

# IMNature

The newsletter for IMN hosts and certified graduates

2024 Summer Edition



## In this issue:

Naturally Inclined

Chuck Harvuot

Collaborative Coinservation

Siera Stuart

One thing Leads to Another

Lois Oyer

If People Can't Come to the Park. . .

Keri Ousler and Brenda Phillips

Likin' Lichens

Phil Cox

DNR News

## Naturally inclined.....

### .....a note from the State Council President

Over the years, I've had a wide variety of creatures visit my birdfeeders, most have been typical visitors, but a few have been completely unexpected. I must admit I have a wide variety of feeders, two for standard bird seed, an Oriole feeder, a hummingbird feeder, one for a suet cake, a tube with Nyjer seed, and for the squirrels- two that hold shucked corn, one that holds an ear of corn, and an interesting jar feeder that holds peanuts. One might say- the more, the merrier.

The feathered visitors include a typical diversity of songbirds, (Cardinals, Bluejays, Blackbirds, Orioles, finches, sparrows, etc.), several species of woodpeckers, an occasional stopover by wild turkeys passing through, and a couple of raptors (a Cooper's hawk and a Red-tailed hawk), that really aren't interested in the seed, but rather what is eating the seed. There's a lake about 100 yards down the hill, so some water fowl make the trip up the hill. I always enjoy seeing the Sandhill Cranes, especially when they have a colt tagging along, but I'm not so eager to see the Mallards and Canada Geese; the ducks act like little vacuum cleaners and I have enough goose poop along the lake shore- I don't need it around the house. The ducks and geese get chased away whenever I see them.

There are also some regular four-legged visitors, three varieties of squirrels, several rabbits and a lot of chipmunks. (My grandmother would say there are more chipmunks than you can shake a stick at.) I frequently see raccoons in the evening, some deer- especially in the winter, and a few years ago I witnessed a fox eating seed I'd scattered for the ground feeders. There are a couple of ground hogs that nose around, but I've not ever seen them actually eating the seed.

Mornings are the busiest time- right after I fill the feeders. With the exception of the Nyjer tube, the hummingbird feeder and the suet holder, all the other feeders have been cleaned out from the previous day. I sometimes wonder if the birds are up in the trees waiting/watching for me, because they're at the feeders shortly after I finish refilling them- often before I return inside. It can be a busy time with occasional squabbles at different feeders. And while the morning provides the best opportunity to watch, I do check throughout the day to see what might be out there.

Such was the case on a day in late May. When I was in the kitchen, I caught a quick glimpse of a large bird standing next to one of the bird feeders. It wasn't a Sandhill Crane, so I went back to the window for a longer look. When it saw me, it took off, but not before I recognized it- a Great Blue Heron. What? A Great Blue at one of my bird feeders? I see them down by the lakeshore all the time, but never here at the top of the hill. Other than being a bit bemused, I passed it off as a fluke. Until... I saw it again the next day, standing like a statue, next to the same feeder. Once again, when it saw me, it quickly departed.



I've watched Great Blue Herons at the lake, both when sitting on a bench or out in my kayak. A large blue-grey bird with a black and white head, long legs and a shaggy-like appearance; they typically hunt along the shoreline, slowly

I've witnessed a few catch a fish, shake it a few times and gulp it down, but now my curiosity was piqued. Why was this heron visiting my bird feeder, especially when there is a lake with fish and frogs a few wingbeats away?

The Sibley Guide noted that the Great Blue is our largest heron, standing about four feet tall with a six-foot wingspan, and having a heavy bill; it's a solitary hunter, that "hunts fish and other animals while wading slowly in quiet water". My Peterson Guide had a bit more information on their diet, adding "frogs, crayfish, mice and insects" to its menu. Since both of these books are really meant to help identify birds, I wasn't surprised by the limited dietary information- so, off to the Internet.

I read a few articles and learned that the Great Blue is a widespread, adaptable species, whose population is growing, despite some loss of habitat. Its unique appearance is probably the result of successful adaptation through the centuries- the oldest Great Blue fossils are from the Epoch, about 1.8 million years ago. They are monogamous during breeding season, usually returning to the same rookery each year- although they may change breeding partners in subsequent seasons. Both parents will incubate, and feed, the young- who are dependent on their parents for food for three to four months after hatching. (Pardon me while I digress a bit- there is a rookery, along the Tippecanoe River, within a couple of miles of my house, and years ago a friend and I decided to go 'check it out'. We had to hike a way to get to it, and I remember quite a few large nests high in the trees, a lot of loud squawking, and a lot of poop on the ground. We didn't stay very long- or go back.)

Other articles mentioned: that the Great Blue has excellent eyesight allowing it to hunt at night; that it is not a picky eater; eating whatever it can catch and swallow- some lists also included reptiles, birds, ("especially ducklings"), and small mammals; that occasionally, it can become an unwelcome visitor at backyard ponds, hunting for koi, or along the shores of fish hatcheries- although studies seem to indicate that the Great Blues were more likely to catch/eat diseased fish that were closer to the water's surface. I don't have a pond, so I was still a bit perplexed as to what it was doing here by my feeders.

Two days later, I had an answer. I noticed a Great Blue walking down the hill with something in its beak. I grabbed my binoculars, and then my camera- zoomed in, and took a photo of the heron holding a chipmunk. I watched as it continued towards the lake, but didn't see if it actually ate the chipmunk. I'm not quite sure why I didn't think of chipmunks as a possible menu item, after all they are small mammals, but I didn't. And, the articles I read did seem to indicate herons have a fairly wide diet.



Since that day, I've only seen a heron stalking around the house on a couple of occasions; it has not become a regular visitor. Perhaps it prefers fish, or maybe chipmunks are harder to catch; I'll probably never know the answer to that question. But, whatever the reason, I still have more chipmunks "than you can shake a stick at".

*Chuck*

Coming Soon!

More information and registration materials for The Gathering

September 27 – 29 in Ft. Wayne



## Collaborative Conservation

By Siera Stuart, 2023 IMN

As Indiana Master Naturalists, we all understand the impact and influence our IMN courses had on us. We spent many hours gaining new knowledge, exploring nature, and connecting with like-minded people. We built relationships with the people we saw each week as we all worked toward a common goal: becoming Indiana Master Naturalists. Luckily for me, I was able to witness that same cohesiveness at work outside of the classroom.

In May 2024, Zionsville Nature Center's IMN coordinator Rachel Felling had the idea to offer our Indiana Master Naturalist classes a unique volunteer opportunity. This opportunity didn't involve pulling garlic mustard or cutting down honeysuckle, both of which are great volunteer activities. Instead, it allowed us to put our new knowledge and skills to the test by participating in a citizen science project called a bioblitz. A bioblitz focuses on identifying and documenting as many species as possible in a short period of time. This bioblitz was at Zionsville's newest and largest park, the Carpenter Nature Preserve. While this park is not yet open to the public, the Indiana Master Naturalists got a sneak peak of this beautiful nature preserve while earning a few volunteer hours. Over 30+ Indiana Master Naturalists attended the bioblitz and worked cooperatively to collect a baseline of species data before construction officially begins on the park.

Before the 216-acre former Wolf Run Golf Course could succumb to traditional residential or commercial development, long time Zionsville residents and conservationists, Nancy and Jim Carpenter purchased the land. Recognizing an incredible opportunity to save and restore wildlife habitat while creating a place for the community to enjoy nature, the Carpenters and the Town of Zionsville worked together to lay the foundation for the future of the Carpenter Nature Preserve.

The Indiana Master Naturalists spent a total of 3 hours exploring the 216-acre Carpenter Nature Preserve during the bioblitz event. Divided into groups focusing on plants, reptiles and amphibians, insects, and birds, we worked together to catalogue the biodiversity. The energy was high as we trekked through the terrain, resulting in over 900 different observations encompassing approximately 350 different species by the end of the morning. Our cooperation and cohesiveness provided an excellent baseline of species data before construction begins on the park. This data could influence future restoration projects and park development.

It was clear from our short time at the Carpenter Nature Preserve, that Mother Nature has been hard at work gradually reclaiming the former 18-hole golf course a little bit each day. While there is still much to be do before the park can open to the public, the Zionsville Parks and Recreation Department has big plans for the property including rustic trails, bird blinds, and eventually a new home for the Zionsville Nature Center. The bioblitz gave us all an opportunity to reconnect with one another while offering just a glimpse of the amazing biodiversity. Our cooperative efforts not only provided valuable baseline species data but also exemplified the effectiveness of collaboration in conservation.





## When One Thing Leads to Another

By Lois Oyer, AIMN, Elkhart County

As a volunteer with the bird banding program at Merry Lea Environmental Learning Center, I enjoy the early morning chorus of bird song, seeing the birds up close and learning about birds. But there's a side benefit to this volunteer opportunity.

Every thirty minutes we need to check the nets for birds, which means we're walking several miles along the trails. My eyes are scanning the ground, the trunks of trees, the ripening raspberries, looking for anything that catches my eye! Most recently, my eyes landed on an orange, black, white striped and spotted caterpillar about 1.5" long. My knowledge of caterpillars is limited, so I pulled out my phone to use the "Seek" app and determined that this was an Eight-Spotted Forester moth caterpillar.

When I got home, I started researching this species, with the scientific name of *alypia octomaculata*. They can be found where wooded areas meet open fields in the mid-west and eastern part of the US., as well as in Canada. Eggs are laid on grapevines (both wild and cultivated) and Virginia creeper and other plants in the grape family. (I had neglected to notice what plant this caterpillar was on.) The larvae then eat the leaves of these plants. The pupa stage happens in soil or crevices of old wood. The adult moths emerge in early spring with black, white, orange, red and yellow colors and a wingspan of 1-1.5". Eight white or cream-colored spots are visible on the black wings when spread and has bright orange-red leg hairs. There are orange tufts on the first and second pair of legs. The adult moth flies during the day during March through July, causing it to be mistaken for a butterfly. Benefits of this species is that it provides food for predators at all stages of life and the [adult moths](#) have a role as pollinators. They can be seen nectaring at flowers, like butterflies. Next time I'm scanning my surroundings, I'll need to see if I can see the Eight-spotted Forester [moth](#)!



## If the People Can't Come to the Park, Bring the Park to the People!



Keri Ousler with butterfly

By Keri Oursler, Brenda Phillips, and, in memory of Indiana Master Naturalist Pat Higgins

St. Joseph County Indiana Master Naturalists Keri Oursler, Pat Higgins, and Brenda Phillips partnered with Hamilton Grove Assisted Living to create a bird and pollinator habitat for residents. With dozens of feeders up since fall 2023, the residents now enjoy a steady stream of avian visitors to their windows, gardens, and porches. The Master Naturalists also established several native plant gardens designed to promote sustainable growth as the community faces climate change. Along with a raised bed garden, residents are enjoying sitting and working outside while identifying birds and growing vegetables.

On February 16th, Brenda, Keri and Pat partnered with the Hamilton Grove staff Melissa Taghon and Liz West to join the Great Backyard Bird Count, organized

by the Cornell Lab of Ornithology and National Audubon Society. The Great Backyard Bird Count, or GBBC, is an annual volunteer citizen-based science project that brings thousands of birders from all over the world to observe their backyard birds and record their sightings—this helps the Cornell Lab and Audubon scientists better understand global bird populations before one of their annual migratory periods. On this day, residents gathered in wheelchairs and assistive devices to identify and count nearly 20 different bird visitors to their feeders and reported their observations via e-Bird. After nearly an hour of steady observations, residents were very excited to spot a Downy Woodpecker. A few months later, in spring, he was joined by a female, and residents are now hoping for the pair's babies to visit their feeders soon.

Hummingbird feeders went up in late May, and the first Ruby-Throated Hummingbirds have begun to frequent feeders outside resident's windows. Native plants were also planted to support these "jewels of the bird world," such as cardinal flower (*Lobelia cardinalis*), swamp rose mallow (*Hibiscus moscheutos*), and hairy beardtongue (*Penstemon hirsutus*). In the upcoming years, these plants among others will become a native food source and natural attractor for hummingbirds throughout the summer months at Hamilton Grove.

Along with the plants that attract hummingbirds, many native plants have been installed that will also attract butterflies, bees, moths, and a variety of native pollinators. One of the primary goals for the native plant beds is to create a habitat that can support a pollinator's full lifecycle; this includes not only planting a nectar source for the adult form, such as a butterfly-- it also includes planting a food source for the larval form, such as a caterpillar. Another goal of the native plant beds is to make a natural food source for birds. With these goals in mind, these plants were added to the garden:

- Grey-headed coneflower (*Ratibida pinnata*)
- False sunflower (*Heliopsis helianthoids*)
- New England Aster (*Symphiotrichum novae-anglae*)
- Evening primrose (*Oenothera biennis*)
- Swamp milkweed (*Asclepias incarnata*)
- Blue vervain (*Verbena hastata*)
- Nodding bur marigold (*Bidens cernua*)
- Golden alexander (*Zizia aurea*)



... and many more to come, as more native plant beds get installed in the courtyard. Because Hamilton Grove communities also include stand-alone homes, independent-living residents are now helping to fill feeders and provide support to native plantings.

Since last fall, more diverse birds have arrived, including visitors not previously seen in the courtyard, such as Blue Jays, Hairy Woodpeckers, Rose-Breasted Grosbeaks, and Mourning Doves. While the food was a great help to the birds throughout the winter, the IMN team knew that fleshing out the courtyard and providing native plants would give these birds, and many other types of wildlife, a place to call "home." As a result of the team's efforts, the National Wildlife Federation recently certified the interior courtyard garden as wildscape-friendly to animals.

This project was made possible through volunteer efforts by IMNs, and with support from Wild Birds Unlimited. A low-cost effort, it has engaged residents who now ask excitedly about birds they not only see but hear and are beginning to distinguish birdsong. Residents are becoming interested in the new gardens being installed and are seeing butterflies and bumblebees. We encourage anyone to reach out to similar facilities in their communities as this project has brought so many smiles to the residents who are now heading outside to enjoy what Indiana nature has to offer.

# Likin' Lichens

By Phillip Cox, Purdue Extension – Vermillion County

If you're an IMN you have to love trees and thus need to know about lichens! Also, Master Naturalist's sometimes get asked really tough questions so I thought I'd share this information just in case you get asked about lichens. Last spring, I received a photo of lilac bush stems that had what was described as a fungus that looks blue but was white, wet and spongy. The gentleman had pruned a few stems and this growth had mysteriously appeared. Of course, the client wanted to know what he should do to resolve this problem. I told him not to worry as the growth are lichens and will do no harm to his cherished lilac.

If you take a close look at some of the more established shrubs or trees in your landscape, you too may notice something you cannot seem to describe – that may look like a kind of fungus on your tree. As I have said, this growth could be a lichen (pronounced “liken”), as they are very common. In fact, about 18,000 species of lichens are known worldwide and the U.S. Forest Service estimates that about 3,600 species are in North America. The Purdue Plant and Pest Diagnostic Lab website says that lichens occur in a variety of habitats from the Arctic to the Antarctic and all regions in between. One finds them on exposed rocks in the deserts, on solidified lava flows in Hawaii, on frozen substrata in the polar regions, on the bark of trees, and on the leaves of plants.

Trees can have a partnership with lichens basically anywhere on a tree. The key thing to remember, they are not and do not cause disease problems. They exist on the tree only to obtain sunlight and can grow rapidly when exposed to full sun conditions. (Such was the case when the previously mentioned client had pruned several dead lilac stems.) In addition to growing on trees, lichens can be found in just about any suitable environment including dead wood, rocks, soil, or just about any place they can obtain sun and then anchor in place.

A lichen is an extraordinary organism because it consists of two unrelated organisms, an alga and a fungus. These two components coexist as a single organism creating a symbiotic relationship. The alga, because it is a green plant, can photosynthesize and provide energy for the lichen. The fungus contributes to the relationship by obtaining water and minerals and by protecting the algal cells from desiccation. The fungus and the alga when working together make up what is known as the lichen thallus.



The color and form of this growth is often used to group and classify the lichens. The most common species of lichens on trees tend to be a gray-green color, but other species may be orange, yellow, slate blue, or black. There are three major growth forms of lichens: foliose, fruticose, and crustose. Foliose lichens have leaf-like lobes. These are the gray-green structures that can often be seen growing on tree trunks or branches. They are slightly raised and can grow and coalesce with other lichen thalli, covering several inches or more of bark. If moistened, they become somewhat rubbery and can be removed. Fruticose lichens have hair-like or stringy thalli and are less common. Finally, as the name implies, crustose lichens have crust-like thalli. Crustose lichens can often be found tightly embedded on rocks or lower tree trunks.

So again, don't be alarmed if you see them on your trees because besides being harmless, they are an important part of the ecosystem and can tell a story. Lichens need clean, fresh air to survive. As an organism they can absorb everything from beneficial nutrients to harmful toxins. They especially like to absorb water in the air, which is why so many are found in damper areas along lakes and streams or other water sources. The next time you go to the big city look around for lichens. You probably won't see very many. In centers

of heavy industrial pollution, no lichens can be found. The lichen population increases gradually with distance from these centers and is thus something of a measure of pollution intensity. Because lichens are extremely sensitive to air pollution, their absence can be used to indicate poor air quality or excessive air pollutants. In fact, some research indicates the various forms of lichens can help in identification of the type of possible pollution sources and their origin. So, if lichens are growing on your trees, take a deep breath and join me in the “Likin’ Lichens” club!



## News from the DNR

### **O’Bannon Woods State Park receives new hellbenders**

O’Bannon Woods State Park has received two new Eastern hellbenders as part of its ongoing exhibit of North America’s largest salamander, one of its many live animal exhibits open for viewing.

In cooperation with a larger regional program dedicated to the preservation and reintroduction of the species, the park’s Hickory Hollow Interpretive Center has an exhibit dedicated to preserving the species and teaching people about it. In Indiana, the hellbender is protected as an endangered species.

The new hellbenders were recently received from Columbian Park Zoo in Lafayette. They are 8 ½ years old and approximately 13 inches long. “They are eating and adjusting to their new environment very well,” said Jarrett Manek, the state park’s interpretive naturalist. “As an indicator species for healthy water, this species is one worth learning more about.”

The previous two hellbenders exhibited at O’Bannon Woods were transferred as part of the cooperative regional restoration effort among the Indiana Department of Natural Resources, Purdue University, and other zoos across the region that has helped reintroduce hundreds of young hellbenders into the Blue River in southern Indiana as well into other Midwest waterways. Metsger Park Zoo in Evansville and the Kentucky Department of Fish and Wildlife each received one of the hellbenders last year as part of their respective breeding programs.

Hickory Hollow Interpretive Center is open Tuesday through Sunday, 10 a.m. to 3 p.m. For more information on the hellbenders and upcoming programs, call 812-738-8234 or see [interpretiveservices.IN.gov](http://interpretiveservices.IN.gov).

### **Crawfish frog recovery underway at Angel Mounds**

This spring, DNR herpetologists began a multi-year project to recover state-endangered crawfish frogs at Angel Mounds State Historic Site in Evansville. A large crawfish frog population historically occurred at Angel Mounds, but the frogs died out during the 1980s from unknown causes. A habitat suitability study funded by the Indianapolis Zoo recently determined that Angel Mounds continues to harbor quality grassland habitat and high densities of crayfish burrows—a critical habitat feature for this burrow-dwelling frog.

During March and April, DNR herpetologists collected crawfish frog egg masses from a large Greene County population and relocated them to Angel Mounds to re-establish the frogs on site. Eggs were placed within protective cages in the original crawfish frog breeding pond until the eggs hatched about two weeks later. Herpetologists are monitoring wetland levels and tadpole development until the tadpoles metamorphose into small frogs, which typically happens in June and July.

## Crawfish Frog Recovery



After metamorphosing and leaving the pond, the young crawfish frogs take up residence in a small burrow that was built by a species of terrestrial burrowing crayfish. Crawfish frogs spend much of their lives at their burrows, resting on the surface near the entrance, or down inside it where they are protected from predators and weather extremes. While the burrows may be located several hundred meters from surface water, they run deep enough to reach the water table, giving frogs access to moisture during hot summer months.

Crawfish frogs take two to three years to reach sexual maturity, meaning that the frogs that were moved to Angel Mounds this spring will not return to the pond from where they hatched to mate until 2026. During this two-year waiting period, the frogs will mature and reach up to four inches in body length,

making them one of the state's largest frogs. In the meantime, the DNR plans to move additional egg masses to supplement the local population during the spring of 2025.

Crawfish frog recovery at Angel Mounds has involved a multi-partner collaboration with the DNR Division of Fish & Wildlife, Indiana State Museum, site director Mike Linderman, and Evansville resident Mike Lodato, who documented the Angel Mounds crawfish frog population crash in the 1980s. DNR herpetologists are currently working under a conservation grant from the Indianapolis Zoo to identify other recovery sites for this rare species in southwest Indiana.

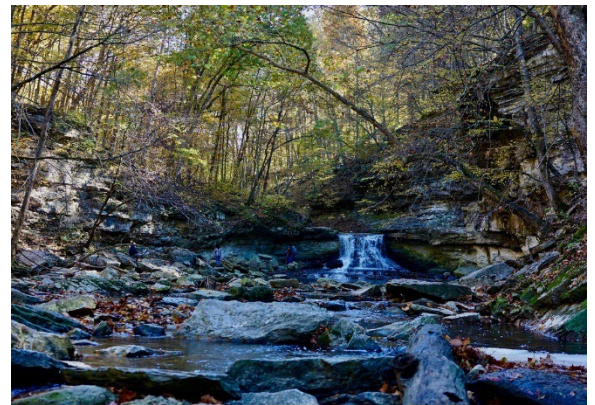
## Several more McCormick's Creek State Park trails reopen

Several trails at McCormick's Creek State Park reopened in May after being closed for clearing of downed trees after March 31, 2023 tornado. Through the efforts of Department of Natural Resources (DNR) staff and volunteers from Team Rubicon, trail access has increased from 3.6 miles to 7.1 miles since the fall of 2023. Team Rubicon is a veteran-led humanitarian organization that serves global communities before, during, and after disasters.

The reopened hiking trails are trails 2 and 3, and the Bridle Trail is reopened for hiking only, as the saddle barn will be closed during the 2024 season for pasture restoration and barn maintenance.

Trail 2 begins behind the Civilian Conservation Corps (CCC) Recreation Hall, ventures into McCormick's Cove Nature Preserve, and ends between the family cabins or the beginning of Trail 1. The reopened portion includes the Quarry Loop. Trail 7 remains closed. Guests should not cross barriers where the Quarry Loop meets Trail 7. Trail 3 provides access to McCormick's Creek waterfall from the falls parking area and from Canyon Inn. One wooden trail structure has been repaired, extending the trail length by 0.8 miles.

"It is hard to imagine the scope of the damage that blocked these trails," said Carl Lindell, central regional manager for Indiana State Parks. "Trees fell on top of each other, and sometimes crews were climbing 6-8 feet in the air to move along a trail's hiking surface to work. Marking trees to cut and then clearing them has required well-trained and experienced sawyers working in difficult conditions. Our staff and skilled volunteers have nearly doubled the available trail mileage since last fall."





Trails 1, 4, and 9 remain fully open, taking hikers to McCormick's Cove Nature Preserve, the fire tower, and the Peden Farmstead. Trail 8 remains partially open from the pool to the nature center area but is closed beyond Pine Bluff Shelter where it leads to the campground.

Although more of the trail system at McCormick's Creek is now reopening, closures remain on trails 5, 6, 7, and 10 until crews clear them and trail structures are repaired. Guests should respect closure signs and should not use these trails until they are ready for safe use. For the latest information on McCormick's Creek State Park visit <https://www.in.gov/dnr/state-parks/parks-lakes/mccormicks-creek-state-park/>

Want to promote your alumni group, highlight a volunteer, or tell about your favorite experience with nature? Have an article and/or pictures you would like to submit? Or does your organization need volunteers? Let us know by contacting [chapman\\_ej@yahoo.com](mailto:chapman_ej@yahoo.com)

Deadline for submissions for the **Fall edition** will be **October 1**.

Submitted articles may be awarded volunteer hours!



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



The Indiana Master Naturalist program is sponsored by the Resource Conservation & Development Councils, Indiana Soil & Water Conservation Districts, Purdue Cooperative Extension Service and Indiana Department of Natural Resources. [www.indianamasternaturalist.org](http://www.indianamasternaturalist.org)



Extension