

## The Oaks of The Blean

The soil of The Blean consists mainly of London Clay. This is not especially short of nutrients and so the early growth of trees is usually relatively vigorous. However, the clay is very heavy and later growth is slow. In order to reach a size suitable for providing timber, an oak needs to grow for about 120 years in these conditions. The reality is that very slow growth is normally not straight and so the commercial value of the wood is limited. If you look closely at the old buildings of Canterbury or the medieval barns at Littlebourne and Faversham, you will discover that they are not characterised by large timbers. The neighbouring woods were not able to supply these; many a local hostelry or oast-house contains recycled ship's timbers! Indeed, there are well documented records of high quality oak timber necessarily being imported from Ireland in the Middle Ages.

The most efficient use of the land was to manage it as a silviculture system known as "coppice with standards". This was achieved by cutting trees to ground level at regular intervals. This stimulated the tree to produce multiple shoots from the stump or stool. The length of the cycle depended on the species of tree and the use to which the wood was put. This practice produced coppice wood formed through early vigorous growth. Thus the best possible returns were ensured. The function of the mature standard trees was to provide shade for the coppice and to draw up the coppice poles towards the light so that they might grow straight. In The Blean, oak standards are associated to a large extent with sweet chestnut coppice and with hornbeam coppice. Oak itself was also traditionally coppiced.

There are two main species of oak native to Britain. The Common (Pedunculate) Oak, *Quercus robur*, has acorns with definite stalks. The Sessile Oak, *Quercus petraea*, has acorns with very short stalks or with no stalks at all. *Q.robur* grows best on heavy, fertile lowland clays whilst *Q.petraea* prefers the better draining hills of the west. One might therefore expect the Pedunculate Oak to predominate in The Blean but most of the oaks have a hybrid quality.

A large acreage of oak coppice is found in Ellenden and for several centuries this wood was a major source of tanbark. After 1953 the Canterbury tannery turned to a Brazilian bean as its source of tannin, but loads of tanbark continued to be sent to Canterbury East station and thence by rail to supply the leather industry of Northampton. The amount of tannin in bark decreases with the age of the tree and for this reason oak coppice was traditionally used; the coppice rotation was kept to about 15 years. However, it is difficult to bark the coppice poles and so this practice stopped in the 20th century. It was an easier matter to remove the thicker bark of mature trees. Peeling was best achieved in April or May after the first leaves showed. Woodmen referred to bark taken from the trunk as "body bark" and that taken from the branches as "arm bark". Smaller rolls of "arm bark" were wrapped within in a larger roll of "body bark". Tannin is soluble in water so the bark was stacked to dry with the inner surface shielded from the rain.

Coppice oak grown on a 20 year cycle was preferred if the wood was used for fuel, charcoal production or pit props. Vast numbers of pit props were delivered to the coal mines at Chislet, Tilmanstone, Betteshanger and Snowdown. Occasionally the props collapsed under the various stresses causing the roof to cave in. Miners much preferred the wooden props; unlike the metal ones they creaked before they gave way thus giving the miners a warning of impending danger. The importance of oak (and hornbeam) charcoal to this part of Kent should not be underestimated. Charcoal was required for the gunpowder industry at Faversham and also hops were originally dried using charcoal as fuel since wood smoke would have led to serious contamination. Whilst thinking of the brewing industry it is worth mentioning that coopers preferred softer oak grown more quickly on sandier soils. Representatives from Fremlin's and Whitbread's selected suitable standards for this purpose from Pine Wood near Littlebourne; the harder oak of The Blean would not have been appropriate for barrels. Local oak would have been used for posts, stakes, gates, fences, flooring and joinery. Larger timber has been fashioned to make sluice gates on the Romney and Walland marshes. Cleft oak was regularly utilised to make ladder rungs although sweet chestnut made an excellent

alternative. Oak was the wheelwright's choice for spokes, elm for the hub and ash for the rim. Stephenson's Rocket had oak driving wheels! Even oak galls had their use. Gallic and tannic acids derived from oak apples were mixed with ferrous sulphate to make a good ink. Moreover the ferrous sulphate was sourced locally from the Copperas industry based in Whitstable.



Oak coppice    singled

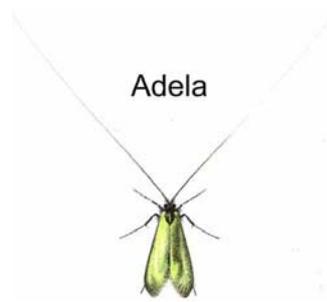


There is an important relationship to be understood between oak coppice and oak standards. Oak seedlings often do not thrive in the shade of the wood. If standards were felled, how were they to be replaced? The answer lay in the practice of "singling". When cutting an oak coppice stool, a woodman selected one pole and left it standing. The idea was that any new shoots would be unable to compete with one that had such a head start and so they would die back. Experience suggested to the woodman which would be the best pole to choose for this purpose. Often it is possible to identify the remains of the coppice stool at the base of a standard. (See photograph) Certainly oaks *have* been planted in The Blean. For example, the Victorians were interested in furniture with an interesting grain and so they were intrigued by the possibilities of "burr" oaks, trees with rounded lobes on their sides. Often these trees may be seen at regular intervals in lines, suggesting that they were indeed planted. When an acorn germinates, nearly all the early growth is of a deep tap root. It is impractical to transfer the seedling from the nursery to the wood intact and its tap root has to be cut before planting out. A number of the oaks that fell in the storm of 1987 were stressed or suffering from "die-back" but others were in rude health. Many of the latter had been planted out and the shortened tap root meant that they were less securely anchored.



The Oak supports a wide variety of other life forms. The oak apple is well known to us and we have seen the holes where the gall wasp, *Andricus kollari*, has emerged. Other species of *Andricus* cause amazing distortions of acorns described as Artichoke and Knopper galls. (see pictures) We have also seen ants climbing the oak to milk the aphids which in turn are feeding on the sap of the tree. The caterpillars of the Mottled Umber and Green Oak Tortrix moths do most to defoliate oaks. Several decades ago there were rather more rooks in The Blean than is presently the case and the sound and

sight of these birds “squabbling” around the oaks in the summer months was a sure indication that they were feasting on the larvae. Less damaging are the caterpillars of the genus *Adela* which feed in the leaf litter. During the summer the adult moths of one of these species can be seen swarming in the canopy of the oak. They possess very long antennae and bright sunshine shows off their metallic blue-green colour to advantage. (see picture) You may see swallows or martins catching a meal of these moths on the wing. The Stag Beetle is a familiar figure, but have we encountered its larva? Hunt for it in the decaying roots and stumps of oak. The larva may take up to three years to mature after which time it may reach a length of five inches. (see picture) A bright yellow bracket fungus, *Laetiporus sulphureus*, may be found on living oaks during the summer months. (see photo) Commonly called “Chicken of the Woods”, it will often infect old trees through a wound. Ultimately it is responsible for the rotting of the heart-wood and inevitably hollowing is the result.



Some of our oldest oaks are often pollards. This type of tree results from a type of husbandry similar to that of coppicing with the difference that pollards are cut at about head height. They are often marker trees. Look on your OS map for Crooked Oak at the point where Bossenden, North Bishopden and Church Woods meet. Crooked Oak was also on a parish boundary. The pollard photographed is found at the junction of Great Den Lees, Grimshill and Church Woods. Trees in a wood grow in competition with others and even the oldest and grandest cannot compare in stature with a “patriarch” of the parkland. Edward Step in *Wayside and Woodland Trees* records the Gelenos Oak which stood some four miles from Newport. Contemporary records report that when the tree was felled in 1810 it yielded 2,426 cubic feet of timber and 6 tons of bark. The timber and bark from this one tree were roughly equal to the average harvest of three acres of oak coppice after 15 years growth. Typically trees growing in the open may not reach great heights but their girth may be truly enormous!

