May 2007

Weather report

May could be summed up as generally cool, wet and windy. A total of over 90mm of rainfall was nearly double the average for the month and resulted in huge puddles lying on the main ride. The woodland floor was littered with fragments of new leaf growth. Apart from the 25th May with a daytime maximum of 26 C, temperatures hovered around the 15 C mark. The 28th was a thoroughly miserable wet, windy and cold day with a maximum of only 9 C!

Extracts from Rodney's Diary

10th May

Quick visit to walk round before predicted downpours arrived.

14th May

Still clearing felled hemlocks but now looking as though getting



Rodney measuring a hornbeam stool. The stool has a circumference of 428cm. The mature poles have circumferences of 165cm, 134cm, 126cm, 123cm and 97cm.

near the end. Oak sapling found amongst brash, marked and mesh pegged around it to give it a chance. Large standing puddles on main ride after recent rain but otherwise only wet on the surface with no problems driving as far as caravan with truck and tractor.

23rd May

Tree measuring survey of larger conifers and all trees along field boundary at western end. Several more stumps pulled out of picnic site clearing using hand winch.

24th May

Two more tree stumps pulled out of picnic site clearing with tractor. Last of large felled hemlock trunks cleared from new clearing, with just a few shorter sections left to remove to enable access to clear last of brash.





Will remember to fell a smaller area in future now I know how much work is involved, as this year's worth was too much for one pair of hands.

29th May

Two tallish stumps in new hemlock cleared site cut into seats with backrest shape, remainder cut down to near ground level. Larger sections of timber moved and stacked and lighter brash piled ready for next visit with tractor.



Tree species survey

It probably seems rather strange when 'discovering' woodland to have concentrated so far on identifying mosses, fungi and flowering plants without really mentioning in any detail the trees that grow in Long Wood.

This is because up until the end of April the majority of them are in a dormant state, standing leafless, providing a framework and a backdrop against which other life forms have been able to bask in the limelight. Then warm spring temperatures encourage the emergence of new leaf growth that rapidly enlarges and expands, the canopy soon closes over preventing most of the available daylight from reaching the woodland floor and by the end of May the trees have truly asserted their dominance.

We decided that now was a good time to begin a more comprehensive survey of the species of trees growing in our wood. We divided our plot up into manageable sections, electing to start with the area along the western boundary.



When Mike Chapman in his capacity as Plantation on Ancient Woodland Site Officer very kindly paid us a site visit in October 2006 to offer advice on our Douglas fir and western hemlocks,

he commented on these boundary specimens. To quote his report:

'Along the woodbank are the largest and oldest broadleaved trees on this property. These include oak, ash, hornbeam and an

exceptionally large field maple. Ever since then the latter has been affectionately referred to as 'mini-maple'.



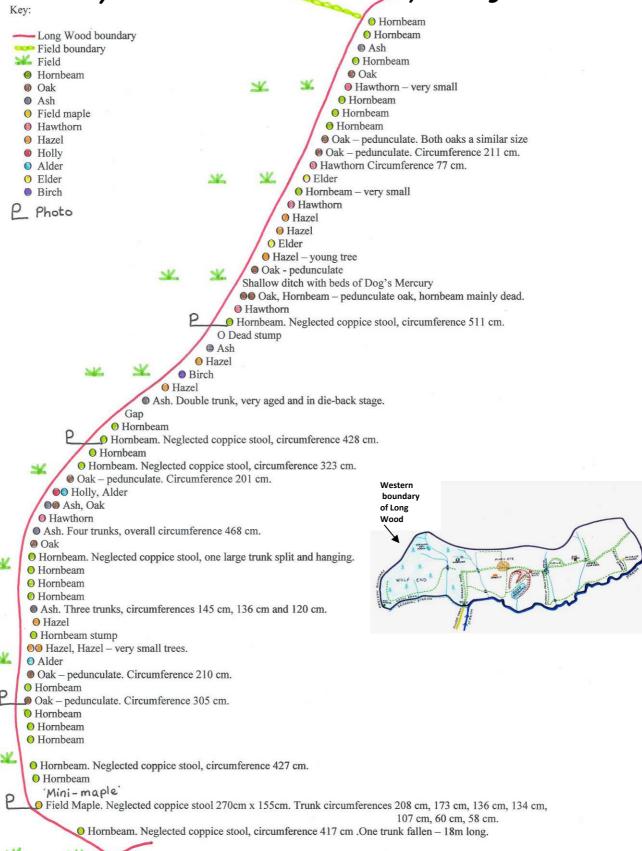
Mini-maple occupies the south-western corner starting a line of fully mature trees that are at least 200 to 300 years old and in varying states of decay. There are no other maples living along this edge of the wood but there are several unidentifiable stumps present. Many of the trees have been coppiced in the past but since neglected, resulting in huge coppice stools with mature poles. One such specimen two-thirds of

the way up the boundary from our maple, a hornbeam comprising 10 mature poles, has an overall circumference of 5 metres 11 centimetres.

Apart from the maple, hornbeam, pedunculate oak and ash trees already mentioned, there are also two fully mature alders, a hawthorn and a holly. The remaining assortment of hazel, hawthorn, birch and elder appear to be the result of natural regeneration.

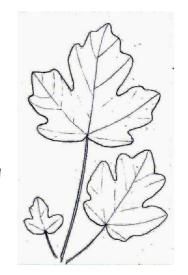
On account of their uniqueness in Long Wood, I decided to record individually every one of these aged trees and record their position, with some measurements, for posterity.

Survey of trees on western boundary of Long Wood



Acer campestre Field Maple

This is the only maple native to the British Isles, where it is a common hedgerow tree, typically planted along woodland edges. It prefers heavy soils and can tolerate strong winds and atmospheric pollution. The field maple is usually described as a small deciduous tree which coppices strongly, grows rapidly when young to 15 metres and



rarely exceeds 25 metres in height. As can be seen in the photograph above, our maple certainly responded well to being coppiced at some point but was then neglected, leaving the seven poles to grow to maturity, reaching their maximum potential.

The stool measures 270 centimetres across with a depth of 155 centimetres. The poles have circumferences of 208cm, 173cm, 136cm, 134cm, 107cm, 60cm and 58cm. A significantly younger pole also exists which only has a circumference of 4cm.

The deep green leaves of the maple grow in opposite pairs, are 4 to 7 cm long, have three or five rounded lobes and are slightly downy on the underside. They produce honeydew that is apparently a popular food source for hairstreak butterflies, also attracting moths, but owing to the fact that the leaves of 'minimaple' are so far above our heads it is no easy task to assess exactly what species of wildlife the tree is being visited by. The sparse yellow-green clusters of flowers appearing with the leaves in April are monoecious – the individual flowers are male or female but occur on the same plant. Seeds are borne on wings set at almost 180 degrees to each other.

Maple bark is grey-brown in colour, fissured and has a cork-like texture. Because timber



sized trees are uncommon, the fine- grained, pale brown wood has been restricted to use in joinery, marquetry and craftwork. The tough, elastic substance that has the ability to resist attack by insects and take a high polish was appreciated by the makers of musical

instruments in the Middle Ages and more recently by those producing violins, using maple to form the back, sides and neck of the instruments. The wood of the roots is often knotted and valued for small objects of cabinet work.

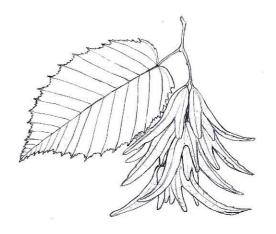
In previous centuries the leaves were utilised as packaging around stored apples and rootcrops to help preserve them through the winter months. The sugar-containing sap was another useful resource. After tapping the trunk in early spring, the collected liquid could either be drunk or boiled to be concentrated into syrup.

As a fuel, maple burns well without sparking. A rather lovely old custom I discovered involved carrying a child around the trunk of a field maple to ensure a long life. Unfortunately this could not be attempted around our tree without becoming entangled in barbed wire, which has replaced the somewhat diminished ancient woodbank to deter inquisitive livestock.



Carpinus betulus Hornbeam

Hornbeam is a hardy, shadetolerant, deciduous tree native to the South-east of England, where it arrived after the last Ice age, thriving in rich, low-lying soils or heavy clays. Although superficially resembling beech, it is a relative



of alder, ash and birch, normally attaining a maximum of 30 metres in height and 150 years in age. Single, mature specimens produce a broad crown but hornbeam is more likely to be found coppiced, pollarded or as hedging - the tree's habit of keeping its dead leaves until spring making it a useful windbreak. It is thought that the original mazes at Hampton Court were hornbeam.



The huge neglected coppice stools growing on Long Wood's western boundary are fully mature in varying stages of decline and decay, from a few dead branches much appreciated by woodpeckers to no more than rotting stumps. In the photograph on the left Rodney can be seen standing beside the largest specimen that has 10 poles and an overall circumference of 511 centimetres.

Hornbeam bark is initially smooth and grey but becomes fluted and cracked with age. The alternate, dark green, oval leaves are double-toothed and 4 to 10 centimetres long. They have noticeably parallel, strongly impressed veins. Long yellowishgreen male catkins, and smaller green female catkins appear on the same tree between March and April, turning to loose,

hanging clusters of small nuts in three lobed bracts in October and November.

The wood is greyish-white and has no heartwood. Being extremely hard and close grained makes it unsuitable for ordinary carpentry but an excellent material from which to fashion wooden screws, butchers' chopping blocks, tools such as mallets, striking hammers in pianos, balls, skittles and billiard cues. When steel was still a very expensive commodity, hornbeam was traditionally used to make spokes and cogwheels.

As fuel the wood produces an exceptionally hot, slow burning fire and the charcoal was valued in the manufacture of gunpowder.

Hornbeam nuts are an important food source for birds. Some fifty-one species of insect and mite can be found living on the tree including up to twenty-two species of moth.

Although rabbits and field mice are partial to nibbling the leaf shoots and foliage, the tree is supposedly resistant to the grey squirrel but I'm afraid those resident in Long Wood do their best to disprove this claim, regularly leaving long strips of bark hanging from the trunks. Perhaps they are prone to suffer with that 'Monday morning feeling' and realise instinctively that the bark has tonic properties, as it is used in the production of a Bach Flower Remedy to treat tiredness and weariness.

The name hornbeam is a relatively modern one dating from the late 16^{th} century, prior to this it was known as hardbeam, beam coming from the Old English for tree or wood.



Quercus robur English Oak, Pedunculate Oak

The English Oak is a deep-rooted, deciduous tree found growing in abundance across Britain, commonly as a standard in coppiced woods. It thrives in heavy, wet soils, can grow in semi-shade or full sun and will tolerate strong winds. A life span of over 1000 years is not unusual, the tree growing rapidly for the first 80 to 120 years then generally slowing down, a marked slowing in diameter growth occurring after 250 to 300 years when branches also start to die back. Oak can reach a height of 45 metres with a rugged crown, but its leading shoot is often eaten forcing large side branches to form a spreading dome.



When the tree is young the bark is smooth and silvery-brown in colour, but with age it becomes grey-brown, rough, hard and deeply fissured.

English or Pedunculate oaks can be identified by their very short leaf stalks (some that I measured were only 2 millimetres) but long acorn

stalks or 'peduncles', anywhere between 5 to 12 centimetres.



Another distinguishing feature on the deeply lobed leaves is the pair of tiny basal lobes that project back beyond where the leaf blade meets the stalk. Acorns are rarely produced until the tree is about 40 years old and then only abundantly in what are known as mast years, every 4 to 7 years.



The English oaks mapped in the species survey on Long Wood's western boundary are the oldest specimens we have, their trunk circumferences at chest height ranging from 201 to 305 centimetres and so we presume probably all planted at the same time

This photograph is of the largest tree. Considerably smaller and younger is an oak at 'Hazel Corner' with a girth of 94

centimetres and another at the edge of the new 'Wolf End' clearing which splits just above its base into two trunks with circumferences of 68 and 73 centimetres.

Approximately seventeen years ago the previous owner of our wood was awarded a Forestry Commission grant to re-stock the site with native broadleaves and although many of these subsequently died, some have survived especially between the picnic site and the edge of the new clearing to the west of the entrance slope. Old, broken, plastic guards with accumulated

debris inside were removed together with surrounding, crowding birch to give these oaks access to more daylight. The emergence this season of the latest generation of self-regenerated trees has triggered off a race to locate the new growth between Rodney armed with protective tubes and the resident voles and rabbits looking for a tasty snack.

Hopefully they will grow to maturity because the English oak supports more wildlife than any other tree in Britain including 284 types of insect, which in turn supply most of the food for birds such as tits and tree



creepers. In ancient times wild boar ate the acorns, but although these animals now roam across Sussex again we have yet to see any evidence of their presence in Long Wood, instead our acorns provide nourishment for jays, pheasants, squirrels, mice, badgers and deer.

Historically humans also considered the seed as a food source, even though the bitter tannin content first needed to be leached out either by thoroughly washing in running water or more traditionally by burying the acorns in boggy ground over winter, after which they could be dried, ground to a powder and then mixed with a cereal to make bread or stirred into stews to thicken them. In times of hardship roasting the seed produced a coffee substitute.

Oak has a long history of medicinal use, the bark being the part of the plant most commonly utilized, harvested from branches between 5 - 12 years old and dried to later make decoctions that have proved to be useful in the treatment of dysentery, diarrhoea, haemorrhages and externally to bathe wounds and skin eruptions.

Any galls produced on the tree can be mixed with salts of iron to yield a black dye and ink, with salts of tin for yellow or with alum to obtain a brown colouring.

The pale brown wood of the English

oak is renowned for being strong, hard, tough and durable even under water and has therefore always been highly valued in the construction of everything from buildings, ships and furniture to casks in which wines and spirits are able to mature. Apart from providing excellent fuel and charcoal, it is additionally a source of tar, acetic acid, creosote and tannin.

Taking all these facts into consideration it is hardly surprising to discover that in Celtic times the tree was referred to as the 'Father of the woods', and weddings often took place beneath its spreading branches.