Teszars Woods and Flamm City February 5, 2024

	BOTANICAL NAME (with etymology & genus pronunciation)	FAMILY [CC] = Coefficient of Conservatism	COMMON NAME (with tips we learned)
	Acer saccharinum (mnemonic: "Who wants sugar?' [no answer] "Who wants silver?" ["1!" "I want silver!"]) (AY-sr / sack-er-RYE-num)	Sapindaceae [CC2]	Silver Maple (leaf lobes spikey, frazzled, with deep angular sinuses, like a Sugar Maple after 20 cups of coffee, / scratched twigs have a perceptible odor / leaf underside silvery / bark develops a shaggy, flaky appearance / flowers have no petals [unlike Red Maple])
	Asimina triloba (native American name of tree + 3 lobes) (uh-SIM-in-uh)	Annonaceae (a Basal Angiosperm family) [CC5]	Pawpaw (the only member of the family not confined to the tropics, hence the naked "paintbrush" buds in winter / tree branches can be flat, forming a terraced, planar architecture)
	<u>Betula nigra</u> (birch + black) (BET-choo-luh)	Betulaceae [CC4]	River Birch (no terminal buds / lateral buds have hook at tip / bark on mature tree peels into thin sheets / leaves somewhat triangular with both small teeth and shallow lobing at the same time / long, pendulous male catkins form in fall, but the inconspicuous green female catkins appear on spur shoots in the spring with the leaves)
	<u>Carya cordiformis</u> (nut tree + heart-shaped) (KAYR-ee-uh)	Juglandaceae [CC5]	Bitternut Hickory (has naked buds, like the pecan / St. Louis has 7 different hickory species / the hickories can be divided into 2 sections: the Bitternut and Pecan belong to one section [Apocarya] while all the others, i.e. Pignut, Shellbark, Shagbark, Black, and Mockernut belong to the other section [Carya] which has scales on its buds)
	<u>Celtis occidentalis</u> (tree name + western) (SELL-tiss)	Cannabaceae [CC3]	Hackberry (easy to identify from its laminated bark / on hackberry, witches broom [dense, stunted, abnormal growth from a single point] is caused by powdery mildew + a mite)
	<u>Cephalanthus occidentalis</u> (head + flowers + western) (seff-uh-LANN-thus)	Rubiaceae [CC3]	Buttonbush (habitat: wetlands / leaves: opposite, entire / fruit: spherical clusters of achenes persist into winter)
	Euonymus fortunei (euonymus = good name) (yoo-ONN-i-mus)	Celastraceae (Bittersweet family) [intro]	Wintercreeper (has a juvenile non-flowering creeping stage, which is followed by a climbing, flowering, fruiting stage / Robert Fortune brought us an unfortunate, highly destructive plant)
	Forestiera acuminata (somebody's name + narrowing to a long point) (for-ESS-tee-AYR-uh)	Oleaceae [CC6]	Swamp Privet (leaf: opposite, ovate with long-tapered tip and wedge-shaped base / early budding and lenticels can be mistaken for spicebush [although spicebush is not opposite-leaved] /)
	Fraxinus pennsylvanica (ash tree + Pennsylvania) (FRACK-sin-us)	Oleaceae [CC2]	Green Ash (dioecious / buds: opposite, reddish-brown with velvety texture / twigs: new ones are somewhat flattened / leaves: opposite, compound, leaflets taper at base to a short, winged petiole; undersides not whitish (in contrast to <i>F. americana</i>) / leaf scar: straightish, not strongly curved around bud / habitat: prefers wet / more than 99% of Green Ash trees that are infested with the Emerald Ash Borer will die, however a small number of "lingering ash" will survive for cultivation) /
_	<u>Gleditsia aquatica</u> (somebody's name + water) (gleh-DITT-see-uh)	Fabaceae [CC10]	Water Locust (even though we found <i>G. aquatica</i> 's long red thorns and bark to be very different from Honey Locust, the most noticeable difference is the fruit, which are small, thin, almond-shaped seed pods)
	<u>Ilex decidua</u> (= holly + deciduous) (EYE-lex)	Aquifoliaceae [CC5]	Possumhaw / Deciduous Holly (dioecious / spur shoots useful for identification / leaf: obovate to elliptic with crenate margins / some leaves grow in fascicles from spur shoots)
	<u>Ouercus lyrata</u> (oak + lyre-shaped) (KWERK-us)	Fagaceae (white group) [CC8]	Overcup Oak

		(fruit: acorns mostly enclosed by cap / habitat: likes it wet / leaf: has outstretched arms like Post Oak, but the "head" lobe is much narrower than the fanned-out head lobe of Post Oak)
Quercus macrocarpa (oak + big fruit) (KWERK-us)	Fagaceae (white group) [CC4]	Bur Oak (leaves: largest of any native oak; shape varies, but often widest above the middle with upper portion shallowly lobed while the lower narrower portion of leaf has deep sinuses / twigs: conspicuous whiskers at ends / younger branches can become cork-covered / fruit: it's called "macrocarpa" for a reason – its acorns are large with a fringed cap that covers most of nut / bark in thick, fire-resistant vertical ridges / buds rounded with gray fuzzy hair / largest in McBaine)

NOTES

WORST TO BEST: There's at least one website that allows people to rate the different trails. This trail, the Teszars Woods trail, got the lowest ratings of any. Comments on AllTrails include: "easily an ankle breaker", "better than having a subdivision here", "not much more than a deer path". People complained that the trails were muddy, unmarked, and did not offer any scenic views. True, true, and true. So I was expecting our walk to be a muddy mess – and even wore overshoes (which turned-out to be like roller skates on the wet leaves). But as we climbed down the steep slippery incline from the parking lot, we found the largest PawPaw trees that we've ever seen. Soon after that came the Overcup Oaks (*Quercus lyrata*) with their iconic acorns, followed by the confounding Swamp Privets (*Forestiera acuminata*). And then Tina Richardson led us to the crown jewels of our expedition, the Water Locusts (*Gleditsia aquatica*), the C10 trees which kept us electrified from then on. Those who had complained online about Teszars Woods must not have been botanists, because what threatened to be the worst of walks ended-up being one of our best!

<u>SNOW</u>: We were walking off-trail when we passed a half-bucket mound of whiteness. John matter-of-factly and without stopping said "snow" as he walked past. Mark replied "must be a cold spot". It was probably in the 40's at the time – not impossible for a mound of snow to persist. And it really, really did look like snow. But it hasn't snowed in St. Louis for 2 weeks and the temperature only dips below freezing at night. Although we're in the middle of winter, the mound had to be the work of spittle bugs. I was tempted to correct John and Mark but now I'm so, so relieved that I didn't. There's probably a name for their kind of dry humor – at least there should be. "Sarcasm" doesn't seem quite right. It happens a lot in our group. In summer we'll be passing a *Conium* (poison hemlock) plant and somebody will say "salad greens". Somebody else might reply "not bad with *Crotons*". Those of us who are a couple steps behind (both literally and figuratively) have to decide whether or not to correct them.

ROOT SPROUTS vs WATER SPROUTS: When we were walking back to the Flamm City parking lot, John pointed to dozens of narrow, vertical stems in an area around a Silver Maple tree. "Look at all the root sprouts" he said. "Root Sprouts" is a phrase I've not heard on any of our walks before. A "root sprout" is a clone plant that pops-up not from a seed but from the root of its mother plant. Trees are thought to produce root sprouts in response to stress or injury. The sprouts can be dug up (with part of the root) and planted elsewhere.

"Water Sprouts" are also upright shoots caused by stress, but they grow from the trunk or large branches high up in the tree. Their straight, vertical shoots look peculiar against the tree's normal, graceful branching. Water Sprouts grow from dormant buds that have been awakened by pruning or disease of the terminal buds. They can also be caused from stresses such as a lack of water. It seems counterintuitive, but keeping trees watered helps prevent water sprouts. Water sprouts are easy to see this time of year when there are no leaves. Arborists urge people to remove water sprouts because they sap energy from the rest of the tree.

WOODPECKER BLONDING: We came upon a number of Ash trees that had fallen victim to the Emerald Ash Borer. One of the tell-tale signs of infestation are the large splotches of light bark that can be found on the trunk. But this "blonding" (as it is called) is not some disease-caused discoloration of the bark, but rather the result of woodpeckers chipping-away at the bark to get at the EAB larvae. Sebastian, Ted, and others discussed this activity for quite a while. Recalling that a woodpecker cocks its head between rounds of pecking, they hypothesized that the woodpecker could probably hear the larvae munching away. So the pecking was not willy-nilly. Sebastian contended that the woodpecker would have to expend too much energy if it were excavating the bark like a miner digging for gold. He surmised that the woodpecker had a mechanical technique – that it knew the exact spot to peck in order to create a clean cleavage in the bark. They looked for (and found) impact dimples in the fresh bark to support their "exact spot" theory.

<u>ART MUSEUM</u>: There were many fallen trees along our path. Some of the older ones had lost their bark, exposing their wood core. Somebody noticed that galleries had been etched into the wood by some type of boring insect. But the canals weren't meandering in random directions. They were shaped like starbursts! Ted explained that the short, deep, linear canal in the center of the starburst was made by the mother Bark Beetle. She then laid her eggs around the perimeter of her canal. The many larvae that emerged then ate their own paths away from the mother's canal, resulting in a beautiful aster-like design.

As with new plants, once we can "see" something, we start finding it everywhere. We started finding similar insect carvings in all the bare logs around us. Some logs had more than one aster pattern close to each other. The radiating galleries would then cross each other, resulting in fascinating linework. It was like walking through an art museum!

<u>COCKLEBUR</u>: One of the plants we noticed at Flamm City was *Xanthium strumarium* (the Cocklebur). It's a native, easy-to-recognize, onery little plant that enjoys causing problems. It has the lowest CC value ("zero"). The reason it's featured here is because John mentioned that it's a favorite food of the Carolina Parakeet. "If you can find one, you can feed it cockleburs." Not everybody laughed because not everybody got the joke. The Carolina Parakeet is a now-extinct bird. Until early in the last century, the Carolina Parakeet was a beautiful St. Louisan. A drawing of it can be seen <u>HERE</u>.

SHORT OBSERVATIONS:

- Tina Richardson led us to the C10 Water Locust trees. Yes, we already mentioned it in the "Worst to Best" paragraph above, but it bears repeating because it so changed everything.
- Unlike last week's Hackberry tree with Witch's Broom, many of the Hackberry trees we found today had a gall on their leaf petioles. They are caused by the "Hackberry Petiole Gall Psyllid" (*Pachypsylla venusta*) one of the very host-specific "Jumping Plant Lice".
- Steve was good to pick up some trash (hard to avoid in an area that floods). As a cosmic reward, when he went to put the trash in a trash can, he found an unopened package of Harbor Freight Step Drill Bits in the can.
- When we passed a red-fruited Possumhaw tree, John told us that he had examined it and had determined it to be a female tree. (The joke being that *Ilex decidua* is dioecious. Only female trees have fruit.)
- Dave was probably the first to find an Overcup Oak tree and its distinctive acorn. After John introduced us to a large Bur Oak, Cathy Barnett was probably the first to find its huge acorn (or at least its huge, frilly cap). The tree is called "*Macrocarpa*" for good reason!
- Kathy Bildner found a dried-up *Hibiscus laevis* (Smooth Hibiscus). John reminded us that the "Smooth Hibiscus" has smooth, glabrous leaves and hairy seeds. But its lookalike *Hibiscus lasiocarpos* (Hairy-Fruited Hibiscus) is just the opposite with hairy leaves and smooth, glabrous seeds. Somebody called one of these plants a "Marsh Mallow". It's an appropriate name, but that common name is traditionally given to the non-native *Althaea officinalis*, the famous culinary, ornamental, and medicinal plant from Europe and elsewhere.
- Somebody expressed happiness at hearing the call of a Bluejay. John explained that the Corvids (Bluejays, Crows, Ravens) were hit hard by the mosquito-borne West Nile Virus.
- We found a Hackberry Tree (maybe 6 inches in diameter) that had been chewed down by a beaver. Some investigated the area for other signs of beaver activity.

PARTICIPANTS:

There were 20 of us botanists today, who are (in alphabetical order):

Brenda Adams, Cathy Barnett, Kathy Bildner, Steve Bizub, Tom Buescher, Jerry Castillon, Tina Cheung & Keith Woodyard, Wayne Clark, Sebastian Forward, Michael Laschober, Ted MacRae, Burt Noll, John Oliver, Tina Richardson, David Steinmeyer, Kathy Thiele, Mark & Deb Tolcou, and George Van Brunt.