an interest in getting involved.

However, public usage is currently limited by safety concerns, particularly as the woodland becomes less open in character: some of the anti-social activities that occur will deter walkers and the perennial issues of litter, fly-tipping and drug paraphernalia make the site a less congenial environment for educational groups and families to enjoy. Repeated efforts have so far not reduced the level of abuse the local area receives, however, a partnership uniting the local police and fire services, town and county councils, schools, housing associations, probation services and NGOs including the Trust is working on a scheme to improve the route to Ysgol Maesincla and engage young people in smartening up their local environment.

Factors Causing Change

Local social/ cultural issues are the main factor determining the usage, or otherwise, of the site: without a strong local commitment to improving the environment, problems such as litter and dumping are likely to persist and require constant effort and cost to contain. Maintenance will be required to maintain an appealing network of paths and open space, to counteract natural succession. Increasing usage and long wet winters may cause erosion and compaction on unsurfaced paths.

Long term Objective (50 years+)

The established footpath routes will be maintained with suitable walking surfaces for a semi-urban location. Open meadow areas will be retained and develop characteristics of semi-natural neutral grassland, providing visual interest and communal space. The site will be used and valued by the local community: the ideal would be for a community group to start to develop greater involvement in the wood, with local schools and families using it increasingly as recreational resource.

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

Footpaths and entrances will be maintained in a tidy and safe condition, being improved where badly poached. Litter, fly-tipping and hazardous wastes will be removed on a regular basis and not be allowed to build up. The existing meadow area and its floristic interest will be maintained by annual cutting/ raking.

The Trust will continue to work in partnership with other local agencies and community representatives where opportunities exist to engage local people with initiatives to improve the visitor welcome to the site, by providing information, clearing litter and tipped waste and repairing and revamping vandalised features. Groups wishing to use the site will be supported where safe to do so, with the expectation that encouraging positive uses of the wood will deter negative behaviours and reduce local concerns about site safety.

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	3.84	Ash	1999	Wood establishment	No/poor vehicular access to the site	Informal Public Access, New Native Woodland	
<p>Five fields of previously improved and semi-improved pasture, separated by old hedge-banks, on one side of the valley of Afon Cadnant. They were planted with native trees in 1999 with oak and ash as principal trees, together with birch, alder, aspen, hazel, rowan, holly and hawthorn. A small community orchard of apples, pears and damsons was also established. Meadow areas in the flatter ground at the bottom of the valley were left unplanted and are retained by cutting annually. The site is urban in character and prone to vandalism. An informal network of paths is maintained, linking to public rights of way either end of the site: Lôn Maesincla and Lôn Plas.</p>							

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.