



TREE PLANTING

Why plant trees?

Trees are the largest and longest living organisms on earth. Apart from their aesthetic beauty they are of both ecological and economic importance. The emergence of human civilisation itself was significantly based on trees as they provided food, fuel and shelter. Trees provide a rich habitat for a wealth of wildlife including birds, insects and even other plants! They store huge amounts of carbon dioxide and they help maintain the balance of gases in our atmosphere. Trees are responsible for purifying the air we breathe, as they remove harmful particles. They also provide shelter by acting as wind breakers, providing protection for agricultural crops and buildings and preventing soil erosion.

Trees provide the raw materials for many of the products we use, timber is used in the construction industry, to make furniture and fencing. Other tree products include the fruit we eat, cooking oils and materials such as rubber. Chemicals extracted from trees are also used as medicines throughout the world.

What trees should you plant?

It is important to plant native tree species as they will be better suited to the conditions and wildlife of your area. Prehistoric Ireland was carpeted in woodlands but today only 6% of our landscape is



covered by trees. Of this 6%, only 2% are broad-leaved trees such as oak and ash, the remaining 4% are introduced coniferous species which exhibit less biological diversity and cause soil acidification. A list of trees native to Ireland and other non-natives is provided below.

A species native to Ireland is one which arrived here before the end of the last ice age. Native species provide a habitat for native wildlife, birds, insects, mammals and other plants. Oak (*Quercus*) is a native species to Ireland which acts as host to 284 species of insects. Other native species such as hawthorn and willow also have large numbers of insects associated with them.

When to plant?

The best time of year to plant trees is between leaf fall in late autumn and leaf burst in late spring. Planting should be avoided during very cold spells. Some species have specific planting times, so it is best to check up first.

What size to plant?

- A 'standard' tree is one with a girth of 8-10cm and a height of 2.5-3m (approx.).
- A 'whip' is 40-120cm tall and is the most commonly planted. Whips have a far better chance of survival and in 5 years will be taller and healthier than a standard planted at the same time. Whips cost a fraction of the price of standards and don't need to be staked.

Trees for planting in Ireland...

Species	Soil Type	Natural Habitat
LARGE NATIVE TREES		
Native oak	clay, heavy loam	woods & rocky ground, mainly lowland
Ash	rich, moist & alkaline	hedges, woods & rocky places
Wych elm	moist, fertile soil	mountain glens beside rivers & streams
NON-NATIVE / NATURALISED SPECIES		
Beech	chalky, fertile soils	woods & hedgerows
Small leaved lime	basic, alkaline soils	woodlands on limestone soils
Hornbeam	clay, fertile soils	mixed woodlands and hedgerows
MEDIUM SIZED TREES		
Silver Birch	light sand, peats & gravel	beside lakes & inland bogs
Downy Birch	damp peaty soils	healthy ground
Alder	damp soils	riverside & lakeshore
Whitebeam	limestone & sandy	woods, cliffs & rocky places
SMALL TREES		
Hawthorn	any soil type	hedges, fields & rocky places



How to plant a tree

Step 1: Preparation - Careful preparation of the planting site is desirable to ensure that saplings mature into healthy trees. Do not plant saplings in areas overshadowed by tall trees, buildings or near walls. If the tree reaches 30m in height make sure that the planting site is at least that distance from walls or buildings. Test your soil type in order to ensure that the species you have chosen to plant are compatible. Collect all tools and materials necessary. Take them out to the area for planting.



Step 2: Making a hole - Firstly dig a hole big enough to take the root ball of the tree, there should be a distinct 'tide mark' on the trunk indicating the depth it was planted at in the nursery. Leave the turf to one side as you will need it later.



Step 3: Compost - Mix some well rotted manure, compost or leaf mould into soil if soil is stoney and poor.

Step 4: Roots - Dip the roots of the tree into water - this will help the tree survive. If the sapling is bare-rooted spread roots carefully and cover with soil. Shake the sapling to allow soil to cover roots and avoid large air pockets. If the young tree was grown in a container make sure that the root ball is firmly placed and surrounded with soil.



Step 5: Firm soil - When roots are covered, split the sod and place upside down to bring level with ground - watch the 'tide mark'. Firm the soil with back of your heel.



Step 6: Water - If the soil is dry, soak thoroughly after planting. You could also sink a piece of pipe, perforated with holes, into the planting pit to ensure that the water gets down to the roots and is not evaporated in dry weather.



Step 7: Ties - Trees up to 1m in height do not need a stake. Trees over 1m should be supported using a stake. The stake should be between one-quarter to one-third the length of the tree and should be tied at the bottom.



Step 8: Protection - If the sapling is exposed to grazing animals e.g. rabbits, deer, a plastic tree protector or metal mesh surround may be necessary.

Step 9: Timing - The best time to transplant saplings is from October to April. Autumn is the optimal time for many species. If the sapling has been grown in a container it may be planted at any time of the year.

Step 10: Aftercare - After the tree has been planted watch out for the signs of distress such as drought, wind exposure, disease or grazing.



Step 11: Planting more trees - Dig your next hole about one spade's length away. Avoid planting in straight rows and vary the species you choose.

Caring for trees after planting

Maintenance is as crucial to tree survival as correct planting, so there is no point in planting trees if you are not willing to provide aftercare. Maintenance should be applied for at least the first two growing seasons, and should involve the following:

- ✓ Maintain a 1m weed-free zone around the base of the tree. A mulch of organic material such as compost or well rotted manure, placed around the base of the tree will help conserve water and control weeds, therefore encouraging rapid establishment.
- ✓ Watering should be carried out regularly during the first two growing seasons. There is often a dry period during May and June, and many newly planted trees die at this time due to drought.
- ✓ Check the stakes and tie regularly. Remove these after two years if the tree has rooted well. If not, reduce the length of the stake by half.
- ✓ Cut back broken branches to a strong shoot or to the main trunk.
- ✓ Replace dead or vandalised trees at the end of the growing season.