

ALDER *Alnus glutinosa*

LATIN EXPLANATION. *al-nus*; Latin name for alder. *glu-tin-o-sa*; sticky (the foliage).

HEIGHT - A deciduous waterside tree exceptionally reaching 30m, but usually to 15m (45ft) or so.

SOIL TYPE - It is tolerant of a wide range of soils but grows best where the pH is above 6. It is able to withstand prolonged waterlogging around its roots, developing nitrogen-fixing nodules. For this reason it is also often successful on reclaimed land. Alder is happiest when it is growing in moist loam, upon which rain or floods have washed down good layers of humus from a higher elevation. If it is growing in a particularly porous soil, the alder becomes merely a big bush.

HABITAT - Alder is found frequently alongside streams and in marshland where it can become dominant in areas that are not permanently flooded. One of our three natural woodland types is wet woodland, of which alder would be an important component. This is now quite uncommon in Northern Ireland.

SHAPE - When young it has a strong single trunk and is conical in outline, but it becomes broad-headed with age. Young trees grow quickly when in suitable conditions and are capable of growing by as much as a metre a year at this stage. Adventitious roots (those which grow at an unusual location) are sometimes produced from near the base of the stems and help to support the tree in unstable ground. These are particularly common on coppiced plants.

ASSOCIATED SPECIES - Alder buckthorn (*Frangula alnus*), ash (*Fraxinus excelsior*), downy birch (*Betula pubescens*), guelder rose (*Viburnum opulus*), willows (*Salix spp.*)

DISTRIBUTION - Alder is widely distributed throughout Ireland, occurring from sea level up to 500m.

FLOWERS & SEEDS - Alder flowers during February and March. Male catkins are between 5 and 10cm long and shed copious amounts of pollen. The female flowers, immature cones, develop into 1-2cm long woody cones by October, ripening from green to brown. Alder seed is distributed by wind and on water.

INTERESTING FACTS

- Seedlings survive waterlogging, but require high levels of light, humidity and oxygen, which restricts natural establishment to river banks and mud, but mature alder woods do not seem to provide conditions suitable for successful regeneration.
- Alder propagate well vegetatively. Cuttings (0.6-1m (2-3ft) long) taken in the autumn and kept over winter with their ends in water will grow well after planting them in the spring.
- Alder has 141 phytophagous (plant-eating) insect species associated with it.
- It has a hard but easily carved yellow timber that is still used occasionally as the traditional material for the soles of clogs or wooden shoes.
- Alder trees put more nitrogen in the soil than they use, so they build up fertility. Alder woodlands, when cleared and drained, will yield heavy crops provided the ground is dry enough. The fertile fens of East Anglia once supported many alder thickets.
- An established alder also has a deep-probing tap-root, about 150cm (5ft) long, which enables the tree to survive falling water levels during drought.
- The name alder comes from the Anglo-Saxon *aler* and is a common element in place names; Aldershot, for example, means alderwood.
- When dry, alder wood is water-resistant, and it does not split when nailed. It is also used for broom and tool handles.



Alder cones ready to ripen in late-summer.

Alder seed extracted in a nursery.

