

The beauty of beech

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The European, or common, beech, *Fagus sylvatica*, is not native to Ireland and its origin and introduction date remain obscure but it thrives here and is frequently described as the “mother tree” of the forest, or the “lady of the woods.”

The species, which belongs to the same family as oak and chestnut, is renowned for its beauty, its excellent hedging potential and its benefits for wildlife. Beech hedges have been widespread throughout Ireland since the 18th century due mainly to young beech’s ability to extend branches into every conceivable gap in their vicinity, forming excellent barriers. These hedges usually retain their dead leaves throughout the winter.

Unfortunately this beautiful tree is particularly sensitive to a problem known as transplant shock, which accounts for its sometimes high mortality rates post-planting. In temperate areas of the world such as Ireland, beech is often planted in the dormant season as bare-root stock. The ideal bare-rooted beech plant should be well balanced, have a good shoot/root ratio and sturdy root collar/height ratio, with a fibrous root system.

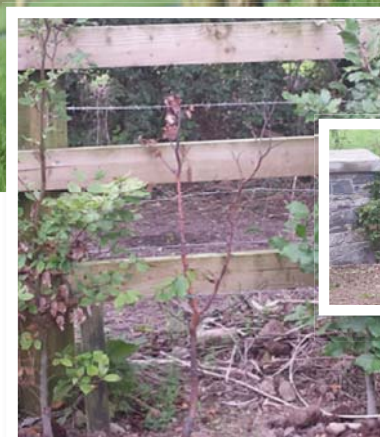
A 60-90cm tall plant with a 12mm plus root collar diameter generally meets these requirements and one should watch out for and discard any trees with severely unbalanced or ‘J’ shaped roots before planting.

Regrettably, bare-rooted beech transplants can be subjected to a series of potential stresses from harvest right through to planting. These stresses can range from extremes in temperature/desiccation during handling, planting and storage to root and shoot injury due to rough handling when transporting and planting.

If planting is delayed for any reason after delivery, bare-rooted beech plants should remain in their co-extruded (black on the inside white on the outside) bags in an upright position, and spaced about 25cm apart, not stacked on top of each other. They should be stored in a cool shaded area for no longer than three weeks. Farm buildings are generally ideal for storage. If planting is delayed for a prolonged period of time, stock must be heeled in. Young beech is a poor competitor with grasses and other ground vegetation compared with other tree species.



The Meikleour Beech Hedge in Scotland (Stokes and Rodgers, 2004)



Poorly planted 60/90cm beech 75% mortality rate

Beech will grow on a wide range of soils and it is a very thirsty tree but it cannot tolerate periodically or permanently wet or water-logged soils. Short periods of waterlogging, especially to small plants, are lethal but one should also note that beech will not survive on extremely dry sites.

Inadequate maintenance following transplanting, poor planting, poor site condition/preparation, planting at the wrong time of the year and poor plant handling techniques are some of the causes of failure leading to transplant shock. However, a little care at this critical stage in the life of a beech will be rewarded with decades, or even centuries, of the magnificent beauty of this relative newcomer to our shores.



Recognised by the *Guinness Book of Records* as the highest hedge in the world, the Meikleour

Beech Hedge located north of Dundee was planted in 1745 and is one-third of a mile long (530m) and 100ft (30m) high.

It is thought the men who planted it were called to fight in the Jacobite Rebellion and none of them returned alive. In tribute the trees were allowed to grow and the hedge acts as a living landmark to them. (Visit Scotland.)