

All About Pine Trees - For Oklahoma Gardeners

Every gardener seeking four-season interest should consider evergreens in the landscape. As a structural backdrop for other plantings, a habitat for wildlife, a wind or noise break, or on its own as a specimen, an evergreen can supply texture and depth to vacant garden spaces.

Pines are a popular evergreen choice for the creative gardener...but what makes a pine... a pine?

What is a Pine Tree?

Pine trees belong to the genus *Pinus* and the family Pinaceae. This is the largest family of conifers, with approximately 120 species worldwide. Native in the Northern Hemisphere, they can be found living in temperate and subtropical regions of the world.

The characteristics of pines are fairly familiar. The most noticeable features are the needle-like leaves and reproductive cones.



Earlier leaf forms are present on seedlings and younger plants, but mature to the adult needles we commonly see.

Most species are monoecious, having male and female reproductive structures (cones) on the same tree. Smaller than the female cones, the male cones fall after their pollen is shed. It is the female cones with which we are most familiar; they remain on the tree up to three years (depending on the species). Scales generally contain two seeds, but some scales have none...and when the cone matures and opens (sometimes a forest fire triggers this event) the seeds can be dispersed by wind or animal consumption, again, depending on the species.

The bark has a rough plated, scaly or flaky appearance, and can vary in color from browns to reds, depending on the age of the tree. Pine tree growth habits include the standard conical shape, but may also include fastigiate (upright, erect branches), columnar and weeping forms.

The mature height range is broad; the smallest of dwarf specimens grow under 10 feet, to the largest Ponderosa pine at over 250 feet tall.

Selecting a Pine Tree



Great site selection and good soil are always key to successful planting. Light requirements vary from full sun to a tolerance of partial sun. Tolerance for a particular condition does not necessarily mean the plant prefers it; it may survive but the aesthetic value might be compromised in these extreme scenarios.

Well drained loam is usually optimal, but [some species](#) may actually tolerate dry or alkaline or even sodic (salty) soils. Avoid extremes of wet or dry, and mulch in drier locations for moisture retention and weed control.

Be deliberate with your tree selection. Pines can serve many purposes in the landscape, whether it be for ornamental interest, wildlife habitats, hedges or screens, foundation or urban plantings. Consult [this fact sheet](#) from the OSU Extension for a comprehensive discussion about selecting one for your intended use.

Problems and Disease

Some of the most prevalent conditions affecting pines in Oklahoma are Pine Wilt, Dothistroma Needle Blight, Diplodia Tip Blight and Canker, and damage caused by the Nantucket Pine Tip Moth.

Observe your pines often for foliar and bark problems, disease progression and insect activity. Knowing which agents may be present will dictate the treatment program. In all cases, consult your OSU Extension office for diagnostic guidance. More information and photographs for each of these diseases can be found at the [links at the end of this article](#), or the associated Tulsa Master Gardener article [here](#).



"File:Bursaphelenchus xylophilus on Pinus nigra (02).jpg" by USDA Forest Service - North Central Research Station, USDA Forest Service, Bugwood.org is licensed under [CC BY 3.0](#)

Some Notable Cultivars

Knowing which pine you would like will go far in understanding the care requirements for what will quickly become one of your favorite plants. The examples listed here are certainly not exhaustive, but can inspire you to find your own favorite.

[Pinus bungeana, Lacebark Pine](#)

- Slow growing, mature height to 100'
- Interesting patchy, exfoliating bark, similar to Sycamore
- Full sun, well-drained soils

[Pinus heldreichii, Bosnian Pine](#)

- Slow growing, 30' tall in landscape use
- Oklahoma Proven selection
- Edible seeds, young cones are purple
- Pyramidal habit
- Full sun, tolerates drought and high pH soils (when established)

[Pinus flexilis, Limber Pine 'Vanderwolf's Pyramid'](#)

- Slow growing, 30' tall in landscape use
- Oklahoma Proven selection
- Dense growth, silver blue-green needles
- Pyramidal habit
- Resistant to pine wilt disease
- Full sun to part shade, low maintenance, tolerant of most soils

Plant...With a Purpose!

No Oklahoma garden should be without a pine; for wildlife support, structural interest and textural appeal. Pines are not just a forest tree, and not only a wintertime novelty; they serve many purposes in the Oklahoma landscape.

Resources:

[Oklahoma Gardening: Pine, Cedar, Spruce and Cypress](#)

[OSU Extension Fact Sheet HLA-6463: Selecting Evergreen Trees](#)

[Pine Wilt Disease: EPP-7674](#)

[Sampling for Pinewood Nematodes: EPP-7675](#)

[Dothistroma Needle Blight of Pine: EPP-7331](#)

[Diplodia Tip Blight and Canker of Pine: EPP-7330](#)

[Nantucket Pine Tip Moth: EPP-7645](#)

[University of Illinois Extension: Pine Disease Chart](#)

[Clemson Cooperative Extension Fact Sheet HGIC 1020: Pine](#)

[American Conifer Society](#)