

American Beech

Fagus grandifolia

One of my favorites, this massive tree will slowly reach a height and spread of up to 120 feet. The tree is low branched with attractive leaves providing deep, inviting shade. The American Beech is the only species of this genus in North America. Although it is now common to the eastern US, it once extended as far west as California and probably flourished across North America prior to the last glacial period. It is a climax member of eastern hardwood forests and may attain ages of 300-400 years. Beech wood is excellent for turning and steam bending. It wears well and is used for flooring, furniture, and containers. The nuts are eaten by people, though not commercially, and are an important food for wildlife. American Beech produces nuts first at about 40 years. Most every tree is indelibly scarred with the initials of lovers.



Identification

Leaves

Deciduous, alternate, simple, elliptical, glossy green, 2.5-5.5" long, pinnately veined with each vein ending in a tooth. Leaves are dry and papery.



Bark/Wood

Distinguished bark that is smooth, thin, and gray; carvings persist indefinitely. Looks a bit like elephant skin. Wood is almost white and resistant to decay.



Flower/Fruit

Monoecious; flowers late April to May. 1/2 to 3/4" nuts are irregularly triangular, shiny brown, edible, found in pairs within a woody, spiny husk.



Form

A medium to large tree with a rounded crown. Often found in thickets produced by root suckers. Thick, short trunk. Taproot gives way to heart root system.



Uses

Beech mast is palatable to a variety of birds and animals. Beech wood is used for flooring, furniture, turned products and novelties, plywood, baskets, rough lumber, pulp, and fuel. It is especially favored for fuel wood.

Ethnobotany

Creosote made from beech wood was used internally and externally as a medicine for various human and animal disorders by Native Americans and early settlers.

Native Distribution

Range is from Cape Breton Island in the east to Michigan, south to the Gulf States.

Establishment

Difficult to transplant and intolerant of compaction and grass competition. Shallow roots need space.

Growing Conditions and Culture

Mature Size 120'Hx60'Wx6'dbh
 USDA Zone 3-8
 Light Requirements Shade Tolerant

Soils Diverse, not compacted
 Drought Tolerant? Moderate
 Inundation Tolerant? No

Pests/Damaging Agents

The thinness of Beech bark makes it susceptible to a large variety of sucking insects. Usually not fatal, but crown dieback and death have occurred. Frost cracks barks and can allow introduction of fungus.

Similar Species

Propagation

Seed - cold stratification of 90-120 days.

Source(s)

Seeds from Orion Farms, Philadelphia, NY and transplants from Black Lake, NY.