

# How to Identify Virginia's Native Pines

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pond pine Pinaceae *Pinus serotina* Michx.

**Leaf:** Evergreen needles, 4 to 7 inches long in fascicles of 3, occasionally 4, straight, dark yellow green;

**Flower:** Monoecious; males cylindrical, purple to yellow, in clumps at ends of twig; females light green to red, at ends of new growth;

**Fruit:** A globe-shaped cone, 2 to 3 inches long, armed with a small spine. They remain closed and persist on the tree for several years;

**Twig:** Slender to moderately stout, light brown, reddish brown buds;

**Bark:** Dark brown, broken into irregular, flattened, somewhat scaly plates;

**Form:** Upright tree to 70 feet, trunk often twisted with numerous sprouts and a thin crown.



## loblolly pine *Pinus taeda* L.

**Leaf:** Evergreen needles, 6 to 9 inches long, with (usually) three yellow-green needles per fascicle.

**Flower:** Monoecious; males long cylindrical, red to yellow, in clusters at branch tips; females yellow to purple.

**Fruit:** Ovoid to cylindrical, 3 to 6 inch red-brown cones; umbo is armed with a short spine, maturing in early fall.

**Twig:** Orange-brown in color, fine to moderately stout; buds are narrowly ovoid, light reddish brown.

**Bark:** Initially red- to gray-brown and scaly; older trees are ridged and furrowed, with somewhat rounded scaly plates; very old trees have red-brown, flat scaly plates.

**Form:** A medium to large tree can reach well over 100 feet tall, self-prunes well and develops a fairly straight trunk and an oval, somewhat open crown.



## Virginia pine Pinaceae *Pinus virginiana* P. Mill.

**Leaf:** Evergreen needles, 1 1/2 to 3 inches long, with 2 yellow-green, twisted, somewhat divergent needles per fascicle.

**Flower:** Monoecious; males cylindrical, yellow, near branch tip; females yellow to red, curved prickles present.

**Fruit:** Conical to ovoid cones are 1 1/2 to 2 1/2 inches long, sessile and persistent, with red-brown scales and an umbo armed with a sharp, needle-like prickle, maturing in the fall.

**Twig:** Slender, green changing to purple-green with a glaucous bloom; buds gray-brown, narrowly ovoid.

**Bark:** Orange-brown and scaly on young trees; older stems develop thin, small, scaly plates, cinnamon colored patches often on upper parts of trunk.

**Form:** A small to medium sized tree reaching up to 70 feet tall, eventually develops a flat top sparse crown; dead, gray (sharply angled upwards) branch stubs are almost always present along the trunk.



## longleaf pine Pinaceae *Pinus palustris* P. Mill.

**Leaf:** Evergreen needles, very long and feathery (8 to 18 inches long), with three dark green needles per fascicle; tend to be tufted at branch tips.

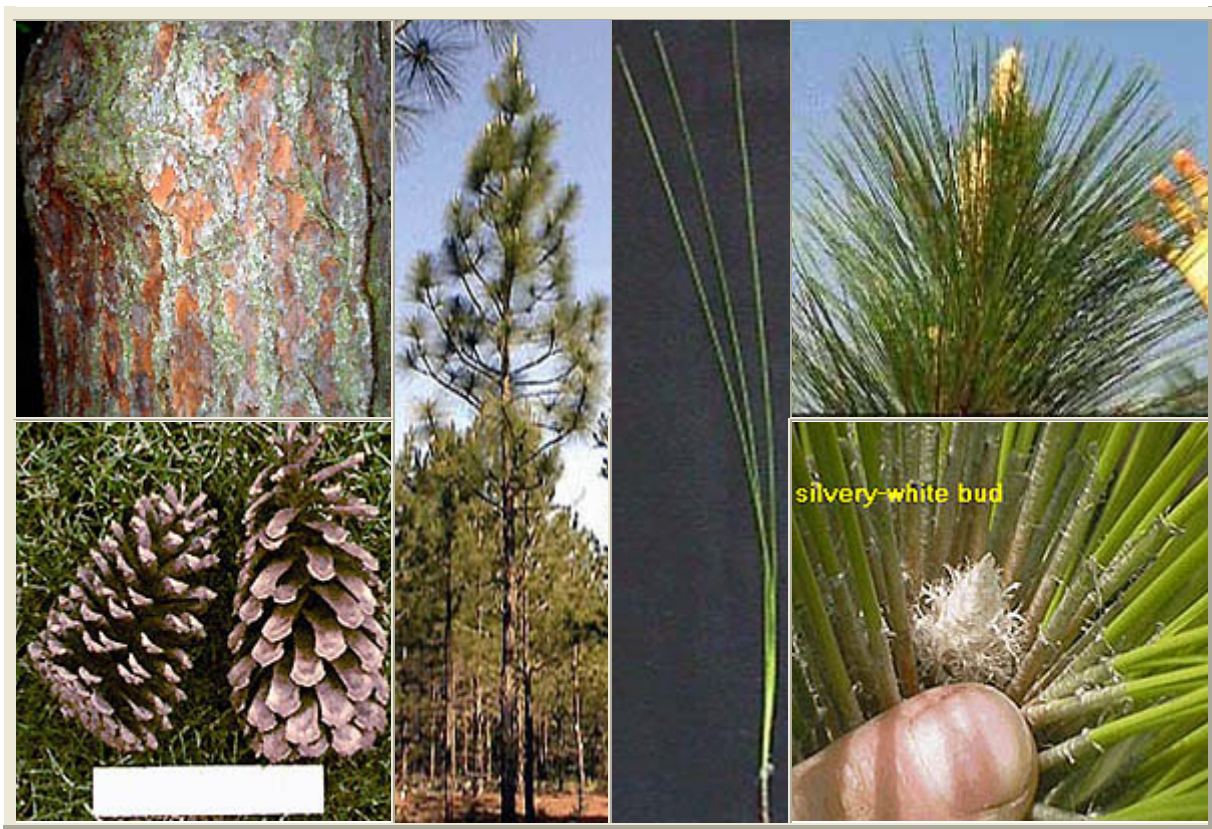
**Flower:** Monoecious; males yellow-red, long, in clusters; females oval, purple.

**Fruit:** Very large (largest cone in the Eastern U. S. --6 to 10 inches long), ovoid to conical in shape, sessile, red-brown, umbo is armed with a curved prickles, maturing in the fall.

**Twig:** Very stout, gray-brown; buds large, ovoid, silvery-white.

**Bark:** Quite scaly, orange-brown to gray, eventually developing flat plates.

**Form:** A medium sized to large tree capable of reaching over 100 feet in height, with a straight trunk, coarse branches and tufted needles at ends of branches.



**shortleaf pine Pinaceae *Pinus echinata* P. Mill.**

**Leaf:** Evergreen needles, 3 to 5 inches long, two or three (on the same branch), slender and flexible needles per fascicle, dark yellow-green in color, fascicle sheath is persistent.

**Flower:** Monoecious; males cylindrical, red to yellow, in clumps at ends of twigs; females light green to red and armed.

**Fruit:** Egg-shaped cone, 2 inches long, somewhat persistent; red to brown in color, umbo is armed with a small prickle, maturing in fall; scales stay relatively flexible.

**Twig:** Green and purple when young, later turning red-brown.

**Bark:** Scaly and dark on young trees, eventually developing flat, scaly plates; very small (pencil point) resin pockets or "Volcanoes" may be apparent.

**Form:** A medium to large tree with a straight, well pruned trunk, able to reach over 100 feet tall; typically has a small, open, pyramidal crown.



## Table Mountain pine Pinaceae *Pinus pungens* Lamb.

**Leaf:** Evergreen needles, 1 1/2 to 3 1/2 inches long, with 2 twisted, yellow-green, stout needles per fascicle.

**Flower:** Monoecious; males long, cylindrical, purple to yellow, clustered near branch tips; females green to light purple, often in clusters.

**Fruit:** Cones are ovoid, three inches long and very stout, dark red-brown and the umbo is armed with a large, thick, curved spine, sessile and persistent, often in whorls; maturing in the fall.

**Twig:** Moderately stout and tough, orange-brown in color; buds are narrowly ovoid, light brown and often resinous.

**Bark:** Scaly, dark red-brown or gray in color, eventually developing irregular plates with very scaly surfaces.

**Form:** A small to medium sized tree up to 65 feet tall with an irregular crown that supports several large, heavy branches, often with numerous, persistent, closed cones.



## pitch pine Pinaceae *Pinus rigida* P. Mill.

**Leaf:** Evergreen needles, 2 1/2 to 5 inches long, with three twisted needles per fascicle, yellow-green to green.

**Flower:** Monoecious; males cylindrical, red to yellow, in large clusters at twig tips; females yellow to red, with small, curved scales.

**Fruit:** Cones are ovoid, 2 to 4 inches long, light brown in color; umbo is armed with a short, stout prickle; cones are often persistent for many years; maturing in fall.

**Twig:** Orange-brown and moderately stout; buds narrowly ovoid, light gray-brown.

**Bark:** Dark and scaly when young, developing red-brown or yellow-brown thick flat plates with deep furrows; sprouts of needles may be present.

**Form:** Extremely variable; short and poorly formed on poor sites, but can be a straight, medium sized tree reaching 80 feet tall on better sites; epicormic sprouting is common.



**eastern white pine** Pinaceae *Pinus strobus* L.

**Leaf:** Evergreen needles, 3 to 5 inches long, with five, slender, flexible needles per fascicle; fascicle sheath deciduous, needles appear blue-green because of 3 or more glaucous lines of stomata.

**Flower:** Monoecious; males cylindrical, yellow, in clusters near branch tips; females light green, tinged in red, at ends of branches.

**Fruit:** Cones are 4 to 7 inches long, cylindrical, with thick, rounded cone scales, very resinous, borne on a long stalk and maturing in late summer.

**Twig:** Slender, gray-green to orange-brown in color; buds long, ovoid, reddish brown.

**Bark:** On young trees, thin, smooth and gray-green with some lighter splotchy patches; later becoming thick, reddish brown to gray-brown with prominent finely scaly, rounded, long ridges and darker furrows.

**Form:** A large tree with a very straight trunk often reaching well over 100 feet in height. The crown is conical when young, later developing wispy, horizontal, upturning branches.



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