



# The Trailblazer

*Newsletter of the Elkhart County Indiana Master Naturalists*

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Issue 4

Autumn 2022

## Fall Quarterly Meeting Elkhart County IMN Alumni Club

The fall meeting was held Thursday, October 13, at the Westside Park in Nappanee. Our guest speaker was Vicky Rydzynski who spoke about native carnivorous plants. Worldwide, there are 720 carnivorous plants. In the United States we have 66 varieties. Carnivorous plants are adapted to low nutrient, acidic or alkaline soil, and a high water-table habitat. We have five types of insectivorous plants: Venus Flytrap, Bladderworts, American Pitcher Plant, Sundews, and Butterworts (also known as “pings”).

We had a short business meeting during which Carole Mitchell reported on the events where she has presented the IMN program to attendees and Melanie Helmuth updated us on volunteer opportunities.

## IMN Alumni Workday @ Bonneyville Mill



On Saturday, October 1, 2022, a group of about ten IMN Alumni met at the Bonneyville Mill County Park perennial garden to pull invasive weeds and vines, as well as uncover a lost walkway and signage. We filled the trailer MANY times! Since it was also the day of the pancake breakfast we attracted a lot of attention from passersby who wanted to know who we were and what we were doing. Overall, it was a very productive work day!



Left: Mary exhibits leadership not just as Chair, but also in work details!

Right: 1, 2, 3 . . . PULL! The vines were tenacious.



# Volunteer Opportunities

- Elkhart Environmental Center: Oct. 21, need trail actors.
- Elkhart Environmental Center: anytime, invasives removal
- Trees for Goshen: October 31 – Nov. 4, labelling trees
- South Bend Parks: Howard Park, weeding



Check your email for more details and other **volunteer opportunities**. Sometimes those emails get filtered to junk folders because they have multiple recipients.

## 20 Years of IMNs!

To celebrate this anniversary, various locations around the state have had one day programs. These programs count for education hours. The last one is coming up soon: **November 5** at **Indiana Dunes Visitor Center**, 1215 North State Road 49, Porter IN. The subject is northern saw-whet owl banding. Bring

a lawn chair, dress for cooler weather, and bring any snacks or drinks. A campfire may be available. A pizza buffet dinner will be provided at the start of the evening. Banding nights are weather dependent and do not operate when rain or high winds are present.



## Potluck and IMN Graduation

Thursday, November 10, 6 – 9 p.m.  
Schrock Pavilion, Shanklin Park

A sign-up sheet circulated at the last quarterly meeting, but there's certainly still time to decide what to bring to the annual potluck, graduation, and awards ceremony. Get your hours in to

Jenna by November 7 to be eligible for the top three volunteer spots. All hours recorded get sent to the state and are used to promote and evaluate the IMN program, so please send them to Jenna, even if you aren't in the running for top three. (If you have additional hours after that date, you can count them as hours for 2023.) There is no business meeting at the potluck—just come and have a good time with your fellow IMNs.



Come hungry!



## Preparing for Winter

By Lou Anne Hostetler

On October 15 at Pokagon State Park IMN 20 year celebration many IMN alumni met at the nature center to listen to "As Nature Falls Into Winter" by Jan McGowan. She explained that nature is in an energy crisis as summer turns into fall then into winter. Energy flows from plants to consumers. There is more energy available on June 21 during summer solstice than on December 21 during winter solstice.

First she explained that a tree has to tolerate the cold. Trees harvest the sunlight until fall arrives. As chlorophyll recedes, leaves turn yellow or orange or deep vibrant reds. Deciduous trees lose their leaves. Trees convert starch to sugars that form antifreeze around each cell so the cell does not freeze in the winter.

What do mammals do? Hibernation, torpor and denning are three ways mammals overwinter. Scatter hoarders are animals that save nuts, berries and seeds for fall because they give high energy nutrition. They get berries from the spice bush, maple leaf viburnum, dogwood or Virginia creeper, for example. Squirrels and beavers are scatter hoarders. Hibernation is a condition to save energy used by groundhogs, dormice and bats. They put on thicker fur or go inside a microclimate which could cave or burrow to keep warm. A groundhog will dig to the bottom of their tunnel system and some animals like snakes and skunks will share the groundhog's tunnel at a level closer to the top or middle. Torpor is a more temporary condition where the animal (eastern chipmunks, for example) has an overnight temperature reduction to match the area they inhabit. Denning is similar to sleep and is done by opossums, skunks, raccoons, bears.

What do reptiles do? Reptiles and amphibians perform a process called brumation where they slow down and stop functioning at certain temperatures. Snakes stop at 60° and crawl into another animal's burrow. Toads stop at 48° and dig below the frost line. Snapping turtles settle in the mud at the bottom of a pond for six months. There are frog species that don't freeze, but in some frogs ice fills the frog's abdominal cavity and surrounds the internal organs then ice crystals form between the skin and muscle. But in the spring these frogs thaw out and are ready for a new season.

What do insects do? Insects perform diapause which is a stopping of their life cycle which they enter before cold temperatures arrive and food becomes scarce. Insects use proteins in their blood as antifreeze to keep them dormant until their cycle can continue in the spring. Some butterflies overwinter as adults, some as caterpillars, some as chrysalis, and some as eggs.

What do birds do? Birds migrate if they have to depending on the food supply. Some scatter hoarders that are birds include blue jays, black capped chickadees, tufted titmice, and white breasted nuthatches. They have feathers to insulate their bodies. Flying takes a lot of energy but birds live at the edge of their energy budget. Some birds stay and store away food and do power flights to keep their bodies warm. They conserve energy in protected areas like nest boxes or pine trees. They fluff their feathers and tuck their bills, eyes and feet into the fluff.

At the end of the lesson, we went on a nature walk to look for signs of organisms preparing for fall and winter that included receding chlorophyll from leaves, new buds awaiting next year's growth, chewed up nuts or nuts being cached or carried, plants with berries, birds hiding sunflower seeds, burrow holes, reptiles or amphibians, butterflies, a goldenrod gall, and some migrating birds. We found leaves that were changing color, new buds, nuts that were chewed, berries, a groundhog hole, a goldenrod gall, and some birds flitting around the wooded area.

In conclusion, during the winter months organisms either tolerate like a tree, mammals scatter hoard food and perform one of three ways to overwinter, reptiles perform brumation, insects perform diapause, and birds either migrate or scatter hoard and stay. I knew the word hibernation though the other ways animals overwinter were new to me. I loved learning about the cells of trees and animals that do not freeze. Then the nature walk experience put it all into perspective as we learned signs to look for in the fall.





## Incident With a Spider

I felt bad about the incident with the spider.

I surely did have good intent  
Sometimes things just happen.

And that's exactly how this went.

I had started my backyard fire,  
with various pieces of kindling.  
And as the wood was beginning to take off,  
I saw a spider that was clinging.

Flames were spreading all around.  
The insect hemmed in by the heat.  
“This innocent spider must be saved!”  
I grabbed a stick to attempt the feat.

My goal was to brush the spider,  
away from the spreading heat.  
I thought that this was only fair,  
since I was the one who put it there

My intentions were good, my aim was not,  
as I tried to save that bug.  
My flick with the stick was inaccurate,  
as I brushed the spider off the wood.

Unfortunately my help did not,  
achieve the desired intent.  
And truly I was quite sorry,  
as into the fire it went.

Jim Carpenter October, 2022



## Don't forget these important dates:

**November 7: Volunteer hours due to Jenna!**

**IMN Potluck and IMN Class Graduation** November 10

**Next IMN Alumni Meeting** January 12—Details TBA

On the IMN web page there is a link to a printable volunteer hour record. It is not mandatory to use this, but it might be handy to record your hours as they happen so you don't forget!

<https://www.in.gov/dnr/state-parks/programs/indiana-master-naturalist-program/indiana-master-naturalists-forms-volunteers-links/>

If you don't save the Trailblazer but need to check the information for meetings, you can always find it on the SWCD website.

## 2023 Meeting Dates

January 12

April 13

July 13

October 12

November 9 - Potluck

# Identifying Our Native Mantis

Carolina mantis (*Stagmomantis carolina*)

Chinese mantis (*Tenodera sinensis*)

Size of Adults



1.8 - 2.5 inches in length



4 inches in length

Facial Markings



Scaly plates with no pattern



Vertical lines between the eyes



Egg Case or "Ootheca"

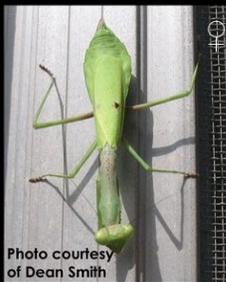


Flat arrangement with a trilobite-like appearance, typically on a vertical surface



Rounded & resembles an old roasted marshmallow, typically on a plant stem

Male / Female Comparison



Female abdomen widens in the center & her wings do not reach the tip. Male's wings cover the slender abdomen. Green to brown coloration



Female typically has a plump abdomen & thinner antennae. Male has thicker & more textured antennae. Green to brown coloration



www.indiananature.net

From Carole Mitchell: Now is the time to find and destroy the invasive egg cases. The best way I have found is to freeze them. Give them to a wildlife rehab—the animals LOVE to eat them.

From IN Nature:

In Indiana, there are primarily\* two mantis species: the native Carolina mantis (*Stagmomantis carolina*) and the exotic Chinese mantis (*Tenodera sinensis*).

Chinese mantises were accidentally introduced to America in 1896 through the nursery trade in Philadelphia and have subsequently been purposely released for pest control and purchased for education and even as pets. Both species of mantis are predatory and opportunistic hunters, lying in wait for their prey. Both typically eat insects, spiders, isopods, and other terrestrial Arthropoda creatures, but the larger, more powerful Chinese mantises have been documented killing frogs, lizards, salamanders, shrews, mice, small turtles, bats, and even hummingbirds by stalking flowers and nectar feeders.

Chinese mantises are now naturalized in Indiana. Although not officially classified as invasive, their presence in our ecosystem is impacting native insects, many of whom are in decline, including native bees, butterflies (including monarchs), and moths.

For those attempting to control exotic Chinese mantises on your property, proper identification is the first step. Our native Carolina mantises have evolved here along with the animals that they prey upon, and therefore, this species should be encouraged. For those willing, adult\*\* Chinese mantises can be killed or frozen and fed to native birds in the winter. Another method of control is to correctly identify, locate, and then destroy the oothecae (egg cases) of the Chinese mantises between the late fall and early spring. Most oothecae hold approximately 200 young, making egg case removal and destruction a productive, though pinpointed method of management within a given area.

The goal of exotic species management is to increase native diversity and is a personal decision that must include research and education. We at Indiana Nature LLC understand that not everyone will subscribe to the reduction methods identified for Chinese mantises. However, we believe in the importance of education regarding their origin and impact on our ecosystem.

\*The European mantis (*Mantis religiosa*) can be found in the Midwest, but far less commonly. It is not featured in this infographic.

\*\*During the nymph stage of mantis development, it is more difficult to differentiate the Carolina from the Chinese mantis.

IN Nature Facebook group: <https://www.facebook.com/groups/659140774243804/?ref=share>

Website: [www.indiananature.net](http://www.indiananature.net)

The picture on the masthead this month is from a recent hike at Lloyd Bender Memorial Forest, an ACRES property in Noble County. Send me one of your trail pictures for the next issue! Thanks to Carole, Jim, and Lou Anne for contributions this month.

Do you have any pictures or a story that you'd like to share with other Elkhart County IMNs? I edit the *Trailblazer*; I don't write it. It's YOUR newsletter—what would like to see in it?

Send your contributions to [chapman\\_ej@yahoo.com](mailto:chapman_ej@yahoo.com) for the next issue of the *Trailblazer*, which will be out in January right after our next meeting. (But don't wait—you'll forget! ☺)

I'm happy to help with smoothing things out, fixing misspellings, etc., but I need your input to have a truly creative and interesting newsletter.



The mission of the Indiana Master Naturalist program is to bring together natural resource specialists with adult learners to foster an understanding of Indiana's plants, water, soils and wildlife, and promote natural resource volunteer service within the State of Indiana.

