



Under the Oaks ARBORETUM NEWSLETTER

VOLUME 28

Learn About Recent Tree Relocation Efforts. Celebrate Tennessee Arbor Day. Meet the Newest Addition to our Arboretum.



Relocating Our Yaupon Holly

Article By Bo Kelley, MBG Arborist
Above Photo by Natalie Pratt

When touring the Garden, visitors are greeted by gradual changes throughout the garden spaces along the way. Moving from the highly manicured Formal Gardens, with clean lines and simple palettes, down through the Lowlands, where permaculture design elements replete with native pollinator-friendly plants, the entire 96 acres and 30 distinct gardens create a dynamic landscape. One garden space, however, is isolated and on full display year-round. The Water Garden, located in a courtyard within the Visitors Center, has captured the attention of visitors to the Garden since 1966, and it's about to experience some radical changes.

Recently, the decision was made to renovate the Water Garden. Following the modernization of the Grand Hallway and Visitors Center, the Water Garden felt left behind in time. Designs have been created and the buzz surrounding the face-lift is spreading throughout the Gardens. In lieu of scrapping all the plants within the garden and starting fresh, efforts to conserve the existing collection were considered a top priority. Of all the plants scheduled for removal and relocation, the most iconic (and ambitious) is the Yaupon Holly (*Ilex vomitoria*) that has been masterfully cloud-pruned over the years.



Transplanting a large, older tree takes a lot of careful planning and consideration. Plants are rather well-off growing in one spot their entire life, but some species are more suited for transplanting than others, and luckily the Yaupon Holly is one of them. Regardless, transplanting is a stressful event for any plant, more so for a tree of great size and age. To lessen the effects of transplant shock, the tree's roots were first treated with chemicals engineered to increase survivability. The tree's roots are the crucial part of the tree that must be cared for during transplantation. The next goal was to create a root-ball that would contain sufficient roots for re-establishment. Given the tree's location, trenching on the north and south side was done as far away from the trunk as possible, while the east and west side of the root-ball were considerably further away, giving the root-ball an overall rectangular shape with maximum root concentration. The root-ball was then covered with layers of burlap, a method used to ensure that the soil does not fall away from the roots when the tree is moved. All of these methods are standard practice, but the biggest concern was the most obvious. How can you move a 12-foot tree that weighs well over 3000 pounds?

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The answer was to use a crane to lift the tree out of the courtyard and over the building! Precision rigging techniques and a lot of care, provided by both Garden staff and Woodland Tree Service, made for a sight not seen every day. The tree was successfully lifted out of its old home and transported to a new site in the Japanese Garden, where its cloud-pruned canopy will fit right in. The tree will be cared for extensively in the early stages following the move, until it is apparent that the root system has successfully established itself in the new site. Be sure to visit the Japanese Garden and look for the tree on the west side of the moon gazing pavilion on your next visit.

Celebrate the Official City of Memphis Arbor Day on Friday, March 4



Join us at the Garden on March 4 at 10 am for the official City of Memphis Arbor Day Celebration. The festivities will include a reading of the Mayor's proclamation, a poem reading by the President of the West Tennessee Chapter of the Urban Forestry Council, tree planting demonstration, tree giveaway, and a tour of the magnificent trees at MBG. Plus children can have some fun learning about trees at a self-guided station in our Visitors Center.

Free and open to the public.

Tree Planting :

A Chinkapin Oak (*Quercus muehlenbergii*), donated by long-time MBG supporter Dabney Nursery, will be planted at the Garden. This native tree is very desirable to both birds and mammals.

Learn more about this addition to our Arboretum in the article below.

Tree Sapling Giveaway:

Flowering Dogwood (*Cornus florida*)
Eastern Redbud (*Cercis canadensis*)
Red Mulberry (*Morus rubra*)

Tree saplings are provided by The Arbor Day Foundation to honor Memphis as a Tree City USA.

Tree Tour:

Certified Arborist Bo Kelley and Urban Forestry Advisor Linnea West will give a tour through MBG directly after the tree planting where they will highlight and discuss a selection of native trees. Information ranging from field identification techniques to the historical and cultural significance of the species will be explored throughout the tour.

TENNESSEE ARBOR DAY CELEBRATION SPONSORED BY



Meet the Newest Addition to the Memphis Botanic Garden Arboretum - Chinkapin Oak

Article and Above Photo By Linnea West, MBG Tree Team

Chinkapin Oak, *Quercus muehlenbergii*, is native to central and eastern North America with a long and interesting history intertwined with humans. The dark brown ¼" acorns provide important food for turkey, deer, bear, squirrels, chipmunks, and other small mammals and birds, especially red-bellied and red-headed woodpeckers and blue jays. The small white nutmeats taste delicious to humans as well!

The name Chinkapin (also spelled Chinquapin) is from the Algonquin term '*chechinquamin*', for the shrub-size *Castanea pumila*, which is similar in leaf and also a valued source of edible nuts. Cherokee prepared Chinkapin Oak leaves medicinally to treat headaches, fevers, cold sweats, and blisters. The Koasati tribe of Tennessee and surrounding region used the leaves to cure stomach ills.

Early pioneers made split-rail fences from Chinkapin Oak. Later, these fences were sold to engineers on the riverbank to fuel steamboats. Durable Chinkapin wood has been used for railroad ties, construction lumber, furniture, and flooring.

Chinkapin Oak thrives in sunny, limestone outcrops of high pH and on well-drained upland slopes, tolerating a wide range of soils but reaching its greatest size in rich bottomlands.

Growing in the open, this grand tree can reach 80 feet tall or more, with a crown spread nearly as wide. Each 4-6" glossy dark green leaf has 8-13 incurved teeth ending in a point (but not a bristle). The leaf underside is a downy pale green; the twigs are light tan with clustered end buds. (The serrated leaves resemble those of the true Chestnut tree, *Castanea dentata*, which was once widespread in the same eastern North American forests.) The bark of mature trees is light ash gray splitting into thin, vertical flakes.



Small dark acorns are 'muehlenbergii'.
Photo by Linnea West



Chinkapin foliage with immature acorns courtesy of [Prairie Moon Nursery](#)



Photo by Linnea West

A member of the White Oak group, Chinkapin produces acorns every year. Male flowers are dangling pollen-bearing catkins; female flowers are tiny yellow knobs on short stems nestled singly or in pairs in the axils of leaves. Oaks rely on wind pollination for reproduction. Greenish-yellow pollen is carried aloft on spring winds from the ripened male catkins to female flowers on other trees. Fertilized female flowers grow into acorns throughout the summer, ripen and fall in autumn, root, and begin to grow, all within the same year.

Open-grown Chinkapin Oaks are massive trees with thick boles and wide-spreading branches. The current National Champion measures 110' tall with a 92' crown spread in Clark County, Kentucky. The oldest known Chinkapin is over 430 years old in Guadalupe Mountains National Park, Texas.

Our newest addition to the Memphis Botanic Garden Arboretum is a four-year-old *Quercus muehlenbergii* to be planted on Tennessee Arbor Day! Please come visit this storied Oak as it settles in to grace our grounds for perhaps hundreds of years.

*The botanical name, *Quercus muehlenbergii*, honors the 18th century American botanist Muhlenberg. (The original misspelling at tree registration stands as the official tree name under rules of botanical nomenclature.)

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