



# Cwm George & Casehill Woods

## Management Plan

# 2014-2019

## MANAGEMENT PLAN - CONTENTS PAGE

ITEM	Page No.
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Introduction

Plan review and updating

Woodland Management Approach

Summary

1.0 Site details

2.0 Site description

2.1 Summary Description

2.2 Extended Description

3.0 Public access information

3.1 Getting there

3.2 Access / Walks

4.0 Long term policy

5.0 Key Features

5.1 Planted Ancient Woodland Site

5.2 Archaeological Feature

5.3 New Native Woodland

5.4 Semi Natural Open Ground Habitat

5.5 Ancient Semi Natural Woodland

5.6 Informal Public Access

6.0 Work Programme

Appendix 1: Compartment descriptions

Appendix 2: Harvesting operations (20 years)

Glossary

## MAPS

Access

Conservation Features

Management



## 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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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®) under licence FSC-C009406 and through independent audit.

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

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

The following guidelines help to direct our woodland management:

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

## SUMMARY

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

## 1.0 SITE DETAILS

<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 usage.

## 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
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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

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.

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
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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 pockets of regenerating western hemlock pose a threat to ancient woodland features. A more substantial area of planted beach also requires a thinning intervention 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 and a bridleway runs North to south through the compartment with several footpaths emanating from it.

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
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.							
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
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.							
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
2019	1a	Thin	3.50	26	90
2019	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.