

Common alder

(*Alnus glutinosa* (L.) Gaertn.)

Distribution & Provenance

Common or black alder is a native tree to Ireland and has a natural range extending right across central Europe and as far east as the Caspian sea. There are many different species of alder distributed throughout the northern hemisphere but common alder is the only one native to Ireland. Alder is a pioneer species and is thought to have been one of the first species to recolonise large parts of Ireland after the last ice age 10,000 years ago. Alder transplants planted in Ireland are virtually all derived from local seed sources.



Natural distribution of common alder

Silviculture & Management in Ireland

Alder grows on wet sites, typically along lake, stream and river banks, but not exclusively so. It is tolerant of a wide pH range but grows best on soils of pH 4.0 – 7.5. It is a hardy species, tolerant of late spring and early autumn frosts and, being relatively deep rooting, is also tolerant of wind. However, it dislikes any form of drought and young trees can die in drought conditions. It regenerates naturally on damp, muddy ground, the seed being carried both by wind and on water. Alder is a pioneering, light demanding species and grows very vigorously in its early years. It will rarely grow taller than 20 metres in height and is a relatively short lived tree, attaining full development within 30 – 40 years. Thinning needs to be regular if optimum stem development is sought.

Alder is a coppicing species and has often been managed on such a basis in the past for the production of farm timber such as firewood and small poles. Alders are often seen as multi stemmed trees because of their coppicing ability.

In general, browsing by domestic stock or other herbivores does not cause serious problems to alder as animals tend to eat the leaves only and not the stem or bark. This is because alder bark has a high, unpalatable, tannin content.



Mature, free standing common alder

Non Timber Benefits

Common alder is capable of fixing atmospheric nitrogen and is therefore a useful species in soil improvement. The same feature makes alder a very useful 'nurse' for growing in mixture with other more commercial species. As well as providing nitrogen for the accompanying species it is also a very effective provider of shelter, which is of critical importance in the establishment of other, particularly broadleaved, species.



Alder sprig showing catkins

Its one disadvantage as a nurse species is that it often competes with the main species for space and light if it is not cut back at the appropriate time. As a native species, alder fits naturally into the Irish landscape, is a component of riparian woodlands, and provides an attractive range of colour in the landscape over the seasons, particularly in winter with its striking branches and in spring when its catkins are seen.

Position in Irish Forestry

Alder, having colonised Ireland after the last ice age, was abundant in historical times and its probable use was for hedging and providing material for wattles. Archaeological records from the late bronze age and iron age show that alder was used in the manufacture of shields. Its Irish name, Fearnóg, frequently features in Irish place names such as Ferns in Co. Wexford and Ferney in Co. Fermanagh. Alder has rarely been planted as a stand alone species in Irish forestry but is more frequently used for its non timber benefits of site improvement, nursing and shelter. Alder is now a grant aided species and there are currently approximately 2 million alder transplants produced and sold by Irish nurseries each year. Coillte, the Irish Forestry Board, currently manage an area of over 800 hectares of alder in Ireland. Considerably greater areas are known to exist under private and public ownership.



Alder is an important component of riparian woodland

Uses & Markets

Alder wood has a coarse texture and turns light reddish brown when dried. It is not commonly used as a structural timber but is becoming increasingly popular in furniture making and in door manufacture. In eastern Europe it has been successfully used for plywood manufacture. As a native timber it has many traditional uses such as in charcoal production, turning, leather tanning and musical instrument manufacture. In the Netherlands, alder is the traditional timber used in the manufacture of clogs.

Further Information

Further information on growing alder can be obtained from your local Forest Service Inspector or any Professional Forester.



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