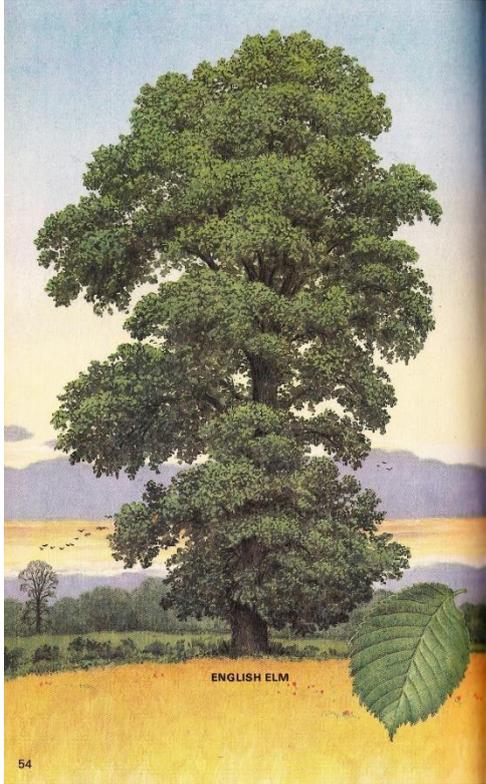


The English Elm

(*Ulmus procera*)



The English Elm Tree (*Ulmus procera*) was brought to the UK during the Roman occupation and has been identified through genetic studies as originating in Italy or possible Turkey, although the majority of English Elms (*Ulmus minor var. vulgaris* – a minor clone of *Ulmus procera*) are clones supplied by Dutch growers in their thousands during the 17th Century and used extensively in England during the land grabs made available by the Enclosures acts of the 17th & 18th century. The Trees initially would be planted at the ‘corners’ of the enclosed land to identify the area with hedges or fences built later as the land was put to use.

Below are photographs of *Ulmus Procera* (the Roman English Elm) which survive in Eastbourne, they survive because the little beetle that carries spores of the ‘American fungus’ of the [Dutch Elm disease](#) has weak flying wings and cannot fly higher than approx 200 ft before the stronger winds overcome it, so the beetles cannot fly high enough to clear the chalk hills that surround Eastbourne. This is the reason for many years why the Elms in Brighton were spared the

disease, but eventually the beetle arrived in Brighton from somewhere and the trees were cut down to prevent breeding habitats for the beetles.

The following Elm Trees were photographed because of the stem Galls that are growing on the Trees. Stem Galls are caused by bacteria and viruses which have been transmitted by insects that penetrate the trees bark, either to feed on the sap or to lay eggs when the tree is still young enough to have thin bark. The Galls do not directly harm the Tree but the swelling does impede the flow of the upward movement of water and the downward flow of sugars. The insect vectors are tiny wasps which lay eggs under the young bark and transmit several species of bacteria, although not well understood. Recent studies have found some species of ‘midges’ that also carry bacteria that cause galls on woody and herbaceous plants.

I have noticed that trees growing near water or in moist environments tend to have a greater amount of stem Galls than trees in more dryer environments, this could be caused by several factors. Either the bacteria requires a water environment for part of its life cycle or the insects that behave as the vectors require a moist environment for their own life cycles, it is well known that many insects absorb moisture through the atmosphere rather than having the ability to ‘drink’, Bacterial spores are also small enough to be carried or suspended in atmospheric water droplets.

Elm trees can be identified easily from their leaves, at the base of the leaf where it meets the leave stem, there is a 'lobe' or asymmetrical unbalance between the two sides of the leave stem, this can be seen in the photo below of the elm leaves.

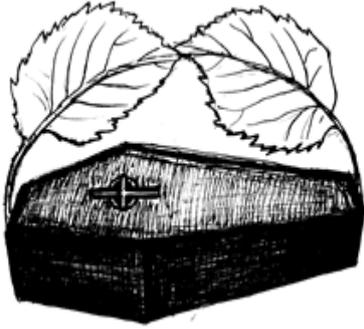
In Greek mythology, the hero Orpheus, having rescued his beloved wife Eurydice from the Underworld by enchanting everyone there with his harp music, paused to play her a love song, at which spot the first elm grove was said to have sprung up. In Celtic mythology, too, elm trees were associated with the Underworld. They had a special affinity with elves who were said to guard the burial mounds, their dead and the associated passage into the Underworld.

Elm trees in Britain can grow to become some of the tallest and largest native trees. Like the [oak](#), they often had very specific customs and folklore attached to individual, named trees such as the Tenor, Bass and Alto elms on Humberside, or the Dancing elms of Devon around which May Day dances were held (these trees have all sadly succumbed to Dutch elm disease). As well as their widespread use in hedges, their stature made them imposing landmarks and boundary markers, and travelling preachers and judges would often pronounce from beneath them. Their large distinctive shapes feature prominently in many English pastoral paintings by Constable (eg his famous "The Haywain" painting) and his contemporaries.

The elm's wood bends well, or distorts easily, depending on which way you look at the situation, and indeed the 'wych' in [wych elm](#) refers to its wood being pliant, and not to witches, who were said to shun elm trees. This characteristic made the wood largely unsuitable as a building material, nor does it make a good fuel. However, like alder wood, elm wood withstands wet conditions very well, making it a popular choice for the building of boat and barge hulls, bridge foundations, and cartwheels. Like Scots pine, hollowed-out elm was used to make urban water pipes prior to the introduction of metal ones. Its pliancy was also put to use in a variety of ways. In Scotland the stick used to play shinty, called a caman, can be made from a variety of woods, with elm being a popular choice as it often has a natural bend already in the wood. Failing that, it could easily be heated, bent and set to the required shape. Mediaeval Welsh archers made their long bows from elm wood, whereas English bowmen preferred [yew](#).



It is interesting to note that both the yew's and the elm's mythology is intimately bound up with death and the transition into the Underworld, and that both woods were used to such deadly effect in mediaeval warfare. Elm's connection with death does not end there, as its wood is traditionally used to make coffins, though the wood's durability underground may also play a part in this choice. Perhaps people who knew elms well were reminded of their own mortality when remembering the elm's reputation for dropping large boughs without warning on otherwise still, warm days; "Elm hateth man, and waiteth" as the old saying goes.



In Scotland wych elm is the more common species of elm. In Gaelic it is known as 'leven', as in Loch Leven in Kinross, and was valued for its roles in the dyeing of wool. Intermittent colours in woollen yarns (by which a weaver could more easily create a pattern in the weave) could be introduced by way of an early form of tie-dyeing. Twine made from the inner [bark](#) of the elm tied tightly at regular intervals, to form 'hanks' of the yarn, was used to stop a dye from reaching the wool. A yellow dye could also be derived from the elm, and the leaves were fed to livestock when other fodder was scarce.

Notwithstanding elm's legendary associations with death and the Underworld, people also looked to elm for medicinal cures. The inner bark was especially efficacious when chewed or boiled into a liquor to treat colds and sore throats, while the boiled bark was also used to treat burns.



"When the elmen leaf is as big as a mouse's ear,
Then sow barley never fear;"
Part of a rural planting verse

Paul Kendall