# OAK TREES IN WYRE FOREST

**Brian Stephens**

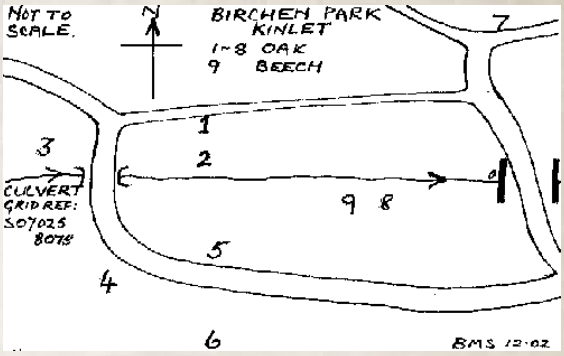
Like the curate's egg, the Mawley Oak is good in parts. The standing section seems not to have been damaged by the severe gale of Saturday 26th, Sunday 27th October 2002, almost the anniversary of the tree's collapse. The present height, very similar to the original, measures 20.72 m = 68 ft. (see method below, base = 38 m, angle 25 degrees, + 3 m correction). However, any optimism that new shoots might emerge from the damaged and fallen boughs has so far proved unjustified, (Review 2001). The only emergence is a mass of fruiting bodies of the Ascomycete fungus Black Bulgar, *(Bulgaria inquinans Fr)*.

The form of the Mawley Oak has prompted suggestions that it may have been pollarded at some stage. Examination and reflection would not support the idea of pollarding as practised with willows, beech and hornbeam, as in Epping Forest; limes at Shrawley, oaks as at Hill Court Farm, WWT Reserve. To provide timber of required size, pollarding was repeated during the life of the tree and a distinct distortion in the lines of trunks and branches resulted. The branches of the Mawley Oak show no such discontinuity. They sweep smoothly from the trunk and each other with no sign of disturbance or evidence of branches systematically removed. The girth of the Mawley Oak branches compares with mature trees elsewhere in the forest, which might suggest growth over 100 years or more, but on such a time scale, if pollarding occurred, one could expect to see signs of human interference, (Worcester Biological Record Centre (WBRC) Record No. 12 April 2002, pp3-12 and 13-14. www.wbrc.org.uk). Indeed, the form of the tree is typical of a well-grown Sessile Oak *Quercus petraea*.

What of other contenders for the crown, following the demise of the sovereign at Mawley? Trees of similar scale and habit, in hedges and parkland are quite common, many have short thick trunks with multiple branching at about ten or twelve feet. There is an example near Lower Brockhampton House (NT), easily viewed from the track, to the left, as one approaches the house; (SO 6860 5585). This is in Hereford and less of our concern.

Of more interest, however, is a group of large oaks in the northern most area of The Forestry Commission plantation of Birchen Park, Kinlet, Shropshire, now an outlier of the main forest of Wyre and less often visited. We must thank Mr. Chris Bradley, with his intimate and detailed knowledge of the Forest, for bringing this stand to our attention.

Here, on the sloping sides of a sheltered glade, there are several massive oaks, standing close enough for a single map reference to suffice, near where a stream, flowing to Kinlet Park, is culverted under the track, (SO 7025 8078). About 100 yards downstream is a substantial concreted culvert and depth gauge. The eight largest trees are described below.




Methods follow a protocol of English Nature's Veteran Tree Initiative and Worcs. Veteran Tree Record being compiled by Harry Green *et al* at WBRC (see reference above).

The exact identification of each tree needs to be checked. The two common oak species, Pendunculate *(Quercus robur L.)* and Sessile *(Q. petraea L.)* can be found as pure specimens and as hybrids showing, in various ways, the leaf and fruit characters of the two species. Many Wyre Forest oaks are hybrids, while others tend more distinctly to one of the two species and some may be pure.

Of the eight large oaks cited below, seven show leaves with fairly typical features of *Quercus robur*; rectangular outline, auricles at the broad base, veins to the sinuses and stalks to the acorn cups. Leaves with a variety of features could be found. Number 7 however, shows leaves distinctly different and like those of *Q. petraea*; long and narrow with tapering base and no auricles, nor veins to the sinuses. Acorn cups showed no signs of stalks.

Girth was measured with a tape at 1.3 m, (chest height). For trees on steep banks this was taken from the higher side, which for this stand meant the north or south side.

The spread of each canopy was measured by a tape from east to west, since this direction avoided the sloping ground, judging the vertical projection of the most extensive shoots.



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Height was estimated using an improvised theodolite, consisting of a tripod, with a spirit level and a protractor attached, with a sighting device. By measuring and levelling a base line to the foot of the tree, then measuring the angle to the top-most twigs the height could be calculated. The tangent of the angle, multiplied by the length of the base line, gives the height. Such measurements are rather approximate, since the terrain and other vegetation made viewing difficult. Measurements were made in metres and converted to imperial.

**Number 1.**
This impressive tree is situated about 50 yards NE from the culvert, on a south facing slope and has the remains of a derelict deer seat. From the north side of the trunk to the south, the ground falls three feet. On the SE side, three feet up, a patch of bark, about 15 in x 20 in, has been removed. The tree is characterised by a huge boss of epicormic growth round the trunk, less so on the north side, up to ten feet. From amongst the top of this growth the remains of the lowermost branches emerge at 9 to 10 feet. Eight can be counted at this level, mostly broken, some trimmed. From about 12 feet, four main branches rise up almost vertically, with one a strong leader. These fork to eight substantial branches. Below the boss, the trunk is regular and the girth can be measured, but only at 2 ft 6 in on the north side.

| | | |
|---|---|---|
| Girth | 17 ft 2½ in | 5.25 m |
| Canopy | 68 ft 10¾ in | 21.00 m |
| Height | 66 ft 0 in | 20.10 m |
| | (Base 29.5 m x tan 34° 20') | |

**Number 2.**
This tree has an unusual form compared with local oaks, growing on less sloping ground mid way between No.1 and the stream. From a smooth bowl rising to ten feet, two large main branches continue upwards, at steep angles. These are the only large branches, the side branches being relatively slender. There are long, torn patches just above the fork where two large branches have broken out, apparently also rising at a steep angle, and another smaller, lower branch has been cut.

| | | |
|---|---|---|
| Girth | 11 ft 6½ in | 3.52 m |
| Canopy | 70 ft 6 in | 21.50 m |
| Height | 101 ft 4 in | 30.90 m |
| | (Base 38.0 m x tan 38° = 29.68 m | |
| | + 1.220 m level correction) | |

**Number 3.**
This specimen, 15 paces NW of the culvert, grows as a straight standard with a substantial bole and small side branches.

| | | |
|---|---|---|
| Girth | 10 ft 4 in | 3.15 m |
| Canopy | 55 ft 9 in | 17.00 m |
| Height | 74 ft 6 in | 22.71 m |
| | (Base 38.m x tan 35° = 21.71 m | |
| | + 1.0 m level correction) | |

**Number 4.**
This is a large tree on a steep, north-facing bank, above the track, 25 paces south of the culvert. Two large branches snapped in the gale of 26/27th October 2002, and lie beneath. From the fresh breaks they can be seen to have been from the central, lead shoot. The larger, lower one, to the NE, from about 30 ft above ground, had a girth of 46 in, six feet above the break. Another to the SE, torn out with a ten foot split, several feet higher up, had a girth of 36½ in. The top section of the leader has also broken off and remains lodged high in the canopy. From the massive bowl, at 12 feet, two huge branches emerge, each forking again to give numerous thick branches.

| | | |
|---|---|---|
| Girth | 19 ft 1 in | 5.82 m |
| Canopy | 88 ft 6 in | 27.00 m |
| Height | 80 ft 3 in | 24.46 m |
| | (Base 45 m x tan 27° = 22.94 m | |
| | + 1.520 m level correction) | |

**Number 5.**
This is the most striking tree of the group and the prime contender to succeed the Mawley Oak. Conspicuous, on the north-facing bank, beside the track SE from the culvert, one is struck by the enormous root buttresses. The lowest branches arise at 8 to 9 feet. They are not large. There are four living and one broken off, and some remains of others. From 12 to 20 feet, six main branches diverge, and at a higher level these all fork again to give a spreading canopy.

| | | |
|---|---|---|
| Girth | 22 ft 6½ in | 6.87 m |
| Canopy | 109 ft10¾ in | 33.50 m |
| Height | 80 ft 9 in | 24.62 m |
| | (Base 37 m x tan 32° = 23.12 m | |
| | + 1.5 m level correction) | |

**Number 6.**
Thirty paces south of No. 5, in a clearing among conifers, on a relatively level site and away from the steep valley, this is a well-formed standard, with symmetrical canopy, and widely spreading roots.

| | | |
|---|---|---|
| Girth | 8 ft 2 in | 2.49 m |
| Canopy | 55 ft 9 in | 17.00 m |
| Height | 57 ft 0 in | 17.37 m |
| | (Base 26.5 m x tan 34$^o$ = 17.87 m – 0.5 m level correction) | |

**Number 7.**
About 100 yards N from the concrete culvert there is a well-formed standard tree with a symmetrical canopy, exposed on a south facing slope with conifers behind. Leaves on the ground below show *Q.petraea* features, and there were no signs of stalked acorn cups.

| | | |
|---|---|---|
| Girth | 10 ft 9 in | 3.27 m |
| Canopy | 70 ft 6 in | 21.50 m |
| Height | 73 ft 9 in | 22.59 m |
| | (Base 36.5 m x tan 34$^o$ = 24.62 m – 2.133 m level correction) | |

**Number 8.**
Growing close to the south side of the stream on a steep bank about 75 paces E of tree No. 5, and 25 paces west of the large culvert, this is a straight standard tree, similar to No.3 above, with numerous small branches, mostly on the north side.

| | | |
|---|---|---|
| Girth | 9 ft 3 in | 2.820 m |
| Canopy | 39 ft 4 in | 12.00 m |
| Height | 64 ft 6 in | 19.68 m |
| | (Base 43 m x tan 24.6$^o$) | |

**Number 9.**
A large Beech tree (*Fagus sylvatica L.*). In the context of recording notable trees it is hard to ignore this beech growing alongside No.8 above, on the same steep bank, and included here for completeness. A short thick trunk forks at six feet up on the south side, to give two large branches. One forms the leader and from this a third branch broke away some time ago, and lies across the stream. The girth of this branch at its base measured 6 ft 6 in (2.02 m).

| | | |
|---|---|---|
| Girth | 11 ft 9 in | 3.58 m |
| Canopy | 49 ft 3 in | 15.00 m |
| Height | 61 ft 1 in | 18.62 m |
| | (base 48.5 m x tan 21$^o$) | |

Table summarising the dimensions of the eight oak trees, quoted in metres.

| Tree | Girth | Canopy | Height |
|---|---|---|---|
| 1 | 5.25 | 21.00 | 20.10 |
| 2 | 3.52 | 21.50 | 30.90 |
| 3 | 3.15 | 17.00 | 22.70 |
| 4 | 5.82 | 27.00 | 24.46 |
| 5 | 6.87 | 33.50 | 24.62 |
| 6 | 2.49 | 17.00 | 17.37 |
| 7 | 3.27 | 21.50 | 22.59 |
| 8 | 2.82 | 12.00 | 19.68 |

Many of the standard oaks in Wyre show a curve at the base and when cut show eccentric growth rings suggesting they have developed from coppice stools. Borings and ring counts would give an age for the trunk but no clue as to the age of the root-stock, probably very much older. The trees described above appear to be maidens from seedlings. The standard less-spreading habit is typical of *Q. petraea*, and the spreading canopy, of which the Mawley Oak was a fine example, more typical of *Q. robur*. Great variation exists and one cannot generalise. It could be worth while to make a careful assessment of the characters and variation of the oak in Wyre and to determine the extent of hybridisation. But, possibly, research into the history of the Royal Forest and the extent and manner of any management to produce particular forms of timber may be more rewarding.

Tree no.5 viewed from the south east. Dec. 2002.

Brian Stephens