

Red Pine

Pinus resinosa

Twig & Bud



small, ovoid orange - brown buds

twig fairly stout & rough

Bark

tall, straight trunk w/ red-brown bark that has thin, flaky scales; becomes irregularly furrowed w/ age; begins with shallow fissures that turn into thick, irregular blocks

Leaf

evergreen needle-like leaves; needles in bundles of two

needles snap cleanly when bent, unlike other pines

4-6 inches

Habitat

native to northeastern North America; typically found in sandy, well-drained soils & dry woodlands; prefers full-sun. Often grown in plantations.

needles clustered at the end of twigs, which tend to curve upward

Flower

doesn't produce true flowers; instead pollen- and seed-producing cones

female cones near the tips of new growth



male cones form at the base of new growth in spring, then wither away

Fruit

produces egg-shaped seed cones with stiff, smooth scales



2-3 inches



TREE OF THE MONTH

Red Pine • *Pinus resinosa*

ALSO KNOWN AS: NORWAY PINE, NORTHERN PINE

Red pine (*Pinus resinosa*) is a medium-sized, long-lived coniferous tree in the pine family (Pinaceae). It has a conical shape with stout, horizontal to upward-curving branches and a somewhat open crown, which is supported by a tall, straight trunk that is often free of lower limbs. It typically grows 50 to 80 feet tall and rarely reaches 100 feet. Branches and twigs grow in a whorled pattern, with one new whorl produced each year.

Native to northeastern North America and the northern Midwest of the United States, red pine can be found in a range of habitats depending on location. It is most commonly found in sandy soils and prefers well-drained, moist soils with full sun. Due to its long, straight bole, which creates useful timber, it is also widely cultivated in plantations.

Red pine has evergreen, needle-like leaves that grow in bundles (fascicles) of two, held together by a permanent sheath. The thin, flexible needles are 4 to 6 inches long, dark yellow-green, and snap cleanly when bent—a useful identification trait. The needles grow in clusters at the ends of twigs, which tend to curve upward. The twigs are stout and rough, with narrow, egg-shaped, orange-brown buds.

Its bark, red-tinged from crown to base, gives the species its common name. Young trees have red-brown or pink to gray bark with thin, flaky scales. As the tree matures, the bark becomes irregularly furrowed, starting with shallow fissures that turn into thick, scaly blocks with a reddish hue. While other species like white pine (*Pinus strobus*) and Scots pine (*Pinus sylvestris*) also have reddish bark, red pine bark is overall lighter than white pine, and Scots pine bark is more orange than red.

Red pine is monoecious, meaning male and female reproductive structures occur on the same tree. As a gymnosperm, it does not produce true flowers, but rather cones (strobili). Male cones form in large clusters at the base of new growth in spring and wither after releasing pollen. Female cones develop near the tips of new shoots, eventually maturing into woody seed cones.

Mature cones are egg-shaped, nut-brown, and 2 to 3 inches long. They take two years to mature and fall in the third year. In the first year, cones are small and upright; in the second, they become pendulous. The seed scales—those woody, stiff, oval-shaped parts that make up the outside of the cone—lack the spines found on the cones of some other pine species.

As mentioned, red pine can be confused with white pine (*Pinus strobus*) and Scots pine (*Pinus sylvestris*), which share overlapping ranges and have similar statures and growth habits; however, Scots pine is nonnative. One quick and easy way to tell the three species apart is by their needles. While white pine has five needles per bundle, Scots pine has two like red pine, but they are shorter, stiffer, more blue-green, and often slightly twisted.



OPPOSITE BRANCHING PATTERN



ALTERNATE BRANCHING PATTERN



WHORLED BRANCHING PATTERN

The genus name *Pinus* is Latin for pine, while the species epithet *resinosa* means “resinous,” referring to the tree’s high resin content.

Roughly 100 insect species feed on red pine, and its seeds are an important wildlife food source. Black bears often use red pine trunks as marking posts, and the trees provide nesting sites for bald eagles and ospreys.



Tree of the Month is sponsored by Berkshire Environmental Action Team, a 501(c)(3) nonprofit organization located in Pittsfield, MA. Find more Trees of the Month at www.thebeatnews.org.