Marais Temps Clair

July 22, 2024

	BOTANICAL NAME (with genus pronunciation)	**FAMILY** [CC] = Coefficient of Conservatism	**COMMON NAME**
☐	*Abutilon theophrasti* () (uh-BOO-till-lonn)	Malvaceae [intro]	Velvetleaf
☐	*Acalypha ostryifolia* (ack-uh-LY-fuh)	Euphorbiaceae [CC1]	Hop-Hornbeam Copperleaf
☐	*Alisma triviale* () (uh-LISS-muh)	Alismataceae / Alismatales order [CC5]	Northern Water Plantain
☐	*Amaranthus tuberculatus* () (am-r-ANN-thus)	Amaranthaceae [CC0]	Roughfruit Amaranth / Tall Waterhemp /
☐	*Ambrosia artemisiifolia* (am-BRO-see-uh)	Asteraceae (Heliantheae tribe) [CC0]	Ragweed
☐	*Ambrosia trifida* (am-BRO-see-uh)	Asteraceae (Heliantheae tribe) [CC0]	Giant Ragweed
☐	*Ammannia coccinea* () (uh-MANN-ee-uh)	Lythraceae [CC6]	Scarlet Toothcup
☐	*Ampelopsis cordata* (am-pel-OP-sis)	Vitaceae [CC3]	Raccoon Grape / Heartleaf Peppervine
☐	*Anemone canadensis* (uh-NEMM-o-nee)	Ranunculaceae [CC6]	Canada Anemone
☐	*Apocynum cannabinum* (uh-POSS-i-num)	Apocynaceae [CC3]	Dogbane
☐	*Artemisia annua* (ar-teh-MEE-zhee-uh)	Asteraceae (Anthemideae tribe) [intro]	Sweet Annie
☐	*Asclepias incarnata* (uh-SKLEE-pee-us)	Apocynaceae [CC4]	Swamp Milkweed
☐	*Asclepias syriaca* (uh-SKLEE-pee-us)	Apocynaceae [CC0]	Common Milkweed
☐	*Astragalus canadensis* (uh-STRAGG-uh-luss)	Fabaceae (Faboideae subfamily) [CC6]	Canada Milkvetch
☐	*Boltonia asteroides* (bol-TOH-nee-uh)	Asteraceae (Astereae tribe) [CC4]	Doll's Daisy
☐	*Calystegia sepium* (kal-leh-STEE-jee-uh)	Convolvulaceae [CC1]	Hedge Bindweed
☐	*Cardiospermum halicacabum* (kar-dee-o-SPER-mum)	Sapindaceae [intro]	Balloon Vine
☐	*Cephalanthus occidentalis* (seff-uh-LANN-thus)	Rubiaceae [CC3]	Buttonbush
☐	*Chamaecrista fasciculata* (kam-ee-KRISS-tuh)	Fabaceae (Caesalpinioideae subfam) [CC2]	Partridge Pea
☐	*Cichorium intybus* (sick-KOR-ee-um)	Asteraceae (Cichorieae tribe) [intro]	Chicory
☐	*Cirsium discolor* (SR-see-um)	Asteraceae (Cardueae tribe) [CC3]	Field Thistle
☐	*Cynanchum laeve* (sy-NANN-kum)	Apocynaceae [CC0]	Honeyvine Milkweed
☐	*Cyperus esculentus* (SY-pr-us)	Cyperaceae [CC0]	Yellow Nutsedge
☐	*Desmanthus illinoensis* (dez-MAN-thus)	Fabaceae (Caesalpinioideae subfam) [CC3]	Illinois Bundleflower
☐	*Desmodium canescens* (dez-MO-dee-um)	Fabaceae (Faboideae subfamily) [CC5]	Hoary Ticktrefoil
☐	*Desmodium glabellum* (dez-MO-dee-um)	Fabaceae (Faboideae subfamily) [CC3]	Tall Tick-Trefoil / Dillenius' Tick-Trefoil /
☐	*Digitaria sanguinalis* (dij-jit-TAYR-ee-uh)	Poaceae (Panicoideae subfamily) [intro]	Hairy Crabgrass
☐	*Echinochloa crus-galli* (eh-KEE-no-KLO-uh)	Poaceae (Panicoideae subfamily) [intro]	Barnyard Grass
☐	*Elymus virginicus* (ELL-uh-muss)	Poaceae (Pooideae subfamily) [CC5]	Virginia Wild Rye

☐	*Erigeron annuus* (er-RIJ-er-on)	Asteraceae (Astereae tribe) [CC1]	Annual Fleabane
☐	*Erigeron canadensis* [Conyza] (er-RIJ-er-on)	Asteraceae (Astereae tribe) [CC0]	Horseweed
☐	*Erigeron strigosus* (er-RIJ-er-on)	Asteraceae (Astereae tribe) [CC3]	Daisy Fleabane
☐	*Eupatorium altissimum* (yoo-puh-TOR-ee-um)	Asteraceae (Eupatorieae tribe) [CC3]	Tall Boneset
☐	*Euphorbia dentata* (yoo-FOR-bee-uh)	Euphorbiaceae [CC0]	Toothed Spurge / Green Poinsettia
☐	*Euphorbia maculata* (yoo-FOR-bee-uh)	Euphorbiaceae [CC0]	Spotted Spurge
☐	*Euphorbia nutans* (yoo-FOR-bee-uh)	Euphorbiaceae [CC0]	Nodding Spurge
☐	*Euphorbia prostata* (yoo-FOR-bee-uh)	Euphorbiaceae [intro]	Prostrate Spurge
☐	*Fallopia convolvulus* (fuh-LO-pee-uh)	Polygonaceae [intro]	Black Bindweed
☐	*Fallopia scandens* (fuh-LO-pee-uh)	Polygonaceae [CC3]	Climbing False Buckwheat
☐	*Geum canadense* (JEE-um)	Rosaceae [CC2]	White Avens
☐	*Helianthus annuus* () (hee-lee-ANN-thus)	Asteraceae (Heliantheae tribe) [CC0]	Common Sunflower
☐	*Hibiscus lasiocarpos* (hy-BISS-kuss)	Malvaceae [CC5]	Hairy-Fruited Rose Mallow
☐	*Hibiscus trionum* (hy-BISS-kuss)	Malvaceae [intro]	Flower-of-an-Hour
☐	*Ipomoea lacunosa* (eye-po-MEE-uh)	Convolvulaceae [CC1]	Small White Morning Glory
☐	*Iva annua* (EYE-vuh)	Asteraceae (Helianteae tribe) [CC1]	Sumpweed
☐	*Lactuca canadensis* (lack-TOO-kuh)	Asteraceae (Cichorieae tribe) [CC3]	Canada Wild Lettuce
☐	*Lactuca serriola* (lack-TOO-kuh)	Asteraceae (Cichorieae tribe) [intro]	Prickly Lettuce
☐	*Leersia oryzoides* (LEER-see-uh)	Poaceae [CC3]	Rice Cutgrass
☐	*Lepidium virginicum* (leh-PIDD-ee-um)	Brassicaceae [CC0]	Virginia Pepperweed
☐	*Lindernia dubia* () (lin-DR-nee-uh)	Linderniaceae [CC4]	False Pimpernel
☐	*Lotus corniculatus* (LO-tuss)	Fabaceae (Faboideae subfamily) [intro]	Birdsfoot Trefoil
☐	*Ludwigia peploides* (lood-WIG-ee-uh)	Onagraceae [CC3]	Floating Primrose-Willow
☐	*Lycopus americanus* (ly-KO-pus)	Lamiaceae (Nepetoideae subfamily) [CC4]	American Bugleweed
☐	*Lythrum alatum* (LITH-rum)	Lythraceae [CC6]	Winged Loosestrife
☐	*Medicago lupulina* (med-ih-KAY-go)	Fabaceae (Faboideae subfamily) [intro]	Black Medick
☐	*Melilotus officinalis* (mell-ih-LOH-tus / o-fish-eh-NAY-leez)	Fabaceae [intro]	Yellow Sweet Clover
☐	*Nelumbo lutea* () (neh-LOOM-bo)	Nelumbonaceae [CC6]	Yellow Lotus
☐	*Oxalis stricta* (oks-AL-iss)	Oxalidaceae [CC0]	Yellow Wood-Sorrel / Upright Yellow Wood-Sorrel
☐	*Panicum virgatum* (PANN-i-kum)	Poaceae (Panicoideae subfamily) [CC4]	Switchgrass
☐	*Paspalum pubiflorum* (PASS-puh-lum)	Poaceae (Panicoideae subfamily) [CC3]	Hairyseed Paspalum / Hairyseed Beadgrass
☐	*Persicaria amphibia* (pr-seh-KAYR-ee-uh)	Polygonaceae [CC5 or 8]	Water Smartweed
☐	*Persicaria hydropiperoides* (pr-seh-KAYR-ee-uh)	Polygonaceae [CC4]	Swamp Smartweed

☐	*Persicaria lapathifolia* (pr-seh-KAYR-ee-uh)	Polygonaceae [CC0]	Pale Smartweed / Nodding Smartweed
☐	*Phyla lanceolata* (Lippia) (FY-luh)	Verbenaceae [CC3]	Frog Fruit
☐	*Physalis longifolia* (FISS-uh-liss)	Solanaceae [CC2]	Wild Tomatillo / Groundcherry
☐	*Phytolacca americana* (fy-toh-LACK-uh)	Phytolaccaceae [CC2]	Pokeweed
☐	*Plantago rugelii* (plan-TAY-go)	Plantaginaceae [CC0]	Rugel's Plantain
☐	*Polygonum aviculare* (po-LIGG-o-num)	Polygonaceae [intro]	Prostrate Knotweed
☐	*Populus deltoides* (POP-yoo-lus)	Salicaceae [CC2]	Eastern Cottonwood
☐	*Potentilla norvegica* (po-ten-TILL-uh)	Rosaceae [CC0]	Rough Cinquefoil
☐	*Rumex crispus* (ROO-mex)	Polygonaceae [intro]	Curly Dock
☐	*Sagittaria latifolia* () (sa-jit-TAYR-ee-uh)	Alismataceae [CC4]	Broadleaf Arrowhead / Duck Potato
☐	*Salix interior* (SAY-licks)	Salicaceae [CC3]	Sandbar Willow
☐	*Salix nigra* (SAY-licks)	Salicaceae [CC3]	Black Willow
☐	*Scrophularia marilandica* (skro-foo-LAYR-ee-uh)	Scrophulariaceae [CC3]	Figwort
☐	*Senna marilandica* (SENN-uh)	Fabaceae (Caesalpinioideae subfam) [CC4]	Maryland Senna
☐	*Setaria faberi* (set-TAYR-ee-uh)	Poaceae (Panicoideae subfamily) [intro]	Giant Foxtail
☐	*Setaria pumila* (seh-TAYR-ee-uh)	Poaceae (Panicoideae subfamily) [intro]	Yellow Foxtail
☐	*Setaria viridis* (seh-TAYR-ee-uh)	Poaceae (Panicoideae subfamily) [intro]	Green Foxtail
☐	*Sida spinosa* () (SY-duh)	Malvaceae [intro]	Prickly Sida / Prickly Fanpetals /
☐	*Sium suave* (SY-um)	Apiaceae [CC6]	Water Parsnip
☐	*Solanum carolinense* (so-LAY-num)	Solanaceae [CC0]	Carolina Horsenettle / Evil Tomato
☐	*Stachys pilosa* (STAY-keez)	Lamiaceae (Lamioideae subfamily) [C6]	Hairy Hedge-Nettle
☐	*Stachys tenuifolia* (STAY-kees)	Lamiaceae (Lamioideae subfamily) [CC4]	Hedge-Nettle
☐	*Strophostyles helvola* (stro-fo-STY-leez)	Fabaceae (Faboideae subfamily) [CC2]	Trailing Fuzzybean
☐	*Symphyotrichum pilosum* (SIMM-fee-o-TRY-kum)	Asteraceae (Astereae tribe) [CC0]	Hairy Aster, Frost Aster, Awl Aster
☐	*Teucrium canadense* (TOO-kree-um)	Lamiaceae (Ajugoideae subfamily) [CC2]	Germander
☐	*Torilis arvensis* (tor-RILL-iss)	Apiaceae [intro]	Hedge Parsley
☐	*Toxicodendron radicans* (TOCK-see-ko-DEN-dron)	Anacardiaceae [CC1]	Poison Ivy
☐	*Trifolium pratense* (try-FOH-lee-um)	Fabaceae (Faboideae subfamily) [intro]	Red Clover
☐	*Trifolium repens* (try-FOH-lee-um)	Fabaceae (Faboideae subfamily) [intro]	White Clover
☐	*Verbena hastata* (vr-BEE-nuh)	Verbenaceae [CC4]	Blue Verbena
☐	*Verbena urticifolia* (vr-BEE-nuh)	Verbenaceae [CC2]	White Verbena
☐	*Xanthium strumarium* (ZANN-thee-um)	Asteraceae (Heliantheae tribe) [CC0]	Cocklebur

NOTES

WHERE WE WALKED:
We met at a parking area on Island Road (38.893583, -90.415528) under a huge River Birch. From there we crossed Island Road and walked northwestward on a levee road between several pools, stepping off of the levee here and there to better explore the marsh plants. At the end of the road we rested in the shade of a lone cottonwood tree before retracing our steps back to the cars. June clocked our total distance at 1.3 miles.

AN IMPORTANT PLACE:
At 918 acres, *Marais Temp Clair* is a significant habitat within a floodplain. John explained that the meandering Missouri River used to actually flow over it a few hundred years ago. The Audubon Society's WEBPAGE states that 231 bird species have been found here! Although it's not as botanically diverse as it could be, when we stepped down from the levee to explore the marsh we found a mix of plants that we usually don't see elsewhere. It was a different experience that we all very much enjoyed.

STEVE & RUTH:
Everybody was excited to see **Steve and Ruth** again. For those of you who are new, Ruth Tenbrink is a respected naturalist. Her partner, Steve Turner, maintains the vitally important "MissouriPlants.com" website. Our weekly reports (like the one you are reading now) probably wouldn't even exist without his work. Whenever you click on a species name, you're very likely to end-up at Steve's "MissouriPlants.com" website where you can see vivid photos of the plant and read about its life-cycle. It's an indispensable resource which continues to grow and continues to deepen our understanding of Missouri plants.

HIBISCUS:
We saw countless "**Hairy-Fruited Rosemallows**" all around us. These huge, red-throated flowers are magnificent. Most were white, but some were pink. Although our A.I. phone apps identify the pink flowers as *Hibiscus moscheutos*, George explained that they're probably just color variations of the white *Hibiscus lasiocarpos*. To be a true *Hibiscus moscheutos* you'll need more than just a flush of pink in your cheeks. You'll need to go on a diet and get rid of some of that hair on your leaves and especially on your fruit capsules.
According to the BONAP maps, St. Louis has 5 species of *Hibiscus* (list HERE). They all proudly show-off their "monadelphous" (one brother) stamen structure – the trademark of the friendly Mallow Family (Malvaceae). Some in our group actually found a second *Hibiscus* flower, the small but beautiful "Flower of an Hour" (*Hibiscus trionum*). They must have timed it just right.

BALLOONS EVERYWHERE:
Speaking of convergent evolution (which we will) we found 2 very different plants that produce a similar fruit structure. ***Physalis longifolium*** produces a tomatillo-like fruit enveloped by a puffy Chinese-Lantern. A very similar puffy fruit capsule is produced by the fun-to-say "***Cardiospermum halicacabum***" (Balloon Vine). In all the natural areas we visit, we almost never find Balloon-Vines. Yet here they were, climbing all over the place, including over the Chinese-Lantern plants (which we don't see much of either)!
Now here comes the "convergent evolution" part: the Chinese-Lantern plant is in the tomato family (Solanaceae) and Balloon-Vine is – of all places – in the maple tree family (Sapindaceae). They both make similar puffy fruit capsules, but the Solanaceae (an Asterid) and the Sapindaceae (a Rosid) are nowhere near each other on the phylogenetic tree of life.

THE AVOIDED NAME:
Why was this important Conservation Area given the brain-freeze name "*Marais Temps Clair*"? Although at the very beginning of our walk John kindly pronounced the French name for us (mar-RAY tom clair), none of us even once repeated it. It's funny (and rather endearing) that we're all so afraid of appearing uneducated. "*Marais Temps Clair*" translates to "Clear Weather Marsh" but it might as well translate to "Don't Come Here". Did you notice that we seemed to be its only visitors on Monday? (I sent an email to the Conservation Department, suggesting that they rename Marais Temps Clair to something more inviting, such as the "Oxbow Wetlands", or the "Ten Pools", or the "Levee Trails", but for some strange reason they never wrote back.)

SHORT OBSERVATIONS:

- We found 2 plants growing here that from a distance look rather similar. One is **Tall Goldenrod** (*Solidago altissima*). The other is **Horseweed** (*Erigeron canadensis*). Erigeron (early + old man) is also the genus of our Fleabanes. Horseweed is a clever old man. June mentioned that he was the first plant to develop a resistance to glyphosate.
- Steve found a **Climbing Buckwheat** vine. At first he probably assumed that it was our native *Fallopia scandens*. But upon examining it he realized that it was the non-native *Fallopia convolvulus*. Not knowing whether or not it had yet been reported for this county (St. Charles), he took a sample to create a voucher to submit to the Missouri Botanical Garden. It was exciting for us to watch the process. Although probably not a big deal for him, we felt like we were a part of history-in-the-making.
- We found both **Partridge Pea** (*Chamaecrista fasciculata*) and **Maryland Senna** (*Senna marilandica*). John showed us the extrafloral nectaries on their leaf petioles. Both of these plants are in the **Caesalpinioidae** subfamily of the Bean Family. Extra-floral nectaries are a feature of this subfamily. In St. Louis we have 6 members of this subfamily. Besides our Partridge Peas (we have 2 species) and the Maryland Senna, we have the "Redbud", the "Kentucky Coffeetree", and the "Honey Locust" that belong in the Caesalpinioidae subfamily. Maybe we can find extrafloral nectaries on these plants too!
- We saw both **Frogfruit** (*Phyla lanceolata*) and **Blue Vervain** (*Verbena hastata*). They look so different from each other that it's hard to believe they're in the same family (Verbenaceae). It's just the opposite with the **Hedge Nettle** (*Stachys*) and **Germander** (*Teucrium*) that we found. They look so nearly identical that it's hard to believe they're not even in the same genus.
- We saw a couple of smartweeds that we don't often see on our weekly walks. The white flower spikes of the **Swamp Smartweed** (*Persicaria hydropiperoides*) were plentiful. However the reddish flower spikes of the **Water Smartweed** (*Persicaria amphibia*) were hard to find. The plants were everywhere, but almost none of them were in flower. The one or two *Persicaria amphibia* flower spikes that we did find were striking. Of all our St. Louis smartweeds (we have 10 *Persicaria* species – list HERE) this Water Smartweed might have the prettiest inflorescence. However it loses a few points because the plant itself is rather weedy-looking. Yes it may get an extra point or two in the "interesting" department because it has "heterostylous" flowers (some flowers with long styles, others with long stamens), but it's probably not enough to win it a place in the flower garden.

PARTICIPANTS:

There were 14 of us botanists today, who are (in alphabetical order):
Brenda Adams, Kathy Bildner, Jerry Castillon, Wayne Clark, June Jeffries, Michael Laschober, Pat Lynn, John Oliver, Anne Rankin, David Steinmeyer, Kathy Thiele, Ruth Tenbrink, Steve Turner, and Laura Yates.