The Sweet Chestnut

The Sweet Chestnut or *Castanea sativa* is not native to the country. It is a tree of southern Europe; almost certainly it was introduced into Britain by the Romans. The familiar Horse Chestnut or *Aesculus hippocastanum* (Latin: *hippo* = horse; *castanea* = Chestnut) originated in the mountains of Greece and Albania and was brought to this country much later at the beginning of the 17th century. In any event, Sweet Chestnut has been established in Britain for well over a millennium and it behaves as a fully naturalised species.

Possibly the most famous Sweet Chestnut is found at Tortworth Church in Gloucestershire. It is said to have been planted in the reign of King Egbert and to have been used as a boundary marker in King Stephen’s time! The truth of these stories is open to question; what is not in dispute is that this magnificent specimen is huge, venerable and now in decline. A feature of the Tortworth Chestnut is its spiralled bark. Young Chestnuts have a smooth bark and any fissures tend to be vertical. With increasing age the ridges lean to form a spiral.

Sweet Chestnut timber consists of very long fibres and this gives it many of the excellent properties of oak. It works better than most hardwoods, although it can split on nailing and it is extremely durable and resistant. However, many felled trees yield ‘shaken’ timber. These ‘shakes’ are cracks in the wood which might be present from the outset or which might have formed on impact with the ground. This markedly reduces the value of the wood for ‘shaken’ timber can be used only for small items. In order to avoid this problem Chestnut timber is best grown on deep, acid and well drained soils where there is likely to be little frost. Such sites on Old Red Sandstone have proven ideal. Growth should be vigorous so warm, sunny are best.

The heavy clays of our local woods are poorly suited to growing Chestnut timber. Consequently we are more familiar with Chestnut coppice but only on the better drained sites. Even here good quality coppice is not assured. In order to obtain straight poles reasonably rapid growth is needed such as might occur on the sandier soils of Trenley Park on the Canterbury-
Stodmarsh road. The best Sweet Chestnut coppice throughout the whole of Kent was grown on the greensands. For about two centuries the economic importance of Sweet Chestnut in Kent was paramount.

The demand for Chestnut poles started in earnest in the 18th century. Up to this time the tendency had been to grow hops in small gardens using poles of alder or willow. These were grown in local beds. The poles had a tendency to rot rather quickly and they would not survive many seasons even with winter storage. When hop growing became a larger commercial enterprise, production moved to farms and the numbers of poles required increased dramatically. Large areas of woodland were converted to Chestnut to supply the market. At first the coppice was cut on a fourteen year cycle. The poles were naturally resistant and they had a long life expectancy. If any preservative were used it would only have been on the butt end. Later the hop industry changed its practice and the poles had to support extra wire-work in addition to the bines themselves. Consequently the poles needed to be a stronger and a wider diameter was required at the top end. The result was that the coppice was now cut on a considerably longer cycle. In some instances the transition was not satisfactory; the root stock had developed with a short cycle and the later growth of the poles was often not particularly straight. In most areas of the Blean the necessary quality was lacking.

Other markets were found for Chestnut. The wood was ideal for posts and fencing, it was transported to the Sittingbourne mill for the manufacture of paper and it was used to make pit props and rungs for ladders. A few workers remain who continue to make chestnut fencing, but the mill in Sittingbourne switched to processing recycled paper, the mining industry collapsed and wooden ladders have become a thing of the past. In a local DIY store it is possible to buy floor tiles made from chestnut laminates but there is nothing to suggest that they are sourced in Kent. Now most Chestnut is cut for firewood. Chestnut grown on very short rotations has been identified as a potentially excellent energy crop but it remains to be seen if this avenue will be explored more seriously.
In the past a small amount of coppice was grown on three to four year rotations to provide poles for walking sticks. These were steamed to soften them prior to shaping. Chestnut wood, boiled and cut into strips, was also used for basket making. Chestnut faggots were also used extensively for our sea defences here on the Kentish coast. Sweet Chestnut is rich in tannin and in times past any waste wood was used to supplement the tanbark (obtained from oak coppice) for the leather industry.

The current outlook for our Sweet Chestnut woods is not looking good. There are certainly markets for chestnut fencing. At least one European country across the English Channel has introduced ‘green’ legislation to protect the environment by outlawing the use of toxic wood preservatives. Sweet Chestnut has its own natural preservative and Kent is ideally situated to take advantage of this opportunity. Unfortunately the necessary infrastructure has almost completely collapsed and nobody seems prepared to invest. This is a pity because other EU countries may follow suit... Sweet Chestnut is grown in continental Europe but primarily for its fruit. In most locations in Britain the summers are insufficiently warm to yield a crop of nuts of commercial value. Moreover a newly planted orchard tree will not yield decent fruit for several decades; only the French cultivar, *Marron de Lyon*, gives a heavy nut crop at an early age. Quite distinct from usual culinary fare, the Italians consumed *pollenta* during the privations of WW2. This porridge was made from a meal prepared by drying and grinding chestnuts.

Laminates may well represent the long term future for Sweet Chestnut. Scandinavian countries have developed techniques for crossing fibres at right angles to each other before setting them in glue. The result is a material of immense strength capable of serious weight bearing. The beauty of this is that the chestnut coppice used can be of *any* quality. However, this is yet another instance where the UK refuses to countenance investment in such an industry. We pretend to have concerns for the environment but in reality we prefer cheap unsustainable imports.

Much of the woodland in the Blean is managed for the purpose of conservation. Many bodies involved in this work are seeking to eliminate Sweet Chestnut from their sites as alien species and to restock with native broadleaves. Currently in our recent hot dry summers Beech is beginning to suffer. The deep rooting Sweet Chestnut with its Mediterranean origins appears to be better adapted to these conditions. In a period of profound climate change it does seem illogical to assume that we do best with a mix of purely native trees.

*Researched by David Shire – Blean Heritage & Community Group ©*