

Ecological survey

Brineddin Wood

Chapel Lawn

[Chapel Lawn's
quillet
Number 2879]

By Churton Ecology

(Dr A.K. Thorne MIEEM)

Commissioned by Chapel Lawn Community Benefit Society

September 2012

Background and description

- Brineddin Wood is an Oak woodland on a steep south facing slope close to the village of Chapel Lawn; it is 26.23ha in size overall and is a county Wildlife Site.
- The village community of Chapel Lawn now owns a strip of woodland (1.712 acres) known as a quillet. There are several other quillets in the wood, each in different ownership.
- The apportion of woodland strips to tenants in the village began in the 17th century; the strips later became owned by local people.
- A strip of land along the top of the wood is thought to be common land; the common boundary with the wood is not clear but the woodland does thin out near the top of the slope and becomes a band of trees and scrub with Bracken.
- The woodland was apparently felled during WW1 (1914-1918) but, other than this, the history of the management since is unclear; it will have varied across the wood, simply because of different ownership but, overall, it appears likely that this woodland has traditionally been managed as a coppice woodland (even before the WW1 felling). The picture today is one of several multi-stemmed specimens of Oak alongside apparent maidens (single stemmed specimens); a large proportion of the latter are likely to have been singled (i.e. single stems have been selected from the multi-stem re-growth, some time after coppicing) with some being naturally regenerated 'maidens'. There are subtle variations across the wood e.g. in the quillet owned by Chapel Lawn single stems prevail and they are larger than stems in some of the other parts of the wood.
- Most of the Oak specimens within the wood are not large, any larger specimens being confined to or present only near boundaries. This is typical of a coppiced woodland where younger stems arise from older, possibly ancient, stools.
- The canopy is relatively even-aged and therefore of similar height throughout and somewhat dense. Although there clearly has been some Oak regeneration (this is likely to have occurred when areas were last coppiced) there is little Oak regeneration present in the understorey.
- The woodland, as a whole, has two different types of Oak woodland. Although the canopy remains Oak dominant throughout, the shrub and ground layers alter in relation to the slope.
- The lower ground has a higher density of shrubs, including Hazel, and the ground flora includes Bluebell, Creeping Soft-grass and Bracken. This represents an Oak woodland community described as W10 Oak – Bracken –Bramble woodland.

- Higher up the slope, and more extensive than the previous type, is a heathy type of Oak woodland which is W16 Oak – Birch – Wavy Hair-grass woodland. Typically this has very little in the shrub layer and the ground floor supports Wavy Hair-grass (an attractive fine-leaved grass) with patchy Bilberry, Common Cow-wheat and localised Heather.
- An area of rocks is present on the steep slope; here, there are a few pieces of hawkweed; amongst these is a woodland hawkweed that grows largely in the Marches and is known in Latin as *Hieracium cinderella*.
- At the top of the woodland, where the trees start to thin out, there is a return to the Oak – Bracken – Bramble woodland type; again there is an increase in shrub (especially Holly). The ground flora also changes quite significantly near the top of the wood such that the quillet may be defined by this change i.e. where Bilberry and Wavy Hair-grass ends.
- The south woodland edge (outside the quillet area) is an important site for *Campanula patula* (Spreading Bellflower), a late flowering plant which is scarce in the UK.
- Currently there is evidence of grazing (by deer) of the ground flora and of tree boles. This would be an issue in this woodland were any to be coppiced, and some protection of coppiced areas in the form of fencing would be required.

Plant species

Ancient Woodland Indicators/good habitat indicators within the quillet (outside the quillet in brackets):

<i>Campanula patula</i> (Spreading Bellflower)	<i>Lamium galeobdolon</i> ssp <i>montanum</i>
<i>Deschampsia flexuosa</i> (Wavy Hair-grass)	(Yellow Archangel)
<i>Hieracium cinderella</i> (Long-bracted Hawkweed)	<i>Lathyrus linifolius</i> (Bitter Vetch)
<i>Hyacinthoides non-scripta</i> (Bluebell)	<i>Melampyrum pratense</i> (Common Cow-wheat)
<i>Hypericum pulchrum</i> (Slender St John's-wort)	<i>Melica uniflora</i> (Wood Melick)
	<i>Vaccinium myrtillus</i> (Bilberry)

Other ancient woodland indicator species previously recorded from the wood as a whole:

Anemone nemorosa (Wood Anemone), *Blechnum spicant* (Hard Fern), *Galium odoratum* (Woodruff), *Geranium sylvaticum* (Wood Crane's-bill), *Oxalis acetosella* (Wood-sorrel), *Ranunculus auricomus* (Goldilocks) and *Viola reichenbachiana* (Early Dog-violet)

Woody species:

<i>Acer pseudoplatanus</i> (Sycamore)	<i>Ilex aquifolium</i> (Holly)
<i>Corylus avellana</i> (Hazel)	<i>Lonicera periclymenum</i> (Honeysuckle)
<i>Crataegus monogyna</i> (Hawthorn)	<i>Quercus petraea</i> (Sessile Oak)
<i>Fraxinus excelsior</i> (Ash)	<i>Rubus fruticosus</i> (Bramble)
<i>Hedera helix</i> (Ivy)	<i>Sorbus aucuparia</i> (Rowan)

Bird species

There appear to be very few bird species recorded for the area (Skylark, Common Kingfisher, Dipper, Barn Owl and Peregrine Falcon) and none of these are woodland species. Additional records will undoubtedly come to light when the Shropshire breeding bird atlas is published.

The woodland appears to be highly suitable for several woodland species including those species that favour steep Oak woodland (e.g. Wood Warbler and Pied Flycatcher). The sparsity of shrubs under Oak (typical of W16) is particularly suitable for Wood Warbler.

The survey date and weather was unsuitable for detecting many bird species but Tawny Owl was noted in the area during a bat survey of the church.

Mammals:

Badger

There was no evidence of Badger setts in the quillet or nearby areas but a Badger latrine was noted under and around a single mature Scot's Pine to the west.

Dormouse

There are no previous records for this species in the 1Km surround. Although there are good links to other woodland, there is limited potential for this species in this wood other than along the south where there is a denser understorey. A limited nut search was carried out along the south hedgerow but few nuts were found (wrong time of year) and these were all Squirrel nibbled. A search in the autumn would be worthwhile.

Bats

Bat species recorded roosting and/or flying around the nearby church (survey 2012) included Common Pipistrelle, Soprano Pipistrelle, Noctule and Brown Long-eared bat. All these species are likely to forage over the stream and wood.

It is possible that some trees are used for roosts, particularly the more mature trees. The immature stems (dominant) are thought much less likely to support roosts. Standing deadwood may have some potential and should anyway be left alone whenever possible.

Since bats may be roosting within the woodland, the Forestry Commission Guidance (2007) on managing woodland for bats should be referred to. This states that, prior to woodland operations, the woodland compartments/areas to be managed should be walked through, and veterans and any other trees with holes, cracks, loose bark etc. identified (heavy ivy cladding should also be noted). This procedure can be carried out by the 'forest manager' etc. i.e. does not have to be done by a bat specialist. If any of these features are noted, the easiest solution then is to retain trees with any potential for bat roosts (i.e. treat them as bat roosts), but further survey work by a bat specialist will be required if felling of the relevant tree, and/or ones close to it, is desired. The location of such trees should be recorded on the management plan (and/or tagged in the field) and a buffer of trees and understorey maintained around each one; the buffer zone is important for maintaining the same environmental conditions around a roost and is recommended as being a width of one to two canopies. Trees with potential bat roosts should not be left isolated.

If, during operations, any bats or evidence of bats are noted, felling plans should be altered to retain the roost with a surrounding buffer. If this is not possible works should cease and Natural England contacted for advice.

Other mammals

Polecat was recorded from Chapel Lawn in the early 1980's.

Other species

Amphibians and reptiles

Great Crested Newt have been recorded from a pond around 250m from the north-east edge of the whole wood. There appears to be no breeding pond within the woodland.

Comments from local people suggest that there are reptiles in the area but none have been documented.

Invertebrates

White-clawed Crayfish have been found in the River Redlake (1991 record).

Several priority moth species have been recorded from the Chapel Lawn area [Knot Grass, Dark Brocade, Coronet, Cloaked Carpet, Broom Moth, Shoulder-striped Wainscot, Shaded Broad-bar, White Ermine and Buff Ermine] and some priority butterflies [Wall, White-letter Hairstreak, Green Hairstreak and Dark Green Fritillary].

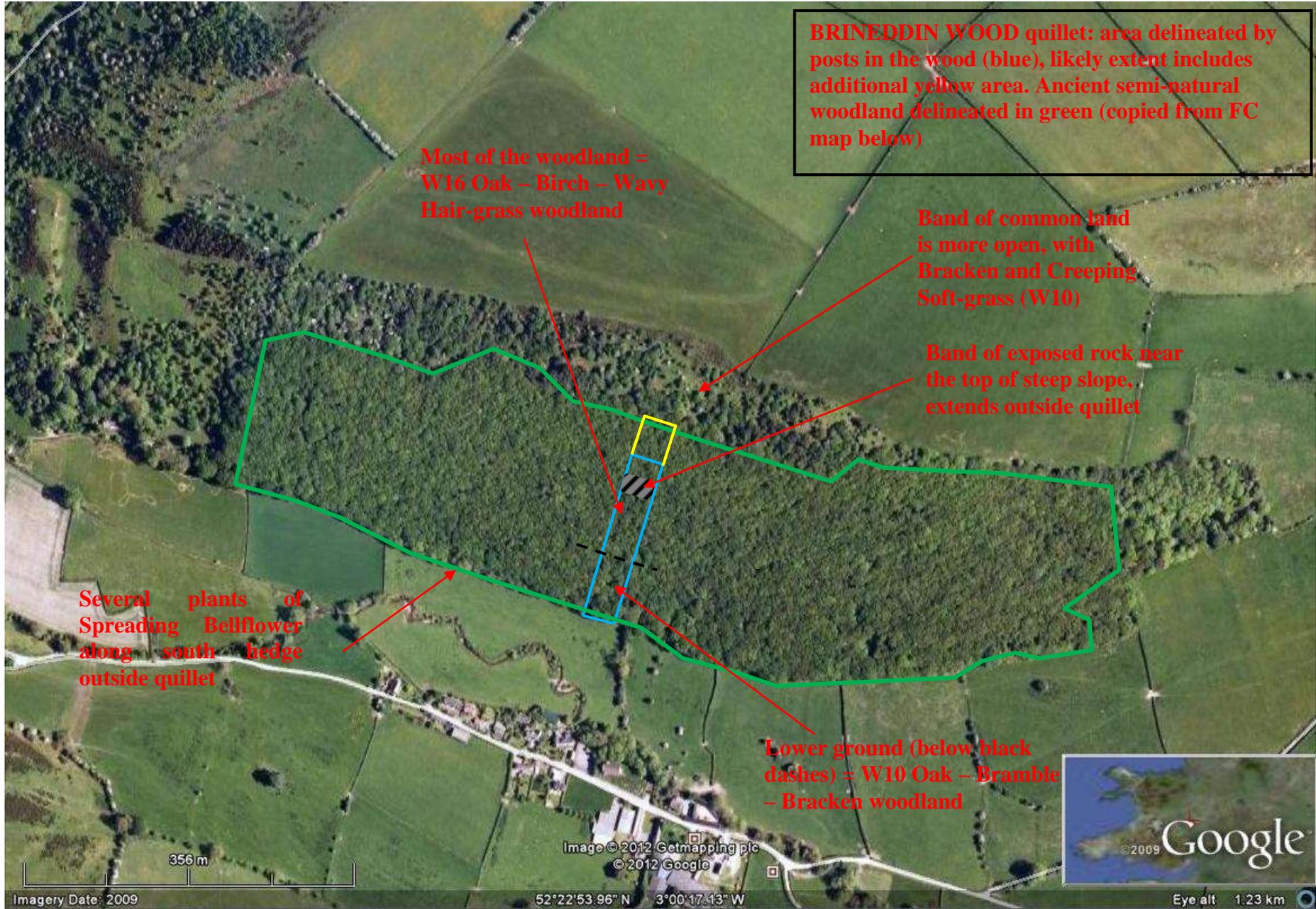
General management objectives and practices

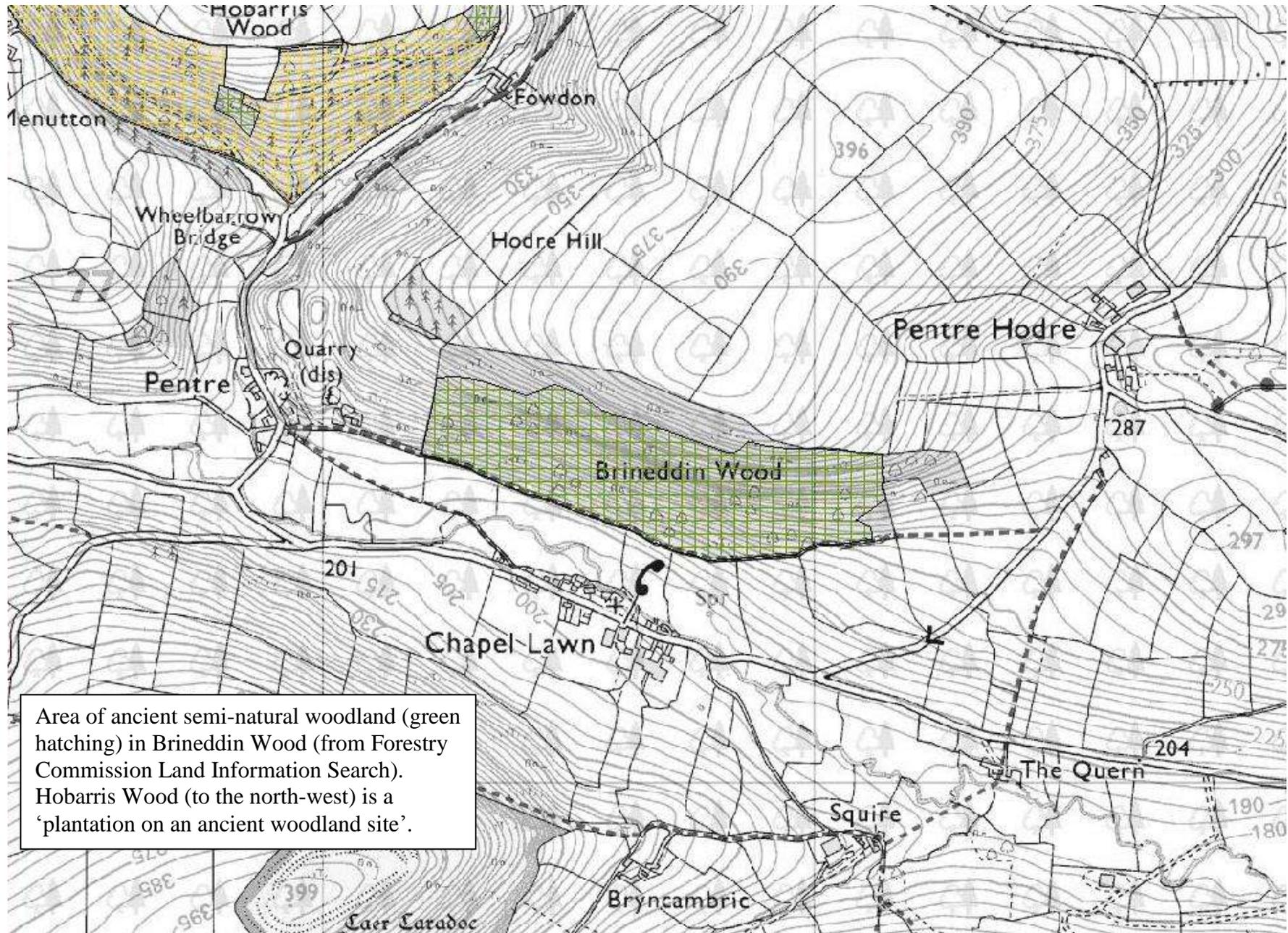
Summary: promote and maintain semi-natural native woodland with some variation in structure and density

- Although this wood has traditionally been coppiced, re-introduction of Oak coppicing after a long period needs to be undertaken with caution as the stools may not re-grow.
- Creating small canopy gaps could result in some re-growth of stools but is, anyway, highly likely to stimulate natural regeneration of Oak i.e. it would temporarily allow some light in to the wood and ultimately result in some areas of younger woodland. By doing this on some sort of rotation means that there will always be some open areas and areas of younger woodland; this variation is good for several fauna species.
- Some Rowan could be encouraged to reach the typically short canopy, to allow it to fruit and provide an additional food source for birds and mammals.
- Coppicing is likely to be easier on the lower ground where the woodland anyway has a higher shrub content; Hazel and other shrubs could be included in the coppice but shrubs should not be coppiced without some thinning of the canopy.
- At all times promote and maintain a proportion of lying and standing deadwood.

Appendix 1

Maps





Area of ancient semi-natural woodland (green hatching) in Brineddin Wood (from Forestry Commission Land Information Search). Hobarris Wood (to the north-west) is a 'plantation on an ancient woodland site'.

Appendix 2

Plant list

Brineddin Wood (a central narrow band only) plant list, SO3176, 15/8/2012, by A.K. Thorne

Taxon	Vernacular	Comment
<i>Acer pseudoplatanus</i>	Sycamore	rare
<i>Brachypodium sylvaticum</i>	False-brome	
<i>Calluna vulgaris</i>	Heather	around rocks only
<i>Campanula patula</i>	Spreading Bellflower	a few plants at SO3144. 7658 and SO3141.7658 in south boundary hedgerow (field side). hedge has been pleached to favour this plant
<i>Circaea lutetiana</i>	Enchanter's-nightshade	
<i>Corylus avellana</i>	Hazel	lower slope (W10)
<i>Crataegus monogyna</i>	Hawthorn	
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	in much of woodland (W16)
<i>Digitalis purpurea</i>	Foxglove	
<i>Epilobium montanum</i>	Broad-leaved Willowherb	
<i>Fraxinus excelsior</i>	Ash	
<i>Galium aparine</i>	Cleavers	
<i>Hedera helix</i>	Common Ivy	
<i>Hieracium agg.</i>	Hawkweed	at least two species around rocky areas, including a few plants of probable <i>Hieracium cinderella</i>
<i>Holcus mollis</i>	Creeping Soft-grass	
<i>Hyacinthoides non-scripta</i>	Bluebell	lower slope (W10)
<i>Ilex aquifolium</i>	Holly	
<i>Lamiastrum galeobdolon subsp. montanum</i>	Yellow Archangel	
<i>Lapsana communis</i>	Nipplewort	
<i>Lathyrus linifolius</i>	Bitter-vetch	
<i>Lonicera periclymenum</i>	Honeysuckle	
<i>Luzula pilosa</i>	Hairy Wood-rush	

<i>Melampyrum pratense</i>	Common Cow-wheat	in W16 woodland type
<i>Melica uniflora</i>	Wood Melick	
<i>Mycelis muralis</i>	Wall Lettuce	
<i>Polypodium vulgare</i>	Polypody	
<i>Primula vulgaris</i>	Primrose	
<i>Pteridium aquilinum</i>	Bracken	
<i>Quercus petraea</i>	Sessile Oak	dominant canopy species
<i>Ranunculus repens</i>	Creeping Buttercup	
<i>Rubus fruticosus</i> agg.	Bramble	very low growing only
<i>Scrophularia nodosa</i>	Common Figwort	
<i>Silene dioica</i>	Red Campion	
<i>Sorbus aucuparia</i>	Rowan	
<i>Teucrium scorodonia</i>	Wood Sage	
<i>Ulmus glabra</i>	Wych Elm	lower slope (W10)
<i>Urtica dioica</i>	Common Nettle	
<i>Vaccinium myrtillus</i>	Bilberry	in much of woodland (W16)
<i>Veronica officinalis</i>	Heath Speedwell	
<i>Viola riviniana</i>	Common Dog-violet	