Naturalists try to give the American chestnut a grand comeback

Along the south shore of Lake Erie, at Sheldon Marsh State Nature Preserve near Huron, Ohio, stands a very special tree. It's not special simply because of its large size, although it's the largest of its type in the state. Rather, the tree is unique because it is one of the very last of its species growing anywhere in the Buckeye State: the American chestnut.

A century ago, chestnut trees were everywhere in eastern Ohio. In fact, one of every four trees was a chestnut. An estimated 4 billion chestnut trees once grew from southern Maine to Mississippi, along the spine of the Appalachians and into its foothills. The wood from the huge trees — some trunks measuring 8 to 10 feet in diameter — not only was beautifully grained but also was rot-resistant, so it was popular for any number of uses: cabins, barns, furniture, or split-rail fences, among many examples.

The delicious, sweet nut of the tree was just as sought-after, eaten by wildlife, livestock, and people alike. (Remember the opening line to The Christmas Song: “Chestnuts roasting on an open fire”?) What's more, you could count on a heavy nut crop most every year — thousands of nuts per tree — as the chestnut tree did not flower until summer, long after the damaging effects of late-spring frosts.

But that all changed in 1904, when the chestnut blight arrived in New York City, likely hitchhiking on exotic nursery stock. It was a quickly spreading and devastating fungal disease, and chestnut trees had no immunity. Within 50 years, all were either dead or dying. At least one naturalist at the time called it "the single greatest catastrophe known in recorded North American forest history."
Today, the Ohio Department of Natural Resources (ODNR), with the American Chestnut Foundation, is attempting to bring back this valuable forest giant. "What's been done so far is to backcross the American chestnut with the Asian chestnut multiple times," says Stephen Rist with the ODNR, Division of Forestry. "The resulting hybrid tree is fifteen-sixteenths American chestnut and one-sixteenth Asian chestnut. The hybrid retains the characteristics of the American tree yet with the chestnut-blight resistance of the Asian."

Rist says that several test plots of hybrid chestnut trees have been planted across eastern Ohio, and results so far have been mixed, yet encouraging. The hope is that one day such seedlings can be reintroduced into the majority of Ohio's eastern forests.

But why attempt such a costly, time-consuming experiment, one that may take generations to see tangible results? Haven't we been getting along just fine without chestnut trees for most of the past century?

"It's important for the health of Ohio's forests to have as many tree species growing in the mix as possible," Rist says. "We never know what the next invasive plant disease might be. Another major benefit of having the chestnut return would be as a food source for wildlife. Everything eats the nuts, from birds to bears."

I'm old enough to have witnessed several major tree diseases sweep through Ohio during my lifetime. As a boy, I saw the devastating results of Dutch elm disease. Years later, on my own few wooded acres in north-central Ohio, I saw anthracnose slowly kill the flowering dogwoods that ringed my yard with their white blooms each spring. Most recently, the emerald ash borer made its appearance, killing most of the ash trees in the Buckeye State.

I hope to live long enough that I see at least one native tree species returned to Ohio's woodlands. With any luck, it just may be the American chestnut.

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A visitor inspects an American chestnut tree — the largest one in Ohio — at Sheldon Marsh State Nature Preserve near Huron.