



Pinus palustris Longleaf Pine¹

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INTRODUCTION

This beautiful, native North American pine tree is capable of reaching 80 to 125 feet in height with a 30 to 40-foot-spread but is more often seen smaller (Fig. 1). It is usually saved on a construction site for use as a specimen in the landscape or for providing dappled shade. Be sure to protect the area beneath the dripline from heavy equipment during construction. Longleaf Pine stays in its tufted, grass-like stage for five to seven years after germinating, growing very slowly while it develops a root system, then takes off at a moderate rate. The bright green, evergreen needles are up to 14 inches long and very flexible, giving an almost weeping effect to the tree. A distinctive characteristic of Longleaf Pine is the new growth clusters, or buds, which are silvery white during the winter. The inconspicuous spring flowers are followed by a large, spiny cone, 6 to 10 inches long, which persist on the tree for a couple of years.

GENERAL INFORMATION

Scientific name: *Pinus palustris*

Pronunciation: PIE-nus pal-US-triss

Common name(s): Longleaf Pine

Family: *Pinaceae*

USDA hardiness zones: 7 through 10A (Fig. 2)

Origin: native to North America

Uses: reclamation plant; shade tree; specimen; no proven urban tolerance

Availability: somewhat available, may have to go out of the region to find the tree

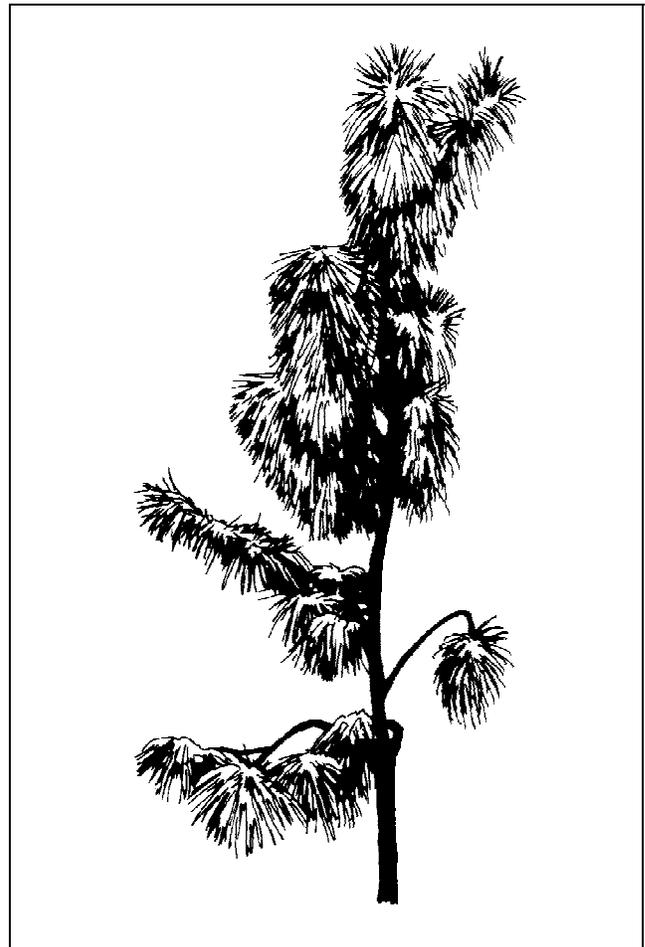


Figure 1. Young Longleaf Pine.

DESCRIPTION

Height: 60 to 80 feet

Spread: 30 to 40 feet

Crown uniformity: irregular outline or silhouette

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Figure 2. Shaded area represents potential planting range.

Crown shape: oval
Crown density: open
Growth rate: fast
Texture: fine

Foliage

Leaf arrangement: spiral (Fig. 3)
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: 12 to 18 inches; 8 to 12 inches
Leaf color: 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: 6 to 12 inches
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: attracts squirrels and other mammals; fruit, twigs, or foliage cause significant litter; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; showy trunk; should be grown with a single leader; no thorns
Pruning requirement: needs little pruning to develop a strong structure
Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break
Current year twig color: brown
Current year twig thickness: stout
Wood specific gravity: 0.59

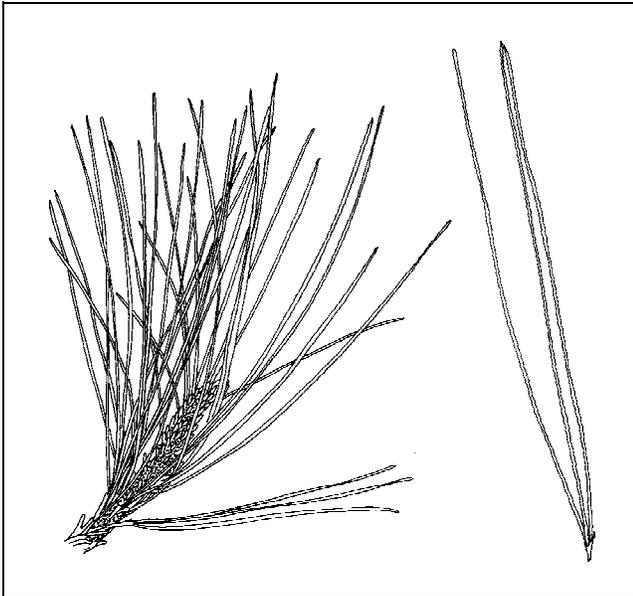


Figure 3. Foliage of Longleaf Pine.

Longleaf Pine should be grown in full sun or partial shade on well-drained, acidic soil. Once established, trees are very drought-tolerant and require no irrigation for survival.

Propagation is by seed. Seedling trees in the wild usually transplant poorly due to a long tap root.

Pests

Some of its pests are borers, sawflies, pine-shoot moth, and pine weevils. Pine bark beetles will occasionally attack old trees which are stressed.

Diseases

No diseases are of major concern. This plant is resistant to fusiform rust.

Culture

Light requirement: tree grows in full sun

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

Drought tolerance: high

Aerosol salt 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

Longleaf Pine is not usually planted in landscapes, but could be used due to its beautiful bark and nice, open habit. It would be suited for planting in large landscapes, such as golf courses and parks, and in other areas with plenty of overhead space. It would probably adapt to the hot conditions created near concrete and asphalt, but dropping needles often discourage people from planting pines near streets or other pavement. This may be a small price to pay for having this tree in the landscape. If people would start planting this tree, it might catch on as Slash Pine has in parts of the South.