Oak (Quercus robur L. & Quercus petraea (Mattuschka) Lieblein)

The natural distributions of oak species in Ireland are divided between sessile oak and pedunculate oak. Both species are native and have spread beyond their natural range due to agricultural activities and horticultural use. Sessile oak is more common and found throughout the country, while pedunculate oak is more prevalent in the southern and western regions.

Position in Irish Forestry

Oak is a staple species in Irish forestry, with a significant role in the timber supply and biodiversity. It is often the dominant species in mixed forests and is valued for its hard, durable wood, which is used in various sectors.

Uses & Markets

Oak timber is an important resource, used in various industries.

- **Construction**: Oak is used in the construction of houses, bridges, and other structures due to its durability and strength.
- **Furniture**: Oak is a preferred material for furniture making due to its aesthetics and durability.
- **Charcoal Production**: Oak is used in charcoal production, which is essential for the iron smelting industry.
- **Cooperage**: Oak staves and casks are made from oak timber, used for the production of whiskey and other spirits.
- **Firewood**: Quality oak wood is also used as firewood, valued for its long-lasting and even-burning properties.

Further Information

- Oak can be grown in a variety of soils, from acid to alkaline, as long as the pH is not too extreme. It is a shade-tolerant species that prefers well-drained, fertile soils.
- Oak saplings are often planted in young plantations, with a spacing of 4.5 to 5.0 metres between trees. Crown thinnings are carried out reducing the stocking to between 1,000 and 2,000 stems per hectare.
- Harvesting typically occurs when trees reach a top height of between 13 and 15 metres, although this may vary depending on the desired size of the timber.
- Oak trees are often thinned to ensure even growth and to prevent the development of epicormic branches. This is usually done at a height of 6 to 7 metres.

Silviculture & Management in Ireland

- **Thinning**: Thinning is a crucial aspect of oak management. It helps to control the growth of undesirable shoots and promotes the development of a strong, straight stem. Thinning is usually carried out between the ages of 20 and 25.
- **Stumps & Tops**: Stumps and tops are often removed to reduce competition and promote better growth of the remaining trees.
- **Diseases & Pests**: Oak trees are susceptible to various pests and diseases, including oak wilt, oak processionary moth, and the emerald ash borer. Management practices should be implemented to control these threats.

Further Reading

- National Forest Inventory of Ireland
- Oak Management Guide
- Irish Forestry Board
- Irish Oak Society

Additional Resources

- **Web Links**: [Irish Forestry Board](http://www.forestryboard.ie)
- **Books**: "The Oak Tree in Ireland: Its History, Management, and Use" by John O'Donnell
- **Videos**: "Managing Oak Forests in Ireland" by The Nature Conservancy

Quality oak is prized by furniture makers.