

# The Shooting Star August

## Newsletter

"Dedicated to the study, appreciation, and conservation of the native flora and natural communities in Illinois."

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Ecological Restoration:
Practical Application
Tuesday, August 17th at 6:30 p.m.
Virtual Presentation

Alice Brandon of the Forest Preserves of Cook County presents the results of restoration work done in oak savannas, woodlands, and prairies, suggesting similar application of restoration techniques for southern Illinois. Learn how prescribed burns, removal of invasive plants, and thinning native trees and shrubs allow enough sunlight to reach the herbaceous layer and how these practices could benefit southern Illinois natural areas.



This program is free and open to the public! To register, please visit <a href="https://tinyurl.com/2re6fm6y">https://tinyurl.com/2re6fm6y</a>.



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### Message from the Southern Chapter President

Hello and welcome to August. In terms of favorite months of the year, I do like August because it is my birthday month, but, honestly, the heat and humidity can at times be daunting, and let's not even talk about the arrival of seed ticks! Still, I hope all of you brave the heat to find some time to explore the late summer flora as it can be spectacular. I recently had the opportunity to conduct my first official plant surveys as a Southern Illinois Plants of Concern volunteer. We surveyed several populations of rare plants that grow in swampy environments and really had a great time. I encourage everyone to consider volunteering for this program as it not only collects really important data to help in the conservation of rare plant species, but it also gives you a built-in excuse to see new areas, spend dedicated time looking at plants, and work with new people. We here at the local chapter of INPS fully support this effort and hope that it continues to be as successful as this first year is turning out to be!

We have some great programs coming up. This month, we get to hear from an Alice Brandon, an expert in restoration. Next month we are having some more field opportunities to explore southern Illinois and learn more about the plants that grow here. Keep an eye on our Facebook page and newsletters for more details on these and other opportunities. ~ Chris Evans

Newsletter Editor Note: Thanks for your patience for the absence of the July newsletter. I joined the thousands of firefighters and was away on wildfire detail in Wyoming. To hear more about these operations, listen in on this interview and news article: <a href="https://bit.ly/3m5HGaz">https://bit.ly/3m5HGaz</a>.

"I encourage everyone to considering volunteering for the [Southern Illinois Plants of Concern] program as it not only collects really important data to help in the conservation of rare plant species, but also it gives you a built-in excuse to see new areas, spend dedicated time looking at plants, and work with new people."

### Feature Plant of the Month Fameflower,

Fameflower, Phemeranthus parviflorus

Chris Benda captured this rarity in bloom, this flower only occurring in just 3 counties in southern Illinois. According to Benda, it is also called Flower-of-an-Hour because the blooms only last once for a short period of time. The flowers are a third to a half an inch across with five pink, starshaped petals with bright yellow tips on the stamens in the center. The flower starts with a single bloom, but develops other branches throughout the growing season with new flowers blooming only once, late in the day. The fleshy leaves are a couple inches long in dense cluster at the base of the plant. It is well suited for living in dry, hot habitats, such as glades and rocky outcrops.







### Southern Chapter

P.O. Box 271, Carbondale IL 62901 southernillinoisplants@gmail.com www.facebook.com/southernillinoisplants

#### **Calendar of Events**

August 17 Alice Brandon Ecological Restoration: Practical Virtual

Application

September TBD TBD TBD

October INPS Workday Pleasant Valley

Nov. 16 Lauren Pile TBD Virtual

CTH = Carbondale Township Hall, 217 E. Main St., Carbondale IL at 6:30 pm; TBD = To Be Determined For more information visit <a href="http://www.ill-inps.org/index.php/southern-chapter">http://www.ill-inps.org/index.php/southern-chapter</a>

Don't forget to check out the INPS YouTube channel, including recorded seminars from guest speakers from around the country! Check it out at <a href="https://bit.ly/2SIHs2B">https://bit.ly/2SIHs2B</a>.





#### Illinois Native Plant Society Southern Chapter

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#### Local Events & Announcements



### Illinois Extension

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN



#### Which Grass is Which? Warm-Season Grass Identification

August 18 | 2pm

Warm-season grasses grow and flower in the summer providing habitat and forage for wildlife.

Learn to identify the wide variety of warm-season grasses growing in Illinois in a free online webinar by University of Illinois Extension. **Presenter:** Erin Garrett

Register Today!

https://bit.ly/3k1bBx

This webinar will be presented via Zoom. The webinar will be recorded and posted to University of Illinois Extension's YouTube channel after it has been processed and closed captioned.

Questions? Email Erin Garrett at emedvecz@illinois.edu

### Local Events & Announcements



#### Local Events & Announcements

#### Mowing for Butterflies

This is the time of year some of you may be ready to mow/ bushhog the fallow fields, field edges, and pastures. Hopefully, you can put this off for a month or so especially of the area has a good growth of milkweed. Why? To help perpetuate butterflies especially monarch butterflies. They are coming to



the peak of their fall reproduction cycle for the fourth generation of monarchs in 2021. In southern Illinois, the spring peak for monarchs is about April 15- May 30 or so which is the second generation of monarchs. The summer has some here and there then beginning about July 15 to the end of September the greatest number of monarchs are hatched to mature into an adult monarch in 20 to 30 days. This is the fourth generation which will migrate to Mexico for the winter then fly back to Texas where the female lays eggs for the first generation of 2022.

At the Barkhasuen-Cache River Wetlands Center there are numerous black/yellow-green/white stripped monarch caterpillars/larvae feasting on the milkweed; common milkweed, butterfly weed, swamp milkweed, etc., which is their only food source. I began seeing them in late July but now they are everywhere. The monarch eggs will hatch in two to four days after being laid, the larva will eat-eat-eat for ten to twenty days then form a chrysalis. It stays in the chrysalis stage for ten to fifteen days to emerge as an adult orange and black with a little bit of white monarch butterfly. Almost as soon as its wings are dry, it will begin its journey south.

Sometimes one can not put off cutting the shaggy looking field, but if there is an option to wait until mid-October to cut the field this will allow more of the monarchs to complete their cycle from egg to adult, and then journey on.

If you want to learn more about monarchs, stop by Cache River State Natural Area, Barkhasuen-Cache River Wetlands Center. Also, August 28 through September one may catch butterflies, insect collection nets and holding cage provided, learn how to identify the butterflies caught, and if you have caught a monarch, place a Monarch Watch tag on it before releasing to continue its journey. On **Saturday**, **September 18, 10 - 11:00 a.m**. there will be a presentation on this remarkable creature. For more information on Monarch Watch go to <a href="https://www.monarchwatch.org">www.monarchwatch.org</a>.





University of Illinois Extension is partnering with Illinois Department of Natural Resources and Friends of the Cache River Watershed to host trash blasts in State Natural Areas, Parks, Trails, and Fish and Wildlife Areas. Master Gardeners, Master Naturalists, and members of the public are invited to assist with litter clean-up events. Members of the public will need to fill out an IDNR volunteer waiver on site. Kim Rohling will coordinate small teams of volunteers to collect litter from 9:00-11:00AM, in various locations in southern Illinois.

Volunteers will be required to sanitize their hands, follow social distancing guidelines, and wear a face mask for the duration of the event. To be prepared, volunteers should wear sturdy shoes, bring their own work gloves, and a face mask. Trash buckets and trash grabbers will be assigned to volunteers to use for the morning. All equipment will be disinfected before and after the event. This event is limited to 10 volunteers in order to follow recommended COVID-19 guidelines from Extension and IDNR. Register to save your spot now https://go.illinois.edu/IDNRTrashBlast.

Bring your own water to stay hydrated. We recommend you wear a wide-brimmed hat, lightweight pants, and a lightweight long-sleeved shirt to protect yourself from the sun, biting insects, or poison ivy/understory plants. Wear study footwear and bring your own work gloves. Maps to the meeting location for each clean-up will be emailed to you the Monday before the event. Hope to see you there!

### **Invasive Species Corner**

Please look at the following resources for the latest in Invasive Species news.

http://www.rtrcwma.org https://www.frstillinois.com www.sipba.org

### Identification and Biology of

### Spotted Lanternfly (Lycorma delicatula)



The spotted lanternfly (*Lycorma delicatula*) is an invasive insect pest of fruit, ornamental, and woody trees. Spotted lanternfly is native to China, Bangladesh and Vietnam, but was first discovered in southeastern Pennsylvania in late 2014. Since this initial discovery, it has spread to at least eight additional states. The spotted lanternfly damages trees by feeding on them, and its waste product, honeydew, encourages the growth of mold that harms the health of the host plant. Tree-of-heaven (*Ailanthus altissima*) is a preferred host, but this pest could potentially devastate grape (*Vitis* spp.) and logging industries.

#### Identification

The spotted lanternfly is a planthopper, with the adult being approximately 1 inch long and 0.5 inch wide at rest (Fig. 1). Its forewings are gray in color with distinctive black spots and outlined wing tips, while the hind wings are red and black in color and contain a white band. Wings are held closed over the body unless in flight. Its abdomen is mostly black, with yellow bands between segments. The early (1st – 3rd instar) immature stages are covered with white spots on a black body (Fig 2), and then develop red patches as they mature (4th instar) (Fig. 3).

#### Are they found in Illinois?

No. As of this writing, spotted lanternfly populations have only been found in the Mid-Atlantic region of the U.S., but they are capable of spreading quickly. The following link contains a spotted lanternfly distribution map that is continuously updated: <a href="https://bit.ly/2QqDOD5">https://bit.ly/2QqDOD5</a>. Quarantine measures are in place in several states to help stop the spread of spotted lanternfly to new areas within the U.S.

#### Life Cycle and Biology

The spotted lanternfly has one generation per year in its current U.S. distribution. Inconspicuous egg masses containing 30-50 eggs are laid by females on multiple surfaces, including tree bark, stones, and man-made structures, from September until



**Fig. 1.** The adult spotted lanternfly, shown resting on tree-of-heaven (top) and with its wings spread out (bottom). Photos: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org



Fig. 3. An immature spotted lanternfly. Photo: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org



Fig. 2. Early instar spotted lanternfly nymphs. Photo: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org

### **Invasive Species Corner**



Fig. 4. Inconspicuous egg masses laid by a spotted lanternfly female on tree bark. Photo: Lawrence Barringer, Pennsylvania Department of Agriculture

early November (Fig. 4). The eggs overwinter until the nymphs emerge around late April or early May (Lee et al., 2019). Young spotted lanternfly nymphs feed on tender plant tissue from a variety of plant host species, some staying in the canopy of the tree where they hatched while others move to the ground and feed on the plants found there. There are four nymphal instars; once spotted lanternfly reaches the fourth instar, it begins feeding on woody plant tissues from a narrower range of plant hosts. Adults emerge by late July and mating occurs in late August through the fall. Spotted lanternfly can be distinguished by its appearance and also its behavior; both nymphs and adults are strong jumpers, capable of jumping several feet at a time.

#### **Host Plants**

Spotted lanternfly feeds on at least 103 species of plants in the U.S. In addition to tree-of-heaven and grapes, red and silver maple (*Acer sp.*), black walnut (*Juglans nigra*), and other hard- and soft-wood tree species serve as common hosts. Because spotted lanternfly feeds on such a broad range of hosts, it can impact multiple habitats (i.e. agricultural, residential) in a single landscape (Urban 2019).

#### Damage

Spotted lanternfly feeds on plant sap, weakening its host plant as a result. In addition, plants can be indirectly damaged when the spotted lanternfly excretes significant quantities of "honeydew," a sticky, sugary substance, onto the surfaces of the plants where they have been feeding. This leads to the formation of sooty mold, which acts as a sunblock, preventing photosynthesis in the host



Fig. 5. Aggregation of spotted lanternfly adults. Photo: Lawrence Barringer, Pennsylvania Department of Agriculture

plant and plants surrounding the infestation. The honeydew and sooty mold may also build up on patios, backyard furniture, and vehicles.

A weakened host plant may become more susceptible to droughts, other pests, or pathogens (Urban 2019). Grapevines are particularly sensitive to lanternfly feeding damage and numerous vineyards in Pennsylvania have reported yield losses (Urban 2019). Currently, spotted lanternfly is not known to transmit plant pathogens, but it is a nuisance pest to homeowners and business owners due to its tendency to congregate in large numbers on trees and the surfaces of synthetic objects (Fig. 5).

#### Management

In areas experiencing high populations of spotted lanternfly, a combination of mechanical control, host reduction, and chemical control is recommended to help contain and manage this insect at each life stage.

#### Reporting

This insect has not yet been found in Illinois. If you believe you have found the spotted lanternfly in Illinois, send a photo and a detailed email to <a href="mailto:lanternfly@illinois.edu">lanternfly@illinois.edu</a> including where, when, and the specifics of the location. In addition, contact the Illinois Department of Agriculture at (815) 787-5476.

### **Invasive Species Corner**

#### **Acknowledgements**

Heather Leach (Penn State University) and Lawrence Barringer (Pennsylvania Department of Agriculture) provided expert reviews for this fact sheet. This work is supported by the Crop Protection and Pest Management Program [Grant No. 2017-70006-27150] from the USDA National Institute of Food and Agriculture. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U. S. Department of Agriculture.

#### **Authors**

Inaoka, Mirai, Nicholas Seiter, Kelly Estes, and Kacie Athey. 2021. "Identification and Biology of Spotted Lanternfly." University of Illlinois Extension.

#### References

Lee, D., Park, Y., & Leskey, T. C. (2019). A review of biology and management of *Lycorma delicatula* (Hemiptera: Fulgoridae), an emerging global invasive species. Journal of Asia-Pacific Entomology, 22(2), 589-596. doi:10.1016/j.aspen.2019.03.004

Spotted Lanternfly Alert. (n.d.). Retrieved November 21, 2020, from <a href="https://www.agriculture.pa.gov/Plants">https://www.agriculture.pa.gov/Plants</a> Land Water/PlantIndustry/Entomology/spotted\_lanternfly/. SpottedLanternflyAlert/Pages/default.aspx

Spotted Lanternfly. (n.d.). Retrieved January 16, 2021, from https://nysipm.cornell.edu/environment/invasive-species-exotic-pests/spotted-lanternfly/

Urban, J. M. (2019). Perspective: Shedding light on spotted lanternfly impacts in the USA. Pest Management Science, 76(1), 10-17. doi:10.1002/ps.5619

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Dodecatheon frenchii – French's Shooting Star

☐ Leadership & Organization (serving on

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board at State or Chapter level)

☐ Leading Field Trips & Tours

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