



Alnus glutinosa Common Alder¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

A popular tree of moist to wet soils, common alder is a moderate to fast-growing (two feet per year) deciduous tree which usually grows to 40 to 50 feet in height with a 20 to 40-foot spread and a 12 to 18-inch trunk but is capable of reaching 80 feet in height in the woods (Fig. 1). It is not native but has escaped from cultivation and will form pure stands or thickets in disturbed wet sites. Pyramidal when young, common alder often has multiple stems making it ideal for use as a screen or specimen, the trees eventually becoming more rounded or oval as they mature. The two to four-inch-wide, dark green, roundish leaves with toothed edges and pale undersides are joined in spring by rather insignificant male and female flowers. Foliage remains green well into the fall. It is the fruits which are most interesting, small, nutlike, one-inch "cones" which persist throughout the fall and winter, long after the darkening leaves have fallen. These fruits, along with the attractive, dark brown, furrowed bark and multi-stemmed growth habit, make common alder an attractive landscape specimen throughout the winter. The fruits are food for a variety of wildlife.

GENERAL INFORMATION

Scientific name: Alnus glutinosa

Pronunciation: AL-nus gloo-tih-N0-suh

Common name(s): Common Alder, Black Alder,

European Alder **Family:** *Betulaceae*

USDA hardiness zones: 3 through 7 (Fig. 2)

Origin: not native to North America

Uses: reclamation plant; screen; shade tree; specimen

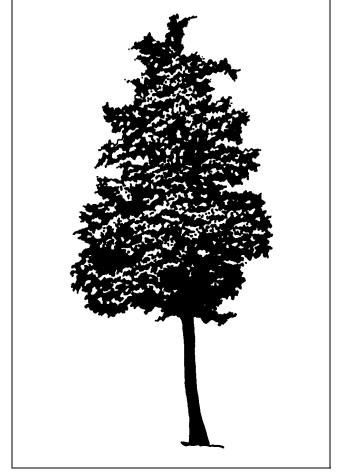


Figure 1. Mature Common Alder.

Availability: grown in small quantities by a small

number of nurseries

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^{2.} Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.

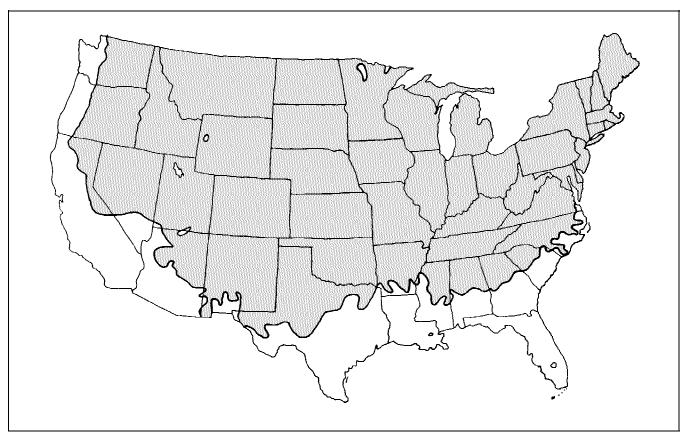


Figure 2. Shaded area represents potential planting range.

DESCRIPTION

Height: 40 to 50 feet **Spread:** 20 to 40 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more

or less identical crown forms **Crown shape:** oval; pyramidal

Crown density: dense Growth rate: medium Texture: coarse

Foliage

Leaf arrangement: alternate (Fig. 3)

Leaf type: simple

Leaf margin: double serrate; serrate

Leaf shape: orbiculate Leaf venation: pinnate

Leaf type and persistence: deciduous **Leaf blade length:** 2 to 4 inches

Leaf color: green

Fall color: no fall color change Fall characteristic: not showy

Flower

Flower color: purple; red

Flower characteristics: inconspicuous and not

showy; spring flowering

Fruit

Fruit shape: elongated; oval Fruit length: < .5 inch Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; no significant litter problem; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: grow mostly upright and will not droop; showy trunk; should be grown with a single

leader; no thorns

Pruning requirement: requires pruning to develop

strong structure **Breakage:** resistant

Current year twig color: brown; gray
Current year twig thickness: medium; thin

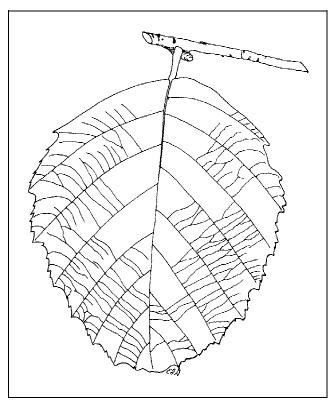


Figure 3. Foliage of Common Alder.

Culture

Light requirement: tree grows in part shade/part sun;

tree grows in full sun

Soil tolerances: clay; loam; sand; acidic; alkaline;

extended flooding; well-drained

Drought tolerance: moderate

Aerosol salt tolerance: moderate

Soil salt tolerance: moderate

Other

Roots: surface roots are usually not a problem **Winter interest:** tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers

Outstanding tree: tree has outstanding ornamental

features and could be planted more **Invasive potential:** No entries found.

Ozone sensitivity: tolerant

Verticillium wilt susceptibility: not known to be

susceptible

Pest resistance: long-term health usually not

affected by pests

USE AND MANAGEMENT

A good plant for establishing along stream banks to stabilize soil and add interest, alder can also be used as a specimen in a more formal landscape where wet soil challenges most other plants. It can be pruned to one central leader or used as a multi-stemmed specimen. Branches on central-leadered trees form attractive horizontal layers unlike most other trees. Similar to the dogwoods in this respect. Unfortunately, it is usually not grown in nurseries but nursery operators should be encouraged to grow this adaptable tree.

Common alder will grow easily in full sun or partial shade in almost any landscape setting since the trees are able to "fix" nitrogen, or take it out of the soil atmosphere, enabling these trees to grow in the poorest and wettest soils where other trees might fail. Common alder will grow best in wet or moist soils, acid or alkaline, and have even been observed growing with roots submerged in water, but it is also tolerant of moderate drought, compaction, and urban stress. Common alder transplants easily and will seed itself into an area creating a thicket if it is planted and left alone in an area which is not maintained.

Cultivars include: 'Aurea', golden yellow leaves; 'Fastigiata' - narrow, upright form; 'Laciniata' leaves not as deeply lobed, vigorous growth; 'Pyramidalis', upright or columnar form to 50 feet tall, 25 feet wide.

Propagation is by seed. Cultivars are grafted onto seedling root stock.

Pests

Leaf miners, tent caterpillars. Tent caterpillars can cause significant defoliation but trees normally recover.

Diseases

Powdery mildew and cankers but these are usually not serious.