

**Jack Pine**  
*Pinus banksiana*



**Identification:** A hard pine, characteristic of the northern forests; the most widely distributed pine in Canada.

**Leaves:** needle-like evergreen, in bundles of 2, 2-4cm long, straight or slightly twisted, stiff, sharp-pointed, light-yellowish-green, spread apart, edges toothed.

**Flowers:** monoecious, males cylindrical, yellow-green, in clusters at twig tips; females oval, reddish appearing in May.

**Cones:** cones take two years to develop. Variable in shape, oblong to conical, asymmetrical, straight, or curved inward, 3-7cm long, yellowish-brown when mature, stalkless, usually pointing towards the end of the branch, often in clusters of 2 or 3 at nodes; usually remaining closed and persistent on the tree for 10-20 years and many stay on the tree for the life of the tree. Scales thicken at the tips, smooth, held closed by a resin bond; opening when exposed to heat from a wildfire or sometimes from direct sunlight or warm days. Seed crops begin at 5-10 years and occur in most years thereafter.

**Bark:** thin, reddish-brown to gray when young, with age becoming dark brown, flaky, furrowed into regular thick plates.

**Wood:** moderately hard and heavy. Weak, light brown in color.

**Distribution:** It is found in the coniferous belt all across Canada.

**Climate:** Dominant tree in southern boreal forest.

**Habitat:** Occurs on poor quality sites such as coarse sands, shallow soils, and rock out crops. Grows in pure stands or mixed stands with others shade-intolerant species such as white birch, trembling aspen, balsam poplar and tamarack and with shade tolerant species such as black spruce, white spruce and balsam fir.

**Growing Characteristics:** They are small trees up to 20m high, 30cm in diameter and 150 years old, occasionally larger. Open-grown trees: have tapered trunks, crown is conical, open; branches ascending, and arching. Forest-grown trees: slender, straight, with little taper, the crown is short. On poor soils and rocky sites, the tree is short, and often twisted with long stout branches, some of them dead or dying with the crown an unkempt look. Root system is wide-spreading, moderately deep, and often has a tap root.

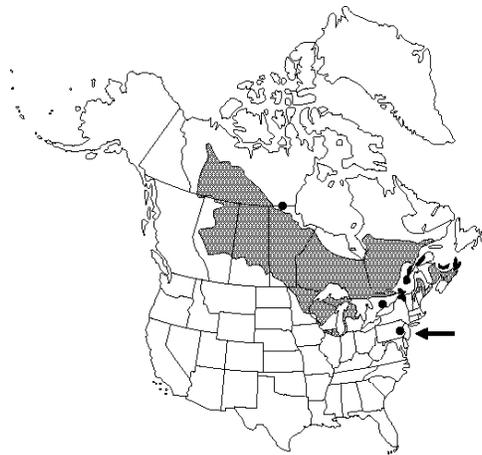
**Reproduction:** Reproduces by seed. Minimum seed bearing age in open stands is 5-10 years. Some seed is produced every year and serotinous cones accumulate in the crown. A mature stand may have as many as 2 million seeds per acre stored in unopened cones. Because of abundant seed production, few mature trees are necessary to regenerate a stand.

**Uses: Modern** - An important commercial timber species. The moderately hard and heavy wood is used for pulpwood, lumber, telephone poles, fence posts, mine timbers, and railroad ties. It is also planted for Christmas trees.

**Fun Facts:**

- ✚ Jack Pine is the territorial tree of the Northwest Territories.
- ✚ Jack Pine have adapted so well to their environment that they REQUIRE wildfires (or a lot of sunlight) in order for their seeds to be released from the cones. You can try this out at home by placing the cones in a dry sunny location or someplace where it is warm. In a few days the cones will open and seeds will start to fall out.

**See the details of the bark and cones on the following page...**



Distribution of Jack Pine in North America

<http://azael100.tripod.com/id3.html>

**Bibliography:** *Trees in Canada* by John Laird Farrar page 58-59

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