## Tower Grove Park (Main Drive)

November 10, 2025

What? No species list? Well, we made one last year and it still does the job. You can find it <u>HERE</u>. Instead of making a repeat species list, the gameplan for this year is to simply highlight some of the trees that John stopped to talk about.

WHERE WE WALKED: We met at the end of Main Drive near the Shakespeare statue at Flag Circle. But none of us were even looking at poor Mister Shakespeare. We were instead all gathered around the tailgate of David's car as he showed us some of the magnificent druse (druzy) quartz that he had recently dug-up. "Wow!" was the usual reaction as we each saw the sparkling stones for the first time. They were *dazzling*! And as a bonus to the visual treat, we got to learn some geology too as David calmly and clearly explained how these crystals were formed over millions of years. After the rock show, we set-off to admire and identify the trees. We wandered here and there along the south side of Main Drive towards Grand Avenue. Then we crossed Main Drive and slowly zig-zagged back to our cars along the north side of Main Drive. We didn't visit the flower gardens at the end because it was just too uncomfortably cold. Hours before our walk the temperature had been way down to the mid-20's. And that's Fahrenheit!

<u>TREE ID's</u>: It was a good feeling to be able to identify almost every tree we found. For those trees that we were unable to identify (mostly exotics from far parts of the world) we were able to use Tower Grove's Interactive Tree Map (<u>HERE</u>) to learn what they were.

<u>PHOTOS</u>: Kathy Bildner has kindly shared her photos of our walk. You can find them on our GoogleDrive (<u>HERE</u>). Among her photos are several of Missouri's biggest Bigtooth Aspen tree. Tower Grove Park is an arboretum with 2 "State Champion" trees (neither of which we visited today – except for Kathy):

- Bigtooth Aspen (*Populus grandidentata*) which can be found near the GPS [38.605889, -90.262399].
- Swamp Privet (*Forestiera acuminata*) which can be found near the GPS [38.604276, -90.257047] or along Arsenal Street across from house address 4152.

<u>PARADE OF TREES</u>: Here's a list of the more notable trees that John seemed especially interested in talking about. They're listed (more or less) in the order in which we encountered them:

- HOP-HORNBEAM (Ostrya virginiana): a long row of these recently-planted trees were the first to grab our attention. The trees had attractive clusters of hop-like fruits dangling from the ends of its first-year growth. Rick Armstrong explained that these Hop-Hornbeam trees were planted in a tidy monoculture row because the Park has a new Master Plan which calls for a number of "allees" to be created. You can find the park's "Tree Restoration Master Plan" HERE. It's very interesting.
- **SOUTHERN MAGNOLIA** (*Magnolia grandiflora*) This first Southern Magnolia that we found was a cultivar ("Bracken's Brown Beauty") that had dark brown velvet on the underside of its big, thick leathery leaves. Later we found other Southern Magnolias that did not have such a velvety brown underside.
- **BUR OAK** (*Quercus macrocarpa*): Big leaves with rounded-tip lobes, massive frilly-capped acorns, corky growth on its branches, and whiskers on the ends of its twigs. Add them up and we only get one answer: Bur Oak
- YELLOWWOOD (Cladrastis kentukea): "Cladrastis" means "fragile branch". We almost never encounter this tree from the Bean Family in the wild. John popped-off one of its compound leaves to show us a bud hiding inside the leaf's pulvinus. He popped the leaf back on like a Lego piece. Everybody laughed. His voice was emphatic when he mentioned that its spring flowers are exceptional. Hopefully we can return here in the spring not just to see the Yellowwood blossoms, but also the blossoming Cherries and the more than 30 taxa of Magnolias for which this park is so famous.
- **SMOKETREE** (*Cotinus obovatus*): We found several of these recently-planted trees in a group. This dioecious C9 plant from the Poison Ivy family (Anacardiaceae) gets its name "Smoketree" not from the inconspicuous flowers of its panicles, but afterwards from the <u>hairy stalks of its spent flowers</u> (of which we found remnants). But as we observed, it's real beauty is in the Fall when its leaves turn pumpkin-orange.
- WHITE FRINGETREE (*Chionanthus virginicus*): "Chionanthus" means "snow-flower". This dioecious C10 plant from the Olive Family has drooping panicles of fragrant flowers in the spring. Each flower has 4 long, linear petals. We found 3 of these small trees planted in a group. Wayne is lucky to have a White Fringetree in his front yard!

- **GINKGO** (*Ginkgo biloba*): Ginkgo trees with their fanlike leaves are famous relicts from the Age of the Dinosaurs. Most parks only plant male trees, but Tower Grove Park is enlightened and has allowed quite a few female trees with their smelly seeds to prosper. Those are the ones we purposefully sought out. The seeds with their foul-smelling sarcotesta blanketed the ground beneath the trees. The species is so old that we technically can't call the apricot-looking sarcotesta "fruit" because fruits are ripe ovaries, and ovaries are from flowers, and flowers hadn't yet been "invented" when Ginkgos covered the earth. The cooked nuts are actually delicious. They have the texture of gummy-bears. Learn how to prepare them HERE.
- ENGLISH OAK (*Quercus robur*): We knew we had found the famous English Oak when we noticed its long acorns on the ground. John told us a story about a thousand-year-old cathedral in Europe that had burned to the ground. Fortunately they were able to rebuild it because a field of English Oaks had been planted hundreds of years earlier for this expressed purpose. (By the way, in Germany they call it a "German Oak" Deutsche Eiche.)
- **NORWAY MAPLE** (*Acer platanoides*): John mentioned that when he was a child he had one of these in his backyard that he loved to climb. He broke off a leaf to show its milky sap (an identifying feature).
- WATER TUPELO (*Nyssa aquatica*): We knew we had found Water Tupelos from the swollen bases of their trunks
- WATER OAK (*Quercus nigra*): We found several of these (along with the Water Tupelo and Wahoo) near a creek. Its leaf looks like a Willow Oak leaf, but the end of the leaf is a bit wider and kitelike. John told us that their tiny acorns are cute, but we couldn't find any. Don't get confused with the species epithet "nigra". It's not a Black Oak (which is *Quercus velutina*). Instead, think of the Niger River the 3<sup>rd</sup> longest river in Africa.
- WAHOO (*Euonymus atropurpurea*): These trees were ablaze in red. However John made the interesting comment: "Where have we seen this color?" Evidently for those perceptive enough to notice and understand differences in hue, shade, tint, and tone, the Wahoo has a unique color. As a bonus, the tree branches were loaded with handfuls of fruit that also have an eye-catching color that is not quite the same as the leaf color. This is an artist's tree for sure!
- **BIGLEAF MAGNOLIA** (*Magnolia macrophylla*): Oh, if only all species epithets were as practical as this! John actually identified one of its huge leaves on the ground before we even found the trees. There were several Bigleaf Magnolia trees in a group, and they all appeared to have been recently-planted.
- GOLDEN LARCH (*Pseudolarix amabilis*): the botanical name means "lovable false larch". This arresting plant was covered with starbursts of flat, golden needles that were growing from dark, very conspicuous spurs. Somebody asked if another name for this tree is "Tamarack". John explained that "Tamarack" refers to our true Larch (*Larix laricina*) which loves the cold and mostly grows up in Canada. This "Golden Larch" is not a true Larch but rather a Chinese native that is planted in parks for its beauty and its tolerance for heat and humidity.
- **TULIPTREE** (*Liriodendron tulipifera*): What's not to like about this tall tree from the Magnolia Family? Its shapely leaf look like a tulip. It's flower looks like a tulip. It's empty fruit structure looks like tulip. The name "Tuliptree" makes *everything* look like a tulip!
- **OSAGE ORANGE** (*Maclura pomifera*): We found plenty of this tree's green, brainlike bowling balls scattered across the ground. It's in the Mulberry Family, so the fruit has a very sticky latex sap. John joked about Giant Ground Sloths coming to collect them. (It is speculated that this plant is an evolutionary anachronism whose seeds were once dispersed by now-extinct megafauna who fed on the fruit.)
- CHESTNUT (Castanea sativa x crenata): although it's in the same family as the oaks (Fagaceae), the long, sharply-toothed leaves appear very different, and the porcupiny fruit looks nothing like an acorn (at least on the outside). Burt is the one who first introduced us to this tree. If you, like everybody else, get confused between Chinkapin, Ozark Chinquapin, Chestnut, Chinkapin Oak, Chestnut Oak, Swamp Chestnut Oak, visit last year's report HERE where we tried to sort it all out.
- **KENTUCKY COFFEETREE** (*Gymnocladus dioicus*): The (compound) leaf of this plant may be the largest that we have in St. Louis, with the possible exception of the leaf from the Devil's Walking Stick (*Aralia spinosa*). There was a long row of these now-leafless trees from the Bean Family. It was obvious that this species is dioecious because some trees were loaded with leathery legumes while others had none.
- LONDON PLANE (*Platanus* x *acerifolia*): We found both the hybrid London Plane Tree and one of its parents, the native Sycamore (*Platanus occidentalis*). There are 4 features that can help us differentiate them.
  - 1. the bark from the London Planetree begins exfoliating at ground level whereas the American Sycamore bark begins exfoliating higher up in the tree.
  - 2. the exfoliating bark from the London Plane often has an extra color (olive green)
  - 3. the leaf of the London Plane is more divided than that of its American Sycamore parent, but not as divided as its other parent, the Oriental Plane.

- 4. the fruitballs of the American Sycamore hang down as singles, whereas the fruitballs of the London Plane hang down in multiples (because London is more crowded than St. Louis).
- CUCUMBER TREE (*Magnolia acuminata*): Our only native Magnolia is a massive tree. John more-than-once pointed-out the unusual green color of its furry flowerbuds.
- CATALPA (*Catalpa speciosa, bignonioides*, and *ovata*): Yes, we saw 3 different species of these "Lady Cigar" trees: Northern Catalpa, Southern Catalpa, and Chinese Catalpa.
- **BALD CYPRESS** (*Taxodium distichum*): John pointed-out that in the Woodland Pool area (which was dry), the bald cypress showed its knees, but in the field of bald cypresses next to it, there were no knees showing.
- **SEVEN-SON FLOWER** (*Heptacodium miconioides*): There was a group of these multi-trunk trees planted alone like an island. This plant from the honeysuckle family is fascinating. It has an exfoliating bark. Its leaves are opposite and they have veins that are so strongly impressed that they form a design of their own. The flowers are white and fragrant. We missed the white petals which had fallen off a few weeks earlier. But that's okay because we got to see something even better the leftover red sepals radiating like a crown around the fruit. If the name "Seven-Son Flower" seems strange, it's because it is a literal translation of its Chinese name. It refers to the seven flowers in each cluster. (Actually, when the cluster is closely examined, it becomes clear that there are only 6 flowers the 7<sup>th</sup> is a terminal bud.) The genus name "*Heptacodium*" means "7 poppy heads". The species epithet "*miconioides*" refers to the Miconia plant which has a similarly strong leaf venation pattern. But since the Seven-Son Flower is the only plant in the genus, the species epithet isn't even necessary.



(Proof that we were once here in the Spring)

## PARTICIPANTS:

There were 13 of us botanists on this chilly day, who are (in alphabetical order):

Rick Armstrong, Kathy Bildner, **Jan Castanis**, Wayne Clark, Michael Laschober, Sharon Lu, Burt Noll, John Oliver, Anne Rankin, David Steinmeyer, Kathy Thiele, George Van Brunt, and Laura Yates. (We highlighted Jan's name because this is her first time joining us. We all appreciated her intelligent comments and hope that we see her in the future.)