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HOMETOWN U.S.A.: Meadowview, Va.

New hope for the old chestnut

Some true tree lovers hope a little crossbreeding and a lot of patience will salvage an American forest classic from near extinction.

By Tina Susman, Los Angeles Times

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From atop a small hill in Virginia, Fred Hebard has views into the past and the future. Ahead of him: the ancient peaks of southern Appalachia. American chestnut trees once held sway across those hazy hills, numbering some 4 billion across the eastern United States.

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Behind Hebard: a fledgling forest of spindly chestnut trees, their young branches bare and quivering in the cold wind. If all goes well, those trees are the beginning of a new species, one created in a chestnut mating project aimed at salvaging the American chestnut tree from near extinction.

Hebard might never know if the plan succeeds. It could take decades to determine whether the trees behind him show high levels of blight resistance. "And that only tells you if you have a chance" at full resistance, said Hebard, chief scientist of the American Chestnut Foundation, who has devoted his life to crossbreeding nuts.

Before you snicker at the idea of a group called the American Chestnut Foundation, consider some chestnut facts: Americans spend \$20 million a year importing chestnuts from Europe and Asia; the meaty nuts are gluten-free, cholesterol-free and a lot less fattening than other nuts; chestnuts make a terrific beer; chestnut tree devotees include Rolling Stones keyboardist Chuck Leavell, whose backyard in Georgia became home last month to a seedling that could be part of the new species coming from the farm Hebard oversees in southwestern Virginia.

"If we keep on losing components of our forests, what are we going to have left?" said Hebard, explaining the passion for a tree that is not even extinct, and for a nut that is imported easily from Europe and Asia for use in salads, stuffings, bread and in toasty bags sold from food carts in New York City.

America used to produce billions of those nuts until a blight imported from Asia attacked trees in New York. The disease spread quickly, and between 1904 and 1940, the trees were nearly wiped out.

Those that remained were either not blight-resistant or too few and widespread to produce healthy offspring

to sustain the species, whose healthiest specimens grew to 100 feet tall. The trees' absence had a trickle-down effect on wildlife that foraged for chestnuts. Some experts say the panther's disappearance from this region can be traced to the trees' disappearance, because the rodents that were panther prey lost a key food source.

It would be decades before the crossbreeding program would take hold. Now, after crossing blight-resistant Chinese chestnuts with nonresistant Americans, the foundation has begun widespread test plantings of a nut that is 15/16 American and 1/16 Chinese. It hopes the equation will produce a tree that has the Chinese version's resistance to disease and the American version's ability to thrive in North America's climate.

"Tree-breeding is not for the impatient," said foundation spokeswoman Meghan Jordan, who says the American chestnut tree's relatively low profile adds to the challenge. The foundation, started in 1983, competes with larger and more established groups such as the Audubon Society for donations and grants, and there's no guarantee of success.

"In some ways, you're selling a dream," Jordan said.

And as long as chestnuts are easily available, it can be difficult to persuade people that America needs its own chestnut trees.

Hebard points to the trees' historical significance in this part of the country. "This was the last holdout of a subsistence economy," Hebard said of the region, "and the chestnut was a very important part of that economy. It wove itself into the psyche."

The blight's peak coincided with the Great Depression, meaning the loss of a cash crop, food source and a source of timber used for everything from telephone poles to furniture.

To say that chestnut foundation members are excited about the new nut — in scientific terms dubbed the B3F3 — is putting it mildly. Hebard gets more requests from chestnut lovers vying for the right to plant a few B3F3s or their seedlings than he can grant.

Most test plantings are on government-run forestland, but some private citizens have become overseers of one or more B3F3s. They include Leavell, a longtime environmental activist, and Bart Chezar, a Brooklyn native who persuaded the chestnut foundation to send him several chestnuts for planting in a New York City park.

Several months after he sent his request to the foundation headquarters, Chezar got the message he'd been hoping for: The nuts were in the mail. They arrived in a plastic bag tucked into a small, flat-rate U.S. Postal Service box and were housed in Chezar's refrigerator until a ceremonial handover to park officials last month.

Passers-by, photographers and park officials peered down at the history-making chestnuts, which resembled large Milk Duds. After some time in a controlled environment on Staten Island, they will be planted in Brooklyn's Prospect Park and watched for the bark-eating cankers that are a sign of blight.

Several hundred miles to the south, at the Meadowview farm, Hebard and David Bevins, a foundation researcher, were sorting through nuts and seedlings, packing them into boxes, and shipping them to members across the Eastern U.S.

Refrigerators opened to reveal a chestnut sperm bank, with plastic containers of pollen that will be rubbed onto female flowers to produce new chestnuts.

At a recent fundraising event put on by the foundation's Virginia chapter, chestnut fans raised tens of thousands of dollars for the effort while eating chestnut-themed food and bidding on chestnut-themed items: a

necklace made of glass beads in the shape of chestnut leaves and burs; picture frames made from chestnut wood; a birdhouse crafted from chestnut trees.

The popular chestnut beer didn't make it, but Catherine Mayes, the Virginia chapter president, vowed to get some for next year's chestnut gala.

"It's an unbelievably huge challenge," Mayes said of bringing back the tree. "And I'm not sure we're going to do it, but we're going to try."

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