



# Alder (Alnus glutinosa)

Alder is found throughout the National Park, particularly in damp habitats. The leaves are round and bright green with slightly wavy edges. These leaves fall from the trees in autumn. The flowers are borne in early spring on catkins and the female parts form long lasting woody cone-like fruits. The seeds are very light and can be carried by the wind. Timber cut from Alder is white at first, but turns red shortly after. This has led to many superstitions about the tree bleeding, but it was used to good effect as the wood was used to make shields in ancient times, the red adding to the dramatic effect in battle. As it grows, with its roots in water, this tree is useful to stabilise river banks. The wood does not rot in water, and Venice is built on pilings of alder. It was also used in Ireland in water mills. Alder roots also fix nitrogen from the air making the surrounding land more suitable for other trees and plants.

## Ash (Fraxinus excelsior)

Ash is a very common tree in the National Park, it grows tall and fairly straight. It has creamy grey bark, which has interesting 'hand-drawn' patterns, when young. These change to wavy lines as the tree gets older. The new leaves are protected by black shields, which are almost rubbery in texture. The leaves themselves are pinnate and are made up of leaflets, usually between 8 and 12 per leaf. These leaves are some of latest to come out in the forest. In autumn the leaflets fall, adding to the rich leaf litter. The seeds, which are also known as keys are arranged in large hanging groups, these are winged and fly off with the wind when ripe. They have a wonderful shape which allows them spin through the air. Ash is poisonous to cattle and sheep. This tree was a very important tree in ancient times as the timber was used for the making of spears and javelins. The wood is strong but has some give in it which meant it could bend slightly when it hit its target. It was also used to make parts of chariots and carts as the 'spring' in the wood stopped it from breaking. Now of course Ash is used in the making of hurlies, and the game of hurling is known as the clash of the ash.











## Beech (*Fagus sylvatica*)

Beech is a deciduous tree which is not native to Ireland, coming originally from central Europe. It has insignificant flowers in spring, which are followed by bright oval leaves with wavy margins. In early spring these leaves may be eaten in a salad and may be used to make a drink called beech leaf noyau. In autumn the seeds, are protected by round spiky pods knows as mast. These contain two triangular seeds which are edible. It can become very large with a big crown which blocks out light, creating a deep shade. This shade blocks the regeneration of new plants. After leaf fall the ground below the tree is covered with leaves and spent mast, which crunch as you walk over them. Timber from beech was very important for furniture and house building. The beeches here in Connemara National Park were most likely planted by James and Mary Ellis.



# Downy Birch & Silver Birch (Betula pubescens & Betula pendula)

These two trees are fairly common throughout the National Park, and they are hardy trees which can withstand a lot of wind. The leaves of birch are small and have coarsely toothed margins. Yellow/green catkins appear in spring, the catkins on Silver birch are slightly longer. The bark of birch is smooth and can be any colour from grey to silver to copper, this bark peels away in strips exposing an almost white bark underneath. The trunk and branches are often covered with lichens and mosses, which make it popular with birds, both as a feeding station and as material for nest building. Sometimes we can see strange growths on these trees, which are known as witch's brooms or bird's nests. These may be caused by a fungus, a disease, or insect attack; it is the tree defending itself by clumping the growth in that particular area. These growths don't normally affect the tree, but in the area of the growth, there are no leaves so this affects the photosynthesis process. Birch trees were one of the first trees to colonise the land after the ice age and is still associated with the tundra ecosystem.

#### Bog Myrtle (Myrica gale)

This very low growing deciduous shrub or sub-tree grows in boggy areas of Connemara National Park and can be seen on the yellow and blue trails. Brown stems carry aromatic oval leaves which are green/grey and leathery. These leaves which are spirally arranged have a sweet resinous smell when brushed against. Oval male catkins which are orange and hanging brown female catkins are borne on separate bushes, and appear before the roots have nitrogen-fixing actinobacteria, which enable the plants to grow in their harsh conditions. The plant was used in the production of beer in the past, and some modern breweries are again using it in their craft beers. The plant can also be used as an insect repellent and was often used by campers and woodsmen to keep flies and midges at bay. Women should keep away from this plant as it may affect their health, especially while pregnant.







# Hawthorn (Crategus monogyna)

A very hardy, long lived deciduous, tree which can be found throughout the Park. Well grown and sheltered ones grow straight, while more exposed ones are twisted bent by the wind. It has small, shiny oval leaves which are divided with 4-7 pairs of lobes. flowers appear in May, giving this tree the common name of may bush or whitethorn. These flowers are attractive to bees. The flowers and new leaves are edible and make a wonderful and refreshing tea. In autumn the tree is covered in red fruits or haws, which are a great favourite with birds. These are edible and good for you, but can seem a lot of work for very little, this has given rise to an old saying, 'welcome haws when all fruit fails'. The branches and twigs are covered with strong very sharp thorns, which led to the tree being used in hedgerows and as a protection around houses. These thorns also offer shelter to bird life especially at nesting time. This tree is the fairy tree and holds a special place in the minds of most Irish people. You would never cut one down, especially a lone one, in fact the Galway-Limerick motorway was redirected around one such tree. People would never cut flowers from the tree or bring any into a house as it was thought to be bad luck.

### Hazel (Corylus avellana)

This small tree or shrub, is one of the first to colonize cleared land and it plays an important role in the conditions for new forest. The leaves are almost round with many indents around the edge. They are a mid to light green in colour. Male catkins appear on the tree during the winter, and in early spring tiny red, female flowers appear, a hand lens is needed to see these flowers. In autumn nuts appear as paired or sometimes more clusters at the tip of branches. These may be gathered as food, in ancient times people depended on hazelnuts as a food source. Hazel was also coppiced and long thin branches allowed to grow. These were cut and used in the construction of houses, being so flexible they were woven for the wall of these early houses. They are still used in the construction of wattle fences.











### Holly (*Ilex aquifolium*)

These evergreen trees, are a very familiar sight in woodlands throughout Connemara National Park. Their stiffy, leathery, green leaves have spiny margins, which help protect the trees from grazers. These spikes tend to disappear as the tree grows taller and often smooth leaves are to be found higher up the tree. insignificant white flowers appear in spring, which are followed by green berries which turn bright red in the winter. These berries are a favourite food source for many birds. The berries are not consumed by humans, although we cut many branches and trees as decoration at Christmas time. Holly is also another early colonizer of cleared land. Holly also makes a great stock proof fence, and along with hawthorn it is regularly used as a hedge.







This deciduous tree is not native, but has been widely planted throughout Ireland. It is one of the first trees to come into leaf in the National Park. Before the leaves appear, they are covered by a sticky cover. White/pink flowers cover the tree in early summer and these are loved by bees. In a good growing season, the tree produces a good crop of green fruits which contain two or more brown nuts, or conkers. These were well known to young people who played conkers, I suspect that this was more of a pastime in former times than at present. The name horse chestnut comes from a curious mark on small branches, if you look carefully you will see horseshoe shapes on the bark, these even have holes for the nails. These trees were probably planted by the Ellis family.

# Juniper (Juniperus communis)

Here in Connemara National Park, this tree is normally only found on the mountain tops, and then in its prostrate form. The trees have stiff blue/green needle like leaves arranged in threes. Male and female flowers are found on separate plants. The female flowers are green maturing to blue/black berries. These berries are best known for flavouring gin, in fact that word is a corruption of the Dutch genever. Juniper berries are also used to make a rich wine sauce for game especially venison.



### Common Lime (Tilia x vulgaris)





Not native to Ireland, this deciduous tree was very popular on estates. It is an easily recognised tree at any time of the year, as its base is surrounded by new growth; this growth is coloured red and the leaves are protected by a red covering. The leaves are heart shaped and edible when young. During the summer the leaves cover the flowers and fruits, these vellow/white flowers are fairly small, but appear bigger as they are backed by a long wing like bract. The small hard seeds take over from these flowers but stay attached to the bracts. The flowers and bracts can be picked and dried for a relaxing tea. The wood of lime is very light and trees get damaged fairly easily. Another curiosity associated with lime, though not exclusively, is that you often find flattened branches, these are known as fasciations, or cresting and are the result of a hormonal imbalance or bacterial or viral attack. These flat branches send masses of new branches up and down to counteract this imbalance. Sometime we also find red growths on lime leaves, these are lime nail galls, caused by a mite. Each red gall is known as a pouch and may contain hundreds of larvae by the end of the summer.



## Sessile Oak (Quercus petraea)



This is the king of trees in Ireland, and grows in a mixture of soils from rich, through to poor acidic soils. The leaves are irregular and shallowly lobed with an oblong shape. Small flowers which are red/green appear in May and these are followed by the leaves which burst from tightly packed branch tips. Oaks are slow growing but they produce a vast amount of leaves that carpet the forest floor around them. The acorns have no stalks and spring from the twigs, these provide a food source for birds and other animals. The oak is traditionally associated with strength and kingship. It is the most important tree for biodiversity with over 20 species of bird and over 200 species of invertebrates making use of it. The oak is also associated with over 1,600 place names in the country, such as Kildare, Derry and Derryclare. Various oaks also suffer from two easily recognizable galls. Oak apple gall, which is caused by a gall wasp, who lays her eggs inside a dormant leaf bud. These develop into red fruits similar to an apple, these usually drop off in June. The second gall is the oak marble gall, caused by another wasp, which was intentionally introduced from southern Europe in the 1800's because the galls have a high tannin content that was used in tanning leather. The hard outer shells stay on the tree.

## Rowan (Sorbus aucuparia)

This tree is also known as mountain ash, due its leaves being slightly similar to Ash leaves. This is a good tree for mountains and rough places, but is at its best in sheltered areas. The leaves are made up of 5 – 10 leaflets which colour well in autumn. In the spring the tree is covered with white flowers and these are followed in autumn by red berries. You cannot eat these berries, but they can be harvested and cooked, they make a good savoury jelly. The berries are an important food supply for birds and other wildlife. The tree was used as a protection against the little people, and a small branch of it would be tied to a churn to stop the butter from being spoiled.







# Scots Pine (Pinus sylvestris)

There is an ongoing debate as to whether any native trees are to be found Ireland or not, but it is felt that some of the original stock survived in remoter parts of Connemara. Most of the others would come from imported stock. This tree is very hardy and can withstand storms and gales like few others. The needles are blue/green and paired. The lower branches die back or are carried up to the top where they form large crowns, which spread outwards as the tree ages. The trunk of the tree is covered in soft spongy material very often with mosses and lichens attached. The male cones are yellow and the more familiar female ones are green when young becoming grey/brown when older. When dried these release their seed. The trees here in Connemara National Park were probably planted by The Ellis Family.





# Sitka spruce (Picea sitchensis)

Not an Irish native, this tree comes from the northwest coast of America, found in Canada, and Alaska. It takes its name from the town of Sitka which was the capital of Russian Alaska. Here in Ireland, Sitka spruce are widely used in forestry plantations. Here in Connemara National Park, they are used as dot planting, and have been allowed to grow to full size. The evergreen foliage, is blue/green, the needles are flat, stiff and pointed, very soft when new, but gradually they become pressed against branches as they age. The seeds are found in in cigar shaped cones, which are golden brown. The new growth tips can be added to sugar and put in a sunny spot where a kind of honey will be produced, they are also good at curing chesty coughs.

# Sycamore (Acer seudoplatanus)

This is not a native tree, which is getting a bad press at present, as it spreads very rapidly due to its winged seeds. It is now joining the ranks of the invasive plants along with Rhododendron ponticum, and Japanese knotweed. The leaves are five lobed with toothed margins and nave a pinkish colour when new. The flowers hang down from the twigs and are yellow/green. The seeds which replace them in pairs and form an angle of 90 degrees. When ripe at the end of summer or early autumn, they split apart and spin off through the air. People will recognize these seeds and they are often know as helicopters. These seeds are driven far away from the parent tree to start a new plant. Most people would be familiar with them sprouting from gutters. The leaves may be covered with black spot (a fungus) before they fall, and when they do fall they densely cover the ground killing off the undergrowth. They originals may have been planted by James and Mary Ellis as the trees are useful as shelter belts, and they are fairly salt resistant.









## Wych elm (*Ulmus glabra*)

This is the only native elm in Ireland and was originally found growing in the mountains. It is a tree that you would hardly notice throughout the year, but in spring it is very obvious. Clusters of red or yellow flowers are seen on bare branches. These are followed by a mass of flat yellow/green seeds with a small redish dot in the centre. These seed are edible, and have a nutty flavor and look good in salads. The leaves are dark green with 9 to 11 prominent veins, and are have toothed edges, they become very rough to the touch as they grow older. The base of the leaf is asymmetrical with one side overlapping the short stalk. The name wych comes from old English and refers to pliant or bendable. The wood was used for the production of chairs and also for longbows. Early people believed that wych elm protected the dead, and coffins would be made from the wood.

To discover more about Ireland's trees see the Tree Council of Ireland:

https://www.treecouncil.ie/