

American Chestnut

Castanea dentata

Sweet Chestnut

Once one of the most important lumber and food trees of the east, the American Chestnut has been nearly wiped out by blight introduced in 1904 on Asian chestnut trees. Within 40 years, nearly all Chestnuts were dead within the native range. Diseased trees sprout from stumps, but rarely survive to bear fruit. Undiseased trees are located in isolated stands often outside of the native range. The climax member of eastern deciduous forests, its role has been largely replaced by members of the oak family. American Chestnut was a staple of the Appalachian economy and called the "Redwood of the East." Its straight grained wood is rot resistant and ideal for building, rails, lumber, and cabinetry. The nuts were an important cash crop. The bark was a source of tannin for the leather industry. And, it was a graceful forest, street, and landscape tree.



Identification

Leaves

Deciduous, alternate, simple, pinnately veined, 5-8" long, lanceolate, sharply serrate, and hairless. Dark green. Papery thin. Turn yellow in the fall.



Bark/Wood

Smooth and chestnut brown when young, later shallowly fissured into flat ridges. Wood is straight grained, rot resistant, light colored, and easy to work.



Flower/Fruit

Monoecious; showy, yellow-white flowers on 6-8" long catkins in early summer. Delicious fruit, chestnut brown, 1/2-1" diameter, 2-3 to a sharply spined bur.



Form

Tall, grand, massive, well formed tree, though most are now stump sprouts less than 6" dbh and less than 20' tall. Generally tap rooted.



Uses

No longer commercially used for lumber. Limited quantities of nuts are available.

Ethnobotany

Backbone of Appalachian economy. Timber industry and leather industry founded on the Chestnut. Nuts were prized as food staple. Native Americans made tea from leaves as a cough syrup and sedative. Favorite food of the extinct passenger pigeon.

Native Distribution

Member of the climax forest in the Appalachians; Georgia northward to Michigan, mid Atlantic states.

Establishment

Easily sprouted from seed, but extreme care should be taken to avoid spread of blight fungus.

Growing Conditions and Culture

Mature Size 120'Hx60'Wx10'dbh
 USDA Zone 4-8
 Light Requirements Part Shade to Full Sun

Soils Diverse, Acid
 Drought Tolerant? Moderate
 Inundation Tolerant? No

Pests/Damaging Agents

Chestnut blight, *Cryphonectria parasitica*, it fatal to nearly every specimen with no known controls. Escaping blight, aphids and borers are drawn to the Chestnut.

Similar Species

Chinese Chestnut
 American Chestnut leaves are terminally very pointed and narrow at the base; Chinese Chestnut is rounded at base. Chinese Chestnut trunk is generally contorted or twisted; American Chestnut straight.

Propagation

Seed - cold stratify 90-120 days.

Source(s)

Seed collected from Millbrook Mtn Trail, Shawangunks, NY; Eugene, OR; Tadena Park, OR.