# Heritage management plan

# **Coed Abaty**

K. Fretwell 2007?

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## Introduction

The woodland at Coed Abaty has its origins in medieval time sand retains elements of vegetation and habitat of significance. It also contains many archaeological features, also of significance, and responsible management of the woodland will need to balance the needs of both these interests. This report is intended to provide site owners and managers with a summary of the heritage interests.

The site is currently managed as wood pasture.

## Location

Coed Abaty, also known as Coed Mynachlog and Coed Cornwall-fach, occupies the south valley side of the Afon Glasffrwd/Afon Teifi valley to the south of Strata Florida Abbey, centred on NGR SN74666535, bounded on the north by the Afon Glassfrwd, by enclosed moorland to the west and south, comprising 37 hectares.

## **Investigations**

Until the Strata Florida Research Project started in 1999, there had been little investigation of Coed Abaty beyond the survey by CCW in advance of notification of the SSSI in 1982.

The principal surveys commissioned by the Strata Florida Research Project have been a historic woodland survey (Fretwell 2007: see Appendix), and an earthwork and topographic survey by RCAHMW (2007-2011).

The key conclusion of the Fretwell report was that most of the woodland had been clear-felled in 1918 apart from a few trees in difficult locations, and that the main interest of the woodland was in its vegetation and the earthwork features as relics of past management activities.

There have been six excavations undertaken between 2006 and 2012:

- Excavation of a kiln structure
- Excavation of a D-shaped enclosure north of the kiln
- Excavation of the holloway/trackway

- Excavation of a test pit in the open area south of the trackway
- Excavation of the large building
- Excavation across the boundary bank

The excavations have generally shown that the features survive in good condition but have limited artefactual or dating evidence.

## **Designations**

There are no Scheduled Ancient Monuments or Listed Buildings in the area.

There are no archaeological sites recorded on the Historic Environment Record in the area.

Coed Mynachlog-fawr was designated a Site of Special Scientific Interest in 1982 as semi-natural board-leaved woodland "mainly uncoppied, sessile oakwood with mire and flush communities in clearings". The woodland was characterised as "predominantly acid sessile oak-birch woodland with a hazel understorey", with oaks estimated to be 1500-250 years old.

The woodland falls within the Pantyfedwen and Crofftau Historic Landscape Character area of the Upland Ceredigion landscape.



© This orthophotography has been produced by COWI A/S from digital photography captured by them in 2006. Licensed by the Welsh Assembly Government's Department for Environment, Planning and Countryside.

## Chronology

There is no certain evidence of the medieval origin of the woodland, although this seems highly probable. The features excavated have produced few artefacts but the presence of medieval pottery suggests that many are of this date.

The woodland is shown on the 1765 estate maps and its successors, although the extent of the woodland has varied over time, with map evidence for periods of clearance at the west, southwest, and southeast (most of these areas not covered by the SSSI designation but part of the woodland).

There is a leat that runs from the Afon Glasffrwd through the wood, across Coed Dolgoed, and eventually reaching mining workings in the vicinity of Twyn.

For ease of reference the woodland units have been numbered (see plan).

| Unit | Name                                     | History  | Vegetation   | Main heritage features  |
|------|--|--|--|---|
| 1    | Bola'r Allt                              | Woodland since 1765  |  |   |
| 2    | Goch                                     | Woodland since 1765  |  | Banks marking trackway<br>shown on 1765 and 1819<br>map; leat |
| 3    |  | Not in SSSI. Woodland since 1765   | Coppiced hazel.  | Banks marking trackway<br>shown on 1765 and 1819<br>map; leat |
| 4    |  | Woodland since 1765  |  | Trackway; leat  |
| 5    | [Bola'r<br>Allt Goch<br>on tithe<br>map] | Woodland until 1843. Not shown as woodland 1889-present; not in SSSI.    | Noted as containing ancient hazel coppice stools at west.      | Contains earthworks aligned along the slope; leat             |
| 6    |  | Woodland since 1765  | Old oaks, some pollarded, in steep valley                      | Quarrying and large<br>building; leat                         |
| 7    |  | Woodland since 1765  | Old oaks, some<br>pollarded, especially<br>along boundary bank | Boundary bank and trackways; leat                             |
| 8    |  | Woodland 1765-1843. Not<br>shown as woodland 1889- <b>Not</b><br>in SSSI | Birch hazel, rowan, old oak.                                   | Old woodland boundary;<br>leat                                |
| 9    | Coed<br>Cornwall-<br>fach                | Woodland since 1765  | Alder and beech at north end.                                  | Platform, kiln and<br>enclosure, boundary<br>bank; leat       |
| 10   |  | Woodland since 1765  |  | Old woodland boundary; leat                                   |
| 11   | Part of<br>Caer<br>Talwrn                | Field in 1765, 1843, planted mixed woodland 1955                         | Recent planting  | Old woodland boundary   |

## **Management recommendations**

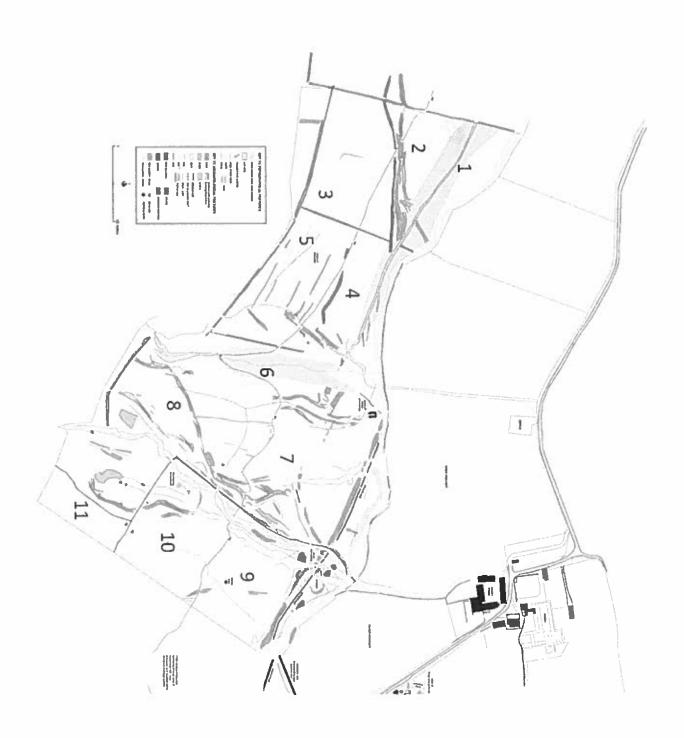
CCW's preferred management regime was continued use as pasture-woodland, with light grazing with cattle sufficient to maintain its open character, but protection from excessive grazing.

This recommendation can be supplemented with the need for caution in undrtaking management works (forestry, drainage, footpath maintenance) in an area with demonstrated heritage significance and sensitive features. Particular consideration should be given to proposed works using machinery.

Any proposed works should not be undertaken until advice is sought from Natural Resources Wales (CCW's successor body) and Dyfed Archaeological Trust (advisers on heritage management).

#### Contact numbers:

Natural resources Wales 0300 065 3000 Dyfed Archaeological Trust 01558 823121



## APPENDIX: Woodland and ecology survey, 2007

## STRATA FLORIDA – Preliminary Study of Abbey Woods

Katie Fretwell December 2007

#### **Outline Information**

See garden report

Alternative names:

Abbey Woods = Coed Cornwall-fach + Bola'r allt-goch etc. Also known as

Coed Mynachlog.

Outline history:

Planted Ancient Woodland (PAW) said to be planted by the Abbey cC12th

and retained ever since.

Designations:

SSSI, PAW (not statutory)

Ownership:

Dai Arch

#### Introduction

This report sets out to provide an initial investigation of the history and record the current state of the Abbey Woods (see Brief, Appendix 1), complementing a sister report on the garden, which concentrates on the history of the site.

#### **Outline History**

The wood is thought to have been planted by the Abbey in the medieval period. The area is intensively covered in earthworks, probably mainly relating to the medieval mining activities of the Abbey. The presence of earthworks suggest the wood was open at that time; thus it was probably planted later to provide fuel for smelting, etc. The wood was probably subsequently felled and replanted a number of times. It seems to have been largely clear-felled in 1918, and has probably only self-sown subsequently. The wood has survived relatively intact into the 21st century, with part at the east made into Forestry Commission conifer woodland. As an intact deciduous woodland it is a rarity in Wales, and for that reason was designated an SSSI.

## History

See garden report

#### The Abbey

C14th

Edward I instructed that all woods and thickets in the neighbourhood should be cut down along the roads.

1536

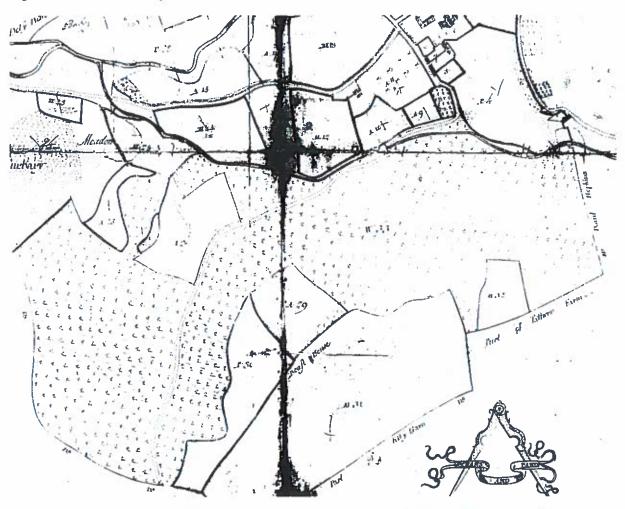
Leland noted "Many hilles therabout hath bene well woddid, as evidently by old rotes apperith, but now in them is almost no woode. The causses be these; first the wood cut doun was never copisid, and this hath beene a great cause of destruction of wood thorough Wales. Secondly after cutting down of woodys the gottys [goats] hath so bytten the young spring [coppice regeneration] that it never grew but lyke shrubbes. Thirddly men for the nonys destroyed the great woddis that thei shuld not harborow theves... a hill side Clthmoyne, wher hath bene great digging for leade, the melting whereof hath destroied the wooddes that sumtime grew plentifulli therabout". Leland also noted that the lead mines at Cwm Ystwyth had denuded the valley.

## After Dissolution

1765

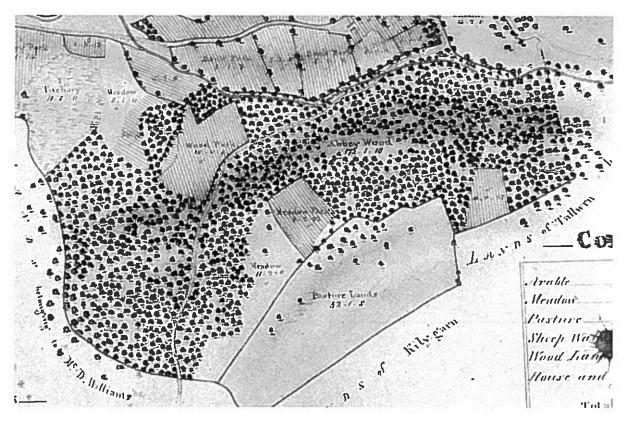
John Davies map shows the 'Great Wood' with an outline much as now but extending further to the west and south to merge with what is now Coed Cnwch. There were areas of cleared land within the wood, a road along the river side leading to Coed Cnwch, and Waenwen is shown as 'Beast House', but little further detail is given.

Figure 1 John Davies map 1765



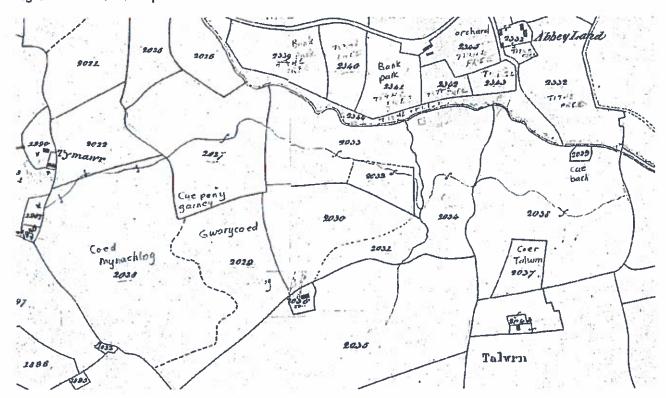
William Crawford map shows 'Abbey Wood' much as in 1765. It shows Meadow Park and Wood Park as cleared areas within the wood.

Figure 2 William Crawford map 1819



The tithe map does not show wood and the schedule does not have much information on land use. The map shows the leat which is thought to be associated with the old abbey site; parcel names include Cae Coed, possibly relating to a cleared area within the wood; and Bola'r Allt Goch, attached to two small areas, later used for the whole wood. The field names suggest that areas had been cleared since 1765, with Cae penygarney on land which was wooded in 1765. The area 232 noted as Bola'r allt goch corresponds with the present area of open hazel coppice, while what is now called Bola'r allt goch was Coed allt goch (2033).

Figure 3 1843 tithe map

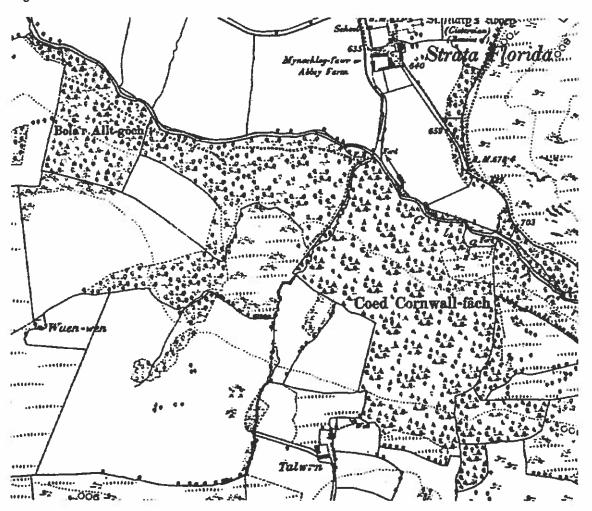


1830 First edition OS 1" map shows extensive wood.

The *Illustrated London Reading Book* notes that "...Extensive woods once flourished in the vicinity of Strata Florida."

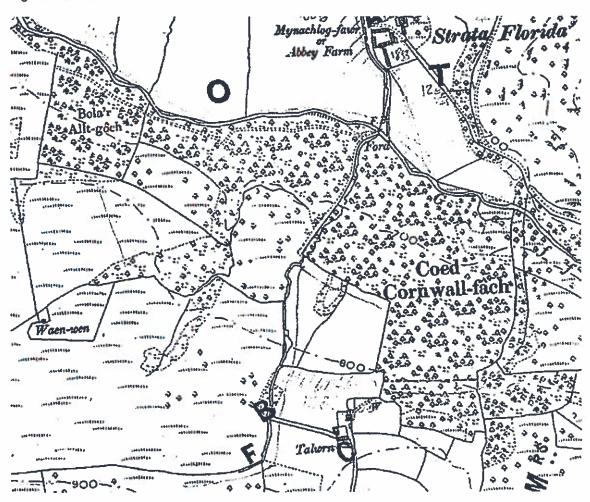
The first edition OS 6" and 25" maps shows the wood in some detail. By now further clearance of Gwarycoed had fragmented the woods, with Abbey Wood now split from Coed Cnwch (or Coed Mynachlog as it was called on the tithe map) to give the present layout of woods. Some conifers appeared in what was now Bola'r allt goch (previously Coed yr allt goch) and in Coed Cornwall-fach (named after the old mill below). The leat is not shown, but lies along the 700 ft contour which appears on the 6" version.

Figure 4 First edition OS 6" 1889



1904/05 The 2<sup>nd</sup> edition OS shows the landscape virtually unchanged since 1889. The symbols used are different, and this map seems to show the areas of open hazel coppice not shown on the 1889 OS.

Figure 5 1904 2<sup>nd</sup> edition OS 6"



Abbey Farm was sold as part of the Sunnyhill estate of Trawscoed. The sale catalogue 1918 notes that all the standing timber had been disposed of on both Abbey Farm and Talwrn.

The eastern part of Coed Cornwall-fach and fields further east were acquired by the

Forestry Commission and planted up as mixed woodland. ?Cae Talwrn was also

planted up as mixed woodland.

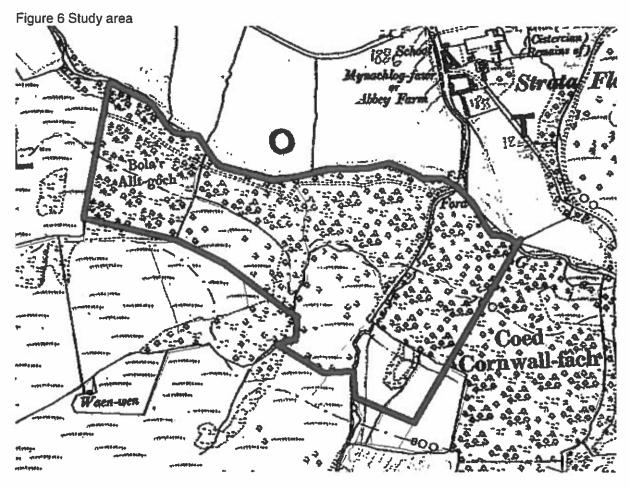
1973 The Forestry Commission acquired further land to the south.

Archaeological earthwork survey. 2007

#### **Present Study Area**

1955

The present study area was generally taken to be the remaining part of Coed Cornwall-fach, westward to Bola'r allt goch. This comprises about 13.7ha of woodland and about 4.7ha of open land with scattered trees.



#### **Topography and Soils**

The wood generally slopes fairly steeply from south to north. Glacial drift substrata gives rise to poor acidic soils; slight alkaline area to west; tree growth is generally good and not stunted.

#### Archaeology

There is a wealth of well-defined archaeological earthworks in the wood which are the focus of ongoing survey and excavation work by Lampeter University. Sites identified so far include: River – the Glasffrwd runs in an artificial channel, possibly created by the abbey to divert water from the abbey site and provide water for mineral workings and mills.

Road – the road running north-west to south-east is possibly Roman as it is cut by the diverted river, is highly engineered and fairly straight. Possibly associated with mineral extraction, etc.

Leat – the large leat channel some 3 miles long runs through the whole length of the wood along the 700ft contour line, heading towards the old monastery site, with which it is thought to be associated, ie C11th/C12th.

Artificial streams – the many steep, narrow-sided streams in the wood running south-north are generally artificial, probably medieval, associated with washing minerals extracted higher on the hillside above.

Tile kiln – a conical feature was excavated 2006/ 2007 and thought to be a kiln for the manufacture of the encaustic floor tiles in the abbey.

Settling tanks – a large, flattish area which seems poisonous to trees may have been a settling tank for minerals which collected toxins, possibly with a clay bottom.

Linear quarry - a deep cut is possibly a linear quarry.

Stone piles – piles of stones generally on the edge of the wood are probably associated with field clearance for arable.

Building platform - there is a building platform at the western end of Bola'r allt goch.

Building foundations – there are the remains of a building near the river.

Boundary walls – there is one extant wall, probably C19th, and traces of older walls, possibly for woodland management compartments.

About half of the present wood, mainly the central and southern parts, was covered by an archaeological survey during summer 2007 by Louise Barker of RCHAMW, mapping the possible Roman road, leat, etc and about four of the largest trees.

#### **Ancient Wood**

The main evidence for the woodland having a planted origin is the extent, quantity and type of earthworks. The earthworks suggest the wood was open during at least the early medieval period. Woodland was obviously in short supply and highly valued at that time for fuel purposes – at Cwm Ystwyth, two tenements were acquired for their wood in the C17th. It is not known when the wood was planted, nor why - it is not on such a steep slope that it would have been unsuitable for agriculture; however, the number of earthworks and contamination of the soil from mining works may have rendered it unfit for farming.

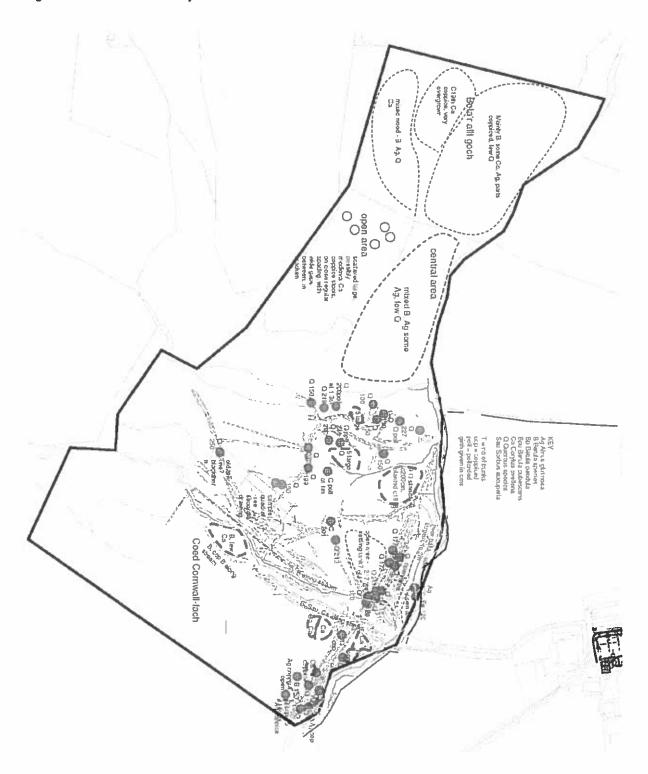
Parts of the wood shown in the 1765 map were later cleared away to leave the present wooded area.

#### Tree Survey

A fairly basic tree survey was carried out summer / autumn 2007, using the RCHAMW plan as a base, so concentrating on the same areas. The main trees, generally, the largest oaks, were sketch mapped and the woods generally characterised. A sample 60m x 40m quadrat at the south, near the main footpath, was recorded in more detail. Information was also compiled from CCW, from a visit with Arthur Chater, botanist specialising in the flora of Ceredigion and other sources.

The main new information from the historical survey is that all the wood was cut down in 1918. This would seem to explain the limited age and interest of the current tree population. The few surviving larger oak trees probably escaped felling through either being fairly inaccessibly located on river or stream banks, or through being fairly 'poor' specimens, with short trunks from either natural or artificial pollarding or being immature. The wood seems subsequently to have been more or less abandoned, with little replanting. The present tree population is thus either self-sown from seed of the felled trees, or coppice regrowth from the felled trees.

Figure 6 Sketch Tree Survey



#### **Overall Population**

Today the woodland is totally deciduous, although some conifers were shown in 1889 and 1904. The trees tend to be fairly well spaced, with open areas between. They generally seem to be concentrated along the many banks, whether archaeological features or natural features such as the river bank. The dominant tree species is birch, which occurs throughout the wood, with a mix of coppice and standards, some quite large and in an odd mix of species. There are also scattered oaks, some largish, also mixed in species. There are pockets of alder, generally in the wetter areas. Throughout there are many stands of hazel coppice, also seeming to concentrate in some areas, with some very large coppice stools. There are also odd specimens of sycamore, ash and rowan, with a few crab apple and other shrubs including goat willow and blackthorn.

Generally there is very little regeneration within the wood. It is casually grazed by sheep, with some animal feeders. The present trees generally exhibit fairly vigorous growth.

Little management has been carried out on the wood for at least the last 50 years, although there appears to have been some coppicing of hazel in that time.

#### Birch

There are large numbers of birch in the wood, often grouped together in discrete areas, with trees up to the general maximum mature size for the species, about 120cm girth, probably about 100 years old. They are probably all self-sown or are the regrowth of trees felled in 1918. They generally grow very irregularly, with many sprouting from walls, etc. Unusually, some appear to have been coppiced, while at least one set looks like a bundle planting (ie 3-4 trees planted in one hole).

Arthur Chater has studied the birches here informally and notes that most are unidentifiable - they are not the common native species Betula pendula (silver birch) nor Betula pubescens (downy birch); while many have characteristics intermediate between the two, they are not straightforward hybrids either, but also tend to have also some characteristics of a third species, B. celtiberica and / or a fourth species, B. japonica. B. celtiberica was only recently identified as a native to Wales. It has features intermediate between B. pendula and B. pubescens. B. japonica is a non-native species from Japan. There are also at least three specimens of B. Litwinowii, an unusual non-native species introduced from the Caucasus located on or near the wall near the footpath, a location which suggests it is unlikely they were planted.

A Chater has sent samples of all these birches to Peter Sell at Cambridge to await further identification. The complexity of the birch population is a mystery, and is out of character for the area - nearby woodlands have a normal population of B pendula and B pubescens. The inference is that most of the trees are probably second generation hybrids, possibly of an earlier population of planted trees which for some odd reason included the two non-native species. The 1918 clearance of planted birch was probably followed by a period of neglect and selfseeding.

Linnard 2001 notes that birch were recommended in the C18th by John Hanbury as a fast-growing replacement for coppice for charcoal for firing furnaces. There is no evidence to suggest that such plantations were established, but it may be that this advice was taken here. The original planted birch may have come from Nanteos, where the introduced species may have been planted in the garden. The birch seem generally to be in areas devoid of hazel coppice and in flatter areas closer to the main paths, suggesting perhaps that the old-fashioned hazel coppice was removed and replanted with birch at some time in the C19th.

## Oak (Quercus)

There is a low proportion of oak in the wood, with perhaps 60 mature trees. Most of these appear to be self-sown individuals along banks, with sprawling shapes, which were probably not valuable enough to be harvested in the 1918 felling. Similarly, there are about four larger 'pollards', probably again not valuable enough to have been harvested in 1918. These include the largest oak on site, the 'pollard' in the sample quadrat by the footpath, size 323cms girth. It is difficult to date pollards from their girth size, as the growth rate is not standard. Dowsing gave an age of about 250 years for these trees. The few trees which appear to be pollarded seem to have occurred naturally rather than being man-made — they are cut at various heights and do not seem to relate to boundaries, etc.

There is one coppice stool which is probably a regrowth from 1918. There is also one section of more regular trees which appears to be a planted block, possibly planted around 1880 and therefore not mature enough to have been felled in 1918. There are also a few good, standard trees along the 'Roman' road. There are few platforms of lost trees or stumps.

A Chater notes the trees are generally a mix of sessile oak, Q. petraea (between 50 and 75% depending on different criteria) and hybrids between Q. petraea and Q. robur (English oak) (25-50%) with intermediate characteristics of long petioles and auricles, with no true Q. robur. The proportion of hybrids is slightly higher than in other local ancient woods nearby.

## Alder (Alnus glutinosa)

There are two main areas of alder coppice, in the wetter, bottom areas, at the east and at the west. The trees are probably mainly coppice regrowth after the 1918 felling, with some self sown standards.

Most alder woods in Ceredigion were previously coppied to supply material for clog making.

#### Ash (Fraxinus excelsior)

There are a few ash near the head of the valley where the leat crosses, indicating slightly more neutral soil.

## Rowan (Sorbus aucuparia)

There are a few self-sown, smallish trees.

## Crab apple (Malus)

Three trees were located in at least two different forms. One at GR SN7436 6544 with very small fruit and heavily armed with thorns is likely to be the ancient native type, *Malus sylvestris*, which is now very rare or non-existent, according to Dr Barry Juniper. This individual seems to be an old coppice regrowth and is now in poor health. It should be propagated vegetatively and possibly recoppiced as a priority. Two other individuals in other areas are more like reverted *Malus domestica*, ie with no thorns and larger fruit.

#### Hazel (Corylus avellana)

There are large quantities of hazel coppice throughout the wood, seemingly clustered in particular areas. Most of the coppice stools seem to be relatively small, and were perhaps planted in the C19th or seeded in since the 1918 felling. There are also a few very large, old stools in an open area east of Bola'r allt goch (no 2032 on tithe map) which appear to be very large. Unfortunately, it is almost impossible to date hazel coppice from the stool size, as older stools tend to split into smaller groups. Dowsing gave a medieval date for these stools.

The lack of surrounding woodland and the clustered pattern of the stools in this area gives the impression that it was previously covered in similar hazel stools at regular spacing, probably with traditional oak standards between, but that at some point an attempt was made to remove all the woodland and convert the land to farming. For some reason the removal was not completed, leaving the vestigial remains of woodland. This area is still covered in bluebells in spring. These coppice stools are possibly the only direct living link to the abbey, besides the yew trees in the cemetery.

There are also a few larger fruited hazels planted along the track to Abbey Farm, ie *C. avellana* form *schizochlamys*, identified by their longer, more elaborate cupules around the fruit.

## Willow (Salix auricula)

Shrubby willow in some areas.

#### Goat willow (Salix cinerea)

Two at east, one very large typically sprawling specimen and nearby one unusually tall and straight.

## Blackthorn (Prunus spinosa)

Few individuals at east, including some along an old trackway, possibly part of an old boundary.

## Hawthorn (Crataegus monogyna)

Surprisingly few specimens.

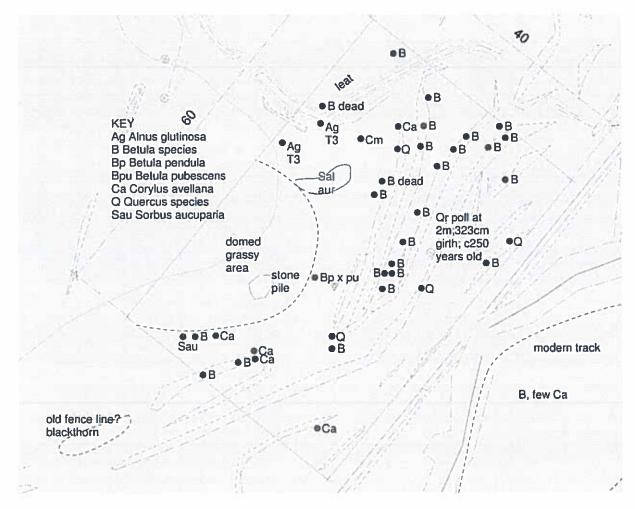
## Sycamore (Acer platanoides)

There are three trees at the east and unusually no offspring. It is possible these trees are mainly male flowered, so producing no seed.

#### Sample Quadrat

The sample quadrat at the south near the path was more fully recorded. This was taken to be a fairly typical area, with a typical mix of birch and hazel. However, with the discovery that most of the wood was clear-felled, the results do not appear very useful. The plan shows mainly self-sown birch, with one old oak, a possible pollard and probably the oldest tree in the wood, with some scattered young hazel coppice.

Figure 7 Sample quadrat tree survey



#### Ground flora

There is a dense cover of bluebell (*Hyacinthus non-scriptus*) through much of the wood, including areas probably cleared of trees some time ago. This is normally taken as an ancient woodland indicator species. Unfortunately, study by Arthur Chater suggests that the usual pattern of ancient woodland indicator species does not hold for Ceredigion. The generally mild, damp conditions mean that the traditional indicator species such as bluebell are able to survive and spread almost anywhere in the county. A study is currently being made by CCW of indicator species in Wales. Many of the other indicator species are calcareous and not present in this wood.

#### **Forestry Commission**

The Forestry Commission acquired the main, eastern part of Coed Cornwall-fach in 1957. They do not maintain old records on previous plantings. The wood at that time was probably similar to the western part of the wood, with self-sown birch taking over land clear-felled in 1918. This was probably felled and replanted at that time with mixed conifer dominated forestry, along with further land to the east acquired 1955. The eastern part of Coed Cornwall-fach was clear-felled in 2006. A further smaller block adjoining to the south was acquired in 1973. These holdings adjoin further large holdings on the hillside to the south and east. Coed Dolgoed and Coed Cnwch to the west are also now Forestry Commission owned.

## SSSI Designation

Coed Mynachlog was designated an SSSI in 1982 for its "large area of mainly uncoppiced, shrub-rich, sessile oakwood with mire and flush communities". The SSSI designation covers all the study area and includes a small remaining section of native woodland in Forestry Commission ownership.

#### Other Biological Survey

CCW carried out a woodland survey in 1988.

A Chater has also looked at the molluscs and beetles in bracket fungi but found nothing of interest. Lichens and mosses – A Hale

Inverts - Adrian Fowles

## **PAWs Designation**

The site is said to be designated as a Planted Ancient Woodland. However this seems more generally to be applied to ancient woodlands which have been replanted with conifers. The designation is non-statutory.

#### Gazetteer

<u>Coed Cornwall-fach</u> is the area east of the footpath, enclosed by the stone wall and crossed by the leat. It presently covers about 4.5ha, but previously incorporated the larger area now owned by the Forestry Commission to the east. This wood is generally gently sloping and hence rather wet, fairly open and mixed, with areas dominated by alder coppice and smaller pockets of hazel coppice, along with a thin scatter of oaks and denser scatter of birch.

<u>Bola'r allt-qoch</u> (4.2ha) is the rectangular wood at the west, lying on a steeper slope, and divided in two by the leat. It is mixed, with large areas of very overgrown, probably C19th hazel coppice at the west, and elsewhere is mainly birch, with some alder and oak.

The <u>central wood</u> of 6.7ha is divided by the leat from the open areas to the south. There are large open areas along the river, between the river and the 'Roman' road and in the settling tank area. The trees are mainly birch, with one area of oak standards, possibly planted late C19th and pockets of hazel coppice.

The <u>open areas</u> to the south appear to have been cleared from woodland. The area at the west appears to be the vestigial remains of earlier hazel coppice.

#### Historical use of timber / wood / coppice products

The main traditional uses of timber would have been building works. Smaller wood was used for a variety of purposes including:-

Domestic firewood – however, only one room of the monastery was heated.

Industrial firing for smelting or kiln firing. However, kilns tended to be fired with brushwood. There is some association of hazel coppice with manganese mining near Nanhoron. Wood is said to have been used for firing until the C15th but not later, when charcoal took over.

Oak bark was valued for tanning of leather.

Generally there is little hazel coppice in Wales, although it was highly valued elsewhere in Britain. The uses of coppice products were various:-

Hazel hurdles were used for folding large sheep flocks, generally the traditional management style in the east of England, but not popular in Wales. Lloyd and Turnor noted "a total want of materials for hurdles" in Ceredigion in 1794 and that "timber is a scarce article in this county".

Hazel spars were used for thatching; later in the C20th as thatch gave way completely to slates and tiles, thatching was used for ricks only.

Hazel was also used for weaving heavy duty baskets. It may be that the products of the mines, etc were carried away in such baskets.

Hazel may also have been used for charcoal production.

#### Conclusions

The standing wood seems to have somewhat less historic interest than previously thought due to its relatively recent origin. Thus the woodland as a whole is primarily significant for its archaeological earthworks. The trees are generally recent and of lesser intrinsic value, although they play an important role in protecting the earthworks, have an unusual mix of species and form an important amenity area. The most important plantings are the possible medieval hazel coppice stands in the open area at the south-west.

#### **Management Considerations**

Abbey Wood has survived due to benign neglect. This area is not within the Trust acquisition area and therefore is in need of long term management agreements with the current owner to safeguard its future. It may well be eligible for grant aid, especially to restore the hazel and alder coppice. Fencing would also be important to allow some regeneration. The wood may also be suitable for acquisition by another charity body such as the Woodland Trust.

#### **Further Survey**

It would be useful to carry out further survey work on the wood, including:-

Mapping of possible medieval coppice and main oak trees. This could be carried out using photogrammetry from air photographs, or using GPS. It would be useful to collate this with the RCHAMW survey.

Oliver Rackham is the British expert on ancient woodland and coppice. Although his work is mainly on the east of England, he has carried out some work on Monmouthshire, which has not been published. He has visited the site briefly in the past, but it would be very interesting to get his opinion on the hazel coppice following the present study.

Lichens - no lichen survey appears to have been carried out.

Deadwood beetles - no survey of deadwood beetles has been carried out.

Boring of the largest oak and largest birch should be carried out to confirm dates of planting. Pollen analysis may be carried out on sediments in the settling tank area to establish a planting date for the woodland.

#### **Bibliography**

CCW Coed Mynachlog-fawr SSSI Citation. First notified 1982; 17 ha (42 acres) – see Appendix? CCW Coed Mynachlog-fawr Woodland Survey by R Cooke 10 May 1988 Moore, P D and Chater, A *Journal of Ecology* 1969

## Appendix 1 Brief for Study of Abbey Wood at Strata Florida, 2007 Katie Fretwell Feb. 2007

This is to be an initial scoping exercise to:

- Evaluate the sources of information on the history of the woodland, both physical and documentary;
- 2 Begin to describe the history of the woodland, particularly its extent, but also its management, patterns and components;
- 3 Briefly assess the surviving trees types, ages, sizes, condition, location, etc.;
- 4 Devise a strategy for recording surviving trees and other components of the woodland; and
- 5 Record trees in a sample area.

The main areas of work will be documentary research and fieldwork.

#### Documentary Research

Some work has already been carried out on Abbey Wood. The project will involve initial review and compilation of material, including 'grey' material from CCW, Forestry Commission and Arthur Chater. It will involve some research at the National Library of Wales and elsewhere, in liaison with Gerald Morgan and others. The study will seek to examine the history of the wood through maps and documents, from the medieval period to the present day, to compile material for future reference, and to assess the potential for further future study.

#### Fieldwork

The surviving trees, ground flora and associated structures are to be inspected and briefly recorded, and their future recording requirements and scope for informing the historical story assessed. The tree population is to be analysed, noting species, sizes, evidence of past management, location, condition, etc. The standard methodologies for surveying ancient trees, as devised by the Ancient Tree Forum, and other bodies, are to be examined and, through discussion with David Jenkins (Coed Cymru), a preferred methodology of recording and mapping, and possibly tagging, is to be adopted, with a method of data handling, i.e. database or spreadsheet, to be chosen through discussion with Peter Talbot-Jones. A pilot area is to be selected, in conjunction with Louise Barker (RCAHMW), and the trees within it mapped and recorded using the agreed methodology. The use of dendrochronology to date trees in the pilot area is to be scoped and trialled in conjunction with Nigel Nayling (Lampeter University).

#### Context

Abbey Wood is to be set in the context of similar early planted woodlands in Wales and the rest of Britain.

#### Results

The results of the study are to be presented as a written, fully referenced, illustrated report with schedules of trees etc., and note of potential for future work and priorities.

## Programme

A draft report is to be submitted by the end of November 2007, with the final report to be completed by 31 December 2007.