

## *Pinus palustris* Longleaf Pine<sup>1</sup>

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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

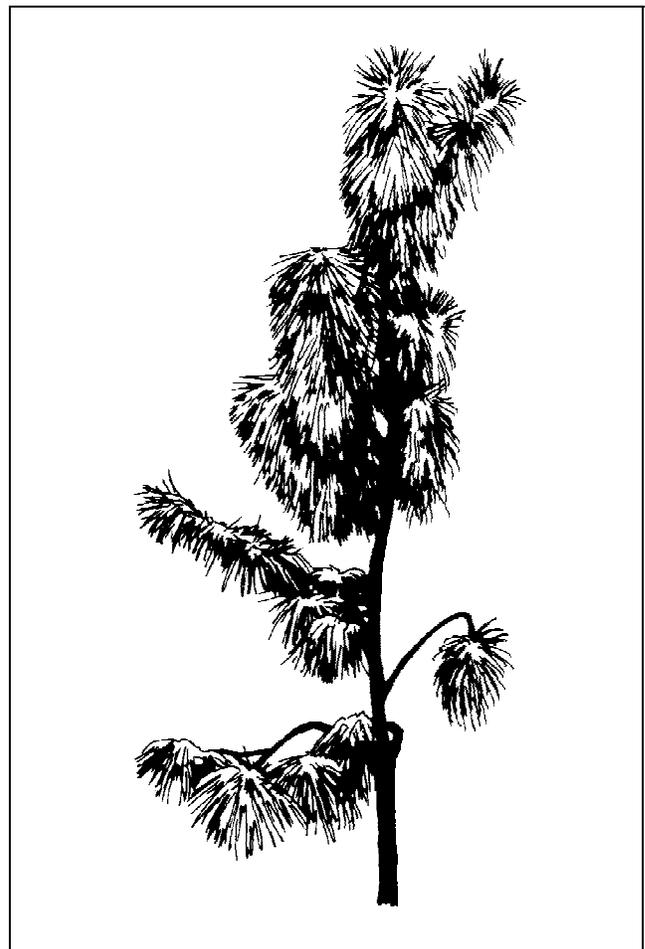


Figure 1. Young Longleaf Pine.

### DESCRIPTION

**Height:** 60 to 80 feet

**Spread:** 30 to 40 feet

**Crown uniformity:** irregular outline or silhouette

1. This document is adapted from Fact Sheet ST-469, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.
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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.