

Earth Day at 50: The Year of the Tree

By Lisa Scheid, Reading Eagle

Pennsylvania Parks and Forests has dubbed 2020 as "Year of the Tree." It is raising $600,000 to replace trees in state parks and forests such as Nolde Forest that have lost trees to invasive insects such as the woolly adelgid and the emerald ash borer.

Other environmental organizations such as Berks Nature and landowners are also embracing the value of trees.

"The ecological value of trees to human beings and the environment cannot be overstated," said Aaron Greenberg, a board certified arborist who is state coordinator of the Pennsylvania Champion Tree program. "Trees take carbon dioxide from the atmosphere, mitigating the effects of climate change and producing atmospheric oxygen as a byproduct, which we need to breath."

Trees also shade our homes, which can reduce heating and cooling costs, and they regulate our watersheds. They provide food and habitat for hundreds of species.

Beside a stream, a treet can help keep waters cool for wild trout.

Trees, Greenberg said, also have a profound psychological effect on human beings: People with consistent access to trees are happier and healthier.

In this Year of the Tree, we checked in with a few tree-huggers.

The tree keepers

Karen Fraley can see the old sycamore from her Kimberton, Chester County, farmhouse kitchen window. It's about 60 feet away, growing in wet land that sycamores like. The branches stretch out like arms, and when the wind blows from the north, the tree twists just a bit. The tree, Fraley say, is deeply rooted.

"She's beautiful; her roots go down as far they go out," she said. "That's the way I think of her. She looks like a woman dancing."

Fraley can't help thinking of the sycamore as female. It's like the tree has a sisterhood with the pioneering independent women who have owned and cultivated the surrounding land for a century.

Fraley's grandmother Effie Disston Fraley purchased the farm in 1938. Prior to her grandmother, the farm belonged to a Quaker widow who used it as a refuge along the Underground Railroad.

The Quaker widow, Esther Lewis, ran her own mining business with iron ore discovered on her land. She educated her four daughters, one of whom became an outstanding 19th century naturalist, Graceanna Lewis.

Fraley's widowed grandmother moved to the West Vincent Township farm in 1940 with her daughters and two granddaughters in the midst of World War II, on her own. Some thought it was daring — or crazy.

Fraley's father, Pierre C. Fraley, became an important science writer and publisher.

Since the 1970s, they've had an arborist feed the tree annually.

"My father started doing that, and we've just continued it," Fraley said. "I imagine its getting pretty old now. I'm not sure how hollow it is inside."

There is a conservation easement that protects the tree and farmstead. Another generation is growing to care for the sycamore.

"Trees are the lungs of our earth," Fraley said. "They give us air to breath; they give us food; they nourish the Earth. They live much longer than we do, so we

have to take care of them. They say a big big tree takes 300 years to grow lives for 300 years and takes 300 years to die. I think that is so beautiful. It just gives you different perspective."

Greenberg said the most dangerous of the diseases of sycamore trees is anthracnose, also called leaf and twig blight. It can kill American sycamore, although it does only minor damage to other varieties. This disease can kill twig tips, expanding to buds, new shoots and leaves.

Sycamores (Platanus occidentalis) indeed grow very large under the right conditions.

"They are relatively fast growing, and in a few hundred years can reach mammoth proportions, especially where they have access to plenty of water and in the wild they are often found growing along creeks and rivers," Greenberg said.

They have also been historically spared the ax because the lumber is not particularly desirable, and because they were planted on the southwest corner of buildings as an early type of heating and air conditioning — one of the last native trees to get leaves on in the spring and the first to drop in the fall, sycamores would provide excellent shade with their large leaves during the summer while allowing the sun to warm the home in the winter.

Greenberg said 17 out of the 20 largest trees in Pennsylvania are sycamores, and many of these are remnants from next to old homesteads and springhouses.

"The only thing preventing sycamores from growing really big is time, space and human interference," Greenberg said.

The Fraley sycamore is indeed the biggest in the state, according the Champion Tree Program administered by Greenberg.

The Champion Tree Program tracks and measures the species and size of trees recommended by people throughout the state. The goal is to be a repository of information about the largest trees of each species in the state.

Greenberg said the information is available so that students, citizens and researchers can study and appreciate the few large, old trees that are still alive.

"Pennsylvania, literally Penn's Woods, was almost completely forested when William Penn came here in 1682," Greenberg said. "In the intervening 400-plus years, almost all of the old growth was cut. We hope that through the Champion Tree Program, the citizens of Pennsylvania can get excited about seeing the very large, and often very old trees that remain in this state, many of which are under threat from development or lack of care."

A forest for the future

In Tilden Township, artists Martha and Jay Ressler planted more than 700 trees on their 2-acre property.

“When we heard that just 2 acres of trees is considered a forest and that each county in Pennsylvania has a forester who can help homeowners start one, we wanted to plant our own,” Martha Ressler said.

Martha is a fiber artist, and Jay a photographer. They are both nature lovers.

Berks County forester Rick Hartleib came and advised them on which trees would be best to plant, where to buy the seedlings and how to care for them. The Resslers began planning months ago. With the help of three friends, Cindy Walls, Libby Cerrulo and Glenn Sweigert, they completed the planting on April 6.

They chose mostly hardwoods: oaks, red maple, hornbeam, locust, persimmon, birch, sweetgum and others, but also 75 Eastern red cedars, said Jay Ressler. The red cedars thrive in the area at the base of Blue Mountain, where they have made their property a haven for birds and pollinators

“We also chose a number of short trees like dogwood and crabapple and shrubs, because we didn’t want tall trees to obscure my sister’s view of Blue Mountain," Jay said. "She lives next door.”

Each tree is protected by a tube called a tree shelter, which keeps deer from destroying the seedlings, and to keep them from drying out. A hardwood stake is attached to the tree shelter to keep it upright, the Resslers said.

In this case, stakes were cut by a local saw mill from dead ash trees

Jay cut down along the edges of the property as part of preparing the land.

“Ash is not as durable as black locust, which is generally recommended, but these stakes came at a price we could afford,” Jay said. "A bird net completes the assemblage to prevent birds from flying down the tube."

Martha said the tree planting was a lot of work.

“There is no question that this was a lot of work, but we feel this was an important contribution, and will enjoy it in coming years," she said. "Our property is scheduled to be part of the Hamburg Garden Tour on June 13, so the public can come take a look.”