

# Maine Tree Species Fact Sheet

**Common Name:** American Beech

**Botanical Name:** *Fagus grandifolia*

**Tree Type:** Deciduous



<http://ostermiller.org/tree/americanbeech.gif>

## **Physical Description:**

**Growth Habit:** The American beech is native to North America and is a large, deciduous tree that can live to be 3000 years old. The root system is shallow and it is difficult to grow grass under this tree. American beech prefers moist, well-drained, acid soil and full sun. It will not withstand wet or compacted soils. The bark is thin, smooth and light bluish-gray. The leaves are alternate, 3-5 inches long, elliptic, acutely pointed, with coarse and hooked teeth. The margin between the teeth is nearly straight. The leaves are green in the summer turning copper or yellow in the fall. Dead leaves tend to remain on the trees into the winter.

**Height:** The American beech is a slow to medium growing tree and reaches 50-70 feet in height, with a trunk diameter of 13 feet and a spread usually less than or equal to height.

**Shape:** American beech is a large tree that often has a short trunk and wide-spreading crown. The tree may sucker and form wide-ranging colonies.

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

American beech is monoecious; male and female flowers are separate on the same tree. It usually flowers in April to early May with the emerging leaves. The fruit consists of a bur, which usually contains 2 triangular edible nuts. The nuts are sweet and are utilized for food by wildlife.

Fruiting occurs from September to October. Beech begins producing seed when 40 years old and produces seed at 2-8 year intervals. Most seeds drop to the ground. A few are carried by rodents or blue jays but seed dispersal is limited. Most seeds will germinate in the first year but after that the seeds lose viability. Beech can also regenerate by root suckers or stump sprouts.

## **Range within Maine:**

American beech occurs statewide. It grows best in rich upland soil. It is hardy to Zone 4.

## **Distinguishing Features:**

The American beech is a short trunked tree with wide a spreading crown. Its dead leaves remain on the tree into the winter.

## **Relationship to Wildlife:**

Beech mast is eaten by a variety of birds and mammals such as mice, squirrels, black bears, foxes, ruffed grouse and ducks. American beech also provides cover for the black-capped Chickadee.

## **Landscape Use:**

American beech is restricted to large area use like parks, and golf courses.

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

Beech is seriously affected by beech bark disease. Cankers infect, girdle and occasionally kill branches. Prune out infected branches. The forest tent caterpillar, gypsy moth, fall cankerworm and ruce spanworm can occasionally cause heavy damage by defoliation.

## **Interesting Features:**

Beechnuts are roasted and eaten or used as a coffee substitute. The leaves and bark are used to make dyes. Beech wood is used to make flooring, furniture, veneer plywood and railroad ties. It is especially favored as fuel wood because of its high density and good burning qualities. Coal tar made from beech wood is used to protect wood from rotting and creosote made from beech wood is used to treat various human and animal disorders.

## **References:**

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

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