

# Maine Tree Species Fact Sheet

**Common Name:** White Oak

**Botanical Name:** *Quercus alba*

**Tree Type:** Deciduous



<http://ua.dnr.wi.gov/org/land/Forestry/TreeID/TreePgs/images/quercusalba.gif>

## **Physical Description:**

**Growth Habit:** The white oak is a slow to medium growing tree that grows on sandy land, gravelly ridges, and moist bottom lands, but makes the best growth on rich, heavy, upland soils. This species is usually found along riversides, sandy areas, and dry hillsides. The bark is ash gray in color, broken by shallow furrows into long, irregular thin scales which readily flake off; on old trunks, furrows frequently become deep. The twigs are of medium thickness, greenish red to gray in color, smooth and sometimes covered with a bloom. The alternate leaves are simple, from 5-9 inches long, with 5-9 rounded lobes, generally deeply cleft toward midrib, dark green in color above, paler below and frequently staying on the tree over the winter. The leaves turn dull red or bronze in the fall.

**Height:** The white oak grows to a height of 60-70 feet with a trunk diameter of 3-4 feet

**Shape:** The crown is rounded, branches are stout, numerous and wide spreading.

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

The flowers come out in May when the leaves are half grown. The acorns ripen in September of the first year and are dispersed by gravity and small mammals, notably gray squirrels. The acorns are light brown in color, oblong and  $\frac{3}{4}$  inch long with a shallow, warty cup, which encloses  $\frac{1}{4}$  of the nut. The fruit is edible, although slightly bitter.

## **Range within Maine:**

White oak occurs naturally in southern and central Maine as far north as Oakland in Kennebec County. It is specifically found in coastal Knox, southern Franklin and Oxford Counties. This species is hardy to Zone 4.

## **Distinguishing Features:**

Ashy gray, flaky bark; deeply cleft lobes in leaves;  $\frac{1}{4}$  of the acorn is enclosed in cup.

## **Interesting Facts:**

Native Americans pounded the acorns into flour and bleached out the tannin with hot water. It is believed in folklore that if you plant an acorn in the dark of the moon, you will receive money in the near future. Carrying any piece of the white oak draws good luck.

The wood is hard, heavy, strong and durable. It is used for furniture, flooring, implements, general construction, ship and boat building.

### **Relationship to Wildlife:**

Squirrels and other wild animals feed on the acorns and young shoots are browsed by deer.

### **Landscape Use:**

The white oak makes a beautiful ornamental tree on large sites such as parks. It is slow growing, difficult to transplant, sensitive to soil compaction and does not do well in heavy, clay soils.

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

The white oak is susceptible to several pests including gypsy moth, yellow-necked caterpillar, pin oak sawfly, saddleback caterpillar, leaf miner, oak lace bug and oak mite. Diseases affecting the white oak include bacterial leaf scorch, anthracnose, cankers, leaf spots, powdery mildew, twig blights, and shoestring root rot. In spite of all the pests and diseases affecting this species, white oak is a durable and long-lived tree.

### **References:**

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