

American chestnuts: There are a few left standing

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Staten Island Advance/Nicole BoffaEd Johnson, curator of science at the Staten Island Museum, pulls out a species from the herbarium, a collection of 25,000 plant specimens going back to the 1860s, located in the Museum's attic.

ST. GEORGE
STATEN ISLAND, N.Y.
— Over 100 years ago, Arthur Hollick presented a paper titled “The Chestnut Disease on Staten Island” to the Natural Science Association of Staten Island, a forerunner of the Staten Island Museum.

“No remedy has yet been found, and the nature of the disease and the method of its propagation and growth make this an exceedingly difficult problem. Unless it very soon ceases itself, as other epidemics often do, the chestnut in this vicinity at least will soon be extinct,” wrote Hollick in 1908.

Hollick was right. No antidote for the virulent blight was found, and the American chestnut tree (*Castanea dentata*) became extinct — nearly. The

blight that began with the introduction of an Asian chestnut species in 1905 ravaged the population of some 4 billion trees in the Eastern United States.

Even the memory of its silhouette on the landscape, its distinctive scent and savory nuts has nearly vanished.

But the tree itself is not extinct. It does not grow to its former majesty, but its valiant persistence and its central role in natural and social history has galvanized the American Chestnut Foundation to try to establish a blight resistant species. Growing to 100-feet with a trunk four feet in diameter, the massive hardwood, was the most ubiquitous tree in the East, accounting for 25 percent of the hardwoods. It grew from southern Maine south through the Appalachians to Mississippi and west to Michigan.

It was said that a squirrel could travel across the chestnut's treetops from Maine to Georgia and never touch the ground.

Its fruit, produced in legendary abundance every year, was valued by all creatures — human, four-legged and winged. In Appalachia, it supported subsistence living and became a cash crop when the railroad came in to transport it.

The aroma of roasting chestnuts in winter on city streets is still familiar, but, these days, they are mostly imported and from another species of chestnut.

Valued for its strength and rot resistance, the timber was used in a wide range of construction projects — from railroad ties to fencing — and its warm and grainy hues were prized by woodworkers.

Billions of trees dying in less than 50 years, made mass amounts of lumber available. Local homeowners, who know that the beautiful woodwork in their home is due to the chestnut blight, may be surprised to learn the tree has not vanished.

STILL AROUND

Island naturalist Ray Matarazzo said the tree can be found in most areas of Staten Island, including the Greenbelt, Evergreen Park in Great Kills, Long Pond in Richmond Valley, Mount Loretto in Pleasant Plains and Magnolia Swamp Park in Bloomfield.

The tree's long, pointy, oval leaves with serrated edges and distinct veins are a prominent feature, and at this time of the year, they are flowering.

On an overcast day, Matarazzo met me at Clay Pit Ponds State Park Preserve in Charleston to go look at the best chestnut specimen he knew of.

With the reminder that the area was preserved because of the rare and, in some cases, endangered flora and fauna that can be found there, he pointed out a number of examples such as black jack oak, sweet bay magnolia, possum haw, and pitch pine.

The chestnut tree survives in two forms, but neither are impervious to the blight and neither ever reaches the regal height and breadth of the historic tree.

The survival instinct is most vivid in the shoots sent up from the stump of a tree that succumbed to the blight. The first tree that Matarazzo showed me was this type. A shrubby understory, it is determined but doomed.

The other one was fully grown, some 22 feet tall and 9 inches in diameter. Up until recently, Matarazzo said if you didn't know better you would think, here is a healthy chestnut tree. And although some get a little taller, they all eventually succumb to the fungal disease that gets under

the bark. This tree, which started showing signs two years ago, has two full blown areas where the blistering blight has girdled it, cutting off the flow of water and nutrients..

“Two feet off the ground, where it’s swollen, and again here (a few more feet up), that’s the blight. That’s why the tree won’t live much longer. What a shame,” said Matarazzo.

The tree was full of catkins, the male flower, that were not yet fully bloomed. The female flower will sprout later. The tree does not self pollinate, however, so without the pollen of another tree, the chestnuts will be infertile — unable to sprout another tree.

But the catkins were plentiful, like Fourth of July sparklers. Matarazzo speculated that it could be a last hurrah that trees are known to produce before their demise.

On the ground, were a couple of spiky burrs in which the nuts grow.

“You can’t imagine the amount of nuts produced and the wildlife that depended on them. For the Lenape (Indians) collecting nuts was part of their diet. They ate them and pounded them into flour to make cakes and bread,” said Matarazzo.

Part II coming next week: They are going to die anyway, why should we care about the chestnut tree?

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