



Under the Oaks ARBORETUM NEWSLETTER

*The flagship publication from the
Memphis Botanic Garden Arboretum,
Tennessee Urban Forestry Council's
First Center of Excellence.*



Volume 32 - Spring 2024



Lake Biwa, in the Japanese Garden, frozen during a winter storm in late January.

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TUFC West TN Chapter Volunteer Appreciation recipients donated well over 6,000 hours in 2023.

Letter From the Center of Excellence

Article by: Bo Kelley, MBG Arborist

I want to start this issue by thanking each and every one of you for your support of the Memphis Botanic Garden and our mission. We depend on your enthusiasm, curiosity, passion, and generosity for our success. As stated in the first issue of *Under the Oaks* in 2008, “from small beginnings, great accomplishments can arise, and we, at Memphis Botanic Garden, have great expectations.” Our journey to this point would not have been possible without the dedication of our members, donors, volunteers, and guests, who have helped us exceed our expectations. Thank you, from all of us here, for your continued support as we grow into new seasons!

I’m excited to share with you this edition of *Under the Oaks*. We’ve had a lot going on around the arboretum, but before I get into the details, I’d like to take some time to recognize a special member of our history. Anyone familiar with the Tennessee world of tree enthusiasts should know Laurie Williams. Well, Laurie retired from the Garden last fall and left me with ~~more than enough work to do~~ us wishing her well. She has contributed more towards our legacy than I can write about in this limited space, but I’ll try to capture a portion of that here (if you’re reading this, Laurie, pour a glass of wine...and find it in your heart to forgive me).



My first interactions with Laurie all but destroyed my expectations that being the arborist at the Garden meant “getting to play in the trees all day.” I left our first conversations overwhelmed; she left rolling her eyes, at the green-as-grass, freshly-minted arborist who thought climbing trees and (occasionally) pruning satisfied the requirements of the job. Thankfully, Laurie is gifted with grace. Grace enough to not fly off the handle when I looked at her with blank stares as she rattled off data: “Need signs on

842, 148, and 130; 732 and 165 need pruning; replace the sign on *Cryptomeria j.*; move Type 1 to 425, section D; 5 arboreta are up for re-certification this year, are you going with us to Southwind next week?”

In my head, I was halfway done drafting my two-week notice; in her head: “They’ll let anyone work here these days.” Thankfully, Laurie is also gifted with patience. A type more like a dozen slaps on the back of the head...but she’d stay with you until you got it right

(these were metaphorical slaps, by the way...they mostly came in the form of “dumbing things down” for me, aggressive reminder emails, and scowling looks). Despite my ignorance, stubbornness, and avoidance of technology altogether, she devoted much of her time guiding me in the practice of arboretum management, an art I’m confident I will never master as she did.

From diligent record-keeping to volunteer coordination (a.k.a “herding cats”), Laurie kept the Arboretum at Memphis Botanic Garden up to date, engaged in our community, and always growing stronger. In our inaugural year of certification with the Tennessee Urban Forestry Council (TUFC) in 2006, she and her team recorded 135 different species, making sure the collection was up to standards. In 2012, the Memphis Botanic Garden Arboretum was recognized as the first Center of Excellence for TUFC, as part of an initiative designed to provide extra depth to TUFC’s outreach and education programs. A Center of Excellence assists with arboretum development and certification, provides ongoing educational programs, and gives citizens a local resource for arboriculture. With the addition of MBG into the Urban Forestry fold, local awareness and tree advocacy skyrocketed, with Laurie and her (and I can’t stress this enough) *extremely* dedicated volunteers on the frontlines, as the “Tree Team.” Laurie and the team (formerly mentioned ‘herd of cats’), have built and maintained an expansive volunteer network of engaged community members, ensuring that all of the expectations of the Center of Excellence are well-exceeded.



Today, we are able to serve as an exemplary leader for urban forestry and tree advocacy. We are built upon overwhelming passion and commitment, held together through community, and unified by a love of nature. This ecosystem wouldn’t have the stability it does today without the dedication of one woman, committed to achieving excellence, who displayed, more than most, the admirable virtue of humility. Thank you, Laurie, for everything you’ve done! *Cheers*

If you’d like to thank her yourself or have questions about the arboretum program you can reach her at her personal email address: lauri.....I’m kidding! Don’t bother her, she’s done enough work already!

Aside from the life-altering change of Laurie’s retirement, things are running smoothly at the Garden. In 2023, we renovated our original ‘Arboretum’ area in the southwest corner of the Garden, which included the planting of over 50 native trees! Additionally, we were the recipient of a TN Division of Forestry TAEP Grant for the second year in a row. Now, almost a hundred small oaks, hickories, and beech trees can be found scattered across the grounds, as part of an effort to ensure the continued conservation of our beloved canopy. In education, we’re planning a more regularly scheduled slate of Tree Tours, our guided identification walks across the Garden. We’re discussing the development of more advanced workshops for tree care and arboretum maintenance for arboretum managers, to guide those interested in developing an arboretum through the early phases. Of course, be on the lookout for information regarding our annual Urban Forestry Advisor’s course this fall...stay tuned for more! For now, enjoy this issue of Under the Oaks and be glad that spring is on the way!

Tree Team Updates

It’s going to be another busy year and the Tree Team is already well underway on arboretum pre-inspections. This process involves the team visiting a previously certified arboretum and checking up on the trees. This includes making sure that all

of the trees on the certified list are still alive and well (free of hazards or debilitating defects), the trees have signage in place, best management practices are being observed (proper mulching, pruning, and protection from lawn mowers and weed-eaters), and the trees are mapped legibly (if Level 2 and up).

If you want to find out more about the arboretum program and learn about the benefits of engaging with trees in your community, visit the TUFC website, [here](#).

Numbers to Know:

- 36 West TN arboreta active in 2023
- 13 different cities represented
- 26 arboreta up for recertification
- Approximately seven new arboreta planned for first-time certification



The Tree Team visits with members of the Orange Mound community at Deaderick Cemetery

From left to right: Lilli Jackson, Claire Barnett, Judi Shellabarger, Jan Castillo, Mary Mitchell, Linnea West, and Laurie Williams

Tree Topic: Agroforestry

Article By Owen Smith, Urban Home Garden Horticulturist and Orchard Curator



Modern industrial farming practices have many negative consequences, from soil degradation and habitat loss to fertilizer runoff, inefficient water use, and dependence on a small number of crops. However, the integration of trees and shrubs into farming systems (a concept called “agroforestry”) may help eliminate many of those issues. Although this form of land management has been practiced in the Americas for thousands of years across cultures, agroforestry started to gain traction and validity in modern agriculture during the Dust Bowl, when widespread soil degradation and wind erosion prompted a government program called the Prairie States Forestry Project. This conservation project involved the planting of millions of trees to create windbreaks throughout the Great Plains, which helped to slow the effects of soil erosion and the severity of dust storms. The use of windbreaks is just one example of the many

forms agroforestry can take.

Today, agroforestry projects such as alley cropping, riparian buffers, forest farming, and silvopasture (the integration of trees with animal pastures) are being implemented on farms, in addition to windbreaks, to diversify crop production, protect and rebuild degraded soils, reduce energy and chemical inputs, and increase water-use efficiency. Agriculture is not the only space where agroforestry can provide these benefits, as these concepts can apply to almost any piece of land. Landowners, city parks, golf courses, and backyard gardens can all benefit from agroforestry, whose design elements can be scaled to fit into any landscape or backyard, functioning as a source of mulch, edible fruits and nuts, shade, a windbreak, or wildlife habitat. We all know the benefits that trees provide in our

landscapes; it turns out that the land does too...and our crops are the better for it!

To learn more about Agroforestry, check out the following resources:

<https://www.usda.gov/topics/forestry/agroforestry>

<https://www.fs.usda.gov/nac/>



Species Spotlight

Arborvitae: The Tree of Life

Article By Linnea West, Tree Team Volunteer



Was *Thuja occidentalis* the first American tree brought to Europe? According to a story published in 1882 by Thomas Meehan, crew members of an early 1500's exploring ship were cured of deadly scurvy by drinking a medicinal tea from a New World plant. Native Americans taught the Europeans to steep this tea from the foliage and inner bark of cedar trees*. Upon learning of this cure on the sailors' return, the King of France gave this healing tree the name of Arborvitae, Latin for the French, "l'arbre de vie" (Tree of Life). This miracle tree was spread widely throughout Europe. Some legends say it was the renowned French explorer, Jacques Cartier, who gave "l'arbre de vie" its name.

American Arborvitae in home yards and gardens may reach 40– 60' tall and 10' wide, growing in a regal conical shape and living 50-100 years. North Pole® and 'Techny' cultivars will stay under 15' with a spread of 6', making an attractive privacy screen. Globe-type arborvitae will remain 3-6' high and wide depending on species. Arborvitae prefers full sun to partial shade, moist soil, and good drainage. In the wild, *Thuja occidentalis*, surrounded by the natural forest, can live 200 to over 400 years. Arborvitae trees in Ontario, Canada are thought to be 1,000 years old or more!



Sometimes called Northern White-cedar, the wood is soft, light, very durable and water-resistant. Through the years it has been used for making canoes, boats, fence posts, shingles, and the shaggy bark as a fire-starting tinder.



Native to North America and hardy in zones 2 – 7, these evergreen trees provide shelter and food to birds, insects, and mammals. Dense, overlapping foliage creates layers of protected rooms for wildlife of all types to weather out a storm or shelter for the winter.

Arborvitae trees bear cones with rich seeds sought out by robins, redpolls, pine siskin, dark-eyed juncos, mockingbirds, brown thrashers, yellow-rump warblers, and cedar waxwings. Also hidden in this tree are small insects relished by chickadees, robins, juncos, and cardinals. The peeling bark is used by several bird species as nesting material. Arborvitae is host plant for over 30 species of Lepidoptera, including jocosse sawfly, juniper geometer, pine tube, and southern variable dart moths.

Visit our own *Thuja occidentalis* 'Green Giant' # 4010 in the alle' to the Iris Garden, and at each of the corners in the Rose Garden, as well as *Thuja plicata* 'Fastigiata' - western redcedar, #148 in My Big Backyard. Note flat, fan-like sprays of foliage made up of overlapping scales, the scales on the sides appearing folded. Female cones grow to be green ½" ovals, further back on the branch than the tiny reddish pollen cones. After shedding their pollen to the wind in spring to be carried to other trees, the pollen cones dry up. The female cones, their scales yellow when ripe, turn brown and split to release their fertilized seeds, a few to grow into new Arborvitae trees.



Upcoming Events & Announcements

Tennessee Arbor Day

March 1, 10 am

The Memphis Arbor Day Ceremony will be held at **Audubon Park** (entrance off of Goodlett St.). Join us for a celebration dedicated to the beauty and magnificence of our urban forest!



Turn Your Backyard into a Certified Tree Sanctuary

Many of us may not be engaged members of a public park or greenspace destined to become a TUFC Arboretum. That's ok! The "Tree Sanctuary" program allows homeowners to create what is essentially a private arboretum. Tree advocacy starts with each one of us. What better way to spend your next dinner party than browsing your private arboretum with your closest friends, sharing with them the love of one of our most precious resources?

[Click here](#) for more information about the Tree Sanctuary program. All questions can be directed to westtn.tufc@gmail.com.



Tennessee Champion Tree Program

The goal of the Champion Tree Program is to "protect, preserve, and keep a record of the largest trees in Tennessee through public education and engagement." Our big trees are our biggest resource!

[Click here](#) to learn more and send in your nominations.

Photo Gallery - Snow Storm Special



Japanese black pine (*Pinus thunbergii*) cradling pockets of snow.

Photo credit: Mary Glenys Espey



Pin oak (*Quercus palustris*) basking on the hill. This tree was removed just weeks later due to advanced decline from Bacterial Leaf Scorch. Here, it enjoys a final respite after over 50 years of watching the Garden grow.

Photo credit: Mary Glenys Espey



A grouping of evergreens, huddled together in the fog against the drift, in Audubon Golf Course. Viewed from Cherry Road.

Photo credit: Owen Smith



The Great Blue Heron, a frequent visitor to the Japanese Garden, effortless in contemplation. Would that it came so easily to man.

Photo credit: Mary Glenys Espey (35mm film)



Southern red oak (*Quercus falcata*) sheltering the entrance to the Sensory Garden. After years of attempted remediation, this magnificent tree was removed as a result of advanced natural decline, deemed too hazardous to persist. After a century of service, this oak greeted millions of visitors as they entered one of our most beloved gardens. Like the pin oak of the previous photo, our southern red oak welcomed its final winter with grace and grandeur, as only an oak tree can.

Photo credit: Mary Glenys Espey (35mm film)

To read past issues of *Under the Oaks* visit the archive by [clicking here](#).

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