Eastern White Pine

Pinus strobus

Common name:

Eastern White Pine, Northern White Pine, Soft Pine, Weymouth Pine, Pumpkin Pine

Pronunciation:

PI-nus STRO-bus

Family:
Pinaceae
Genus:
Pinus

"For three hundred years...White Pine was unrivaled as a timber-producing tree. Perhaps no other tree in the world has had so momentous a career. Certainly no other has played so great a role in the life and history of the American people. Fleets were built to it great stands, and railroads bent to them. It created mushroom fortunes, mushroom cities. Earlier, it was a torch in the hands of American liberty."

"The White Pine is a northern tree; in the aboriginal American forest it was perhaps the most abundant species almost throughout its range. Over vast areas it formed pure or nearly pure stands."

"Few historians mention it now, but White Pine was one of the chief economic and psychological factors in the gathering storm of the American Revolution, at least in New Hampshire and Maine.... The first flag of our Revolutionary forces bore for its emblem the White Pine tree."

(excerpts from Donald Culross Peattie, A Natural History of Trees of Eastern and Central North America)

Quick ID Tips

- Soft 4" needles are in bundles of 5 the only pine with 5 needles east of the Mississippi
- Needles form triangular clusters angled towards the branch tips
- Slender 5-6" cones are slightly curved and lack prickles

Details

- This coniferous, evergreen tree often grows to 100 ft. tall with an irregular crown and long, horizontal branches.
- Needles (modified leaves) are in bundles (fascicles) of five and are slender, soft, bluish-green, 4-5" long. Each needles has two white stomatic lines on the inner surfaces.
- Cones are subterminal, pendent, cylindrical, 4-5" long, often curved, apex pointed, light brown, resinous, and mature in second year.
- Prefers sun or but tolerates partial shade. Best growth on fertile, moist, well-drained soil, but is found on dry, rocky ridges and wet sphagnum bogs.
 Tolerant to air pollution and salts. Decaying needles make the soil beneath the tree very acid, about pH 4.5, which suppresses the growth of other plant species.
- Susceptible to White Pine blister rust, which eventually kills the tree.
- Hardy in USDA Zones 3-7. The native range extends from Newfoundland to Manitoba, south to Georgia and Iowa.
- There are many cultivars available; here are just a few:
 - 'Alba' tree, normal habit, but young needles whitish-green in spring, green in summer
 - <u>'Fastigiata'</u> tree, columnar form, but may be shrubby at frist, then upright, to about 40 ft tall and 8 ft wide (12 x 2.4 m)
 - <u>'Macopin'</u> shrub, broad, about 3+ ft (~1 m) tall and greater width, dense shoots, needles blue-green
 - <u>'Nana'</u> dwarf shrub, globose, wider than tall, dense, branched to the ground, very slow growing, about 5 cm per year
 - <u>'Pendula'</u> tree, may be multi-stemmed, semi-dwarf, long drooping branches
 - <u>'Sea Urchin'</u> dwarf shrub, flatened globe, compact, growing about 2.5 cm per year, needles thin and blue
 - <u>Torulosa'</u> tree, needles much twisted and to a lesser degree the branches
 - <u>'Verkade's Broom'</u> shrub, round, upright, bright green foliage, slight browning in winter
- strobus: Latin for gum yielding tree.



tree habit



5 long needles in a bundle



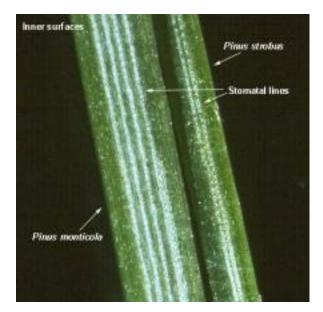
branches and needle bundles



immature cones



mature cones and needles



needle, close-up, comparison with P. monticola



trunk, bark

Sources:

- Oregon State University Landscape Plants, https://landscapeplants.oregonstate.edu/plants/pinus-strobus David Sibley, *The Sibley Guide to Trees* (Knopf 2009)