

Madison-Monroe-St Clair Unit

Below the Canopy

For Master Gardeners and Master Naturalists



May
2022



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Extension Fundraising Events **Gardens in Bloom-June 3 & 4**

The committee will NOT be holding a plant sale this year. Instead, we are having a Gardeners Market. Donate houseplants, plants you started from seed, garden tools, gardening books, containers, and other garden themed items you are no longer using. Items can be brought to the Collinsville office by June 2 or bring to the Market on June 4. Market will be held at West End Dental, 9460 W Main St, Belleville. Look for a signup sheet this month to work as a garden host. The fundraiser is sponsored by St. Clair County Extension and Education Foundation.

Madison County Garden Tour-June 10 & 11

The container raffle returns this year. If you or a project would like to donate a container, please notify Sarah by May 15. Containers should be delivered to the Edwardsville Children's Museum on June 10 by 3:30 pm. Look for a signup sheet this month to work as a garden host. The fundraiser is sponsored by Madison County Extension Education Foundation.

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.

Naturalist Phenology for May

Compiled by Bill Klunk and Elizabeth Frisbie, Master Naturalists

Be on the lookout for:

- ⇒ Various species of Hummingbirds (*Trochilidae spp.*) are migrating back to our region to take up summer residence.
- ⇒ Largemouth Bass (*Micropterus salmoides*) males start moving to shallower water in search of nesting spots when the average water temperature reaches 60F. Spawning will also occur during this reporting period when the water temperature reaches 65F and a 2-4 year or older fertile female bass is herded to the nest by the male.
- ⇒ On the evenings of May 15th & 16th: A total lunar eclipse occurs as the "Flower Moon" nears perigee, its closest point to Earth in its orbit. That means the Moon appears about 6% larger than average.

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.

- **June 21 at 1:30 p.m.—Natives vs. Cultivars**
- **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**

Everyday Environment Webinar Series

Register to participate online [here](#).

- **May 12 at 1 p.m.— Geothermal Energy**
- **June 9 at 1 p.m.— The Conundrum of Common Names**

MG Monthly Continuing Education Series

New for 2022, we're launching a continuing education webinar series entirely devoted to Master Gardeners. Because these webinars will be directed just towards your continuing education, we'll be able to go more in-depth into topics which will help you better your horticultural knowledge, as well as cover those volunteer specific topics that our other webinars can't necessarily delve into. Register at any time [here](#).

- June 2 at 1 p.m.- Duane Friend- Soil Test Interpretation and Soil and Carbon Sequestration
- July 7 at 1 p.m.- Jay Hayek- Illinois Big Tree Register

Recordings for each month's session will be located on this Youtube playlist: <https://go.illinois.edu/monthlyCEseries>

Forestry Spring Webinar Series

Wednesdays, March 30-May 25 from 2-3 p.m.

Illinois Extension Forestry team will lead a nine-session series for woodland owners. The series is free and open to the public and will explore how landowners can manage their trees for better return on investment, improve habitat for wildlife species, learn more about the native ecosystems and restoration potential, and mitigate forest threats such as forest pests, invasive plants, and storm damage. Sign up for one session or the whole series [here](#).

Total Lunar Eclipse

May 15 from 9 p.m. to midnight at Fults

The event is hosted by Clifftop at the Paul Wightman Subterranean Nature Preserve near Fults. Drs. Michael Krawczynski, Assistant Professor of Earth & Planetary Sciences and Ryan Ogiore, Assistant Professor of Physics of Washington University, will join us for the evening. They will cover aspects of the celestial event, photo the eclipse for display on a computer, and be on hand to answer your questions. Take a nap and then come out to the preserve, witness the event, take a moon lit walk on the ADA trail, roast a marshmallow and enjoy this unique event. The PWSNP is located at 3325 G Rd, Fults, IL.

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
May 2022
Elizabeth Frisbie, Master Naturalist

This month the skies in our region become much more active as birds establish their territories and some search out nesting materials while early butterflies and dragonflies reach adulthood and take to the air in flight. The Common Whitetail (*Plathemis lydia* or *Libellula lydia*), one of the most common dragonflies in Illinois and across North America, is frequently seen beginning this month. Since the end of the 19th century, there has been debate among scientists about how to classify Whitetail dragonflies, arguing specifically over whether they belong to the genus *Libellula* or *Plathemis*. The most recent molecular systematics research indicates separating Whitetails from the rest of *Libellula* may be most accurate. IDNR does so and uses *Plathemis lydia* as the insect's scientific name.

The male Common Whitetail has a striking appearance and is easily distinguishable from other dragonflies. He has a large, chunky body (approximately 1.7"/5 cm in length) that features a white abdomen as his common name suggests. This white coloration is a dusty white coating or pruinescence. The male's translucent wings feature brownish-black bands in places, giving the wings a checkered pattern. The Whitetail's wingspan is approximately one and one-fourth inches. While the male and female Common Whitetail both have deep brown heads and thorax, they are dimorphic, meaning they are different in appearance. Female Common Whitetails lack the white body and instead are brown. Entomologists note her wing spot pattern closely resembles that of the female Twelve-spotted Skimmer (*Libellula pulchella*). They can be distinguished based on body size and their abdominal stripes. Whitetail females are smaller in size with shorter bodies that feature white zigzag stripes while the abdominal stripes of the Twelve-spotted Skimmer female are straight and yellow.



Like other Dragonflies, Common Whitetails spend most of their life cycle as nymphs or aquatic larvae and live as adults for only a month or two. Whitetail nymphs are dark brown or green but are often covered in algae. During larval phase, due to predation and desiccation there is up to a 99.9% mortality rate. Dragonfly nymphs are important food sources for various fish, frogs, and birds and may also be consumed by other aquatic insects. Likewise, the nymph themselves are predators, feeding on small fish, other insects, and worms. Whitetail nymphs are considered a biological indicator of pond health as they are somewhat tolerant of low oxygen levels and pollution. This Dragonfly overwinters underwater in the nymph stage and later in the spring crawls onto the land where they molt into adults. Dragonflies may molt (shed their skin) up to 17 times during their lifespan. During their adult stage, Common Whitetails mate mid-air. The female lays her eggs (oviposits) in flight, dipping the tip of her abdomen into the shallow water while skimming the surface, with ponds being her preferred location and the middle of the day her preferred time to lay up to 1,000 eggs. Because of this behavior, females are often commonly referred to as "skimmers."

When looking for adult Common Whitetails, observe near muddy-bottomed, still, or slow water areas. Like other perchers, Whitetails will often rest on objects near the water (generally preferring the tops of pond Grasses or Cattails) and occasionally on the ground. These Dragonflies are known to return to their same perch after a flight, making it possible to observe one Whitetail in particular more easily. Whitetails are known for being among the most swift and acrobatic flyers of all dragonflies. Male whitetails are very territorial and will patrol a 10–30-meter stretch of the water's edge or a 500 square foot area over a pond as their own. Observe for male-on-male competition over areas, involving aggressive flying directly at each other with their white abdomen raised above the rest of their body. These battles result in an established dominance hierarchy where males recognize territorial boundaries. Because of their need to fight off other males, male Dragonflies have extensive flight muscles. Notably, the male Common Whitetail has one of the highest flight-muscle to body mass ratios of any animal (FMR is found by flight-muscle mass/body weight). In fact, most of the male Whitetail's body weight is made up of flight muscle. Like in Humans, muscle use in Dragonflies requires steady and plentiful oxygen. Common Whitetails have a complex tracheal system involving prothoracic and abdominal stigmata to move oxygen to their muscles.

In addition to characteristic aggressive territorial battle flights and tendency to return to their original perch, Common Whitetail display what is known as “hawking” behavior involving swooping down like a Hawk does to catch their flying-insect prey mid-flight by grabbing it with their feet. These dragonflies consume Mosquitoes, Gnats, Flies, Midges, and Butterflies in their adult phase. Whitetails are very agile daytime flyers able to swerve, fly straight up and then dive straight down and rapidly change directions. They typically fly with a burst of speed and may suddenly stop to hover mid-air. Also look for Common Whitetail to stay low. They often fly among the Grasses and Rushes along the pond’s edge. When a Common Whitetail or other Dragonfly crosses your path, especially if it hovers near you, in many cultures this is viewed as a sign of an approaching change in your life or that it is time for you to break free and become your best self. If one happens to land on you, this is an indication of good luck as most cultures, including the Zuni and Navajo nations of the American Southwest, view Dragonflies as spiritual creatures, the celebrated, sacred bearers of blessings, sometimes from the world of departed ancestors.



References: IDNR: “Wild About Illinois Dragonflies and Damselflies!”; www.InsectIdentification.org; Iowa State University's Bug Guide, www.worldbirds.com “Dragonfly Symbolism and Meaning”; Dragonflies of Northern Virginia and University of Kentucky's Office of Environmental Programs.

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