November 7th 2010 Malvern Group ancient tree walk around Hanley Castle, near Upton on Severn, Worcestershire

The walk was led by Simon Roberts and was well attended by an enthusiastic group of 29. Simon briefly explained what he had planned for the morning; the walk was to be over private land, lanes and public footpaths. He emphasised the value of ancient trees, not only in terms of amenity, but most importantly, in terms of wildlife.

We set off from the village centre and soon came to our first stop in St. Mary's Churchyard near a group of tall Limes. We were told that these trees were 300 years old; planted in 1704 to commemorate victory at the battle of Blenheim. All three Lime species are represented here. Many interesting questions were asked and much discussion ensued, a theme which was to continue throughout the morning.

We walked on, then paused to look back towards a majestic Oak, a maiden with a girth of over 5m, standing in an open arable field. Many of us don't appreciate what we have in 'our neck of the woods'; it's not until you get up close to these trees that you fully appreciate just how big and magnificent they really are. Next we went on private land near the castle earthworks and were confronted by a mighty Pedunculate Oak measuring more than 6m in girth. Simon said that had this tree been in central Europe, it would be a National Monument and marked on the map. This particular tree had staghorn branches protruding from its crown; it was 'growing down' in a process of natural retrenchment where the upper crown dies back and new growth develops from latent buds lower down. It has been said that trees resemble men in middle age:- going thin on top and putting a bit on around the waist. Another large Oak nearby, again with staghorns plus a 'C'shaped trunk; this tree had been struck by lightning. Simon also explained that most Oaks in the local area were pedunculate, although there are some pedunculate/sessile hybrids and Turkey Oaks nearby.

We paused on the bridge over Poolbrook where there was a fine Dogwood (*Cornus*...) of tree-like proportions; you would normally expect to see this species as a hedgerow shrub. We proceeded past the castle mound and moat, alongside a leat which used to supply water to the corn mill, but that's another story. Simon explained that a Robinia tree lying prostrate over the leat was producing new vertical growth in a process known as layered phoenix regeneration.

We followed the footpath through the nuttery and out across a meadow where distant views opened up to see the full range of the Malvern Hills. Near Lodge Farm we were to see an old hedgerow with a line of 14 ancient Oak pollards, this concentration probably being a unique habitat feature in the County. Several of these pollards measured more than 5m in girth, Simon explained that these were much older than maidens of similar girth since they had once been working trees and had suffered set backs following removal of their limbs for timber;they are now known as lapsed pollards. Pollarding, carried out above cattle browsing height, promotes new growth from dormant buds and tends to prolong the life of the tree.

There was much discussion on pollarding, woodland coppicing and the intermediate coppard also got a mention, but the main focus of attention was on the habitat value of these trees with their hollows, gnarled and loose bark, with nooks and crannies, all features of age and

decay. These provide essential habitat for many invertebrates, many whose life-cycle is totally dependent on the rotting heartwood. They also provide a refuge for other creatures including bats, and nesting sites for many birds. They are often encrusted with mosses and lichens. Ivy-clad trees also provide a late nectar source and an over winter refuge for many invertebrates.

Fungi also play an important role in the life of trees: mycorhizal fungi form a symbiotic relationship with the tree, being of mutual benefit to each other, the tree gaining essential nutrients including phosphates in return for sugars. This relationship also helps to protect the roots from pathogens, the mycelium forming a physical barrier. Trees would not become established without striking up a partnership with mycorhizal fungi; a Birch seedling, for example, must establish a symbiotic relationship to ensure its survival.

We learned that old hollow trees, being cylindrical in section are mechanically stronger and more able to resist gale force winds than trees with solid trunks. In Oak trees the heartwood serves to stiffen the trunk during the first twenty or so years of the tree's life; it then becomes dysfunctional. In time, threads of white fungal mycelium (this is the vegetative body of the Oak Polypore fungus) start to hollow out the tree and release nutrients back into the soil. Later on, aerial roots may also develop within the trunk; in effect the tree then feeds on itself!

Oak Polypore (*Piptoporus quercinus*)

Invariably found on living or recently dead ancient Oaks, such trees are often of importance for other fungi and invertebrates. This rare fungus forms stemless, cushiony brackets with a smooth, velvety (when young) upper surface. The individual brackets are up to 5cm thick and 20cm wide. Pores develop on the under surface with maturity and the overall colour changes from whitish, through pale-yellow to brown. Fruiting commences in mid-summer, with a peak around early August. The polypore causes a progressive brown rot of the heartwood of the host tree.

Simon spoke about safety concerns in public places regarding ancient trees. There had apparently been concern in Windsor Great Park, where all suspect hollow trees had been tagged, but it was found that following the 1987 winter gales most of the trees left standing were those fitted with tags.

Along Gilberts Lane we saw a Black Poplar lying prostrate; this tree had been recorded as a fine maiden with a girth of over 5m only 2 years previously. Again, near the lane we saw a veteran Oak, now dead but very much alive when recorded. The habitat value of standing dead-wood was discussed along with ground management around trees, where compaction and close cultivation can be damaging to root systems.

Further along, in a nearby hedgerow, we saw another majestic Oak, 6m plus in girth. We were

told that this area is a hot spot; we were asked to look around. There were many veteran trees but many are on private land. Next, a Black Poplar by the roadside; this was a lapsed pollard of considerable age displaying the characteristic burrs and the gnarled bark, which cast shadows to give the tree its common name.

Since time was running short, it was decided to revert to plan B, and cut out a loop, which would have taken about an hour. We took the footpath towards Roberts End to see the first in an impressive line of Oak lapsed pollards in what was a former hedgerow, which extended across several small fields. We were told that there are many more ancient trees in the vicinity and had time permitted, we could have seen a truly magnificent Oak, a lapsed pollard with a girth of almost 7m, further along the path.

We retraced our steps, and paused along the lane by a veteran Oak high up on an embankment. We were told about the Ancient Tree Hunt, a project led by The Woodland Trust to discover all the hidden treasures around us and to put them on the map. Simon tried to encourage all of us to take up the challenge and to be on the look out for special trees in our own area. He said that the minimum requirement is just to let someone know that a tree exists and where it is, others would follow it up and record the details. Ancient trees, unlike old buildings have no legal protection except in some conservation areas, and even then, generally only in terms of amenity, with little or no regard for habitat value.

We returned to the village of Hanley Castle for liquid refreshment at The Three Kings and some took advantage of the burger bar that had been provided for us.

Simon made it clear throughout that the recording of these ancient trees is the first line of their defence, which can then be followed up with recommendations to help preserve these marvellous organisms and the bounty of diverse organisms which depend upon them. Another walk was requested in this area, so we look forward to next year.

For those wishing to get more involved in recording these old trees and how to help save them for future generations, contact Simon Woods at WBRC, Lower Smite Farm, Smite Hill, Hindlip, Worcester WR3 8SZ, tel. 01905 759759 or **records@wbrc.org.uk.**

If you wish to see where trees have already been recorded, go to **www.ancient-tree-hunt.org.uk/discoveries/interactivemap/**

Our thanks go out to Simon for a most informative and enjoyable experience, delivered through an enthusiastic presentation and for his expert knowledge. We must also give thanks to Nick Lechmere and to Peter and Sally Hargreaves, for allowing us access to walk over their private land.

Cec Roberts.

For more information go to....**www.ancient-tree-hunt.org.uk/** or **www.woodlandtrust.org.uk/**