

Bog Wood

Bog-wood is wood from trees that have been buried in peat bogs and preserved from decay by the acidic and anaerobic bog conditions, sometimes for hundreds or even thousands of years. The wood is usually stained brown by tannins dissolved in the acidic water. Bog-wood represents the early stages in the fossilization of wood, with further stages ultimately forming lignite and coal over a period of many millions of years. Bog-wood may come from any tree species naturally growing near or in bogs, including oak (*Quercus* – bog oak), pine (*Pinus*), yew (*Taxus*), swamp cypress (*Taxodium*) and kauri (*Agathis*).

Bog wood is a rare timber which is excavated from deep underground, usually as a by-product of turf cutting, or when bog-land is drained for agricultural use. The wood varies in age, usually ranging between 2,000 and 6,000 years old, although roots of bog yew up to 9,000 years old have been found. The wood has been preserved due to the unique conditions of the Turf bogs, which waterlog the wood and keep it free from oxygen and sunlight which would cause it to decay. The chemistry of the Bog also reacts with the wood and transforms its color, having a different effect upon the three regularly found species of Scots Pine (*déil portaigh*), Oak (*dáir portaigh*) and Yew (*iúr portaigh*). Bog pine is usually a rich red brown color, Bog Oak is usually jet black, but occasionally a very dark brown. Bog Yew is the rarest of the three and the most variable in terms of color, ranging from beige to dark brown while other pieces are streaked with red and purple. The latter two have never reached the popularity of bog oak as a carving medium.

One specific radiocarbon dating at Queen's University, Belfast confirms: " In providing dates along with sculptured wood, you can safely say, in the case of bog yew, that the date of the growth of the wood is between 2000 and 2200 BC and for the bog oak, the date of growth of the wood is between 3300 and 3600 BC" Dr. F. G. McCormack, Radiocarbon Research Unit.

Queens University in Belfast has tree ring records compiled from 4,000 year old bog oak and other ancient oak timbers that spans 7,000 years. A pine chronology for Ireland is also under development. The tree ring chronology allows accurate dating of anything made from oak or pine in Ireland.

Ancient Kauri

Ancient Kauri (*Agathis australis*) or Swamp Kauri refers to prehistoric Kauri forests, buried and preserved in peat up to 50,000 years ago in New Zealand's North Island, often referred to as the "Kauri Coast". Many of the trees grew for nearly 2000 years before they were buried. Some specimens are estimated to have a girth of over 40 feet (12 meters) and to have been as tall as 200 feet (60 meters).

Ancient Kauri is one of the most exotic woods in the world. It's an extremely old growth timber, but not one tree was cut down to harvest it. All the trees were felled thousands of years ago by natural forces.

Extraction of the logs is time consuming, expensive and technically difficult requiring skilled operators of heavy machinery. Working in wet conditions each log must be carefully brought to the surface. Once removed from the ground the log is assessed, then milled to yield the best grain and timber qualities. After the log has been removed, the area is then restored to its original contours with no environmental consequences.

Ancient Kauri pre-dates the migration of Neanderthal man into North America, the hunt for mammoths and cave paintings in Europe. The Kauri forest was already buried some 25,000 years before the on-set of the last Ice Age giving scientists an important insight into Earth's climatic past.

The shimmering streaks of iridescence found in some of the wilder grain patterns are referred to as whitebait and is a trademark appearance of the ancient timbers. This pattern is only found in ancient kauri and even then only in less than 1 percent of the wood harvested.

Bog Oak

The term bog-oak is often used to describe all types of bog-wood. There are three main types of bog-wood – oak (d'air portaigh), pine (d'ail portaigh) & yew (i'ur portaigh). All can be suitable for wood sculpture.

Ancient forests once covered Ireland. Huge oaks, yew and pine that grew and died since the last ice age, some 10,000 years ago. Some roots and trunks were buried in the wet marshy land, which was slowly developing into modern bogs. Much of the wood lay undisturbed for 7,000 years or more, preserved in an enclosed environment.

It is a rare timber, unique in color and texture, a finite resource, even a treasure!

Today, bogwood is mainly found through activities such as turf cutting and land drainage. In bogs where peat is being extracted commercially, tree stumps and trunks are dragged out of the peat with a mechanical digger to the edge of the bog. This is essential, as the wood remains, block peat milling machines. Since the 1940's, the timber has been left on the side of the bogs, piled high. It is this wood that artists take into their workshop to dry and use for carving.