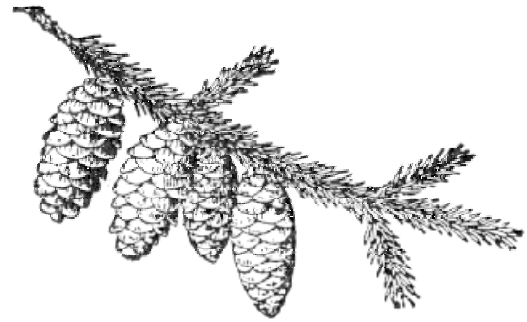


# Maine Tree Species Fact Sheet

**Common Names:** Red Spruce (Yellow Spruce, West Virginia Spruce, Eastern Spruce, He-Balsam)

**Botanical Name:** *Picea rubens*

**Tree Type:** Coniferous



## **Physical Description:**

**Growth Habit:** Red spruce is a medium-size tree that may grow to be more than 400 years old. It grows best in a cool, moist climate and is shade tolerant. The bark on mature trees is thick and broken into thin, reddish scales of irregular shape. The leaves are 1/2 inch long, stiff and prickly to touch. They are very shiny, dark green and have a yellow tinge. The oblong cones are 1 ½ - 2 inches long. When ripe they are shiny and have a reddish brown color. The cone scales are stiff and the margins do not have conspicuous notches. The cones begin to drop in the fall and early winter and are all gone from the branches by summer. The twigs have hairs.

**Height:** Red spruce can attain a height of 60-80 feet and a diameter of 1-2 feet. It will occasionally exceed these measurements. This species is hardy to Zone 2.

**Shape:** The spreading branches form a somewhat conical, narrow head in young trees. The trunk is long with a slight taper.

## **Fruit/Seed Description/Dispersal Methods:**

Red spruce is monoecious. Male and female flower buds open in May. The pendant male flowers are bright red; female flowers are erect and bright green tinged with purple. The cones mature from mid-September to early October, the autumn following flowering. Cones are receptive to pollen when fully open, a condition that only lasts a few days.

## **Range within Maine:**

Red spruce is found throughout the state. It grows on well-drained, rocky upland soils, and particularly on the north side of mountain slopes.

## **Distinguishing Features:**

Red spruce is distinguished from the black spruce by its longer needles and cones.

## **Interesting Facts:**

The wood of the red spruce is light in color and weight, straight grained and resilient. It is used for making paper, lumber, musical instruments and Christmas trees. Spruce gum is obtained

largely from this tree, which was the raw material for the flourishing chewing-gum industry in Maine during the late 19<sup>th</sup> and early 20<sup>th</sup> centuries.

### **Relationship to Wildlife:**

Red spruce is a winter cover for deer and moose, ruffed grouse, snowshoe hare, songbirds and woodcock. Mice and voles have been known to store significant amounts of spruce seed.

### **Common Problems or Pests of the Tree in Maine:**

The shallow root system, thin bark and flammable needles of the red spruce make it very susceptible to fire damage. Pests of the red spruce include the spruce budworm, eastern spruce beetle, the European spruce sawfly and the yellowheaded spruce sawfly, eastern spruce gall, and the pine leaf adelgid.

### **References:**

*Forest Trees of Maine, Twelfth Edition.* Maine Forest Service/Department of Conservation. 1995.

*Silvics of North America:* [www.na.fs.fed.us/spfo/pubs/silvics\\_manual](http://www.na.fs.fed.us/spfo/pubs/silvics_manual) U.S. Department of Agriculture/Forest Service.

*The Peterson Field Guide Series: A Field Guide to Eastern Forests.* Kricher, John C. Houghton Mifflin Co. 1988.



©Creative Imaging Group 2007 All rights reserved.