

Pinus palustris P. Mill.

Common Name	Longleaf Pine
Botanical Name	<i>Pinus palustris</i>
Family	Pinaceae
Form	Tree
Growth Habit	These evergreen trees grow to a height of 80'-100' and reach a 2'-3' trunk diameter. The crown is loose and branches appear only at the uppermost portion of the single trunk.
Bark	The bark is orangish-brown and fissured into large plates. It is very thick in order to protect the tree from the fires that are common in its habitat.
Leaves	The dark-green needles appear densely on branches in clusters of three and are from 9"-18" long.
Cones	Ovulate cones are brown and cylindrical in shape, from 6"-10" long. Each of the scales on the cone has a spine. Pollen bearing cones at the ends of branches are silvery.
Fruit	Winged seeds are released from cones at maturity. The seed itself is about ½" long, while the wing is from 1 ¾"-2" long.
Soil conditions	Found on sandy, acidic soils that range from dry to moist.
Water	High drought tolerance.
Light Requirement	Mature trees grow in full sun. Trees that are still in the grass stage may be found in the shade and won't sprout up until a gap opens.
Native Growth Zone	8-9
Propagation	Seed
Habitat	Historically found in monospecific stands associated with Wiregrass (<i>Aristida beyrichiana</i>) in sandhills and savannas, called "high pine." Very little is left of what was once this type of habitat, and now many Oak species (<i>Quercus</i> spp.) are present.
Remarks	The Longleaf Pine has the longest needles and biggest cones of any eastern pine species. It is unique in that prior to maturity, the pine spends from 3-10 years in what is called the "grass stage." At this stage, it does not yet have a trunk and resembles a clump of grass. This is an adaptation that helps it survive the frequent fires of its habitat by protecting the bud. After this period, it grows rapidly – from 3'-5' in the first year – which again protects the tree from fire, as the bud is now high enough to escape flames.

Works Consulted