Madison-Monroe-St Clair Unit Below the Canopy

For Master Gardeners and Master Naturalists



August 2022



Illinois Extension

Monroe County Office 901 Illinois Avenue P.O. Box 117 Waterloo, IL 62298 (618) 939-3434 FAX (618) 939-7708

Madison/St. Clair County Office 1606 Eastport Plaza Suite 100 Collinsville, IL 62234 (618) 344-4230 FAX (618) 344-5602

Staff: Open

County Director

Nathan Johanning Extension Educator,

Extension Educator, Commercial Agriculture njohann@illinois.edu

Grace Margherio

Extension Educator, Commercial Agriculture gracem@illinois.edu

Elizabeth Wahle

Extension Educator, Commercial Agriculture wahle@illinois.edu

Sarah Ruth

Program Coordinator ruth1@illinois.edu

Nicole Hellon

Office Support Associate

Mary Kay Rahn

Office Support Associate

Master Gardener Online Training

The Extension office is accepting applications for the Master Gardener online fall training. The training is done completely online and there are no set meeting times for class. Contact Sarah for more information or an application. Registration is due September 6.

Staff Updates

Thank you for your patience while we have numerous vacancies at the Extension office. We are currently accepting applications for an Office Support Assistant in Collinsville and SNAP-Ed Community Workers. We will also have 4-H Youth Development and additional SNAP-Ed positions available soon. The County Director position recently closed. View the job openings <a href="https://example.com/here-numerous-new-numerous

100 Years of Horse Power Event

Join Master Gardeners, Master Naturalists, and community groups to learn more about pollinators at the She Shed on August 25-27 at Renner Stock Farms, 3412 Carlyle Ave, Belleville, IL. The event also includes ag demonstrations and presentations. For more info, click here.

Butterfly Festival

Join us for a family-friendly celebration of butterflies, pollinators, and native plants on August 28 from 11 a.m. to 3 p.m. at Baebler Educational Farm. The event includes tours of the pollinator habitat, activity booths, vendors, scavenger hunt, photo contests, and much more. Baebler Educational Farm is located at 4022 JJ Rd, Waterloo, IL.

St. Louis Open Yards

A New Garden Tour Program....The new St Louis Open Yards - A Native Landscaping program is coordinated by Mitch Leachman, co-founder and former coordinator of St. Louis Audubon's Bring Conservation Home program. This garden tour program mirrors the UK and Scotland's National Garden Scheme and implements a means to inspire and promote the use of native plants by providing gardeners access to private landscapes around the St. Louis region. St. Louis Open Yards will ideally compliment existing garden tours by providing a more flexible and season long opportunity to book a tour. Garden visitors register online, which provides detailed descriptions of each landscape and garden availability. Registration includes a nominal fee of \$5 per person, per garden, with a portion of that fee shared with a local charity or non profit selected by each individual garden owner. We believe material support to nonprofits serving our region is just as important in building community as the healthy environment these native landscapes help create. To register for a garden tour or to open your own landscape, please visit our website at stlopenyards.com.

Naturalist Phenology for August 2022

Bill Klunk and Elizabeth Frisbie, Master Naturalists During this time period, be on the lookout for:

- \Rightarrow 8/13: the peak of the Perseids Meteor Shower with 60+ meteors falling per hour
- ⇒ young mammals including Striped skunk (*Mephitis mephitis*), Raccoon (*Procyon lotor*), Red Fox & Coyote to be out with their mothers or beginning to explore on their own in preparation for independent living in autumn
- ⇒ Common Kingsnake (*Lampropeltis getula*) young hatching (August and early September)
- ⇒ Virginia Creeper (*Parthenocissus quinquefolia*) vine changing to a scarlet red color (late August)

Continuing Education Programs

Four Season Webinar Series

Register to participate online here.

The program is also available at both offices. Call or email ruth1@illinois.edu to reserve a spot.

• August 16 at 1:30 p.m.—Late Summer and Fall Blooming Plants

Master Naturalist Continuing Education Series Returns

The Master Naturalist Continuing Education Webinar Series starts up again with Dr. John Martin from the University of Illinois Springfield who will talk on **Navigating the Night Sky on August 17 from 6-7 p.m.** Dr. Martin will discuss finding points of interest in the night sky, and will talk about upcoming night watching events planned at UIS. Master Naturalist volunteers, interns and trainees, along with interested Extension educators/coordinators can register at https://go.illinois.edu/nightsky

Master Gardener Continuing Education Series

Webinars will take place LIVE on the first Thursday of every month from 1-3 p.m. and they will all be recorded and available on Youtube following the session.

- September 1- IPM and Pesticide Safety Review with the PSEP Team- *Tentative Topic
- October 6- Elizabeth Wahle- Backyard Fruit Tips

You can register for each monthly session <u>here</u> and you'll receive the Zoom meeting link in your email right away. Please only register if you plan to attend live. Recordings for each month's session are located on this Youtube playlist: https://go.illinois.edu/monthlyCEseries

Native Seed Collection Webinar August 25 from 10-11:30 a.m.

Collecting native seeds is fun!! Most seeds are in subtle shades of brown, seed capsules often look nothing like the flower, and leaves may be completely gone at harvest. So how do you know when and how to collect your native seeds? Learn from Kelly Schultz, Stewardship Ecologist for the Lake County Forest Preserve District. Most of the webinar will focus on seed collection, but will also include seed processing, storage, and germination. The event is hosted by The Nature Conservancy Volunteer Stewardship Network. Register here.

State Master Gardener Conference September 8 & 9 at Tinley Park

Pre-conference tours are set for September 8. Tours include: Morton Arboretum, Ball Seed Trial Gardens and Cantigny Gardens. Join us on September 9 for the conference at the Tinley Park Convention Center. Enjoy the keynote speaker, 12 breakout session options, vendors, awards ceremony, and more! REGISTER for the conference and LEARN MORE HERE

Color of Autumn

September 24 from 9-11:30 a.m. at Waterloo Office

Join us for a morning of gardening conversation. Topics include seeds starting, backyard birds, and tool sharpening demo. The program fee is \$10 and includes refreshments. Register here by September 16.

State Master Naturalist Conference-October 17 at Allerton Details coming soon...

Check out the Unit Webpage for the most up to date info. https://extension.illinois.edu/mms



Welcome to My Jungle

Dr. Elizabeth Wahle, Extension Educator

I admire the knowledge of plant biologists, especially that group of expert botanists who make me feel like a novice in comparison...those are the people I love to hang around with, at any given opportunity, to improve my own skills and knowledge. Every time I look up a plant description, a little place in the back of my mind remembers that someone or a group of someone's very similar, at some point in history, discovered my exact plant of interest, describing it in extreme detail and giving it a scientific name for the first time. And when more than one discovered it without knowing of the other, a group of experts worldwide got together to decide which scientific name should be accepted over the other and what attributes defined it as a member of a certain plant family, so everyone around the world was on the same page. And that was after someone recognized and proved that two or more plant species with different scientific names were really the same thing. It's rather amazing if you think about it!

I was recently looking at two *Silphium* species in my garden, comparing the differences between the cup plant (*S. perfoliatum*) and the compass plant (*S. laciniatum*). Looking at the two plants side by side, they are rather easy to tell apart. The largest distinction to me is the leaves. The leaves of both are broadly lanceolate, but the leaves of the compass plant are deeply lobed (pinnatifid), whereas the leaves of the cup plant are more coarsely toothed. The leaves of the cup plant form opposite of each other and quite distinctly join around the central stem to form a cup capable of holding water, hence the common name. The leaves of the compass plant are in an alternate arrangement,

But what if I only had a single flower for comparison for deciding which was which? Could I tell them apart even though I know both produce yellow daisy-like flowers of similar size? The answer is yes, though not as easily with the naked eye viewing the front face of the flower compared to the backside. Flipping the flower to inspect the involucre, which is the whorl of leaf-like structure immediately below the flower head on the backside of the flower, one would see the phyllaries (individual component of the involucre) on the compass plant are covered with fine white hairs, which make them coarse to the touch. Whereas the phyllaries of the cup plant are glossy and hair-free. From the top view, a bit more expertise and a better set of eyes than I possess would be needed to compare the sterile disk flowers, fertile ray flowers and the resulting achenes (one-seeded dry fruit that does not open to release seed). To me and my current level of expertise and vision, they both look rather similar, but I assure you there are differences. That said, my husband's level of plant identification skill is whether the plant in question is a tree, a bush, a flower, or grass, and he is perfectly happy taking it no further. He prefers to just make up a name like "Fruitillaria" if called upon to identify a plant. That leaves me the reining expert at least in my own little jungle.



The compass plant has deeply lobed leaves in an alternate arrangement



The leaves of the cup plant form opposite of each other and quite distinctly join around the central stem to form a cup capable of holding water





Left image: the front flower face of compass plant (I) and cup plant (r) are similar and more challenging to differentiate.

Right image: the back face of compass plant (I) and cup plant (r) are easier to differentiate using the involuce Phlox paniculata "Jeana' just gets better every year. Like many perennials, it will take a few more years of growth before reaching its full expected mature height of five feet. The bloom in my planting is already quite spectacular after only three years in the ground.

Because it has a cultivar name, one might think 'Jeana' is a hybrid cultivar, meaning a human controlled its parentage in some manner, making it to some not a true native. Not so in the case of 'Jeana'. It was noticed and collected from a wild population by its namesake Jeana Prewitt, who found it growing along the Harpeth River near Nashville, Tennessee. What stood out compared to all the other phlox in the area was its mildew-free foliage, which I'm happy to report has carried through to my garden site.

As demonstrated, Phlox paniculata 'Jeana' is a US native, but more specifically an ecotype found in Tennessee. Who knows, maybe we have a similar ecotype in Illinois, but is just hasn't been recognized for its garden potential yet. That makes me think of a butterflyweed I grew from seed collected from a population that originated on a clay prairie and sold as *Asclepias tuberosa* var. *clay*. I'm pretty sure the variety name "clay" has not been officially recognized, yet I can attest



Phlox paniculata 'Jeana'

the plant does look physically different from my other butterflyweed in terms of height, internode length, and leaf size. In addition, it germinates significantly later in my garden than my otherwise "straight species" or ecotypes. Yet most important to me as a gardener, is its equal attractiveness to monarch butterflies for egg laying and as a larval food source for monarch butterfly caterpillars.





Asclepias tuberosa var. clay in bloom (L) and as a larval food source for monarch butterfly caterpillar (r)

Wondering While Wandering August 2022 Elizabeth Frisbie, Master Naturalist

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When I was growing up one of my favorite late summer events was the day, usually in August, that my sister, mother, and I would jump on our bikes and peddle down the road to the row of Hedge Apple trees (*Maclura pomifera*) to gather the fallen fruits. Bike baskets piled full, we would return to the house and begin processing our harvest. Some were cut and then baked in order to create discs we'd then fashion into "flowers" with wire stems. Others were washed, dried and placed around the property to ward off the autumn invasion of insects and spiders. My mother would constantly remind my sister and me to wash our hands since the Hedge Apples were poisonous. Recently I observed an Eastern Gray squirrel (*Sciurus carolinensis*) munching on a fallen Hedge Apple quite contentedly. This caused me to wonder about my mother's warnings and whether or not these fruits are indeed poisonous to humans and other animals.

The yellow-green fruit many of us call "hedge apples" are produced by the Osage orange tree, which is also commonly referred to as a Hedge Apple tree. The name Osage orange originates from the tree's native growth area which includes southwestern Arkansas, southeastern Oklahoma, and eastern Texas. This area was also the home of the Osage Indians and white settlers moving into the region applied the tribe's name to the tree. The Osage orange is a member of the Mulberry (Moraceae) Family, which includes both Mulberry and Fig. The tree is known for being guite durable. It is easily transplanted, has no serious disease problems, and is able to tolerate poor soil, strong winds and extreme heat. Beginning around 1850, farmers in the Midwest (including our region) planted many of these trees as a living fence row since, when pruned into a hedge, both feral hogs and livestock are unable to pass through due to the intertwining branches and the thorns on its lower limbs. Osage oranges hedges were said to be "horse high, hog tight and bull strong." Historians give great credit the Osage orange tree, viewing this practice of hedge fence row planting as a primary tool for settling both the Midwest and Great Plains. In fact, some scholars consider this tree as important as the railroad and steel plow for the successful settlement of the Midwest by Europeans! For reference, the hedge fence practice was so widespread in the Midwest and South that by 1869 it is estimated that approximately 60,000 miles of Osage orange hedges had been planted by the European settlers in an effort to manage their livestock. This hedge fencing strategy likely stopped with the introduction of barbed wire and its use greatly declined in the 1880s once the wire was widely available. By then, however, enough trees had been planted that they became naturalized through much of the Midwest. The hedge fence practice rose again during the 1930s Dust Bowl and Great Depression when FDR began the Great Plains Shelterbelt, an initiative in which windbreaks were created to protect farmland in the Great Plains. Records indicate Osage orange was the most popular tree used for this purpose. Notably, because the wood is durable and shrinks and swells very little compared to wood from other trees. Modern manufacturers continue to utilize the Osage orange for fence posts, furniture, and archery bows. In fact, most archers believe the finest bows are constructed of Osage orange wood as it is both incredibly strong and highly flexible (thus the alternative names for the tree: Bowwood or Bodark, stemming from the early French explorers calling it "bois d'arc" or "bow wood."). The archers' opinions appear to be correct since the U.S. Department of Agriculture states the Osage orange has the "highest work to maximum load value of any wood by far," indicating its rare combination of both flexibility and strength. Bonfire aficionados favor this tree's wood as well since it has the highest heating value of any native species (meaning it burns hotter than any other in North America), easily forms coals and does not smoke much, although its tendency to spark necessitates caution and careful seating arrangements. Botanists note that the wood of the Osage orange is the most decay resistant of any wood in the world. These highly valuable traits caused the explorer Meriwether Lewis to send Osage orange cuttings he obtained in St. Louis, MO to President Thomas Jefferson for propagation in 1804.

Typically, the fruits, which are also known as "horse apples," "Irish snowballs" or "monkey brains," are 3-5" in diameter and ripen and fall to the ground in August and September in our region. Many people believe that placement of Hedge Apples in basements and along foundations will ward off Cockroaches (such as the common American Cockroach- Periplaneta americana), Field Crickets (Gryllus) and various rodents. Although researchers did find insect deterrent compounds in the fruit, they were not at a level significant enough to be a successful pest repellent according to scientists. However, the folk remedy continues to be passed down and practiced by many with much reported success. As to whether or not the fruit is poisonous to us, research studies indicate that it is not. However, the milky juice in the stems and fruit often causes irritation to the skin. The taste of the Hedge Apple is guite bitter making them unpalatable to most animals as a food source, although they are technically edible. (Queen Victoria is said to have tried a small bite of a Hedge Apple brought to her by botanist, William Hooker, in 1900. She found it so distasteful her nibble was her only sampling.) Some rodents appear to enjoy partaking of the seeds when a fruit has split open but, in general, wildlife will only eat the fruit's flesh as a last resort. Even though the Osage orange tree and its Hedge Apple fruits may not play a significant role in our local ecosystem, the tree itself has certainly been of huge importance to the history of our region.

References: Frazee, Bob: "Hedge Apples – Facts & Myths" 11/7/14 via U of I Extension; Iowa State University Extension; Jauron, Richard: "Facts and Myths Associated with Hedge Apples," in Horticultural and Home Pest News 10/10/97; Main, Douglas: "The Surprising Ancient History of the Hedge Apple," in NationalGeographic.com, 11/23/2021; USDA.

Madison-Monroe-5t. Clair Unit 901 Illinois Ave. P.O. Box 117 Waterloo, IL 62298

