



Pinus flexilis 'Columnaris' Columnar Limber Pine¹

Edward F. Gilman and Dennis G. Watson²

INTRODUCTION

This cultivar of the North American native tree, probably 30 to 50 feet high and 10 feet wide, has a fairly narrow, silhouette (Fig. 1). The 2.5 to 3.5-inch-long, dark blue/green needles are joined by light brown, 1.5-inch-wide, hanging cones which add to the tree's overall attractiveness. Limber Pine is so-named due to the flexible nature of the branches. Young branches can literally be tied into a knot. The tree has the overall look of a White Pine when it is young.

GENERAL INFORMATION

Scientific name: *Pinus flexilis* 'Columnaris'

Pronunciation: PIE-nus FLECK-sih-liss

Common name(s): Columnar Limber Pine

Family: *Pinaceae*

USDA hardiness zones: 5 through 7A (Fig. 2)

Origin: native to North America

Uses: Bonsai; container or above-ground planter; specimen; no proven urban tolerance

Availability: grown in small quantities by a small number of nurseries

DESCRIPTION

Height: 30 to 50 feet

Spread: 10 to 12 feet

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

Crown shape: columnar

Crown density: dense

Growth rate: slow

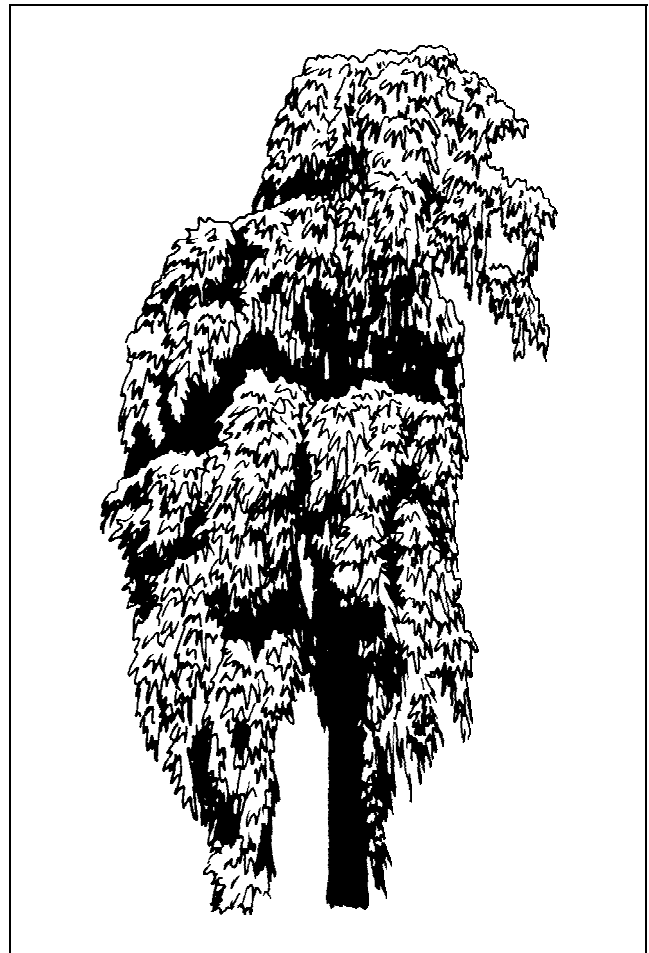


Figure 1. Mature Columnar Limber Pine.

Texture: fine

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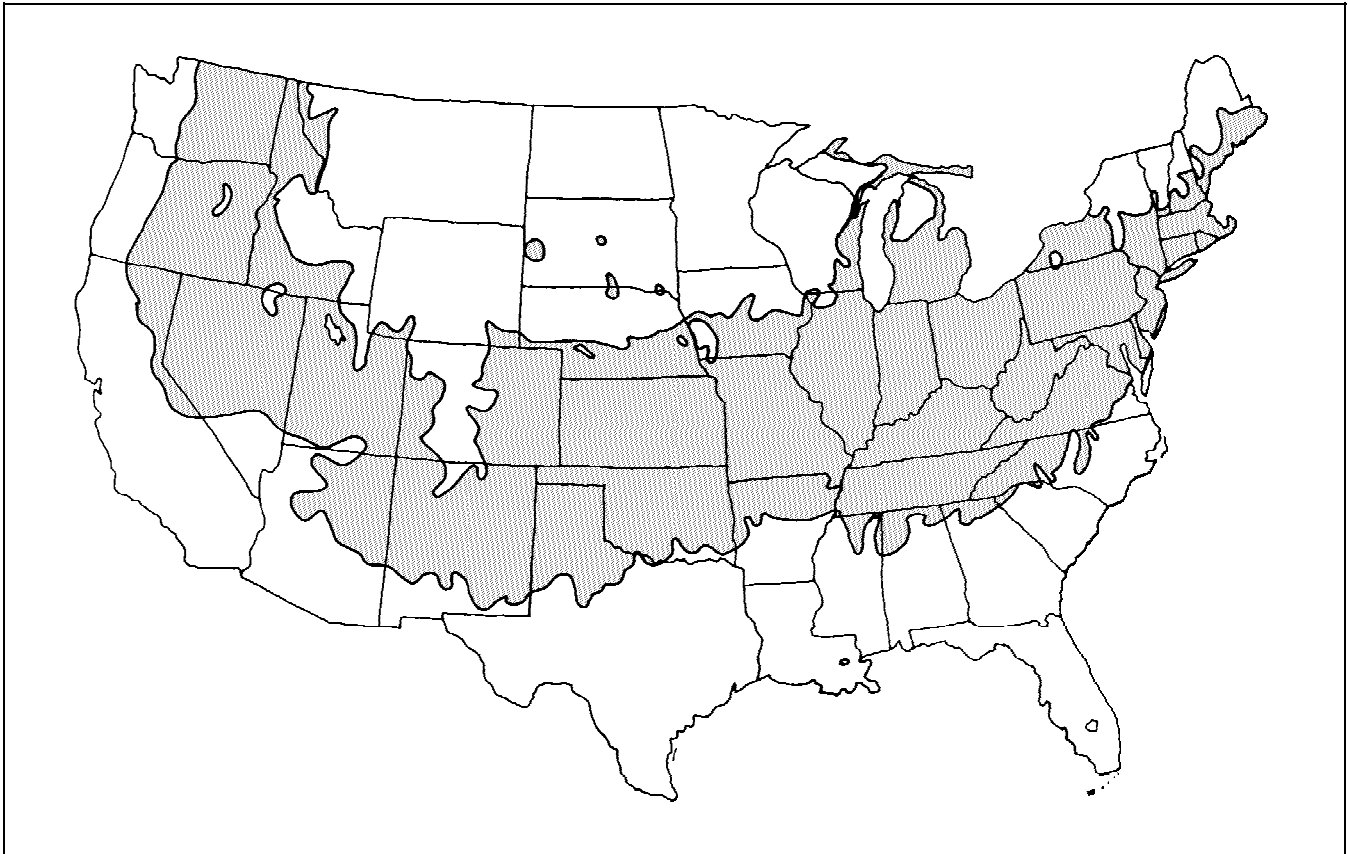


Figure 2. Shaded area represents potential planting range.

Foliage

Leaf arrangement: spiral

Leaf type: simple

Leaf margin: entire

Leaf shape: needle-like (filiform)

Leaf venation: parallel

Leaf type and persistence: evergreen; fragrant;
needle leaf evergreen

Leaf blade length: 2 to 4 inches

Leaf color: blue or blue-green; green

Fall color: no fall color change

Fall characteristic: not showy

Flower

Flower color: yellow

Flower characteristics: inconspicuous and not
showy; spring flowering

Fruit

Fruit shape: elongated

Fruit length: 3 to 6 inches

Fruit covering: dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; fruit,
twigs, or foliage cause significant litter; persistent on
the tree; showy

Trunk and Branches

Trunk/bark/branches: bark is thin and easily
damaged from mechanical impact; routinely grown
with, or trainable to be grown with, multiple trunks;
grow mostly upright and will not droop; not
particularly showy; tree wants to grow with several
trunks but can be trained to grow with a single trunk;
no thorns

Pruning requirement: requires pruning to develop
strong structure

Breakage: resistant

Current year twig color: green

Current year twig thickness: medium

Culture

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

Soil tolerances: clay; loam; sand; acidic;
occasionally wet; alkaline; well-drained

Drought tolerance: high

Other

Roots: surface roots are usually not a problem

Winter interest: no special winter interest

Outstanding tree: tree has outstanding ornamental features and could be planted more

Invasive potential: little, if any, potential at this time

Verticillium wilt susceptibility: not known to be susceptible

Pest resistance: long-term health usually not affected by pests

USE AND MANAGEMENT

Limber Pine grows best in full sun or partial shade on moist, well-drained soil but will easily adapt to harsher sites. Some horticulturists say they grow better under poor cultural conditions of drought and compacted clay soil. It adapts to wet soil by growing a shallow root system. One of the most tolerant of cold, windy weather in the winter and is not cold damaged when most other Pines show needle browning.

A few of the other cultivars include: 'Glauca', foliage is a deeper blue/green than the species; 'Glauca Pendula', irregular, wide-spreading shrub with blue/green needles; 'Glenmore Dwarf', small, upright, pyramidal tree with blue/grey foliage; 'Nana', dwarf bushy type; and 'Pendula', wide, weeping silhouette.

Propagation is by seed.

Pests and Diseases

There are a large number of pests and diseases on Pine.