

Madison-Monroe-St Clair Unit

Below the Canopy

For Master Gardeners and Master Naturalists



JULY
2022



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Master Naturalist Fall Training

The Extension office is accepting applications for the Master Naturalist training. It will be a hybrid training with 3-4 hours of homework and a 2 hour class on Tuesday evenings. Classes are from August 23 to November 1. Contact Sarah for more information or an application. Registration is due August 12.

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 at stloopenyards.com 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 stloopenyards.com.

Plant Clinic Reports

Ever wonder what samples the U of I Plant Clinic is looking at during the year? They will be publishing weekly sample summaries on their website! A monthly report for May was recently posted, but it will be a weekly report going forward. Check them out at: <https://extension.illinois.edu/plant-clinic/plant-clinic-weekly-summaries>

Poison Hemlock Info

Extension staff around the state have been receiving many questions from the public and media about poison hemlock. A new 3-page info sheet covering risks, identification, reporting, and management is now available at go.illinois.edu/PoisonHemlock. The document was authored by Extension Forester, Chris Evans, in collaboration with the IDOA and IDNR.

Home, Yard, and Garden Pest Newsletter

Stay up to date with the latest news on emerging diseases and insects in Illinois. The newsletter is released twice a month. You can get it emailed to you or search past issues online at <https://hyg.ipm.illinois.edu/>.

Naturalist Phenology for July 2022

Bill Klunk and Elizabeth Frisbie, Master Naturalists

During this time period, be on the lookout for:

- ⇒ Downy serviceberry (*Amelanchier arborea*) fruit are maturing. The small berries are dark red to purple in color.
- ⇒ On July 17th between 3:00 AM and sunrise Venus, Mars, Jupiter, Saturn, Uranus, Neptune and a gibbous Moon will be in an arc that rises from the northeast to the south.
- ⇒ Elderberry (*Sambucus canadensis*) start forming small berry fruits by mid-July.
- ⇒ Eastern Cicada Killer (*Sphecius speciosus*) is a solitary wasp often seen during this period.

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.

- July 12 at 1:30 p.m.—Identifying Common Lawn and Garden Weeds
- August 16 at 1:30 p.m.—Late Summer and Fall Blooming Plants

Twilight Meeting

July 11 from 6 to 8 p.m. at Feather's Farm, Waterloo

University of Illinois Extension have partnered with area farmers over the past eight years to provide four evening "twilight meetings" to highlight and demonstrate diverse farming enterprises across southern Illinois. Feather's Farm was established in 2018 and has expanded to multiple high tunnels, with greenhouse and field production of a wide range of vegetables and pasture-raised eggs. Throughout the evening, Keith & Betsy will share their knowledge and experiences building a farm from the ground up. Some highlights will include a demonstration of how they grow lettuce through the summer heat (from seed to harvest), high tunnel and irrigation automation, the importance of irrigation water quality and how to fix poor water quality, rain harvest systems, and no-till production systems. Feather's Farm is located at 5924 J Rd, Waterloo, IL. There is no cost to attend this in-person program, but pre-registration is appreciated. To register online, visit go.illinois.edu/2022TwilightSeries. To register by phone, call 618-695-2441.

Prehistoric Cahokia Mounds Culture and Environment

July 12 from 6:30 to 8:30 p.m.

Bill Iseminger is an archaeologist and well known author. His presentation will cover the previous cultural traditions and the rise, fluorescence and demise of Cahokia, the largest prehistoric settlement north of Mexico, and discuss the many site features and results of past and current archaeological research as well as the development of a world-class Interpretive Center. Culture change is represented from the earliest Paleo-Indian nomads who hunted mammoths and mastodons, then the Archaic period with its introduction of horticulture and mound building, to the Woodland period that introduced pottery, the bow and arrow and corn agriculture, and then the Mississippian period with its expanded agriculture and large permanent settlements, with a focus on Cahokia Mounds, a UNESCO World Heritage Site.

Attendees and friends are invited to have dinner and meet the speaker at the Old Bakery Beer Company at 400 Landmarks Blvd., Alton, IL 62002 at 5 p.m.. To Register to attend this event (in-person or via Zoom), go to <https://www.sierraclub.org/illinois/piasa-palisades> You can join on ZOOM via <https://bit.ly/3yk0acS>. If you have questions, please contact Chris Krusa at 410-490-5024.

Summer Prairie Walk

July 16 at 9 a.m. at Paul Wightman Subterranean Nature Preserve, Fults

Join Clifftop Board member, Laura Schaefer, at Paul Wightman Subterranean Nature Preserve, 3325 G Road, Fults for a summer hike through the prairie to learn more about what's in bloom.

SAVE THE DATES

State Master Gardener Conference-September 8 & 9 at Tinley Park

State Master Naturalist Conference-October 17 at Allerton

Check out the Unit Webpage for the most up to date info.

<https://extension.illinois.edu/mms>



Wondering While Wandering
July 2022
Elizabeth Frisbie, Master Naturalist



Recently I read that “the evening of July 13th brings us the largest Full Moon of 2022.” Remembering back to all the hype around May’s Super Blood Full Moon, I wondered: What makes a Full Moon “super”? IS a Supermoon *really* all that much bigger and brighter in appearance than a “normal” Full Moon?

Astrologer Richard Nolle coined the term “supermoon” in 1979. By Nolle’s definition, a Supermoon occurs when the Full or New Moon is within 90% of its nearest point to the Earth. Scientists use the term “perigee” for this, meaning the time when the Moon (or any other object orbiting the Earth) is nearest to the center of the Earth. “Perigee” comes from the root word “peri” meaning “near” and “geo” meaning “Earth.” Both the New and Full Moon reach perigee several times each year. The colloquial term “Supermoon” applies when this is the case for either a Full or New Moon, although most of us associate the term with the former. Astronomers use the terms “perigean full moon” and “perigean new moon” (or “perigee syzygy” for both), although the phrase “supermoon” is now more accepted among professionals. “Syzygy” is the astronomical term applied when 3 or more celestial bodies line up. We experience a Full or New Moon when the Sun, Earth and Moon form a syzygy with Full Moons occurring when the Moon is on the opposite side of the Earth from the Sun during its monthly orbit. Today, there are multiple computation systems that determine a Supermoon, each calculating slightly differently. One of the most commonly used determination methods was developed by Fred Espenak, a world expert on eclipse predictions. His calculations take changes in the Moon’s orbit during each lunar cycle into account. According to Espenak’s calculations, we can look forward to Supermoons twice more during 2022: on July 13th and August 12th (having already enjoyed them on May 16th and June 14th). Supermoons tend to cluster, meaning it is not unusual for one Supermoon to be preceded by another as we are seeing this year.

Sometimes people are disappointed by Supermoons because they mistakenly believe the Full Moon will appear fantastically huge. During a “Supermoon,” the Moon does not look that much bigger than usual to most of us after it has risen, but it is much brighter than ordinary Full Moons. This is because the Full Moon is occurring on the same date as lunar perigee. The one occurring this month will be the nearest to Earth for the year, thus earning the title “the largest Full Moon of 2022” or the “most super of the Supermoons for 2022.” On July 13th, the Moon will be 222,089 miles (357,418 km) from the Earth. For comparison, the average distance between the Moon and Earth is 238,900 miles / 384,472 km. This shortened distance results in Supermoons looking brighter than an ordinary Full Moon. In fact, a Supermoon exceeds the brightness of an average Full Moon by approximately 15%. The difference in brightness increases to nearly 30% when comparing that of a Micromoon (year’s smallest Full Moon, which occur at apogee- the point where the Moon is farthest from Earth in its orbit) to a Supermoon. Supermoons also appear larger than typical Full Moons. Overall, the appearance of Full Moons varies in size because of the oval shape of the Moon’s orbit around Earth. When it comes to Supermoons, astronomers calculate the size difference to about 7% (for a Supermoon vs. typical Full Moon) up to 14%, when comparing a Supermoon (at perigee) to the size of a Micromoon (at apogee). As a visual size reference, the proportional difference between the size of a Supermoon to a Micromoon is similar to a US quarter compared to a nickel. For many of us the Supermoon’s larger size is most evident during moon rise. Once high in the sky, the increased brightness remains quite noticeable but, to all but the trained observer, the size difference is less visible to the naked eye since the Moon is so far away.



Given the fact typical Full Moons are associated with legends like cursed/bitten humans turning into werewolves it is not surprising Supermoons have their own myths surrounding them. As past Supermoons have proven, it is not the case that the Earth will be destroyed nor will the Supermoon turn most people into raving lunatics. Scientists note that Supermoons do in fact cause slightly higher tides (by around an inch or 2) than do typical Full Moons; however, this amount of tidal increase is not enough to cause a natural disaster. It is also true that Supermoons seem larger in the winter. This is due to Earth being nearest to the Sun (perihelion) in early January each year, so the Sun's gravity pulls the Moon closer to the planet. Notably, Supermoons will get smaller in distant future because the Moon is slowly propelling itself out of the Earth's orbit. It moves 3.8 centimeters farther from Earth each year. This is not new. Scientists theorize at formation the Moon was approximately 14,000 miles from the Earth and is now an average of 238,900 miles away.

References: adlerplanetarium.org; AstroPixels.com; "Carpe Noctem!" by Fred Espenak; CosmicPursuits.com; EarthSky.org; NASA; Natural History Museum; "The Night Sky This Month: July 2022" by Brian Ventruedo; [Old Farmer's Almanac](http://OldFarmer'sAlmanac.com); Space.com

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