

Pinus taeda: Loblolly Pine¹

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Introduction

Loblolly pine is a North American native which is usually seen from 50 to 80 feet tall with a 35-foot-spread though it is capable of reaching more than 150 feet in height. This extremely fast-growing pine is pyramidal when young making it ideal for screening but loses its lower limbs as it grows older becoming a tall, stately specimen, windbreak, or dappled-shade tree. The six to nine-inch-long evergreen needles turn light green to brown during the winter. The often-paired cones are three to six inches long, red/brown, and have very sharp spines. They persist on the tree for several years and mature in the fall. The bark of loblolly pine is very thick which helps make this tree very resistant to fire in the wild.

General Information

Scientific name: *Pinus taeda*

Pronunciation: PIE-nus TEE-duh

Common name(s): loblolly pine

Family: *Pinaceae*

USDA hardiness zones: 6B through 9B (Figure 2)

Origin: native to eastern Texas, then east through the southeastern United States, and north along the eastern seaboard to New Jersey

UF/IFAS Invasive Assessment Status: native

Uses: screen; reclamation; specimen; shade



Figure 1. Full - *Pinus taeda*: loblolly pine
Credits: UF/IFAS

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Figure 2. Range

Description

Height: 50 to 80 feet

Spread: 30 to 35 feet

Crown uniformity: irregular

Crown shape: oval

Crown density: open

Growth rate: fast

Texture: fine

Foliage

Leaf arrangement: alternate; typically in groups of 3 per fascicle, but occasionally in groups of 2 (Fig. 7)

Leaf type: simple

Leaf margin: entire

Leaf shape: needle-like (filiform)

Leaf venation: parallel

Leaf type and persistence: fragrant, evergreen, needled evergreen

Leaf blade length: 6 to 9 inches

Leaf color: light green

Fall color: no color change

Fall characteristic: not showy



Figure 3. Leaf - *Pinus taeda*: loblolly pine
Credits: UF/IFAS

Flower

Flower color: yellow

Flower characteristics: not showy



Figure 4. Cone, Young - *Pinus taeda*: loblolly pine
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Fruit

Fruit shape: oval, cone

Fruit length: 3 to 6 inches

Fruit covering: dry or hard

Fruit color: red brown

Fruit characteristics: attracts squirrels/mammals; showy; fruit/leaves a litter problem; sits sessile to the branch, and often emerges in pairs of 2

Trunk and Branches

Trunk/branches: branches don't droop; not showy; typically one trunk; no thorns

Bark: gray brown and scaly, turning red brown and developing deep furrows and round ridges with age

Pruning requirement: little required

Breakage: susceptible to breakage

Current year twig color: brown

Current year twig thickness: thick, medium

Wood specific gravity: 0.51



Figure 5. Cone, Mature - *Pinus taeda*: loblolly pine
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Figure 6. Bark - *Pinus taeda*: loblolly pine
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Culture

Light requirement: full sun

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

Drought tolerance: moderate

Aerosol salt tolerance: moderate

Other

Roots: can form large surface roots

Winter interest: no

Outstanding tree: no

Ozone sensitivity: sensitive

Verticillium wilt susceptibility: resistant

Pest resistance: resistant to pests/diseases

Use and Management

Pines are often grouped together in a landscape and they are becoming more popular for planting in parks and in commercial landscapes. They create a light shade which allows grass and other plants to easily grow beneath the canopy. People often complain about the dropping needles, but these may be the same people who complain when it rains.

Loblolly pine should be grown in full sun on well-drained, acid soil. It is drought-tolerant once established.

The cultivar 'Nana' reaches only 8 to 16 feet in height making it ideal for use as a specimen or screen. It has a dense, rounded silhouette and may become popular, especially for small-scale landscapes, once people discover it.

Propagation is by seed. Young trees larger than four feet tall are very difficult to transplant.

Pests

Some of this tree's pests are pine bark beetle, borers, pine tip moth, and sawflies.

Diseases

Loblolly is susceptible to fusiform rust and heart rot.

Reference

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. University of Florida Institute of Food and Agricultural Sciences.