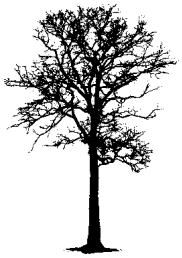
The Alder Tree



Alnus glutinosa

Alder is a member of the birch family of trees, Betulaceae, and can reach 25 metres in height, although in Scotland it is rarely more than 20 metres tall. Like the birches, it is a pioneer species which grows quickly and is relatively short-lived, with the maximum age typically being 150 years.

Alder is the most common tree species in riparian forests,(woods growing alongside water) and it plays a crucial role in these stream- and loch-edge woodlands. As a deep-rooted species, it helps to maintain the soil in river banks and reduces the effects of erosion. Alder root systems which are exposed in the water give shelter to fish during times of high water flow, and provide a safe refuge from predators. Alder foliage provides shade which is beneficial to fish, including salmon and brown trout and its leaves, which are relatively quick to decompose in water, provide nutrients for invertebrates such as the larvae of caddisflies, stoneflies and water beetles. These in turn form part of the aquatic food web, and are eaten by larger organisms, including salmonid fish.

Alder is a key riparian tree. It has special bacteria on its root nodules, which enable the tree to fix atmospheric nitrogen into the soil. In this way it contributes to improving soil fertility, and through its leaves which fall into the water, to increasing the nutrient input in upland streams, where nutrients are often in short supply.

Identification

http://www.treesforlife.org.uk/forest/species/alder.html