



Under the Oaks
ARBORETUM NEWSLETTER

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



Volume 34 - Spring 2025



Letter From the Editor

By: Bella Kirkpatrick, Arboretum Horticulturist

Welcome Trolls and trees! If you haven't been to the Garden in a while, you might not have noticed our new visitors! We have six Trolls visiting the Garden. My

favorites are down in The Lowlands & Shade Gardens: you can see Ibbi Pip putting a birdhouse in a red oak and Basse Buller leaning up against another red oak. On your way to see the trolls, you may also notice some new trees in the ground. We received 33 trees as part of the Tennessee Agricultural Enhancement Program (TAEP) Community tree planting grant. These trees were planted throughout the Garden and include twelve different species of trees. They were planted in areas with mature or declining trees so when those trees eventually come down, there will be trees large enough to fill in the canopy. With all of these new additions, I would like to acknowledge some trees that we have lost. Two of the trees in front of the Visitors Center unfortunately needed to be taken down. Both the cherry bark oak and our state champion shingle oak had decay in the trunk that posed a safety risk, so the hard decision was made to take them down. While it is always sad when a tree has to come down, we have some exciting plans for the front of the Visitors Center and continue to add new trees to our growing collection!



Please enjoy this edition of Under the Oaks about why old trees are important, how to select the right tree at the right time, and the debut of the Liberty Tree in the Japanese Garden.

Upcoming Events:

- Tennessee Arbor Day Celebration at Winchester Park on March 7 at 10 am
- Spring Plant Sale on April 10-12

I Like Big Trees and I Cannot Lie



By Bella Kirkpatrick, MBG Horticulturist

Old trees are beautiful. They often have a large canopy with an almost unbelievably large trunk. They also provide the most ecosystem services: with their large canopies they can collect a lot of storm water before it hits the ground which helps to manage for storm water runoff. The large canopies also provide a lot of shade, which can help lower temperatures. Being so big, they hold a lot of carbon within them. Carbon sequestration is the process of converting carbon from the air to a solid or liquid form. A tree photosynthesizes by taking atmospheric carbon and water and transforming it into oxygen and energy. That energy is often used for growth and the creation of wood. That wood is where the carbon is stored. They also have a lot of wildlife value: many trees are host plants for different types of butterflies and moths, and the branches and cavities provide habitat for birds and small mammals.



With all the benefits of a large tree, there is some maintenance that needs to be done. Larger trees are more sensitive to construction activities, so you should protect it from root compaction or other damage. It is important to keep an eye on your large tree and watch

for any dieback, bare branches, large cavities, or decay at the base. If there is a dead branch, removing it can help prevent disease or rot from spreading. If you need to know if there is decay in a tree, one of the easiest things you can do is "sound" the tree by tapping it with the base of a knife and listening for the difference in sound between the solid and hollow parts. If you see fruiting bodies of fungus, there is likely decay or dead wood.



While it is sad when a big tree dies, it doesn't necessarily mean it has to go. Of course if it is close to a building or a heavily trafficked area such as right next to a path, it should be removed as soon as possible for safety. However, if the tree is in a wooded area or far away from targets, you can leave it and it can continue being an asset. Dead trees, or snags, house insects that woodpeckers and other birds can eat, and the cavities can provide habitat. Plus, the tree will decay and become a new source of carbon.

Old trees also hold valuable history. The growth rings can provide information on previous weather conditions such as periods of drought or years of good growth. Some trees that have been around for hundreds of years have seen many events, and may have artifacts incorporated into their wood, such as one cross section I have seen with a civil war bullet through it.

Overall, if you have a large tree you should cherish it and appreciate everything it does for you and the environment.

Right Tree, Right Location



By: Anna Vo, MBG Horticulturist

Trees are among the largest and longest-living organisms, and they play a crucial role in our urban environments. They enhance our lives in numerous ways, providing oxygen, shade, and carbon sequestration. Trees also support entire ecosystems, prevent soil erosion, and help reduce stormwater runoff. The psychological benefits are just as significant: studies show that trees lower stress levels, reduce crime rates, and even aid in faster recovery for patients who can view them. However, these benefits are only possible when trees are correctly placed in locations that suit their needs. If trees are improperly sited, they can become costly to maintain and potentially hazardous over time.

When choosing a tree, it's essential to consider two main factors: the tree's characteristics and the characteristics of the site. A thorough site analysis is necessary to assess existing conditions, such as space availability, weather patterns, and access to light and water. These factors may limit the types of trees that can thrive in a given area.

When selecting trees, it's essential to consider their specific characteristics. One of the main challenges in urban areas is the tree's size. Factors such as height, spread, and root zone requirements play a significant role in determining which species are best suited for a location. Trees offer various attractive features, including vibrant fruits, flowers, and the ability to attract wildlife. Additionally, other important considerations include pest and disease resistance, drought and salt tolerance, light and pH requirements, as well as maintenance needs. All of these factors should be taken into account to ensure the tree's long-term health and suitability for the site.



After choosing the tree species, the next step is to select a healthy tree from the nursery. Look for a tree with a single, strong dominant leader. Be cautious of issues like included bark, codominant stems, or broken and damaged branches. The trunk should be free from wounds or cuts, with a good taper, and the root flare should be visible. If the tree is in a small pot, carefully remove it and inspect the roots for any signs of girdling. If the roots are black, brown, or give off a foul smell, it could indicate health problems. By selecting a healthy tree, you're ensuring that it will be a valuable asset rather than a potential issue in the future.

Be sure to check out what trees we have at the Spring Plant Sale!

First Liberty Tree in Tennessee Planted in the Japanese Garden



By: Rick Treharne, Isaac Shelby Chapter President, National Society of the Sons of the American Revolution



One of the first things visitors saw when entering Boston in 1765 was a huge, 120-year-old elm tree. In August of that year, someone placed a copper plate on the tree trunk that read “Tree of Liberty.” For exactly the next ten years that elm tree in one way or another played a part in every city protest leading up to the American Revolutionary War. The tree acted as a bulletin board with notices of calls for action pinned onto its trunk, a meeting place or a protest site, and/or a physical symbol of the one-word reason for the American Revolution—Liberty. In August of 1775, after hearing too much talk and seeing too many protests from treasonous locals wanting Liberty, the British soldiers and city Loyalists had had enough. They decided to chop down the Liberty Tree, cut it into pieces, and set the remains on fire.

To help educate Americans about this historic tree, the National Society of the Sons of the American Revolution decided, as part of its America 250 program recognizing the 250th anniversary of the signing of the Declaration of Independence on July 4, 2026, to plant 250 Liberty Trees across the nation. On Saturday, Nov. 23, 2024, their local Isaac Shelby Chapter planted the first Liberty Tree in Tennessee in the Garden’s Japanese Garden and dedicated it to all the veterans of the United States.

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



[Visit the Garden](#) | [Calendar](#) | [Membership](#) | [Give](#) | [Book Your Event](#)



Memphis Botanic Garden | 750 Cherry Road | Memphis, TN 38117 US

[Unsubscribe](#) | [Update Profile](#) | [Constant Contact Data Notice](#)



Try email marketing for free today!