Lead Plant (*Amorpha canescens*)

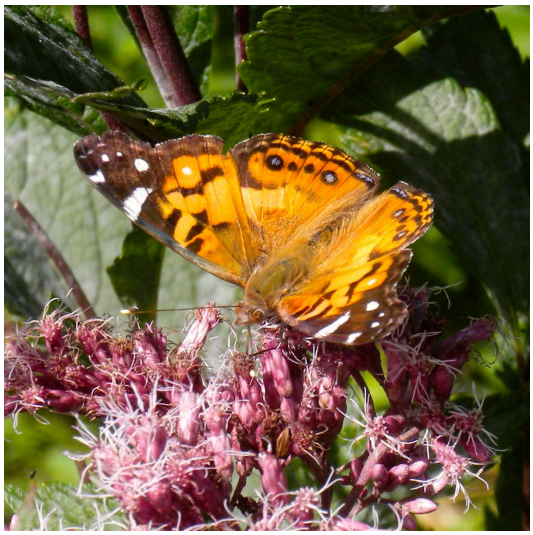
July 2019

SEEDLINGS

Wild Ones|Kalamazoo Area Chapter

What more substantial service to conservation than to practice it on one's own land?--Aldo Leopold

In This Issue



American Lady Butterfly *Photo: I. Gebhart*

Hidden Pond Preserve Field Trip

Saturday July 27, 10am-1pm

Come join us at the beautiful Hidden Pond Preserve near Hastings. The Southwest Michigan Land Conservancy has been working to restore what was once crop and pastureland to the preserve's original prairie habitat and stream/pond area. We'll hear all about their efforts, and witness the verdant and vibrant ecological benefits. More Info

Spotted Lanternfly: An Asian Exotic Moves Westward from the East Coast

Robert A. Haack

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The spotted lanternfly (SLF), *Lycorma delicatula* (White) (Hemiptera: Fulgoridae), is native to China and Vietnam. SLF has also spread to Japan and Korea in recent decades, with the DNA in those populations matching very closely to populations in China. SLF was first reported in the USA in 2014, in Berks County, Pennsylvania, northwest of Philadelphia .

As of early 2019, additional established populations of SLF have been found in small areas of Delaware, New Jersey, and Virginia. In addition, SLF individuals have been collected at various locations in Connecticut, Maryland, Massachusetts, and New York, but no established populations have yet been detected.

Top photo: Immature
Bottom photo: Adult at rest

There are over 700 species of fulgorid planthoppers (or lanternflies) worldwide, but only 17 are native to the continental US, with most found in the Southwest. SLF is the first exotic fulgorid to become established in the US, and it feeds on a wide range of woody plants, including vines, shrubs, and trees.

SLF completes one generation per year, overwintering in the egg stage. There are four nymphal instars. First instars appear in May and June, with fourth instars present during July to August. The first three instars are mostly black with white spots, whereas the fourth instar is largely red with white spots. Adults can be found from July into December, but mating (often taking place along the lower trunk) and oviposition usually do not begin until October. Adults are about 1 inch long with a 2- inch wingspan. Their forewings are gray with black spots, while the hindwings have bold red, black and white markings. Eggs are often laid on flat surfaces in groups of 30-50 eggs, and covered with a mud-like substance that is grayish brown in color.

More than 70 species of woody plants have been recorded as hosts for SLF (Dara et al. 2015), including several important commercial crop species (e.g., grapes, hops, apples, apricots, peaches, plums, and nectarines) as well as ornamental and timber tree species (e.g., cherry, maple, mulberry, oak, poplar, sycamore, walnut, and willow). In China, the favorite host is tree of heaven, *Ailanthus altissima*. Extensive feeding by SLF nymphs and adults, usually occurring on newer growth, can weaken plants and slow their growth. However, much of the economic impact to agricultural crops results from sooty mold development on the fruit after being coated with the insect's excreted "honeydew." SLF populations can be very high with 100s to 1000s of individuals occurring on a single infested plant.

Adults can disperse on their own by active flight, but long distance spread will likely occur by humans moving objects contaminated with any SLF life stage, but especially eggs. The egg masses appear as dried mud, so are easily overlooked and can be easily moved on firewood, nursery stock, lawn and garden equipment, as well as autos, trucks, recreational vehicles, and trailers.

Adult Spotted Lanternfly

Management options are still being developed, but many recommendations can be made based on current knowledge. For example, individuals can scrape egg masses off woody plants and other infested items during fall, winter, and spring. They can also apply sticky band traps around the lower trunks of trees to capture SLF nymphs and adults as they ascend. People should avoid parking vehicles under infested trees, given that SLF nymphs and adults often drop from trees when disturbed. They should also inspect their vehicles and outdoor items before moving them outside of infested zones.

We do not know when SLF will arrive in Michigan or in nearby states. It could take years or it may already be here. Therefore the public should be on the alert for this insect and report it quickly given that early detection may allow for successful control.

References

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Dara SK, L Barringer, SP Arthurs. 2015. *Lycorma delicatula* (Hemiptera: Fulgoridae): a new invasive pest in the United States. Journal of Integrated Pest Management 6(1): 20. DOI: 10.1093/jipm/pmv021

Liu H. 2019. Occurrence, seasonal abundance, and superparasitism of *Ooencyrtus kuvanae* (Hymenoptera: Encyrtidae) as an egg parasitoid of the spotted lanternfly (*Lycorma delicatula*) in North America. Forests 10: 79. doi:10.3390/f10020079

Join the Monarch Monitoring Blitz

Cora Lund Preston, Monarch Joint Venture

The 3rd Annual International Monarch Monitoring Blitz is coming up in Canada, Mexico and the United States from 27 July to 4 August 2019.

For one week, the Blitz invites people across North America to go out to gardens, parks and green areas and monitor milkweed plants for monarch eggs, caterpillars, chrysalises and butterflies. This information will help researchers identify priority areas for monarch conservation actions.

FACTS ABOUT THE 2018 MONARCH BLITZ

- 486 participants across Canada, Mexico, and the United States
- 1,323 records
- 53,588 milkweed plants monitored
- 13,796 monarchs observed
- 6,905 eggs
- 4,900 caterpillars
- 470 chrysalises
- 1,521 butterflies

You can help by spreading the word, hosting a monitoring event, or monitoring yourself during this time!

To take part in the Blitz, simply observe milkweed and monarchs, and report your observations. Record the location and area where you monitored, the number of milkweed plants observed, and the number and life stage of monarchs counted (even if there are no monarchs!).

East of the Rocky Mountains in the United States report to Monarch Larva Monitoring Project. You can also share about and follow the Blitz on social media using the hashtag #MonarchBlitz.

If you host an event, you can register it on SciStarter. Just make sure to select 'International Monarch Monitoring Blitz' in the 'What Type of Event' section.

The Blitz is an initiative of the Trinational Monarch Conservation Science Partnership, created through the Commission for Environmental Cooperation (CEC). Through the Blitz, scientists from the Insectarium/Montréal Space for Life, Environment and Climate Change Canada(ECCC), Monarch Joint Venture, the US Fish and Wildlife Service, the Xerces Society for Invertebrate Conservation, and Mexico's Comisión Nacional de Áreas Naturales

Protegidas (Conanp) **are asking the public to help them understand monarch and milkweed distribution throughout North America.** Data gathered during the Blitz will be uploaded to the Trinational Monarch Knowledge Network, where they will be accessible for anyone for consultation and download.

GR/River City Chapter - Garden Tour & Native Plant Sale

Monday, July 15

See Michigan native plants in an urban garden setting, and learn how you can plant your own.

A fundraiser of River City Wild Ones, the native plant sale will feature 13 species of perennials and 5 species of shrubs.

For more information, including a plant list, visit their website.

Our Annual

Fall Plant Exchange
will be held
Sunday August 25

Details forthcoming

Community Events of Interest to Wild Ones

July 13 - 10:00am-11:30am Build-a-Native Bee House Workshop Kellogg Bird Sanctuary, Augusta, MI

July 18 - 7pm Establishing Native Plant Gardens to Attract Butterflies w/Ilse Gebhard, Oshtemo Township Hall, Oshtemo MI

July 27 - 10:00 am-1:00 pm KAWO Hidden Pond Preserve Field Trip, South West Michigan Land Conservancy, Hastings, MI

August 25 - KAWO Annual Fall Plant Exchange *Details coming soon*

Editor's note: If you know of any local events pertaining to native plants that you feel may interest our readers, please send them along to us at the address below. Thanks!

SEEDLINGS is edited by Tom Small and Kim Patrie. It appears mostly monthly. The next regular issue will come early in August. **Deadline for August issue is July 15.** Please send submissions to Tom at yard2prairy@gmail.com or Kim at safiraraks@gmail.com

To share comments and suggestions, simply reply to this email. We look forward to hearing from you!

Find more information and news at www.KalamazooWildOnes.org and www.Facebook.com/KalamazooAreaWildOnes