



COED CADW  
WOODLAND  
TRUST

# Cwm George & Casehill Woods

## Management Plan

# 2014-2019

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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](http://www.woodlandtrust.org.uk) or contact the Woodland Trust ([wopsmail@woodlandtrust.org.uk](mailto: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.

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## 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](http://www.woodlandtrust.org.uk). Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council (FSC) 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

<b>Site name:</b>	Cwm George & Casehill Woods
<b>Location:</b>	Dinas Powys
<b>Grid reference:</b>	ST155724, OS 1:50,000 Sheet No. 171
<b>Area:</b>	84.43 hectares (208.63 acres)
<b>Designations:</b>	Ancient Semi Natural Woodland, Planted Ancient Woodland Site, Scheduled Ancient Monument, Special Landscape Area

## 2.0 SITE DESCRIPTION

### 2.1 Summary Description

This large site contains a mix of habitats including semi-ancient woodland, new native planting and open meadows. With an extensive network of paths and bridleways, links to trails within the wider area, and an ancient monument of European importance, there is much of interest to see and enjoy.

## 2.2 Extended Description

Cwm George and Casehill Woods are found to the west of Cardiff, between the villages of Dinas Powys and Michelston le Pit. The site forms the boundary of the urban area of Dinas Powys and the former parkland landscape Cwrt yr Ala Park. Neighbouring land use includes arable land, woodland and grazing land. The woodlands are part of a concentration of ancient woodland to the west of Cardiff.

Through a series of land acquisitions the site has developed into a complex of varied habitats and is important for planted ancient woodland restoration and the development of new native woodland. The main restoration phase has been completed with the removal of larch from the site. It now consists of mixed broadleaved woodland dominated by oak and ash. There are also areas dominated by beech from former plantings. Beech is now considered to be a part of the woodland and will not be actively removed. Both Ancient Semi Natural Woodland and Planted ancient Woodland has been recognised as key features for the site.

The existing woodlands of Cwm George and Casehill have been linked by new native woodland plantings on former improved agricultural land. Plantings include native species for the area such as oak, ash and a range of shrub species. New native woodland has been identified as a key feature for the site. Extensive areas of the grassland have been left un-planted and are being restored to species rich grassland.

Although in the main the areas of grassland have improved characteristics the potential for the restoration to species rich characteristics has been recognised by the inclusion of the grassland as a key feature.

A scheduled ancient monument increases the interest of the site. The wooded medieval hill fort is found within Cwm George Woods. The specific management requirement of this important archaeological feature has been recognised as a key feature.

The woodlands of Cwm George and Casehill are well used by the public, with local village populations within easy walking distance and larger urban populations of Cardiff and its suburbs within close proximity. Small parking facilities exist and an extensive network of permissive footpaths and bridleways have been added to the existing public footpath network to allow access throughout the site. The value of the site for informal public access has been recognised as a key feature.

## 3.0 PUBLIC ACCESS INFORMATION

### 3.1 Getting there

By bus:

The closest bus stops are a short distance away in Dinas Powys.

Route 89 from Cathays stops at Llandough Hospital (5th stop). From here walk up to Pen-y-Turnpike Road and turn left. After just over 350 yards turn right: this road is sign-posted Michaelstone-le Pit. Walking downhill you will see the woods to your left and after the road bends left, the Woodland Trust entrance and car park come into view.

Alternatively on the 95 bus (Cardiff-Barry-Rhoose-Llantwit Major), alight at the Elm Grove Road stop, on Mill Road at Dinas Powys. The stop is by The Square where the Three Horseshoes pub is located. Turn right into Britway Road, passing the parish hall on your right. Then after approximately 400 yards, take the right turn into Twyncyn Road. Walk straight to what appears to be the top and right in front is a sign saying Private road. Turn left into Beauville Lane. The wooded road bends to the right and having reached the point where the golf course crosses the road, the road turns left and the Cwm George entrance is straight afterwards on the right hand side.

Or alternatively, instead of walking along Britway Road, by taking Highwalls Road, then turning left into Highwalls Avenue and following this to the right you come out by the Dinas Powys Golf Club's club house and a public footpath north west across the golf course. This footpath finishes on Beauville Lane yards from the Cwm George entrance.

We advise all visitors to check travel information before their visit as it is subject to change.

By train:

The closest train station is Dinas Powys. From the station, cross the road (Cardiff Road) and walk up Station Road. This comes out at The Square where the Three Horseshoes pub is. Follow directions above. The nearest mainline station is Cardiff.

Information from: Traveline Cymru. [www.traveline.org.uk](http://www.traveline.org.uk) or 0870 608 2608.

By car:

For Casehill and Pen-y-Turnpike Woods:

From Junction 33 of the M4 take the A4232. Stay on this road until the 3rd turn off (approx.. six miles) which is signposted Athletics Stadium and Ninian Park. Turn right (the last exit) for Dinas Powys. Going straight away over a weak bridge, the road then climbs quite steeply. After just under half a mile is Leckwith. Then driving downhill, pass Woodland Care Home off to the right, the next turning right being access to housing. Then after a 90 degree turn left where there are filter road markings to turn right but no road sign. This is just over one mile from the roundabout. Take this right turn. The road climbs steeply again. This is quite a narrow road. After three quarters of a mile from the main road turn right (sign-posted Michaelstone-le-Pit). You will see woods to the left and soon come to the car park for Casehill and Pen y Turnpike woods.

The Woodland Trust main car park holds seven or eight cars. There is also informal parking under the trees along Beauville Lane.

For Cwm George Wood:

Follow the directions for Casehill and Pen-y-Turnpike Woods, then, but continue straight on. The road (Turnpike Lane) goes down hill and half a mile from the Michaelstone-Le Pit turning you enter Dinas Powys. Keep on Turnpike Lane and another half mile further along the road becomes Mill Road and ends at the Three Horseshoes pub. From here follow the directions given under the bus information.

The closest pull-in is just beyond here on the left hand side, but there is only room for one vehicle.

## 3.2 Access / Walks

The woodlands of Cwm George and Casehill are well used by the public, with local villages within easy walking distance and Cardiff and its suburbs within close proximity. Small parking facilities exist and an extensive network of permissive footpaths and bridleways have been added to allow access throughout the site. A public footpath running from Michaelston-Le-Pit to Dinas Powys runs through the gorge at the centre of the wood.

These two existing woods are now linked by the new native woodland plantings on former agricultural land. An extensive network of footpaths allows access throughout the site.

At the main car park on the Michaelston-Le-Pit road there are padlocked five-bar gates, squeeze stiles and a horse entrance. Explanatory information boards can be found just inside the gates at both Cwm George Wood and Casehill Wood.

The first path goes uphill and leads towards Pen-y-Turnpike Wood. The bridleway is an easier climb and also leads out to the meadow paths. The paths are generally easy to walk on, being earthen/stony tracks, but they do become muddy in areas. Meadow paths are broad grassy tracks.

At the entrance to Cwm George woods off Beauville Lane, there is a forest barrier, hunter gate and a squeeze stile. There is a broad stony track to follow (bridleway) with a gentle incline, with narrow footpaths branching off which are fairly even although they descend steeply into Casehill.

### Other Trail Networks

Cosmeston Lakes Country Park has a visitor centre on Lavernock Road. Cosmeston is on the coast just to the south of Penarth. Information on Cosmeston Lakes and other walks can be found on the following websites:

#### Vale of Glamorgan

[http://www.valeofglamorgan.gov.uk/living/environment/countryside/cosmeston\\_lakes.aspx](http://www.valeofglamorgan.gov.uk/living/environment/countryside/cosmeston_lakes.aspx)

#### South Wales Out & About

<http://www.southwalesattractions.co.uk/attractions/cosmeston-lakes-country-park.aspx>

There is a whole list of walks from Cosmeston which can be found on:

<http://www.glamorganwalks.com/cosmeston.htm>

## 4.0 LONG TERM POLICY

In fifty years time Cwm George and Casehill Woods will be a semi-natural woodland with a diverse species and age composition, primarily dominated by native species and with diverse, well developed shrub and field layers, representative of the surviving ancient woodland components currently found within the existing areas of ancient woodland.

Scattered, over-mature conifers will remain in planted ancient woodland areas but will not be regenerating significantly or pose a threat to ancient woodland remnants.

The area of the scheduled ancient monument will continue to be wooded and managed as coppice to retain an open nature to permit appreciation of its historical attributes. Mature trees will also be managed ensuring that the integrity of the monument is retained.

Those areas of planted woodland will have matured into established woodland and begun taking on the characteristics of the surrounding semi-natural woodland.

The grassland areas will be retained through a regime of cutting, favouring an increase in species diversity.

The site will be enjoyed by a high number and variety of users including pedestrian and equestrian groups and the network of footpaths and infrastructure will be maintained to accommodate this high level of useage.

## 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 Planted Ancient Woodland Site

#### Description

PAWS that has had the majority of planted species removed. Species retained including beech considered to now be a component of the woodland, but during forest operations native species will be favoured. Ancient woodland ground flora is well developed, in particular cmpt 5. Main canopy species are Ash and Oak. Beech dominates some areas in cmpt 1.

#### Significance

Significant area of planted ancient woodland, now linked by new planting. Ancient woodland ground flora is well represented making the woodlands diverse.

#### Opportunities & Constraints

Well used public site. Any management will need to be considered in context of local perceptions. Opportunities exist to further enhance the age structure and species composition by the creation of gaps and thinning.

#### Factors Causing Change

Suppression of ground flora due to shading. Threat to regeneration from chalara.

#### Long term Objective (50 years+)

Gradual removal of remaining conifer component and restoration of site to broadleaf woodland. Beech will be thinned where its dense shade is posing a threat to ground flora but will be considered native to the site.

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

By the end of this plan period all zones identified in the PAWS strategy will have been subjected to a thinning intervention.

## 5.2 Archaeological Feature

### Description

Scheduled Ancient Monument. Early medieval hill fort and a second earthwork feature. Dinas Powys hillfort is the richest, best preserved and most fully excavated early medieval secular settlement in Wales. The hillfort was extensively excavated by Leslie Alcock in the late 1950s. The subsequent publication became a seminal work of early medieval archaeology (Alcock 1963) and Dinas Powys is often quoted as the classic type site of the early medieval west. The quality and quantity of the early medieval material from Dinas Powys is thus far unparalleled in Wales and the site offers unique insights into the socio-political and economic conditions of early medieval western Britain.

### Significance

Site of national archeological value.

### Opportunities & Constraints

Potential as visitor attraction to site and a source of funding. Management must not adversely affect the scheduled ancient monument, and proactive management needs to ensure that the tree cover is stable.

### Factors Causing Change

Possible hazard from over-mature trees if not managed. Risk of damage to site from increased visitor numbers if promoted.

### Long term Objective (50 years+)

To protect this important monument from disturbance and damage and thus to ensure its preservation for the benefit of present and future generations to enjoy and learn from.

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

The monument will be subject to condition inspections at least once every 5 years to ensure the monument is not suffering deterioration or damage of any kind. If any problems are discovered, this will be brought to the attention of CADW. The site manager will assess trees within SAM for firmness, and conduct any tree work required. This will include coppicing within the vicinity of the monument to open up the understorey and permit greater appreciation of its features. Interpretation installed in this plan period will seek to enhance understanding of this important site.

## 5.3 New Native Woodland

### Description

Two areas of new planting one linking Casehill Wood and Cwm George and the other extending Casehill Wood. Both had high public involvement with an area being planted by members of the Welsh Assembly. A range of native tree species were planted. Millennium features were included on both new planting areas.

### Significance

The presence of new native woodland on the edge of Casehill and Cwm George woods will have a buffering effect, protecting these valuable ancient woodlands from edge effects. This will create more stable conditions within the ancient woodland, which are preferable to ancient woodland specific species. In addition to this, new native woodland will provide a valuable visitor resource, by enabling the public to watch a new native woodland develop and adding interest to their visit. In support of this, there was a very positive response to public consultation regarding the Trust's acquisition and planting of the land.

### Opportunities & Constraints

Open areas particularly in the Casehill Meadows was seen as important during the consultation process. These lie adjacent to the parkland of Cwt yr Ala House, and was seen as an important component of these.

### Factors Causing Change

Natural succession, Chalara, squirrel damage.

### Long term Objective (50 years+)

To ensure that native broadleaved woodland is successfully established and to ensure this remains healthy and vigorous so that, over the long-term, the wood becomes self-perpetuating through natural regeneration, ensuring its existence in perpetuity.

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

The trees and shrubs are now well established and no longer require weeding and beating-up and can be largely left alone to grow and close canopy, with monitoring restricted to once per plan period as part of the woodland condition observations. By 2020, the plantings should have formed into dense thickets of young trees whose canopy has closed, creating the early stages of a woodland environment.

## 5.4 Semi Natural Open Ground Habitat

### Description

Areas of open grassland that range from improved ryegrass reseed to semi natural species rich grassland. These areas make up the open ground within the new native woodland planting areas.

### Significance

Species rich grassland is significantly reduced since the last war. The Trust has the opportunity to contribute to the biodiversity targets for this habitat type.

### Opportunities & Constraints

The opportunity exists to recreate species rich MG5 grassland. This would significantly enhance the biodiversity value of the woodland complex.

### Factors Causing Change

Natural regeneration if not grazed or cut.

### Long term Objective (50 years+)

The areas of open grassland will be managed to increase diversity of the grassland species.

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

Within the plan period, the annual cutting of silage will continue and monitoring of the grassland species will be undertaken.

## 5.5 Ancient Semi Natural Woodland

### Description

Ancient semi natural Woodland is not found extensively within the site, and is restricted to the northern part of cmpt 1, on the steep slopes running down to the Wrinstone Brook. Lowland mixed broadleaves with Oak and ash. Well developed ancient woodland ground flora is found.

### Significance

Area of ancient semi natural woodland. Undisturbed due to the terrain of the area.

### Opportunities & Constraints

Steep slope of undisturbed ancient woodland with little public access due to the terrain. Opportunity to allow natural process to occur without the constraint of public access.

### Factors Causing Change

Chalara.

### Long term Objective (50 years+)

To maintain the health and vigour the ASNW and to protect it from any loss of biodiversity or any other degradation in habitat quality. Over the long-term (50-100 years), the area occupied by ASNW will also be increased through restoring adjacent areas of PAWS woodland.

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

Management will adhere to minimum intervention principles with operations confined to those required to ensure public safety and to remove invasive species should this be deemed necessary.

## 5.6 Informal Public Access

### Description

A site with high public usage. An extensive network of both public and permissive footpaths allow access throughout the site. The proximity of the site to Dinas Powys and Cardiff results in a high level of visitor use. There is also extensive provision for equestrian use with a network of bridleways in Park Wood linked to Casehillwood via the meadows.

### Significance

The site within a special landscape area and is visually attractive. It is close to high urban populations and as a result receives a large number of visitors.

### Opportunities & Constraints

The site could be used in an educational role due to its proximity to high urban populations and historic interest.

The site and in particular the car park suffers from inappropriate behaviour.

Some areas of bridleway can become heavily poached in winter and the meadows are particularly prone to intensive use which can lead to degradation of routes in wet weather.

### Factors Causing Change

Wooden installations are subject to rot and infrastructure is also vandalised

### Long term Objective (50 years+)

To maintain the public car park and a network of paths, rides and bridleways so that people can continue to enjoy free access on foot throughout the wood in the future.

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

Public footpaths, bridleways and other formal permissive paths will be kept clear of encroaching vegetation by cutting back at least once a year to provide users with free unobstructed access. Periodic coppicing will also be conducted on ridesides for the dual purpose of opening access and benefitting wildlife. Entrances, steps, bridges and other access furniture will be inspected periodically by the site manager and maintained in a safe and serviceable condition by carrying out repairs/replacements as required. Woodland Trust welcome signs will be erected and maintained at all formal entrances and visitor safety will be protected by carrying out periodic tree safety surveys along the wood's boundaries and along paths inside the woods.

## 6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
2014	LC - Routine Litter Picks	General litter pick in the area of the medieval hill fort and around the deep pool and report on any damage to hillfort. Keep the centre of the site of the fort and ramparts (see attached map) in good order, removing brash and regenerating vegetation /brash as in previous years. Brash heaps and piles to be no greater than 2m diameter and 0.5m depth/height. Please 'mash' down the heaps with a chainsaw if possible.	22/07/14
2014	AW - Visitor Access Maintenance	Maintain entrances, paths and access furniture marked yellow on site plan. Remove any rubbish and report and quote for any additional repairs required to access furniture or fencing.	26/07/14
2014	WMI - Invasive Plant Control	Hand pulling and control of ragwort in Pen Y Turnpike (new plantation). Pulling to include lifting of roots. Please quote for any additional days needed to control this weed.	09/08/14
2014	AW - Visitor Access Maintenance	Replacement of vandalised kissing gate and fencing and repair of field gate to prevent further motorbike access. Replacement of welcome sign at Tyn yr Coed entrance.	30/08/14
2014	LC - Routine Litter Picks	Remove all rubbish from car park and sweep back any scalplings from tar-mac apron to main car park area five times between March and September at equal intervals.	27/09/14
2014	LC - Routine Litter Picks	General litter pick in the area of the medieval hill fort and around the deep pool and report on any damage to hillfort. Keep the centre of the site of the fort and ramparts (see attached map) in good order, removing brash and regenerating vegetation /brash and piling away from ramparts in piles no greater than 2m width and 0.5m height.	30/09/14
2014	LC - Fly Tipping	Clearance of litter form meadows and retrieval of interpretation board.	30/09/14

2014	AW - Visitor Access Maintenance	Stone drops at pinch points within Case Hill meadows: 3 squeeze gaps 2 stiles and at either end of 2 footbridges.	30/09/14
2014	AW - Visitor Access Maintenance	Item 5a on attached access plan - Resurfacing of bridleway in Case Hill meadow. Use excavated material to create raised bank for future hedge planting along de facto drainage ditch in meadows.	30/09/14
2014	LC - Fly Tipping	Clearance of flytipping in car park.	30/10/14
2014	LC - Fly Tipping	Clearance of flytipping in car park.	15/11/14
2014	AW - Management Access Maintenance	Unblocking of ditch and removal of debris + repairs to footpath in Cwm footpath.	15/11/14
2014	AW - Visitor Access Maintenance	Unit style: Musketeer - lectern - twin leg Size: A1 Material: Semi-seasoned oak (FSC certified) The above unit to suit a 3mm thick graphic panel £554 x3 £55 delivery  Please deliver to:  G A Howells & Sons Baiden Farm Ffordd Y Gyfraith Cefn Cribwr Bridgend CF32 0BS	26/11/14
2014	AW - Visitor Access Maintenance	Removal of 3 interpretation panels and installation of replacement, to include fitting of original display board and repair of fencing in car park.	26/11/14
2015	LC - Routine Litter Picks	Litter Pick of car parking area before filming commences on site on 2/1/2015.	01/01/15
2015	SL - Legal Obligation Work	Trim hedge marked green on site plan, along Pen y Turnpike and Michaelston-le-pit roadsides, so that it does not interfere with passing traffic.	28/02/15

2015	AW - Visitor Access Maintenance	To make safe falling and fallen timber and any unstable deadwood of over 3 inch DBH within 6 metres of the path edge or any falling or fallen timber that would fall within 3 metres of the paths marked yellow and pink on the EMC map.	01/03/15
2015	SL - Tree Safety Works - Zone B	Make safe 'hung up' semi mature Oak tree along main bridleway/vehicle access track at Park wood end of site.  Leave logs in long lengths (as possible) and stack brash neatly.	06/03/15
2015	SL - Safety Inspections / Reports	Inspect and provide report on condition of cliff top fence shown blue on site plan. .	30/04/15
2015	LC - Routine Litter Picks	General litter pick in the area of the medieval hill fort and around the deep pool	30/04/15
2015	AW - Visitor Access Maintenance	Maintain entrances, paths and access furniture marked yellow on site plan. Remove any rubbish and report and quote for any additional repairs required to access furniture or fencing.	30/04/15
2015	WMM - General Site Management	Hire of equipment for site visit	07/05/15
2015	LC - Fly Tipping	Clearance of Fly tipping from One O'clock entrance.	22/05/15
2015	AW - Visitor Access Maintenance	Maintain entrances both Vehicluar and pedestrian, access furniture and paths marked pink on site plan paying attention to cutting around access barriers/gates. Mow the rides, ensure that all ditches are clear of debris and remove any rubbish.	12/06/15
2015	LC - Routine Litter Picks	General litter pick in the area of the medieval hill fort and around the deep pool and report on any damage to hillfort. Keep the centre of the site of the fort and ramparts (see attached map) in good order, removing brash and regenerating vegetation /brash as in previous years. Brash heaps and piles to be no greater than 2m diameter and 0.5m depth/height. Please 'mash' down the heaps with a chainsaw if possible.	22/07/15

2015	AW - Visitor Access Maintenance	Maintain entrances, paths and access furniture marked yellow on site plan. Remove any rubbish and report and quote for any additional repairs required to access furniture or fencing.	26/07/15
2015	WMI - Invasive Plant Control	Hand pulling and control of ragwort in Pen Y Turnpike (new plantation). Pulling to include lifting of roots. Please quote for any additional days needed to control this weed.	09/08/15
2015	AW - Visitor Access Infrastructure	Create approx. 150m stone path at 1.5m wide with retaining revetment boarding + drainage Based on WT Spec 2.15: excavate 100mm deep trench, spread arisings at nearby location to be agreed, line base with Terram, spread minimum 125mm base layer of 40mm to dust stone rolled down to 100mm, spread self-binding gravel 10mm to dust laid at 100mm rolled down to 50mm	15/08/15
2015	AW - Visitor Access Maintenance	Replace steps at access point near car park into Casehill meadows from main bridle path.  Replace damaged steps treads leading up to hill fort area and steps leading from 'Cwm' footpath to Park Wood using timber milled from larch felled to waste in previous years.  Improve footpath surface material to compensate for muddy surface conditions.	31/08/15
2015	AW - Visitor Access Maintenance	Carry out repairs to broken fence line around car park where recently broken. Remove fallen tree from across main access track at 'one o'clock' gates in Park Wood.	31/08/15
2015	AW - Visitor Access Maintenance	Cutting back of overhanging branches and encroaching scrub along bridle path leading from Casehill meadows to Park Wood	31/08/15
2015	AW - Visitor Access Maintenance	Maintenance of Bridle & footpath and networks around site	31/08/15

2015	LC - Routine Litter Picks	General Litter pick of Car park and Hill fort area (August)	31/08/15
2015	NWH - Maintenance Work	Remove and Replace metal estate styled fencing along the Pen-y-Turnpike road, approximately 110 metres with new galvanised metal estate fencing, placing new fencing into the site by approximately 0.5 metres as outlined in the invitation for tender.	31/08/15
2015	NWH - Invasive Plant Control	Pulling by hand of Ragwort in Pen y Turnpike woodland	11/09/15
2015	LC - Fly Tipping	Removal of large 'dumpy bag' of builders waste materials from car park	11/09/15
2015	LC - Routine Litter Picks	Remove all rubbish from car park and sweep back any scalplings from tar-mac apron to main car park area five times between March and September at equal intervals.	27/09/15
2015	LC - Routine Litter Picks	General litter pick of Car park and Hill fort areas (September)	30/09/15
2015	LC - Routine Litter Picks	Litter pick of site and cutting back of roadside verge at car park (2nd visit)	30/09/15
2015	AW - Management Access Maintenance	Site Equipment and Safety Jacket	30/09/15
2015	AW - Visitor Access Infrastructure	Repairs to broken field gate at 'Cwm Field entrance' and cutting back of over hanging branches from along bridle path	30/09/15
2015	AW - Visitor Access Maintenance	Cutting back (1-1.5m) of encroaching blackthorn and scrub from footpath edges, in various locations throughout site. Cutting back of entire bridle path network after 1/8/2015 with some sections cut immediately.  Certain sections of path to be cut by hand as agreed on site visit 01/06/2015 and others with respective machinery. Bridle path to be closed off during working hours as outlined in Risk Assessment.	15/10/15
2015	AW - Visitor Access Maintenance	Additions to new roadside metal parkland style fencing along Pen y Turnpike road	15/10/15

2015	AW - Visitor Access Maintenance	Installation of interpretation boards specifically for scheduled ancient monument.	26/10/15
2015	AW - Visitor Access Maintenance	Strimming of Bridle path against arable field cutting up to edge of tree line and along fence edge.	31/10/15
2015	PE - Volunteer on site activity	Volunteer event equipment inc fencing materials for Hedgelaying and task day	31/10/15
2015	CS - Map / Interpretation Work	Translation costs for 'works and upgrades' sign to be installed on site.	20/11/15
2015	AW - Visitor Access Maintenance	Site contingency to tackle anti social behaviour issues (multiple incidents in 2011/12)	30/11/15
2015	PE - Interpretation & Signage	Supply and delivery of Site entrance temporary information signs informing public of site improvements happening in 2016 & 17  WT02-A3-ACL Woodland Trust signs (with 4 corner holes) / A3 (297x420mm) / 3mm Aluminium composite with matt laminate	30/11/15
2015	SL - Management Consideration	Cutting back and laying of hedge in traditional 'general' or 'midland style' along the Pen y Turnpike road for approximately 50 metres removing small immature trees from immediately behind hedge to improve vision from Michaelston le pit junction.	18/12/15
2015	WMM - General Site Management	Cutting back of roadside scrub along boundary of Pen y Turnpike wood with Pen y Turnpike road.	18/12/15
2016	LC - Routine Litter Picks	Clearance of rubbish from car parking area	30/01/16

2016	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	14/02/16
2016	SL - Legal Obligation Work	<p>Cutting of roadside hedges and verges.</p> <p>Roadside hedges and verges along Pen-y-turnpike road and road leading to Michaelston-le-pit as marked in Pink on 2016 EMC Tender Maps.</p>	29/02/16
2016	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	14/03/16
2016	WMI - General Site Restoration Work	Supply of fencing materials	31/03/16

2016	AW - Visitor Access Maintenance	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance</p> <p>Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	22/04/16
2016	AW - Visitor Access Maintenance	Carry out aeration of all grass surfaced paths across site using tractor mounted 'spiker' rollers.	13/05/16
2016	AW - Visitor Access Maintenance	Carry out aeration of all grass surfaced paths across site using tractor mounted 'spiker' rollers.	13/05/16
2016	WMM - General Site Management	Replace approx. 25 metres of boundary fence along 'Cwm' footpath entrance with Post and Rail fence. Remove old fencing wire and dispose of at licensed recycling centre.	27/05/16

2016	AW - Visitor Access Maintenance	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance</p> <p>Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	28/05/16
2016	AW - Management Access Maintenance	Replace broken field gate in Casehill meadows part of site following vandalism with Galvanised 12ft gate.	31/05/16
2016	SL - Tree Safety Works - Zone B	Cut up and stack fallen mature ash tree from Casehill meadows area.	31/05/16
2016	PE - Interpretation & Signage	New welcome signs 'Cwm George & Casehill Woods' (x6)	31/05/16

2016	NWH - Initial Creation Work	Construction of earth banks and ditches along field edges and planting with hedgerows to replace broken fences and control horse riders along bridle path	31/05/16
2016	AW - Visitor Access Maintenance	Supply of 40 Oak step boards and 80 2x2in Pegs	30/06/16
2016	CS - Ecological Survey & Assessment	Botanical Survey of grassland habitats including hay meadow areas and larger rides in Pen y Turnpike woodland (WOYD part of site)	30/06/16
2016	PE - Volunteer on site activity	Out of Pocket costs for Cardiff Conservation Volunteers to undertake step building task	08/07/16
2016	SL - H&S Signage	<p>DOC04010-5. 75x75mm Woodland Sites Plaque Set Brissco Part No: CZC006</p> <p>Printed black and white on 2mm clear makrolon complete with drill holes.</p> <p>Set to Include:</p> <p>2 x Woodland Site 1 Plaques 1 x Woodland Site 2 Plaque 1 x Woodland Site 3 Plaque 1 x Woodland Site 4 Plaque 1 x Woodland Site 5 Plaque</p> <p>DOC04010-6. 75x75mm Woodland Sites Plaque Set Brissco Part No: CZC006</p> <p>Printed black and white on 2mm clear makrolon complete with drill holes.</p> <p>Set to Include:</p> <p>2 x Woodland Site 1 Plaques 1 x Woodland Site 2 Plaque 1 x Woodland Site 3 Plaque 1 x Woodland Site 4 Plaque 1 x Woodland Site 5 Plaque</p> <p>*Delivery Charge</p>	22/07/16
2016	LC - Fly Tipping	Removal of fly tipping (household waste) from main car park area.	29/07/16

2016	AW - Visitor Access Maintenance	Provide supervisory role for volunteer group undertaking essential access repairs including the collection and delivery to site of materials.	29/07/16
2016	AW - Visitor Access Maintenance	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance</p> <p>Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	31/07/16
2016	AW - Visitor Access Maintenance	Cut and shape newly layed hedge by hand (approx 100m.) and install new wooden welcome signs at main pedestrian access points.	19/08/16

2016	LC - Routine Litter Picks	<p>Maintenance of Car park and main entrance including litter pick of main car park area and roadside verge leading up to car park entrance. Maintenance to include cutting to ground level then roadside embankment along the front of the visitor car park, removing growth and stacking neatly in nearby woodland out of sight.</p> <p>Attention to be paid to banks around car park and behind fences when removing litter.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	26/08/16
2016	AW - Visitor Access Maintenance	Upgrading of timber access furniture and steps throughout site	30/08/16
2016	WMM - Ride Management	Control of scrub encroachment in Pen y Turnpike woodland. Cut and coppice areas of ride side and establish new footpath to replace overgrown path against woodland edge	30/08/16
2016	NWH - Invasive Plant Control	Hand Pulling of Ragwort from Pen y Turnpike part of site. (estimated 1 day) Please quote for additional days needed to complete work.	31/08/16
2016	AW - Visitor Access Maintenance	Carry out maintenance of embankment at permissive bridleway crossing to remove deep trenches from horse usage and install 'steps' constructed from concrete railway sleepers at 2 metre intervals (both sides)	02/09/16
2016	LC - Routine Litter Picks	<p>Litter collection of entire footpath network including litter pick of main car park area and roadside verge leading up to car park entrance. Attention to be made to Hill Fort area and riverside where groups congregate during summer months. Attention also to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	16/09/16

2016	AW - Visitor Access Infrastructure	Replacement of approx. 650 metres of stock proof boundary fence along field boundary with 'Cwm' fields	30/09/16
2016	AW - Visitor Access Infrastructure	Replacement fence line around edge of Car parking area to be constructed from 'Riven' chestnut posts and rails sourced from Graig Fawr woods	30/09/16
2016	AW - Visitor Access Maintenance	Supply and installation of new woodland access gates (x3) and new post and rail fences at bridleway and footpath/access track crossroads area close to Cwm footpath and management access area. Repairs to kissing gates to be carried out and 'stoned' to prevent poaching within gated area.	01/10/16
2016	LC - Fly Tipping	Removal of fly tipping from main car park and disposal of at licensed waste carrier	31/10/16
2016	LC - Fly Tipping	Clearance of fly tipping (car seats) and disposal at licensed waste transfer site	31/10/16
2016	SL - Safety / Legal Obligation Work (SODS)	Cutting back of roadside hedge and over hanging branches along Michaelston le pit road	31/10/16
2016	HF - Protection / Maintenance	Clearance of vegetation on hillfort area by cutting by hand all coppice stools and strimming of ramparts. All brash to be stacked neatly against woodland edge and 'mashed' down into habitat piles out of view.	31/10/16
2016	LC - Fly Tipping	Clearance of fly tipping (mattress and other litter) from car parking area and preparatory work to Park wood entrance to allow for vehicle access for seasonal event.	30/11/16
2016	WMI - PAWS Restoration	PAWS restoration and Halo thinning to waste of larch & hemlock	30/11/16
2017	AW - Visitor Access Maintenance	Repairs to fencing near pen y turnpike / casehill wood pedestrian access point following vandalism	20/01/17
2017	AW - Visitor Access Maintenance	Replacement of 20 steps along Casehill woods footpath at various locations and cutting back by hand of pedestrian access pinch points. (Using Oak)	27/01/17

2017	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	14/02/17
2017	SL - Legal Obligation Work	<p>Cutting of roadside hedges and internal verges.</p> <p>Roadside hedges and verges along Pen-y-turnpike road and road leading to Michaelston-le-pit as marked in Pink on 2016 EMC Tender Maps.</p> <p>Internal verges including from 'one o'clock gate' to fork in bridle path (approx. 200m) (marked in Green on 2016 Tender Maps)</p>	28/02/17
2017	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	14/03/17
2017	LC - Fly Tipping	Removal of fly tipping from main car parking area.	31/03/17
2017	AW - Visitor Access Maintenance	Carry out verge cutting and brash cutting along verges within Casehill woods and meadows along bridle and pedestrian footpaths to reduce encroachment onto paths, to widen pinch points where ground erosion/poaching is occurring and to improve management access.	31/03/17

2017	PE - Interpretation & Signage	10 x A4 Dog Walkers Code of Conduct (bilingual version) £14.20 (£1.42 each no holes) 15 x A5 Dog Walkers Code of Conduct (bilingual version) £10.65 (£0.71 each no holes) Delivery £3.95	07/04/17
2017	AW - Visitor Access Maintenance	Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.  Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.  Pedestrian Footpath: 5.11km (approx.)  Bridleway: 2.7km (approx.)  Pedestrian and Vehicular Access Entrances: 10  **Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.	22/04/17
2017	AW - Visitor Access Maintenance	Supply of 20x Reflective Bollards	28/04/17
2017	LC - Fly Tipping	Remove fly tipping from along verge at main car park.	28/04/17

2017	SL - Tree Safety Works - Zone B	Cut up and stack small diameter fallen tree along Cwm footpath.	28/04/17
2017	WC - Shelter Supply / Erection	Supply of 2x 500 (QTY) bales of bamboo canes 400 60cm shrub shelter plus guards 400 90cm stakes	12/05/17
2017	AW - Visitor Access Maintenance	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance</p> <p>Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	28/05/17
2017	AW - Management Access Maintenance	Supply of 4 7x7inch x 7ft length weather pointed gate posts	31/05/17

2017	AW - Visitor Access Maintenance	Re-align Bridleway and visitor access. work to include re-aligning bridle entrance from within car parking area to old access gate along unclassified road. Work to include grading of shallow embankment and installation of new culvert pipe. Access furniture to be installed to meet British Horse Society standards. New pedestrian access to be created from same area into field with old access gate closed off.	31/05/17
2017	AW - Visitor Access Infrastructure	2 x 12ft Oak 'Penfro' gate, 'Cwm George & Casehill Woods' and WT logo routed into the top rail . Gates hung on the right hand side. + gate fittings 2 x 3ft oak pedestrian gates, 'Croeso' and WT logo routed into top rail. Gates hung on the left hand side. + gate fittings	31/05/17
2017	WC - Shelter Supply / Erection	Supply of 1000 qty 60cm clear spiral guards and bamboo canes inc delivery to Cardiff address	31/05/17
2017	AW - Visitor Access Maintenance	Supply of 4x Finger posts with delivery to South Wales  100 x 100 x 2800 FSC Oak post with recessed routed Woodland Trust Logo on 2 sides in black and 500 x 135 x 25 FSC Oak Finger Arm with recess/routed horse riding symbol in black with routed lettering 'Permissive Bridleway / Llwybr marchogaeth cwrteisi' on 2 sides of finger arm.	09/06/17
2017	AW - Visitor Access Maintenance	Engraving / Routing of Trust logo (leaves only) into finger post upright, painted black.	09/06/17
2017	SL - Routine Safety Work	Cutting back by hand visual display along pen-y-turnpike	30/06/17
2017	PE - Interpretation & Signage	Installation of new name signs at various entrance points and recessing prohibition signs into new gate posts.	30/06/17
2017	PE - Interpretation & Signage	Supply of 3x ladder boards with 2 x A4 poster frames attached to marine ply as per quotation/estimate reference 1150	28/07/17
2017	PE - Interpretation & Signage	Delivery Charge for new entrance signage to South Wales.	28/07/17

2017	LC - Fly Tipping	Removal of fly tipping from car park area and along ditch.	28/07/17
2017	LC - Hazardous Waste	Removal and disposal at licensed premises of part buried animal from casehill fields.	28/07/17
2017	AW - Visitor Access Maintenance	Supply of GRB Sheets for car park surfacing	28/07/17
2017	AW - Visitor Access Maintenance	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance</p> <p>Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	31/07/17

2017	LC - Hazardous Waste	<p>Site clear up and removal of golf buggies from river crossing following joy riding incident on 16th July 2017.</p> <p>Golf buggies to be lifted from river horizontally and stored at contractors premises to be disposed of.</p> <p>Costs to include additional hours worked liaising with NRW and Police, clear up and carriage of golf buggies to premises and temporary storage.</p>	25/08/17
2017	AW - Management Access Maintenance	Digging of small ditch along car park boundary to prevent vehicular access to site following joy riding incident to adjoin PO 517174	25/08/17
2017	LC - Routine Litter Picks	<p>Maintenance of Car park and main entrance including litter pick of main car park area and roadside verge leading up to car park entrance. Maintenance to include cutting to ground level then roadside embankment along the front of the visitor car park, removing growth and stacking neatly in nearby woodland out of sight.</p> <p>Attention to be paid to banks around car park and behind fences when removing litter.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	26/08/17
2017	AW - Visitor Access Maintenance	upgrading of path surfaces throughout site focusing on pinch points	30/08/17
2017	AW - Visitor Access Maintenance	Grade and stone bridleway steps at River crossing.	31/08/17
2017	AW - Visitor Access Maintenance	<p>Installation of new management access gates and bollards in car park area.</p> <p>Work to include prepping of site, removal of old gates and collection of new timber gates from suppliers in Llandeilo</p>	31/08/17
2017	AW - Visitor Access Maintenance	Installation of bollards along car park embankment	31/08/17

2017	AW - Visitor Access Infrastructure	Replacement and repair of cleft chestnut fencing along boundary of car park following joy riding incident	31/08/17
2017	AW - Visitor Access Maintenance	Supply of:  2 x 3ft pedestrian gate (in Oak) in Towy style with hockey stick hanging post  2 x 7x7in 7ft gate posts (oak)  10 x oak rails (4x2in x 12ft)  1x 12ft replacement Pembrokeshire style Oak gate, following vandalism incident , with wording 'Cwm George & Casehill Woods' & Logo routed into top bar of gate and fixings - gate hung on the right hand side.	31/08/17
2017	AW - Visitor Access Maintenance	Supply of 2x timber bollard sockets and end caps	31/08/17
2017	PE - Events - General	Supply of 5 x straw bales for event	31/08/17
2017	LC - Routine Litter Picks	Additional litter pick of hill fort area to remove camp site and tents	31/08/17
2017	LC - Routine Litter Picks	Litter collection of entire footpath network including litter pick of main car park area and roadside verge leading up to car park entrance. Attention to be made to Hill Fort area and riverside where groups congregate during summer months. Attention also to be paid to banks around car park and behind fences.  Send electronic report after each litter collection outlining main contents of litter pick and volume.	16/09/17
2017	PE - Events - General	Cancelation Fees for postponed event - Outdoor Cinema Experience	30/09/17
2017	PE - Events - General	Cancelation Fees for postponed event - Outdoor Cinema Experience	30/09/17
2017	WC - Tree / Seed Supply	Supply of 1x semi mature Oak tree for memorial planting event	30/09/17

2017	AW - Visitor Access Maintenance	<p>Scrape bridleway track leading through casehill woods to remove leaf litter build up and place at appropriate locations to avoid damage to retained deadwood, trees and ground flora.</p> <p>2x New gate to be installed to aid maintenance at 2 locations as agreed within casehill woods. Pedestrian squeeze gap and stone to be included in work.</p>	30/09/17
2017	AW - Visitor Access Maintenance	Cut back and widen footpath leading from half way point of bridleway within casehill wood leading to casehill meadows area.	31/10/17
2017	AW - Visitor Access Infrastructure	<p>Repairs to footpath and bridleway between casehill wood and river crossing</p> <p>Work to include replacement field gate into meadow area and squeeze gap on footpath adjoining as well as installation of new step boards and re-grading of path surface to remove washout ruts and channels.</p>	31/10/17
2017	SL - H&S Signage	<p>Supply of:</p> <p>50 x safety signs with wording 'Warning Cliff Edge / Rhybudd - Ymyl Clogwyn ' with yellow warning triangle as shown on attachment and black lettering on yellow background (Portrait A5 size 148 x 210 mm on diabond with rounded corners). With single run of channel to rear</p> <p>5 x height barrier signs with reflective background in yellow and wording 'Maximum Height 2.1 metres / Uchder Mwyaf 2.1 metr ' and directional arrows in black (100mm x 300mm on diabond with allowance for sign to be drilled along edges) No channel but pre drilled at edges (distance tba) with applied reflective</p> <p>Design Charge (4 hours)</p>	31/10/17

2017	SL - Tree Safety Works - Zone B	Cut up and clearance of fallen small diameter oak tree from along bridle path between Casehill meadows and Cwm George meadows.	31/10/17
2017	AW - Management Access Maintenance	Supply of materials and repair of Broken management access gate following joy riding incident.	31/10/17
2017	PE - Interpretation & Signage	Translation costs	31/10/17
2017	PE - Interpretation & Signage	Supply of 5 x A1 Oak 'Aberdeen' information lecterns (ref: 73880) with graphics panel supplied separately but installed during manufacture including delivery to South Wales.	30/11/17
2017	WC - Tree Planting / Seeding	c.f. Commemorative Tree Planting	30/11/17
2017	WC - Tree Planting / Seeding	Commemorative Tree Planting	30/11/17
2017	AW - Visitor Access Maintenance	Supply of 6 x entrance sign (15 x 12in) with Plain Font	30/11/17
2017	AW - Visitor Access Maintenance	Cut back over hanging briars and branches from along mill field fence line.	30/11/17
2017	AW - Visitor Access Maintenance	Cut back and widen pedestrian access path along pen y turnpike boundary with casehill woods as agreed on site visit.  Brash should be moved from pen y turnpike to pool area in lower meadow to block area off from antisocial behaviour occurring.	30/11/17
2017	AW - Management Access Maintenance	Supply of 5 (15 x 6in) Directional Arrow Signs painted green	30/11/17
2017	AW - Management Access Maintenance	Delivery Charge for entrance signs to South Wales	30/11/17
2017	WMI - PAWS Restoration	Thinning of zones 1-5  Fell to waste all Larch and W.Hemlock trees as marked with pink paint. Trees to be felled in entire length and must not be stacked but snedded to allow to touch the ground.	30/11/17

2017	NWH - Maintenance Work	<p>Replacement of boundary fence along Michaelston le pit road (approx. 60 metres) with new parkland style fencing, cutting back brash and overhanging vegetation to 2 metres inside fence line. Replacement of pen y turnpike entrance gate from that supplied by the Trust in original position.</p> <p>Old fence to be removed from site and scrapped. Proof of disposal required upon invoicing.</p>	30/11/17
2017	AW - Visitor Access Maintenance	<p>Replacement of chestnut paling fence line at 3'6" height along field boundary with casehill woods, adjacent to bridleway and dig hedge embankment alongside to be planted in future year following vandalism in 2017</p>	22/12/17
2017	SL - Routine Safety Work	<p>Carry out repairs to handrails on steps on hill fort ramparts and repairs to handrail on pedestrian bridge across Cadoxton brook.</p>	22/12/17
2017	PE - Interpretation & Signage	<p>Supply of 4 x Information Panel sign inserts ref: WT01-A1-ACL Woodland Trust signs (no holes) / A1 (840x594mm) / 3mm ACM with matt lam with standard delivery option.</p> <p>Delivery to: Chris Walton, LANDMARK 32 Henry Road New Barnet Herts EN4 8BD</p>	22/12/17
2017	WMI - Coppice Restoration	<p>Coppicing of 2a and 3a - Coppice all trees marked with pink paint along Cwm path.</p> <p>Arisings to be chipped and blown into coppiced area to prevent from being burnt or used to block nearby streams.</p>	30/12/17

2018	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	19/01/18
2018	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	14/02/18
2018	SL - Legal Obligation Work	<p>Cutting of roadside hedges and internal verges.</p> <p>Roadside hedges and verges along Pen-y-turnpike road and road leading to Michaelston-le-pit as marked in Pink on 2016 EMC Tender Maps.</p> <p>Internal verges including from 'one o'clock gate' to fork in bridle path (approx. 200m) (marked in Green on 2016 Tender Maps)</p>	28/02/18

2018	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	14/03/18
2018	AW - Visitor Access Maintenance	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance</p> <p>Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	22/04/18

2018	AW - Visitor Access Maintenance	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance</p> <p>Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	28/05/18
2018	WC - Tree Planting / Seeding	Planting of new hedgerow along bridle path edge from Casehill wood to Wier	31/05/18

<p>2018</p>	<p>AW - Visitor Access Maintenance</p>	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance                  Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	<p>31/07/18</p>
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2018	LC - Routine Litter Picks	<p>Maintenance of Car park and main entrance including litter pick of main car park area and roadside verge leading up to car park entrance. Maintenance to include cutting to ground level then roadside embankment along the front of the visitor car park, removing growth and stacking neatly in nearby woodland out of sight.</p> <p>Attention to be paid to banks around car park and behind fences when removing litter.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	26/08/18
2018	LC - Routine Litter Picks	<p>Litter collection of entire footpath network including litter pick of main car park area and roadside verge leading up to car park entrance. Attention to be made to Hill Fort area and riverside where groups congregate during summer months. Attention also to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	16/09/18
2018	WMM - Ride Management	Ride Management of glades with Pen-y-Turnpike	28/09/18
2018	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	20/10/18
2018	PE - Events - General	(Exclusive Program of Events) On-Site Event Christmas in the Woods/Lantern Event November/December 2018	31/10/18

2018	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	23/11/18
2018	AW - Visitor Access Maintenance	Repairs to footbridges and access furniture	30/11/18
2018	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	21/12/18
2018	WMI - Coppice Restoration	Coppicing of Cpt 2a and 3a	30/12/18
2019	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	14/02/19

2019	SL - Legal Obligation Work	<p>Cutting of roadside hedges and internal verges.</p> <p>Roadside hedges and verges along Pen-y-turnpike road and road leading to Michaelston-le-pit as marked in Pink on 2016 EMC Tender Maps.</p> <p>Internal verges including from 'one o'clock gate' to fork in bridle path (approx. 200m) (marked in Green on 2016 Tender Maps)</p>	28/02/19
2019	LC - Routine Litter Picks	<p>Maintenance of Car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance, oiling padlocks and cleaning signs</p> <p>Attention to be paid to banks around car park and behind fences.</p> <p>Send electronic report after each litter collection outlining main contents of litter pick and volume.</p>	14/03/19

<p>2019</p>	<p>AW - Visitor Access Maintenance</p>	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance                  Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	<p>22/04/19</p>
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<p>2019</p>	<p>AW - Visitor Access Maintenance</p>	<p>Maintenance of entire footpath network around site including car park entrance including litter pick of main car park area and roadside verge leading up to car park entrance                  Cut back and trim around all pedestrian and vehicular entrances. Remove all over hanging branches and brambles and cut up any fallen trees. Cut footpaths to widths as outlined in specification and bridleways to be increased to prevent brambles from overhanging path. 1 to 1.5 metre strip to be 'strimmed' behind fence line in car park to create gap between fence and woodland edge.</p> <p>Report any site issues or concerns such as wear or damage to site infrastructure such as steps, stiles and gates.</p> <p>Pedestrian Footpath: 5.11km (approx.)</p> <p>Bridleway: 2.7km (approx.)</p> <p>Pedestrian and Vehicular Access Entrances: 10</p> <p>**Please note, not all of the bridle and footpath network will require grass cutting as woodland conditions reduce grass growth. The networks need to be maintained however to remove any obstructions or undertake minor repairs to site furniture.</p>	<p>28/05/19</p>
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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	17.00	Beech	1960	PAWS restoration	People issues (+tve & -tve)	Archaeological Feature, Informal Public Access	Ancient Semi Natural Woodland, Planted Ancient Woodland Site, Special Landscape Area
<p>Area known locally as Park Wood (formally known by the Trust as Cwm George). A level area of planted ancient woodland with the northern section being steep north facing running down to the Winstone brook. The compartment is bounded by the main access route running from the one o'clock gates to the east, Beauville Lane to the southwest, open farmland to the west and Wrinstone Brook to the north. Mature woodland with beech, oak and ash and some remaining mixed conifers. Ground flora varies between sparse, under the beech-dominated areas, to well developed where Ash dominates. Species include Dog's Mercury, Bluebell, Bramble, Enchanters nightshade and Wood Sedge. Well used public access to the compartment with numerous footpaths and a permissive bridleway. Pockets of regenerating western hemlock still pose a threat to ancient woodland features in some areas of the compartment and require intervention to move towards secure status. Access to the compartment is via the one o'clock gates off Beauville Lane.</p>							
1b	3.30	Beech	1960	PAWS restoration	People issues (+tve & -tve), Very steep slope/cliff/quarry/mine shafts/sink holes etc	Archaeological Feature, Informal Public Access	Ancient Semi Natural Woodland, Planted Ancient Woodland Site, Special Landscape Area
<p>An area known locally as Coed Clwyd-gwyn (known formally by the Woodland Trust as Cwm George). Gently sloping, west-facing area of planted ancient woodland. The compartment is bounded by the main access route running from the one o'clock gates to the west, compartment 4 to the north and the cliff that run down to the bottom of Cwm George to the east. Mature woodland with planted beech, oak and ash and some remaining mixed conifers. Ground flora varies between sparse under the beech-dominated areas to well developed where Ash dominates. Species include Dog's Mercury, Bluebell, Bramble, Enchanters nightshade and Wood Sedge. Although the conifer element is limited, some small pockests of regenerating western hemlock pose a threat to ancient woodland features. A more substantial area of planted beach also requires a thinning interbvention within this plan period to prevent shading out of ground flora. Access to the compartment is via the one o'clock gates off Beauville Lane nad a bridleway runs North to south through the compartment with several footpaths emanating from it.</p>							

2a	5.30	other willows	1995	Coppice	Mostly wet ground/exposed site, People issues (+tve & -tve)	Archaeological Feature, Informal Public Access	Ancient Semi Natural Woodland, Special Landscape Area
<p>Area known as Cwm George. A dry limestone gorge, with a flat floor and substantial cliffs on the western side and the wooded hill fort to the east (Cmpt 3). The valley floor is damp and supports dense regrowth of trees and shrubs and bramble, following clear felling by the previous owner circa 1995. Limestone has been quarried at the northern end to create 50m high cliffs. The cliffs are less steep and lower at the southern end. Access to the compartment is via the one o'clock gates off Beauville Lane.</p>							
3a	9.10	Oak (sessile)	1940	High forest	Archaeological features, Gullies/Deep Valleys/Uneven/Rocky ground, No/poor vehicular access within the site	Archaeological Feature, Informal Public Access	Planted Ancient Woodland Site, Scheduled Ancient Monument
<p>An area known locally as Newland Wood (Formally known by the Trust as Cwm George). A wooded hill of part ancient woodland and part planted ancient woodland, now secure and possessing some typical ancient woodland flora such as blue bells and wood anemone. Bounded by the floor of Cwm George to the west (Cmpt.4) to the south privately owned woodland of Tyn y Coed and areas of new planting to the north and east. The hill is the site of an early medieval hill fort, and a second earthwork feature. Both of these are scheduled ancient monuments. A footpath runs north to south, through the gorge and connects the site entrance at Tyn yr Coed with compartments 1a and b (formally Park Wood) as well as leading to Casehill Meadows and out of the site via the public footpath network to Ely and Caerau hill fort to the north. A second path, emanating from the southern entrance to the gorge follows some steep steps, through the Tyn yr Coed Earthworks and up to the hill fort.</p>							
4a	20.95	Open ground	2001	Non-wood habitat	People issues (+tve & -tve), Sensitive habitats/species on or adjacent to site	Archaeological Feature, Informal Public Access	Special Landscape Area, Tree Preservation Order

An area known as Casehill Meadows. Area of newly created woodland running along the northern edge of the site, bounding both sides of the Cadoxton River and links Cmpt 3 and 5, Cwm George and Casehill Woods. Part of the site was planted by the public and several Welsh Assembly members in December 2001 and known as Casehill Meadows. Oak, ash and alder were the most commonly planted species, along with a range of shrub species. The majority of the cmpt. has been left un-planted following public consultation, which highlighted the proximity to the parkland of Cwrt yr Ala House. The site is mainly flat, but with gentle to steep slopes throughout the site of mainly a northerly aspect.

The grassland areas are the result of agricultural improvement and are at present species poor, although some of the steeper slopes retain species rich grassland. A number of veteran trees are found within the grassland A network of heavily used footpaths, often wet in winter, connect the two areas formally known as Park wood and Casehill Wood as well as linking into the surrounding public footpath network.

5a	10.59	Ash	1960	Min-intervention	Mostly wet ground/exposed site	Archaeological Feature, Informal Public Access	Ancient Semi Natural Woodland, Special Landscape Area
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Area known as Casehill Wood. Casehill Wood is a prominent feature in the landscape around Michaelston le Pit. It is a restored ancient woodland site, formally planted with japanese larch which, with the exception of a few individuals, has now been removed. The wood has retained much of its ancient woodland characteristics, with a diverse structure and composition of mixed broadleaves, including oak, ash sycamore, alder and wych elm, along with some planted larch and beech. An abundant ground flora also exists, including a good population of early purple orchids. The site slopes in places steeply to the northwest, and is bounded to the north west by an area of new planting (Cmpt 4). To the south east another area of new planting is found (cmpt 6). To the north the site is bounded by the council road running to Michaelston le Pit. Access is well provisioned with a bridleway running through the compartment to the meadows and connecting to compartments 1a and b, several footpaths run through the compartment and connect to the meadows and the new planting in compartment 6a.

6a	9.17	Birch (downy/silver)	1999	Wood establishment	Services & wayleaves	Archaeological Feature, Informal Public Access	Special Landscape Area
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Area known as Pen y Turnpike. It is a level area at the top of a wooded NW facing slope (Cmpt 5). New planting as part of the WOYD initiative was carried out in 1999, with a range of native species and a Millennium feature of Scots Pine, open areas were also retained within the woodland planting. The compartment is bounded to the southeast by Pen y Turnpike Road and to the northeast by compartment 5. To the east is the council maintained road to Michelston le Pit. To the west is privately owned land. Some areas of the planting are suffering substantially from squirrel damage, with most species targeted, although this is not currently threatening the overall establishment of the woodland. The habitat value of the compartment is enhanced significantly by the presence of two naturally occurring ponds, towards the south-west of the site. A circular path provides access around the area of new planting.



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**Appendix 2: Harvesting operations (20 years)**

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2017	2a	Coppice	2.00	2	4
2017	3a	Coppice	9.10	1	5
2018	1a	Thin	3.50	26	90
2018	1b	Thin	4.50	29	130

## 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.