History of the American Chestnut

The history of The American Chestnut Foundation (TACF) chronicles the ongoing pursuit of a fundamental goal: to develop a blight-resistant American chestnut tree via scientific research and breeding, and to restore the tree to its native forests along the eastern United States.

More than a century ago, nearly 4 billion American chestnut trees were growing in the eastern U.S. They were among the largest, tallest, and fastest-growing trees. The wood was rot-resistant, straight-grained, and suitable for furniture, fencing, and building. The nuts fed billions of birds and animals. It was almost a perfect tree, that is, until a blight fungus killed it more than a century ago. The chestnut blight has been called the greatest ecological disaster to strike the world’s forests in all of history.

The American chestnut tree survived all adversaries for 40 million years, then disappeared within 40.

The American chestnut tree (Castanea dentata) once dominated the eastern half of the U.S. Because it could grow rapidly and attain huge sizes, the tree was often the outstanding visual feature in both urban and rural landscapes. The wood was used wherever strength and rot-resistance was needed.

In colonial America, chestnut was a preferred species for log cabins, especially the bottom rot-prone foundation logs. Later posts, poles, flooring, and railroad ties were all made from chestnut lumber.

The edible nut was also a significant contributor to the rural economy. Hogs and cattle were often fattened for market by allowing them to forage in chestnut-dominated forests. Chestnut ripening coincided with the Thanksgiving-Christmas holiday season, and turn-of-the-century newspaper articles often showed train cars overflowing with chestnuts rolling into major cities to be sold fresh or roasted. The American chestnut was truly a heritage tree.

All of this began to change at or slightly before the turn of the century with the introduction of Cryphonectria parasitica, the causal agent of chestnut blight. This disease reduced the American chestnut from its position as the dominant tree species in the eastern forest ecosystem to little more than an early-succession-stage shrub. There has been essentially no chestnut lumber sold in the U.S. for decades, and the bulk of the annual 20-million-pound nut crop now comes from introduced chestnut species or imported nuts.

Despite its decimation as a lumber and nut-crop species, the American chestnut has not gone extinct. It is considered functionally extinct by the USDA because the blight fungus does not kill the tree’s root system underground. The American chestnut has survived by sending up stump sprouts that grow vigorously in logged or otherwise disturbed sites, but inevitably succumb to the blight and die back to the ground.