

Coed Ysgubor Wen

Management Plan 2018-2023

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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.
- 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 Ysgubor Wen
Location: Llanegryn, Tywyn

Grid reference: SH625068, OS 1:50,000 Sheet No. 124

Area: 42.48 hectares (104.97 acres)

Designations: Ancient Semi Natural Woodland, National Park, Planted Ancient

Woodland Site

2.0 SITE DESCRIPTION

2.1 Summary Description

Worth visiting for its mountain views alone, Coed Ysgubor Wen is a young woodland that has a small, species-rich ancient wood at its heart. Since 2007, close to 40,000 native broadleaved trees have been planted and the new woodland is now maturing well. It's the perfect place to pass time enjoying the spectacular scenery of the Dysynni Valley.

2.2 Extended Description

Coed Ysgubor Wen, situated in the Dysynni Valley, was acquired for the purpose of creating a large area of new native woodland. The site forms part of a network of PLANT! sites, a Welsh Government scheme which plants a tree to celebrate each birth or adoption in Wales and aims to create new woodland for future generations. On acquisition, the site was mostly improved grassland with patches of gorse scrub. The pasture was extensively grazed prior to planting.

Grassland areas were planted over two years with native broadleaved trees, which are now establishing rapidly. This planting complements the remaining fragments of ancient woodland on the site. This includes five hectares of conifer plantation (primarily Sitka spruce and Douglas fir) established on an ancient woodland site, with remnant oaks and typical ground flora, along with a small area of semi-natural wet woodland of alder, oak, ash and sycamore on the eastern edge from

which the site takes its name. Several small streams rise within the wood and gather within the wet woodland, where a number of the alders have veteran characteristics. These areas were also grazed until acquisition. The network of field boundaries has remained largely unchanged for some hundreds of years, with occasional mature trees occuring in the context of old hedgebanks, while a dense hedge with occasional isolated mature trees follows the road boundary.

The western Dysynni Valley has been subject to much agricultural improvement, with ancient woodland now fragmented within the landscape, although adjacent woodland areas were defined as part of a Broadleaf Core Network by CCW/ Forest Research. Fragments of woodland occur in the vicinity, largely coniferised, while the valley bottom is predominantly pasture and was subject to extensive agricultural improvement, land reclamation and drainage schemes during the late 18th and early 19th centuries. The creation of a significant further area of native woodland will therefore benefit ecological and landscape diversity and connectivity and benefit woodland specialist species.

The property is located 3km north east of Llanegryn on the north side of Dyffryn Dysynni, and was formerly part of the Peniarth estate, one of the foremost gentry estates in Meirionnydd. The Dysynni Valley is a Landscape of Special Historic Interest. Within the site are the remains of farm buildings, including Pant Llwyfog in the centre of the site and Ysgubor Wen on the edge of the wet woodland, both features of historic interest. To the north, the woodland borders an area of ffridd, largely unimproved, which ultimately extends into the ancient landscape of Yr Allt Lwyd (where bronze age features remain).

Since acquisition, the creation of an extensive permissive footpath network has increased public access to the site, making links between the minor road and the permissive byway which cross the hills to the north of the site. This includes a route which in part follows the line of the old 'Milk Path' that crosses the site from west to east (although the historic route no longer persists in full on the ground and this as yet does not connect to the wider rights of way network). Fine views are to be had, including to Craig yr Aderyn, Castell y Bere, Cadair Idris and seawards to Tywyn, viewpoints being incorporated into the planting scheme. As a PLANT! site, significant opportunities for involvement in tree planting have been available for local people and schoolchildren during creation of the new woodland and as a Trust 'welcome site', there is opportunity for on-going visitor engagement, although parking is a limiting factor.

The key features of Coed Ysgubor Wen are: New native woodland Ancient Woodland Site Connecting People with Trees and Woods Historic features

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By cycle or on foot

The road that passes the entrance to Coed Ysgubor Wen is on National Cycle Route 8 (Lon Las Cymru North), which passes through nearby Llanegryn and heads north-east. At the main entrance to Coed Ysgubor Wen there is a bench and bicycle locking post. For a map of Route 8 visit www.sustrans.org.uk

By car

From the A493, take the turn signposted for Llanegryn. Continue through the village and carry on for about two miles (3km) until you pass a property called Ty'rgawen - the wood's main entrance is a little further on, on the left. There is no car park, but it is possible to park at a pull-in near the entrance.

By bus

Buses (Arriva 28) stop at Llanegryn, which is about two miles (3km) from the wood. For further information, contact Traveline on 0871 200 2233 or visit traveline.org.uk

By train

The nearest mainline station is at Tywyn, approximately 6.5 miles (10.5km) away. There is also a stop on the Talyllyn Railway, a heritage steam line, at Dolgoch, which is about four miles (6.4km) from Coed Ysgubor Wen. For further information contact Traveline on 0871 200 2233 or visit traveline.org.uk

3.2 Access / Walks

The main entrance to Coed Ysgubor Wen is located on the minor road from Llanegryn. Two information panels provide visitor information.

The site is steep in places, but the grazed field that is nearest to the main entrance is fairly flat. An easy grade route (waymarked with PLANT! logo markers) takes in the community planting field. Coed Cadw has created an extensive network of additional permissive footpaths which link with both the valley road and a byway that crosses the hills to the north, although these are rather steeper.

There is a bridleway that links Coed Ysgubor Wen to the road, and the wood's boundary to a permissive right of way over the hills behind that leads to Access Land on the nearby Allt Lwyd. Part of the current path network follows the route of the historic Llwybr Llaeth, or Milk Path, which crosses the wood

The path network within Coed Ysgubor Wen offers many fine viewpoints across the spectacular local landscape.

4.0 LONG TERM POLICY

Over time, the distinction between ancient and secondary woodland stands will become less apparent. The greater part of the site will be cloaked in broadleaved woodland, semi-natural in character and primarily comprising native trees such as oak, birch, hazel and alder, although there will be local variations in woodland type and a diverse mix of tree species. While for some time the planted woodland will be rather even in age-structure, in the long term greater structural diversity will emerge as planted trees reach reproductive age and windblow creates canopy gaps. Natural regeneration will be plentiful, sustaining the woodland into the future. Veteran trees will be a notable feature, especially in the ancient woodland stands. Woodland specialist flora typical of oak or wet woodland will spread out from refuges and colonise parts of the wider woodland. Coniferised areas will be restored to predominantly broadleaf woodland, with a robust ground flora. Threats such as invasive species or over-browsing will be controlled.

However, significant open areas will remain, providing viewpoints over the surrounding landscape. To the margins of the site, tree cover will be sparser as the land echoes the character of the ffridd above. The public will feel welcome to explore the site via an established network of paths, some of which follow historic trackways, while appropriate information resources will facilitate public enjoyment of Coed Ysgubor Wen, which will be a location valued both by local people and visitors to Dyffryn Dysynni for its wildlife, history, tranquillity and landscape. The site will be used to inspire others to create new woodlands and highlight the value of trees and woods. Community involvement will continue to be encouraged, as a legacy of the PLANT! scheme: the Trust will in particular support and encourage educational usage. The historical features, including old farm buildings, will remain intact and add interest.

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

Over twenty four hectares of the site have now been planted with native broadleaved trees and shrubs with the aim of establishing semi-natural native woodland over time. The planting was established on improved pasture, with sessile oak and ash as the principal species, oak being favoured on upper slopes and ash in lower and damper areas. Alder has also been planted on wetter ground (to mirror the composition of adjcent wet woodland), while diversity has been added with the planting of a range of other locally native species, including rowan (especially on higher ground), cherry (typical of ancient woodland and providing forage for birds), small-leaved lime and crab apple (both typical features of woods in southern Meirionnydd) and understorey species such as hazel, elder, holly, hawthorn and blackthorn. In order to preserve and frame significant views out of the site, as well as to respect old trackways, archaeological features and maintain broad rides, significant areas were left unplanted and other areas planted only with shrubs. Community involvement during establishment was encouraged through orgnised planting events in compartment 1a. Almost 40,000 trees in total were planted, contributing toward the PLANT! project target. The new woodland is now establishing rapidly on generally nutrient-rich soils, although weed competition from bracken, bramble, thistles and nettles remains locally problematic and annual weed management and beat up work is required.

Significance

The project will in time increase the area of UK BAP habitats, including upland oakwood, on land with previously limited conservation value. The planting contributes to a Welsh Government target of doubling native woodland cover and in particular to the delivery of the PLANT! project, a project to celebrate the birth or adoption of every child in Wales by planting a tree and to create new woodlands for future generations. The establishment of broadleaved woodland here will bolster adjacent areas of ancient woodland and the specialist species they contain, complementing local broadleaf core habitat networks (to which adjoining woodlands belong).

Opportunities & Constraints

New planting will significantly extend and buffer the adjoining areas of PAWS and ASNW. The PLANT! connection has helped to focus community involvement and secure a long term government and public investment in woodland establishment on the site, although the site's location is relatively remote. Internal access is generally good although there are steep slopes within the site.

Factors Causing Change

Coarse vegetation and weed species may out-compete some young planting if not controlled until canopy closure is achieved. Grazing exclusion may need to be maintained until trees are well established and thereafter continued or managed closely. Ash dieback is now widespread at the site, affecting a significant proportion of the planted ash trees. High levels of loss are expected given the age class of the trees, however, the planting pattern means this will have localised impacts and require only minor replanting to ensure canopy closure in the long term: this could be an opportunity to diversify the native species composition by under-planting in a few of the worst affected stands.

Long term Objective (50 years+)

In fifty years, a high broadleaved canopy, primarily composed of maturing native trees, will be established over most of the former pasture, but with significant retained open areas and viewpoints over the surrounding landscape. Pathways through the woodland will form open rides of potential value for species such as butterflies. Natural regeneration will occur within the new woodland and a more uneven age structure will start to develop, with occasional standing and fallen deadwood. By this time, ancient woodland ground flora will have begun to spread from adjacent refugia and have colonised some of the new woodland area, intermixed with remnant grassland species. Species of improved grassland will decrease in abundance with greater diversity developing over time. At this stage, the woodland can be managed in a similar fashion to the adjacent ancient stands (and will then be treated as part of the Ancient Woodland Site key feature).

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

Within ten years, canopy closure can be expected over much of the planted area, sufficient to control most coarse vegetation, although the edges of the planted blocks may be more sparse as they grade into neighbouring ffridd habitats. Once the trees are fully established, the intensity of management can decrease; at this stage, light winter grazing could be considered if there was local interest. Coarse vegetation will be only occasional, although bramble and bracken will remain in the developing field layer. This will be achieved by targeted mechanical or if necessary chemical control in those areas where competition with planted trees is still significant.

Stocking density will be maintained at roughly 1600 stems per hectare throughout the coming plan period, although in the best established stands this can be expected to decrease naturally as the trees mature. In most cases, natural regeneration will be relied upon to fill in any gaps left particularly by ash dieback. In the largest gaps, however, some limited introductions of different native species such as black poplar and wych elm (which may have been unavailable at the start of the project) will be trialled, engaging volunteers from the region to assist.

Tree guard removal will become a priority, with all tree guards from the 2009-10 plantings removed by the end of the plan period. The site will remain stockproof and browsing from other species will remain minimal, although this could be reviewed at the 2023 plan review.

Within the newly planted areas, a significant proportion of open space (minimum 15%) will be maintained to provide diversity of habitat within the developing woodland. In the foreseeable future, this will be by mowing. Whilst local interest remains, cutting and aftermath grazing under licence will continue in compartment 1a, however, in the event of the licence being relinquished, further planting e.g. of parkland-style trees or natural regeneration could be considered.

5.2 Ancient Woodland Site

Description

A semi-natural wet woodland of alder, oak, ash and sycamore is situated on the eastern edge of the site; at the time of acquisition this was unrestrictedly grazed with the adjoining pasture. The waterlogged ground and presence of notable alder specimens indicate its ancient woodland character and this was reflected in its inclusion in the 2011 AWI. Ground flora is diverse with bluebells featuring in drier areas and marsh marigold and angelica in wetter ground. Early in the last plan period, fencing was installed to exclude unmanaged grazing, although retaining the possibility of grazing in future.

Adjacent to the ancient semi-natural stand, a plantation of mixed conifers was established around 1964 on ancient woodland of what appears to have been a more upland oakwood character, with part of the area recorded as PAWS on the latest Ancient Woodland Inventory. About 3.5ha of the compartment is dominated by Douglas fir, with some larch and pine. Scattered remnant oaks and ground flora hotspots (e.g. bluebell, wood sorrel) are located within the plantation and on its edges. The remaining 1.5ha is unthinned Sitka spruce with few Ancient Woodland characteristics other than some remnants on the western edge. An initial thin was undertaken as part of the BWW plan to halo remnant oaks and matrix thin denser plantings, as the threats to these remnants were felt to be critical; the level of threat was reduced by these works, however, areas of dense shade remain and there is significant windthrow.

Significance

Wet woodland is a UK BAP habitat. Ancient semi-natural woodland is an irreplaceable and threatened habitat type in Britain.

Restoration of all PAWS is a Trust priority. The expected habitat upon restoration would be upland oakwood, another UK BAP habitat. The site adjoins a broadleaved woodland core habitat network restoration (in conjunction with adjoining new native woodland creation) will extend and buffer the network on a meaningful scale.

Opportunities & Constraints

The wet nature of the semi-natural woodland precludes machine access and restricts opportunities for public access, although this allows veteran trees to be retained without safety concerns and will ensure that a corner of the woodland is subject to low levels of disturbance. The established woodland will provide a seed source/ refuge for typical woodland species, both trees and ground flora, which may colonise the newly planted woodland and adjacent PAWS areas, while surrounding planting may buffer the existing woodland and provide areas into which woodland specialist fauna may expand.

Conifer shade is the principal threat to AW remnants. However, the frequency of remnant features suggests that there is high potential for restoration to semi-natural woodland habitat. The potential for economic timber extraction is limited by terrain, quality of timber and the small volumes present, although it could be of interest to local small scale markets. At present there is little public access within the zone due to the windblow risk, although following restoration works it may be possible to expand this.

Factors Causing Change

Any hydrological changes resulting from increase in upstream woodland cover or blockages in drainage ditches could impact on the habitat quality and species mix. In the absence of grazing a higher rate of natural regeneration might be expected, resulting in a denser understorey, although grazing should not be ruled out indefinitely if suitable recruitment of young trees is being achieved. Tree disease may impact on species composition: in particular, ash dieback is likely in the long term to generate larger volumes of deadwood and initiate a shift in species composition toward species such as sycamore or alder.

The conifer-dominated area is prone to windblow, which is a constraint to continuous cover methods; caution will be required in thinning works to ensure mature oaks are retained. Rapid canopy removal - by thinning or windblow - may encourage coarse vegetation. At present, however, dense shade in parts of the zone is likely to reduce the abundance and resilience of ground flora remnants and some oaks remain crowded by conifers. Without further thinning, conifer shade will increase and canopy cover/ basal area will most likely increase once more, to the detriment of native flora. There is at present no grazing within the woodland, which may in the long term enable the establishment of a dense understorey; for the immediate future, stockproofing will be helpful to aid the establishment of native trees but in the very long term grazing may be less detrimental. There has in the past been some mountain bike trail-building activity in the woodland which may be detrimental to ground flora establishment but this is limited in extent/ duration.

Long term Objective (50 years+)

The wet woodland will be thriving with a full range of age diversity; natural regeneration will be frequent, while mature or veteran trees will be retained to senescence. Standing and fallen deadwood will be common. Typical wet woodland ground flora will be present, with bluebell, marsh marigold and angelica patches remaining robust. The woodland will grade naturally into the adjoining new native woodland, into which, over time, typical ground flora species will spread.

All ancient woodland remnants will be secure and expanding and the PAWS woodland will be dominated by broadleaved trees, with sessile oak likely to predominate. The ground flora will be typical of upland oak woodland, with sufficient natural regeneration to maintain a high percentage canopy cover. Scattered conifers will remain, but pose no threat to the woodland, with little conifer regeneration.

Deadwood habitat will increase to at least 20 cubic metres per hectare. Coarse vegetation will be rare and invasive species absent.

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

Good levels of natural regeneration will be maintained in compartment 5a, with frequent regeneration of site-native species. Standing and fallen deadwood will be frequent. Typical wet woodland ground flora will be abundant.

At the end of the plan period, all mature oak in compartment 6a will be free of immediate conifer competition and exhibit strong or recovering canopy growth. Woodland specialist flora will remain frequent and the canopy will allow sufficient dappled light for natural regeneration in parts. Coarse vegetation will be occasional (although it may be locally frequent in windblown areas). This may require local control of bramble and bracken by cutting/ bashing, as well as a further light selective thinning of conifer around precursor trees (which if it cannot be extracted without damage should be stacked to reduce the extreme brash levels). A degree of further windthrow is also to be expected, which along with the poor condition of some of the conifer should continue to break up the structure of the planted stands.

The ancient woodland areas will all remain stock-proof and invasive species will be absent.

5.3 Connecting People with woods & trees

Description

Woodland Trust ownership has significantly increased public access opportunities on site, previously restricted to only the public bridleway in the southern part of the site. An extensive network of permissive paths provides access throughout the newly planted woodland along grassy rides, with frequent viewpoints (supplied with numerous benches) that take in major landscape features including to Craig yr Aderyn, Castell y Bere, Cadair Idris and seawards to Tywyn. The planting and path network respects historic trackways such as the Llwybr Llaeth (Milk Path) and only minor infrastructure developments were included (such as gates and stream crossings). There are currently three public entrances, two of which require full replacement of entrance and exit signage. At present there is no less-able access per se; the visual impact of surfaced paths would be considerable and may not be appropriate to the current level of use. However, the lower area of the site (cpt 1a, 7a) provides easy, relatively level walking and the site as a whole is relatively accessible to walkers of reasonable fitness.

A planning application for a small car park at the main entrance was refused (and is unlikely to be possible under Park planning policy), making parking limited, although a small number of cars can use an adjacent pull-in. A relatively level 'easy' grade path connects this entrance with the planting in compartment 1a, which has facilitated community planting events, engaging local schools and groups in conjunction with the PLANT! project; this path is PLANT! waymarked and two information panels sited at the entrance, giving information about the site and about the PLANT! project. Waymarker posts are installed on the wider path network but markers have not yet been installed. A meadow (cpt. 7a) has been retained, in order to provide internal landscape diversity and maintained by a combination of grazing and mowing.

Barns at Pant Llwyfog are among many historic features of public interest and the re-roofing of the old cart shed provides a shelter for visitors exploring the site.

The site is located on on and offroad versions Lôn Las Cymru (Cycle Route 82), a long distance cycle route promoted by Sustrans, and a bench and bicycle tethering facilities are provided near the site entrance as part of this scheme. Cycle hire is available locally, including at Llanegryn and Tywyn.

At present a fairly modest number of visitors, mainly locals and dog walkers, appear to use the facility. The wood is located in a sparsely populated rural area near the small community of Llanegryn (pop. 303), although it is relatively close to the coastal resort of Tywyn (pop. 3264), known for its seaside amusements and caravan parks, south of Cadair Idris within the Snowdonia National Park. The main group usage to date has been by educational groups (although there is no longer an NRW Woodlands for Learning team, which has reduced the number of recent school visits) and peaked around the time of the original planting of the wood. Around 60 local school children attended the PLANT! fifth anniversary event in 2013. The PLANT! project (a government-driven scheme to celebrate the birth or adoption of every child in Wales by planting a tree) may draw occasional local visitors to the site, as each family receives details of the wood where their child's tree has been planted.

Significance

Coed Ysgubor Wen is a site of considerable scale, with potential to encourage access, understanding and appreciation of woodland, particularly in conjunction with the ongoing PLANT! project, which has been a spur to past community involvement. Whilst local parking is a limiting factor, the community planting area in particular is very suitable for group educational usage, with a primarily local potential catchment of Llanegryn/ Bryncrug/ Tywyn, as well as local outdoor education centres.

The site offers diverse woodland types, an extensive ride network with excellent views and some historical interest. It may be of potential interest to specialist groups as demonstrating the benefits and changes associated with the creation of new broadleaf woodland on improved ground.

The wood is located in Southern Snowdonia, an area where the Trust is focusing its efforts at a landscape scale. The vision is to 'promote the distinctive identity of the Meirionnydd Tree-scape, with the Trust at its heart, increasing visitor appreciation of woods and trees and encouraging everyone to explore beyond the key tourist areas.'

Opportunities & Constraints

There are opportunities to further integrate the internal path network into to the wider rights of way network for walkers, with the agreement of neighbouring landowners, e.g. by following old tracks through the area of PAWS following restoration and making a link to the adjacent public right of way. Local people have expressed an interest in the historic value of the site.

The on-going involvement of the Trust in the PLANT! project, led by NRW, may provide resource for commemorative events and educational activities, for instance around key project anniversaries. The legacy of the community planting has also opened links with the local community, in particular the local schools, on which it may be possible to build with appropriate resources. The site presents suitable opportunities for outdoor educational or forest school use.

Volunteer involvement in the wood now the trees are establishing is likely to be sporadic, especially given the small local population, although groups such as the Snowdonia Society may occasionally participate in tasks such as tree guard removal or tree planting. Given the potential interest in monitoring of biodiversity changes in an establishing new woodland, there may be chances to engage with interested ecologists as volunteers or through third party voluntary societies or groups in order to survey and monitor change over time, perhaps linked to educational activities or demonstration materials. The site would lend itself to occasional guided walks as part of a wider programme of volunteer-led walks in Meirionnydd.

In the long term, much of the site could lend itself to some form of community management, subject to local demand.

The lack of a car park and the relative remoteness of the site, however, are barriers to any significant increase in casual visitor numbers. Without bilingual educational materials, the Trust's offer local schools will also be severely limited. The steepness of the site will also limit the numbers of people likely to explore the upper levels.

There are localised conflicts around dog mess, but on a fairly small scale given the current low levels of use.

Factors Causing Change

The path network and viewpoints will require regular maintenance, in particular during the woodland establishment phase, without which they would become rapidly overgrown.

The future direction of the PLANT! project may have an impact on promotional and financial resources: at present there is little central promotion of PLANT! sites except around occasional celebration events. The profile of the site may ebb as time passes since acquisition given its remote location. In general, the grant funding environment is likely to be challenging for the foreseeable future.

In the long term, shifts in the tourism profile locally may change demand for woodland visits, although significant growth in the immediate local population is unlikely.

Long term Objective (50 years+)

In the long term, visitors to Coed Ysgubor Wen will benefit from a comprehensive footpath network that will link all parts of the woodland, connecting from the main entrance off the Llanegryn road to other entrance points, including the public bridleway exit, the track along the northern boundary and the public footpath to the east. A family-friendly route will offer easy walking in the lower areas of the site, giving a flavour of the woodland as it develops. Viewpoints will be maintained to provide excellent views of the surrounding landscape and there will be ample provision of benches. Historic features will add character to the site and the buildings at Pant Llwyfog will be safe, providing shelter to visitors whilst exploring the site. Entrances will be welcoming and well maintained.

The wood will primarily be a resource accessed by local people for walking and quiet recreation and valued for its nature, tranquillity, history and landscape. There will be regular use by educational groups, either schools or outdoor education groups, for outdoor learning. Most of this will be self-led and supported through bilingual educational materials supplied by the Woodland Trust, although occasional events may be held to engage with local school children and their families, who may later return for leisure reasons. Educational material will communicate the many benefits of trees and woods and on-site information will inspire visitors to support further woodland creation. Any appropriate community interest in engaging with the management of the site would be viewed favourably.

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

All present entrances will confirm to the Trust's 'welcome site' standard by end 2018, with appropriate welcome and exit signage. All current visitor facilities (paths, gates, viewpoints, PLANT! waymarkers, benches, interpretation, Pant Llwyfog shelter) will be well maintained. By the end of the plan period, the 'Milk Path' extension through compartment 6a will be completed, with an additional kissing gate and welcome signage installed where the path meets the public bridleway (at SH6285607282, subject to discussion with the neighbour).

By the end of 2019, as part of a cluster of Trust 'welcome sites' within Meirionnydd, walking opportunities at the site wood be promoted via a cluster booklet and a feature sculpture installed as a focal point. At the same time, the waymarking scheme will be completed, with arrow markers installed on a further upper loop (likely to be moderate to strenuous in grade). Gpx files and further information will be made available on the Trust website and during the coming plan period guided walk leader volunteers will run at least one guided walk taking in the site, aimed at local and tourist audiences with a theme of woodland creation.

The site will host an event in 2018 as part of the 10th anniversary of the PLANT! project. This will include weekday educational sessions for local schools, with a follow-up event for their families, and will require transport arrangements from nearby agreed parking. All participating pupils will receive information packs relevant to the Trust's summer 'moment' and family membership.

Subject to the development of sufficient educational materials in Welsh and English by the Trust, Ysgol Llanegryn and other local schools should be invited to participate in our Green Tree Schools award once rolled out in Wales.

The wood will be available for self-led school visits and licences may be granted for activities such as forest school or outdoor education to appropriate third parties.

Volunteer guided walk leaders will be able to respond to requests from groups for guided visits. Volunteers will also occasionally visit the wood to help with practical tasks or undertake biological recording.

5.4 Historic Features

Description

The Dysynni Valley is regarded as a landscape of historic interest, with evidence of human occupation into pre-history. Nearby points of interest include Bronze Age remains on Yr Allt Lwyd and Castell y Bere, built by Llywelyn Fawr. The land at Coed Ysgubor Wen was formerly part of the Peniarth estate, amongst the most prominent gentry estates in Wales. The site contains a range of historic features testament to the area's agricultural past, from hedge banks dating back to early enclosures, trackways, sheepfolds and quarries through to ruined farmsteads (at Pant Llwyfog and Ysgubor Wen). The most obvious of these remains are the three buildings at Pant Llwyfog, dating back to the early 19th century, comprising a cart shed, probably used to house cattle, and two barns, probably used for the threshing and storage of corn. The cart shed was made safe during a previous plan period, re-roofed and weather-proofed, to provide a shelter for visitors. This area, possibly once a dwelling, was linked to Ty'rgawen by a track known locally as the Llwybr Llaeth or Milk Path. A further barn within the wet woodland known as Ysgubor Wen gives the site its name. These historic associations add significantly to the interest of the site and are part of the wider landscape character.

Significance

The historic features provide character and interest, telling a story about the sites post-mediaeval development. The historic features of the site contribute to the wider landscape character of the Dysynni Valley and are of interest to the local community, who noted their importance during the consultation phase on acquisition.

Opportunities & Constraints

Historic remains, particularly the extant buildings, will require maintenance to ensure continued public safety and to ensure that the features do not become overgrown and obscured. These features will require protection during management operations. Some buildings also, however, have potential to provide shelter and constitute a hub for onsite activity or interpretation. Planting schemes respected these features. The features present opportunities for visitor engagement.

Factors Causing Change

Over time, vegetation will establish and obscure or damage historic features if not managed. Management operations involving ground disturbance could damage archaeology, particularly in the PAWS area. New information may come to light regarding other features or details not recorded in the initial survey. Tree establishment will somewhat change the landscape context of the remains over time.

Long term Objective (50 years+)

Feature outlined in the 2007 Historical and Archaeological Survey will be retained. Standing buildings will not deteriorate (or will be repaired) and will be safe for visitors to approach where public access is encouraged. Vegetation establishment will be controlled to preserve historic buildings intact and maintain reasonable visibility. Old boundaries will be retained as features of interest. Archaeological features will be protected during management operations. Paths and open ground will respect historic routes wherever possible. Viewpoints will ensure that visitors continue to appreciate the site in its landscape context. The site's history, particularly Pant Llywfog, will be reflected in any information materials and engagement plans.

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

Pant Llwyfog will be not be allowed to deteriorate, with the cart shed continuing to provide a visitor shelter. Young trees will not be allowed to establish where these may damage the structures. Old hedgebanks and walls will continue to be evident features within the planting, while path maintenance will preserve access along the Milk Path to Pant Llwyfog. Other historic features will be in stable condition and protected during management operations.

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	3.17	Ash		Wood establishment	features	Connecting People with woods & trees, Historic Features	National Park

This compartment comprises sloping improved pasture with a copse of mature oak trees in the centre, surrounding a small stone quarry. Planting in this compartment started in early 2009 with both school groups and a local community planting day: volunteers have since helped to plant 86% of the area with a mix of broadleaved tree and shrub species at a stocking density of 1600/ha; predominantly ash, with sessile oak and hazel, and smaller numbers of other native species (alder, rowan, wild and bird cherry, small-leaved lime, hawthorn, blackthorn, holly, elder and crab apple). The road boundary comprises a dense hedgerow with occasional mature hedgerow oaks. The ground is slightly wet in the most low lying areas and weed species such as nettle are present. A grassy permissive path and bench are provided: this compartment is the most accessible of the planted areas and open ground will be maintained around the viewpoint.

2a	4.15	Oak (sessile)	1	Wood establishment	Connecting People with	National Park
					woods & trees, Historic	
					Features	

This area comprises a steep sloping field of improved pasture which was planted with native trees in early 2009 at a density of 1600/ha. The planting was dominated in equal measure by sessile oak and common ash, with alder in wetter areas, and a mixture of other broadleaved species (hazel, rowan, wild and bird cherry, small-leaved lime, hawthron, blackthorn, holly, elder and crab apple). At the top of the field there is a large area of gorse. Bracken and thistles are abundant in this compartment. The planting block adjoins the remaining ancient woodland (both wet woodland and PAWS) on two sides. Wide-mown permissive paths provide public access and rides within the planted area (22% of the compartment remaining unplanted).

2b	2.35	Oak	2009	Wood	Archaeological	Connecting	National Park
		(sessile)		establishment	features	People with	
						woods & trees,	
						Historic	
						Features	

This area comprises a sloping field to the north of the old farmstead Pant Llwyfog. 82% of the area has been planted with new native woodland since 2009, mainly with sessile oak intermixed with smaller quanities of ash, alder, rowan, crab apple, hazel, hawthorn, blackthorn, elder and holly, at a density of 1600/ha. Bracken and bramble are frequent, with some gorse. A path passes through the southern tip of the compartment.

2c	0.41	Ash	1970	Non-wood	Archaeological	Connecting	National Park
				habitat	· '	People with	
						woods & trees,	
					habitats/species		
					on or adjacent to	Features	
					site		

The compartment contains the remains of the farmstead of Pant Llwyfog, comprising the picturesque ruins of three farm buildings, one of which has been made safe and the roof repaired to provide a shelter for visitors (also, it seems, benefiting resting barn owls). Although mainly agricultural in purpose, comprising a cart house and barns, there may once have been a dwelling here. A path is maintained through the old farmstead. Several maturing ash trees have now established themselves in and around the old buildings and yards.

3a	14.01	Oak (sessile)	Wood establishment	factors, Very steep slope/cliff/quarry/	People with woods & trees, Historic	National Park
				mine shafts/sink holes etc	Features	

This large compartment borders the ffridd to the north, the original grassland being rougher and more tussocky where it bounds the open hill with some bracken and gorse. To the north west, remains of quarries and levels mark earlier slate extraction. Planted in 2010, three quarters of the area now comprises developing broadleaved woodland, predominantly sessile oak with abundant ash and rowan and a selection of other species, namely alder, hazel, crab apple, hawthorn, blackthorn and holly, grading into open ground to the northern edge. A number of viewpoints provide striking views across the Dysynni Valley and benches are provided. Along the lower compartment boundary, the route respects the line of the old 'Llwybr Llaeth' or milk path which linked to Pant Llywfog. The new path links at the site boundary to a permissive cycle route on access land crossing the hills behind.

4a	7.03	Ash	2010	Wood establishment	features,	People with	National Park
					Landscape	woods & trees,	
					factors	Historic	
						Features	

This large gently sloping compartment is bounded to the north east by a stream and bisected by another. Formerly improved pasture, 84% of the areas was planted at 1600 stems/ha in 2010 with mostly ash and sessile oak, along with a substantial component of alder and hazel and a mix of other trees and shrubs (rowan, wild and bird cherry, small-leaved lime, crab apple, hawthorn, blackthorn, elder and holly). Scattered native trees and shrubs occur along the stream/ old field boundaries and occasional mature open-grown pasture trees occur. The compartment contains wide-mown rides which form part of a circular walk.

4b	1.16	Open	1970	Min-intervention	Archaeological	Connecting	National Park
		ground			features	People with	
						woods & trees,	
						Historic	
						Features	

This wedge of sloping rough ground is dominated by over-mature gorse, with some thorn and willow scrub and occasional mature and dead trees, following the line of an old bridleway, connecting the minor road with Ty'rgawen, and one of the many hedgebanks dating back to early agricultural improvment of the site.

5a	2.12	Alder	1914	Min-intervention	Archaeological	Connecting	National Park
		species			features, Mostly	People with	
					wet	woods & trees,	
					ground/exposed	Historic	
					site	Features	

This compartment comprises a pocket of surviving ancient wet woodland dominated by mature alder with ash, oak, hazel and other shrubs, now fenced from stock incursion. The ground flora is typical of wet woodland, the ground being wet almost throughout and fed by several springs and streams. The understorey is well developed, there is good natural regen and some standing and fallen deadwood. Ysgubor Wen (white barn) refers to a ruined farm building located on the edge of the compartment.

	6a	5.43	Douglas	1964	PAWS	Archaeological	Connecting	National Park
			fir		restoration	features, No/poor	People with	
ı						vehicular access	woods & trees,	
ı						within the site	Historic	
							Features	

Now dominated by planted Douglas fir and a block of (younger) spruce, much of this compartment is recorded as PAWS and ancient woodland remnant features are plentiful, although the ground is much drier than that of compartment 5a meaning that any restored woodland would likely be of a very different character. Mature pre-crop sessile oak is frequent especially to the margins of the zone and on rocky outcrops, with occasional pockets of remnant ground flora, including ferns, mosses, wood sorrel and bluebell, suggesting shallower and more rocky soils, on a fairly steep east/ south east facing slope. Archaeological features, including old tracks, gates and boundary banks, are present. There is an area of windblow to the west of the zone which is now dense with coarse vegetation - bracken and bramble - although it has been partially restocked with broadleaved trees and natural regeneration is occuring. Strong north-easterly winds in 2012 also cause significant winblow of mature conifer to the east of the zone. Away from the field boundaries and windblown areas, the ground flora is sparse with a dense thatch of needles. An initial halo and matrix thin has bolstered the remnant features however threats from dense shade remain.

7a	2.67	Open ground	Non-wood habitat	Management factors (eg grazing etc)	Connecting People with woods & trees,	National Park
					Historic Features	

This area of improved grassland has been fenced and retained as open ground to provide internal landscape diversity and is currently sheep-grazed by a local grazier. The main site entrance is located at the north east corner and two interpretation panels provide visitor information here. Just off the Woodland Trust land is a small layby with a bench and bicycle tethering post provided as part of the infrastructure for Lôn Las Cymru.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2020	6a	Clear Fell	5.00	120	600

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.