



Welcome to our third slim-line edition of our newsletter. We hope to cover news in a more timely fashion, attempt to broaden the subject matter we report on as well as pointing out what could be seen in the coming month.



In focus - Beech and associated fungi

An indigenous tree to Southern England, South Wales and throughout central and western Europe. The discovery of Beech pollen dating from 6000 BC in Hampshire proves that this tree is a native, it was present when the country became an island after the end of the last Ice Age. The Beech can live for many hundreds of years, coppiced trees have been recorded at over 1000 years old. A shallow rooted tree which can suffer during storms and die-back at times of drought. In periods of drought, usually in high summer, it can shed quite large branches without warning. This gives the tree staff in the borough council nightmares as councils have been sued over beech branches falling on members of the public. This is why a number of beeches have been felled recently, especially where they are next to footpaths or along roads..

Beech *Fagus sylvatica*



The Beech is monoecious: having both male and female flowers on the same tree. Male catkins hang on stalks at the end of the twigs; female flowers, which are wind pollinated; grow in pairs within a four-lobed cup which eventually becomes the beech nuts (mast).

Beech leaves are marcescent - this means that they wither in autumn but are retained on the branch throughout the winter. Beech woods are usually devoid of woodland flowers, only specialist shade tolerant plants can survive beneath a beech canopy. Also beech leaves are high in tannins, which when they fall in Autumn leach into the soil. Only a few plants can cope with dense shade and these high levels of tannins, and nearly all of these are in the orchid family.

Beech nut oil was used in Britain during the 19th C for cooking and in oil lamps. The oil-rich nuts (mast) were once used to feed livestock - pigs and cattle were released in beech woodlands to allow them to eat the mast. A valuable source of timber since the Middle Ages, especially for furniture as the wood is ideal for chairs as it bends without breaking - chairmakers were known as 'bodgers'. Beech timber was used in the manufacture of gunpowder and as a source of creosote. Beechwood chips are also used in the fermenting process of Budweiser beer!

While plants cannot cope with the shade and the tannins, fungi on the other hand are more tolerant, and beech woods have their own set of mycology.



Porcelain Fungi *Oudemansiella mucida*
 (left) Photographed in Down Grange. Fruits in late autumn to early winter on fallen dead wood or on the trunks of standing Beech trees, usually deeply rooted within the wood. The slimy cap resembles glistening porcelain. It can completely take over a dead tree and deters competing fungi with its own powerful fungicide.



Golden Scalycap *Pholiota aurivella* (right) Found on broadleaf trees especially beech from late summer until autumn. *Pholiota* means scaly, *aurivella* means golden fleece.

The few plants that do appear in beech woods are either those that flower very early or those whose biology can cope with the "toxic" conditions. In the latter camp are the Helleborines.



These are members of the orchid family that tend to be found in woods rather than in open grassland. The White, Narrow-leaved and Red Helleborines can only be found in beech woods on chalk. The most common is the White Helleborine (*Cephalanthera damsonium*) (Left), a few examples of which can be found between Kempshott and Oakley. The Narrow-leaved H. (*Cephalanthera longifolia*) is much rarer and the Red H. (*Cephalanthera rubra*) is restricted to the beech hangers on the edge of the Wield in the east of the county.

The White H. is self fertile, but will cross-pollinate with the Narrow-leaved H. where they occur together.

Hybridisation in orchids is not unusual and that makes identification that much more difficult, even for professionals and experts! Just pity the poor amateur!

Work Parties for February and beyond -

Date	Meeting Point
Thursday, 31st January	Down Grange Meadow. Homesteads Road interpretation board
Sunday, 9th February	Old Orchard, Kendal Gardens
Thursday, 20th February	Old Hedgerow. Footpath between Coniston Road and Down Grange (Behind 77-155 Coniston Road)
Sunday, 2nd March	Down Grange Meadow —see above
Thursday, 13th March	Old Orchard, Kendal Gardens

Times: Sundays: 10.00 to 12.30 - Thursdays: 14.00 to 16.30. Any time you can spare is valued!
 If you would like to join us for the first time please ring **Marion** on **470171**.