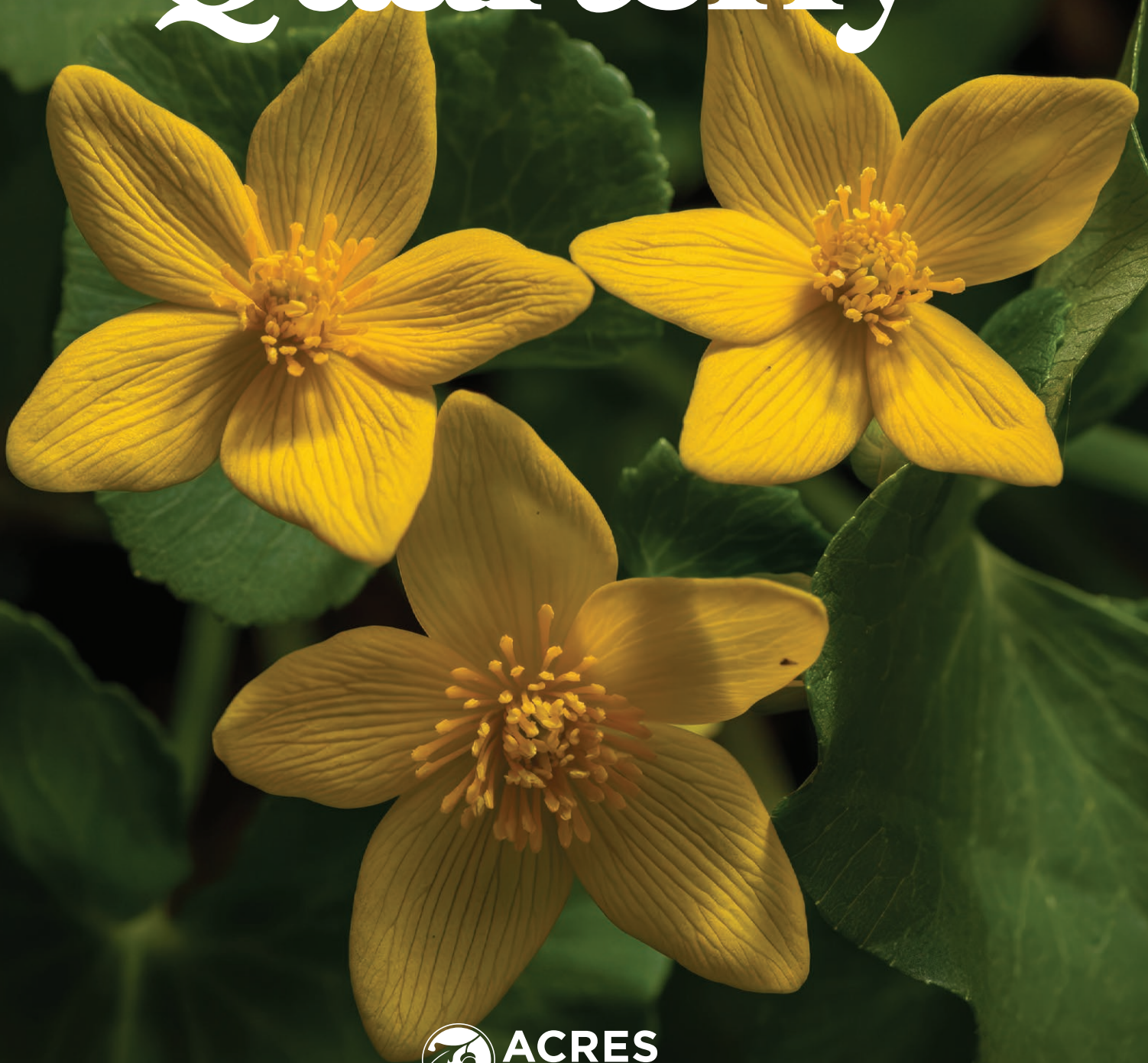


SPRING 2026

# the Quarterly



Protecting Land. Forever.



## From the Executive Director

### Jason Kissel

[jkissel@acreslandtrust.org](mailto:jkissel@acreslandtrust.org)  
260-637-2273 ext. 102

### ON THE COVER

*Marsh marigolds light up wetlands and streamside edges with their cheerful yellow spring blooms.  
Photo by Thomas Sprunger.*

**ACRES Land Trust** owns and protects natural and working lands, inspiring people to value, appreciate and support these places for the benefit of all — today and forever. Today we protect and steward more than 8,700 acres in northeast Indiana and portions of southern Michigan and northwest Ohio. In addition to helping care for and restore our local land, your support also offers trail systems where you and others can explore thriving natural places from dawn to dusk, at no charge. Thank you!

1802 Chapman Road, PO Box 665  
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[acreslandtrust.org](http://acreslandtrust.org)



### Dear Members,

You protect places that protect lives, through ACRES. We most often talk about the land we protect, which makes sense because land is part of our unofficial name, “ACRES Land Trust.”

Yet we protect much more than land. We protect all the life above and below the land, the life passing through the land, the water and air filtered by the land, the rich history that has occurred on the land and the future of the land.

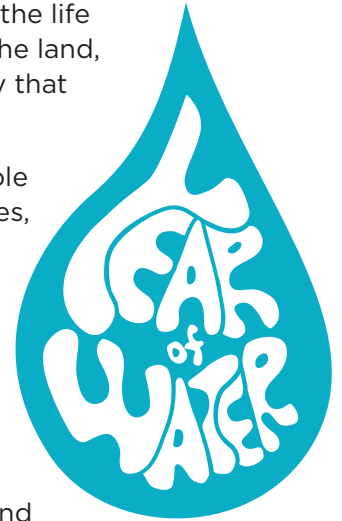
Throughout 2026, we’re going to highlight ACRES role in protecting water. You’ll enjoy water-themed articles, events and social media posts — highlighting your impact on our local, national and global waters.

ACRES service area is situated in a unique area — some of our waters flow to Lake Michigan, others to Lake Erie and others to the Mississippi River. We also have water occurring in many different systems (rivers, lakes, bogs, fens, aquifers, streams, sedge meadows, forested wetlands, etc.), and in different states (ice, humidity, clouds, etc.).

When we turn our attention to one of the reasons for preserving places, it helps highlight the depth and impact of all the reasons for protecting nature. We’ll continue to protect land for *all* the good reasons why; you’ll just notice us highlighting our collective impact on water this year.

To kick off this year’s focus, at my desk in the ACRES office, I raise a glass of well water, purified by its travels through the layers of protective land above it, and say “cheers!”

Thanks,





# TABLE OF *Contents*

Spring 2026

Vol. 65 - No. 1

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|           |   |
|-----------|---|
|           | <b>ACQUISITIONS</b>   |
| <b>4</b>  | <b>Roberts' Woods on Cedar Creek, Hutsell Brogan Preserve and Mackel Family Nature Preserve</b> |
| <b>6</b>  | <b>Blanding's Turtle: Nature's Wetland Sentinel</b>   |
| <b>7</b>  | <b>Kentucky Coffee Tree</b>   |
|           | <b>STEWARDSHIP</b>  |
| <b>8</b>  | <b>LaSalle Family Natural Area Inventory</b>  |
| <b>9</b>  | <b>Water Quality Indicators</b>   |
| <b>12</b> | <b>Spring Hikes &amp; Events</b>  |
| <b>14</b> | <b>Vanishing Pools, Thriving Salamanders</b>  |
| <b>16</b> | <b>Nature's Arteries: By Any Measure, Floodplains are the MVPs of Connectivity</b>              |

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## **the Quarterly**

**Bridgett Hernandez, Editor**

Published by ACRES, Inc., at 1802 Chapman Road, PO Box 665, Hometown, Indiana, for the interest of its members, friends and others similarly dedicated to the preservation of natural areas. ACRES, Inc., is a nonprofit, charitable corporation, incorporated under the laws of Indiana. Contributions are deductible for tax purposes.

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Corporate ..... **\$500**  
Annual ..... **\$20**  
*Dues payable annually.*

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photo by Thomas Sprunger

### Roberts' Woods on Cedar Creek by Randy & Carol Roberts

We moved back to our hometown of Fort Wayne in early 1968, a few years after our marriage. Carol's father, Frank Dulin, told us about a property for sale north of the city. Trudging through deep snow, we instantly fell in love with this site. We built our home here atop a steep canyon, overlooking the confluence of Cedar Creek and Willow Creek.

With our children, Kirsten, Michelle, and Eric, and four grandchildren, we have enjoyed canoeing, exploring, sledding and watching wildlife: foxes playing in the backyard, raccoon kits peering through the screen door, great blue herons wading, kingfishers diving, otters sliding down the creek bank, barred owls talking in the night, songbirds dining at the feeder, turkeys roosting on sycamore branches, deer running across the floodplain and bald eagles following the bends of Cedar Creek. We have watched trees through the seasons, shedding leaves in fall and budding out each spring, doubling in height over 57 years. We have enjoyed the beauty of wildflowers and ferns on the woodland floor, and moss and lichen that decorate the trees.

Our involvement with ACRES originated in our friendship with Tom and Jane Dustin and Jim and Pat Barrett, who were among its co-founders. Carol served on the ACRES board, as Vice President, and, for many years, as *the Quarterly* editor. Now, our property will join over 1,300 acres of forever-protected land along Cedar Creek, preserving its unique ecosystem. The influx of development and shrinking of wild areas in Northeast Indiana influenced our decision to donate our home and 22 acres to ACRES. With support from our children to make the donation, we named the property "Roberts' Woods on Cedar Creek." ACRES promise to protect this precious land ensures that future generations will be able to enjoy this special place forever.



photo by Thomas Sprunger

photo by Jarrid Spicer



## Hutsell Brogan Preserve by Evan Hill

Meeting with Bruce and Molly throughout the acquisition process was a real treat, and that's not just because they grow some of the tastiest tomatoes around!

Spending time with folks who have deep ties to the land in their care and are considering who will care for that land after them is always extremely rewarding.

Three adjoining landowners, all related, made ACRES acquisition of the Hutsell Brogan Preserve possible through generous donations. John Zimmerman and Margaret Timm donated 10 acres alongside their neighbors and relatives, Bob Bayer and Kate Brogan. Bruce Hutsell and Molly Brogan sold the remaining 33 acres to ACRES at a deep discount. We coordinated three separate closings simultaneously, an uncommon occurrence we were glad to make happen.

The 53-acre property features high-quality woodlands, a shrub wetland and early successional fields. These varied habitats support a diverse array of plant species and a rich bird population. Its proximity to an existing preserve is also a plus.

What do future plans hold for this area? We're already making plans for wetland and upland restoration, which aim to reduce the presence of invasive species and likely involve planting a few thousand trees.



photo by Jarrid Spicer



photo by Thomas Sprunger

## The Mackel Family Nature Preserve

One thing we see over and over again with new land donors is the connections they have with other conservationists. For Jerry Mackel, his approach to land protection was deeply influenced by his neighbors and his father, Fred. *"I kind of patterned what I did on what they did,"* he explains.

Growing up next to the Barrett family, who donated the James M. & Patricia D. Barrett Oak Hill Nature Preserve, and watching his father donate the original Mackel Nature Preserve, led him to follow in their footsteps.

This isn't the first time Jerry has protected land with ACRES. In the late 1990s, Jerry protected the Little Cedar Creek Wildlife Sanctuary, dedicating it to his late wife, Molly, and late son, William. Over 20 years later, Jerry has decided that the rest of the property will now be protected forever.

When asked why now, Jerry's answer was simple: "The fact is that I enjoy seeing that happen while I'm still living, and it's nice."

### A Critical Link in the Cedar Creek Corridor

The 28-acre Mackel Family Nature Preserve adds significant connectivity to forever-protected natural areas within the Cedar Creek corridor. Most of the preserve consists of wooded floodplain along Little Cedar Creek, with the remainder comprising early-successional upland and a higher-quality oak-hickory ridge.

*"I grew up wandering through the property in the wetlands and the fields and the creek, and got really attached to the way of nature,"* Jerry recalls.

The Mackel Family Nature Preserve stands as a testament to what happens when love of land meets commitment to forever. While closed to public access to protect its sensitive habitats, the preserve ensures that the wetlands, floodplains and oak-hickory ridges Jerry cherished will continue to thrive for generations to come.

## Blanding's Turtle

# Nature's Wetland Sentinel

By Dr. Bruce Kingsbury

One of my favorite turtles is the Blanding's Turtle, *Emydoidea blandingii*, and ACRES plays an active role in protecting it across the region. They are a handsome and iconic species—once you have seen their yellow throat, there is no doubt about what you are looking at.

They also have a high-domed shell compared to most species in the area. A Blanding's Turtle in its element often looks like a smooth stone that just happens to be in the water, maybe where you were not expecting a rock, and possibly moving.

The distribution of Blanding's Turtles ranges intermittently from the potholes of the eastern Great Plains, across the upper Midwest around the Great Lakes and over to New England. The largest populations are to our west. Blanding's use a variety of shallow wetland types for habitat. Classic places to find them would be emergent wetlands, where grasses and sedges "emerge" from the water, or shrub-scrub wetlands dominated by species such as buttonbush. They tend to spend most of their time in water that is only a foot or two deep, and



the depth of the water depends on the size of the turtle. Juvenile turtles prefer areas where there may only be a few inches of water. These isolated, often only seasonally filled, wetlands are critical habitat for these creatures.

Blanding's are an indicator species. They are relatively uncommon, are state endangered and are under consideration for federal listing as threatened. If you see them at a wetland, it just may be that you are at a site of good quality. Or a site that was of good quality and could be again. This is all because Blanding's live as long as we do, and are reproductive the whole time. Blanding's Turtles, like many turtle species, have low recruitment rates. What this translates to is that they have a limited ability to get from egg to reproductive adult.

The challenge is that "mesopredators" like raccoons dig up most of the nests and eat the eggs before they can hatch, and the young turtles are quite attractive, bite-sized meals to a variety of other predators. As herpetologist Jim Harding says, "They live a long time because they have to," allowing enough new individuals to reach adulthood. They keep trying, hoping it might work. Often these days it does not. Given these considerations, if you do see juveniles, the wetland is likely high quality.

When not enjoying a rest in the sun on their favorite log, Blanding's Turtles forage for invertebrates like crayfish, snails and insect larvae. As is the case with most turtles, though, they are not very discriminating. If a small critter holds still for long enough, they might try to eat it.



# Kentucky Coffee Tree

By Jason Kissel

photos by Scott Namestnik

Kentucky Coffee trees aren't rare in ACRES service area, but they are uncommon enough that it's always a thrill to see one. To me, their most distinctive feature is that it has the largest leaves of any tree in our area—a double compound leaf (bipinnate) often reaching three feet long!

They produce large bean pods that also make identification easy, as they are 4-10" long and 2-3" wide with a leathery look and feel, containing three to six large seeds. They prefer moist, well-drained soils, so you'll most often discover them near wetlands or waterways—often on the base of slopes leading out of these water features.



## Fun Facts about Kentucky Coffee trees:

- *They are separate male and female (dioecious) trees*
- *Their leaf scars are very large and heart-shaped*
- *Because hardly any animals eat or disperse their seeds today, it's theorized that mastodons, giant tree sloths or other extinct animals were the primary seed dispersal mechanism for the tree. Now they rely primarily on water to disperse their seeds.*
- *In the past, their seeds were roasted and ground for a coffee-like beverage (but it was a very poor substitute for coffee, and the seeds are poisonous when raw, so proper preparation was paramount!) and soap was made from the pulp within the seed pods.*

Kentucky Coffee trees may have provided more diverse benefits in the past, yet they continue to provide ample benefits today. Who knows how we, and other animals, may find them useful in the future.

They are also known for excursions overland between wetlands. Many times, this is just part of their normal routine. During the spring, however, females make large moves (sometimes as large as a mile!) across the landscape searching for the right place to lay their eggs. It is somewhat mysterious as to why they pick a particular spot, especially when they pass by seemingly similar habitat. Their mobility, while intriguing, can also get them into trouble. Our landscape is filled with barriers and traps, such as roads and cars. Consequently, contiguous wetland systems are best, allowing turtles to travel safely between wetlands and nesting sites.

So as you can see, Blanding's Turtles require the preservation of good wetland habitat. ***And this is where ACRES comes in.*** Numerous ACRES properties are home to Blanding's Turtles. ***When you hear about the latest acquisition and that it has wetlands, add the charismatic Blanding's Turtle to the myriad array of species being protected, forever.***



# LaSalle Family Natural Area Inventory

Article & photos by Nathanael Pilla

**The corridor along Cedar Creek has long been a priority area for conservation. With the help of ACRES, in 1976, Cedar Creek became one of only three rivers in the state to be designated in Indiana's Natural, Scenic and Recreational River System. In 2024, ACRES Land Trust began protecting an approximately 75-acre property along Cedar Creek, named the LaSalle Family Natural Area.**



Rusty Snaketail (*Ophiogomphus rupinsulensis*)

I had the privilege of conducting a floristic inventory at LaSalle, in part thanks to the generous support of the Indiana Academy of Science and the Indiana Land Protection Alliance's BioInventory Grant. What I found at the site was a unique mix of older remnant ecosystems tied into areas undergoing early ecological recovery from past disturbances. It is this ecological mix along a natural riverine highway that gives this preserve a special ecological niche for life.

In 2025, over 400 plant taxa were documented, with 82 percent of them native to the area. Many of them are plants that prefer somewhat of a disturbance-driven habitat, but nearly 10 percent of the flora were species with highly specific habitat requirements that are particularly sensitive to environmental changes. It is because of this mix that other species of life can flourish. Old fields in the preserve were taken out of agricultural production and planted with lines of oak trees. These oak trees now harbor hundreds of species of gall wasps and midges that have formed an evolutionary symbiotic relationship, which, in turn, can provide food for birds.

The Indiana State Rare dragonfly, Rusty Snaketail (*Ophiogomphus rupinsulensis*) was observed at the site early in the season, where it

# Water Quality Indicators

by Ben Taylor

A high-quality stream, rich in biodiversity and complexity, is a sign of clean water. Did you know that the largest population centers in Indiana obtain their water from surface water sources? The communities of Fort Wayne, Indianapolis and the numerous cities of Northwest Indiana all depend on surface water and the streams that flow into them.

The next time you visit an ACRES preserve, pay close attention to the streams so many of our preserves protect. Specifically, look for a diverse array of flora, fauna and structure as indicators of a high-quality stream.

Birds like Belted Kingfisher and Great Blue Herons depend on healthy fish and amphibian populations. Perhaps most important for the food web are minnows (specifically fish from the genus *Leuciscidae*), which comprise our favorite creek fish. Think chubs, true minnows and shiners. These are often those fish you see in small schools darting in small creeks. Turtles, frogs and snakes are always welcome signs. But one creature that may be the strongest indicator of all is the mussel. Mussels are filter feeders and can easily be impacted by pollution and sedimentation. Seeing these is a sure sign of a quality stream, as spotting them requires clear water. ACRES protects stream habitats that are home to several federally threatened or endangered mussel species.

As we are looking for darting fish and basking turtles, take note of the plant life in the water. Seeing plants growing in the water is a great sign of a stream capable of producing clean water. Eelgrass, named for its long ribbon-like appearance, provides a home for many and is an excellent indicator of a quality stream. Taking our gaze away from the stream, look for a diverse plant community. Stable banks are held together by tree roots, but soils are prevented from eroding when a



lush herbaceous community is present. Look for a mosaic of shady, tree-covered stretches intermixed with more open, herbaceous heavy areas. This diversity is key to cooling water and providing stability to banks.



Often overlooked is the physical structure of the stream itself. A healthy stream is one that has many bends and appears more S-shaped than a straight line. These bends create habitat as debris and logs get caught in them. Additionally, look for a mix of rocky riffles and deep pools. Rocky riffles are crucial for oxygenating the streams, while deep pools provide cooling and a refuge for fish, particularly larger species like bass, pike and catfish.

Examples of places to see all of this at work and some of the species mentioned include Cedar Creek (best observed on a float trip), Tippecanoe River at Ruth Kern Woodland Reserve, Saint Joseph Creek at Kauffman Nature Sanctuary, Fawn River at Fawn River Nature Preserve, Asher Branch at Asherwood, South Branch of the Elkhart River at Lloyd Bender Nature Preserve and Ross Run at Hathaway Preserve.

was common along the clear waters of Cedar Creek. This dragonfly's range is restricted to the northern quarter of Indiana. Another insect of note was the Indiana Endangered and Critically Imperiled leafhopper, Decorated Oak Leafhopper (*Eutettix pictus*), which is an oak obligate and generally distributed throughout the eastern United States. And in the corner of tree rows of an old field stands a large colony of American hazelnut (*Corylus americana*), which was host to the caterpillars of the specialist sawfly, Hazelnut Dawn-Treader (*Empria coryli*). Curiously, this is not a fly at all but a species in the wasp or bee family (Hymenoptera).

**These few examples highlight not only the importance of bioinventory work, but also, maybe more importantly, the protection of these natural and successional ecosystems**



Hazelnut Dawn-Treader (*Empria coryli*) on *Corylus americana*



Summertime at Acres Along the Wabash by Thomas Sprunger

# SPRING HIKES & EVENTS

RSVP for events by visiting [acreslandtrust.org/events](https://www.acreslandtrust.org/events) or calling 260-637-2273. **M** Member Events

## Asherwood Maple Syrup Event **M**

**SATURDAY, MAR. 7** 9-11am

**Asherwood Wabash County**

Experience a maple syrup adventure! Enjoy fresh pancakes while exploring our maple sugaring operation with expert guides. Sample and purchase ACRES syrup straight from the source. \$5/person, under 5 free. Presented by ACRES Executive Director Jason Kissel and ACRES volunteers.

RSVP by March 5



## Book Discussion **M**

**SATURDAY, MAR. 14** 2-3:30 pm

**ACRES Land Trust Office Allen County**

Discuss *Eager: The Surprising, Secret Life of Beavers and Why They Matter* by Ben Goldfarb at this spring book club gathering. Hosted by volunteers Natasha Manor and Bridgett Hernandez. Space is limited. RSVP by March 12.

## Spring Cleanups

Help beautify our preserves during spring cleaning! All supplies and snacks provided.

**SATURDAY, MAR. 21** 1-3 pm

**Seven Pillars Nature Preserve Miami County**

Space is limited. RSVP by March 19.

**WEDNESDAY, APR. 22** 10-noon

**Hanging Rock National Natural Landmark Wabash County**

Celebrate Earth Day with a cleanup! Space is limited.

RSVP by April 20.

## Timberdoodle Toodle Trek

**SUNDAY, MAR. 22** 7:45-8:45 pm

**ACRES Land Trust Office Allen County**

Attempt to discover the elusive woodcock's courtship dance! Start with a brief presentation, then hike field trails to try and witness these unique ground birds and their distinctive calls. Led by Evan Hill, Stewardship Director. Space is limited.

RSVP by March 20.

## Recharging Our Wetlands Spring Hike

**TUESDAY, MAR. 31** 5:30-7pm

**Bicentennial Woods Allen County**

Join local geologist and hydrologist Tony Fleming for a unique multi-season exploration of how wetlands work throughout the year. By revisiting the same trails across different seasons, you'll witness the dynamic changes in water levels, plant life and wildlife. Watch as seasonal water level changes demonstrate how forests and wetlands naturally filter water and replenish our underground water supplies. Space is limited. RSVP by March 29

## History Hike

**SUNDAY, APR. 12** 1-3 pm

**Kokiwane Wabash County**

Step into the past as ACRES archiving volunteers bring the preserve's past to life with tales of how nature and human history have shaped these special places over the decades. Cap off your journey through time at a nearby pub, where the stories—and conversations—can continue to flow.

After hike stop at 950 Speakeasy Bistro. Space is limited.

RSVP by April 10.



## Wildflower Hikes **M**

Spot spectacular spring wildflowers with local wildflower enthusiasts. Learn about the unique blooms transforming our forest floor.

**TUESDAY, APR. 28** 5:30-7 pm

**Vandolah Nature Preserve Allen County**

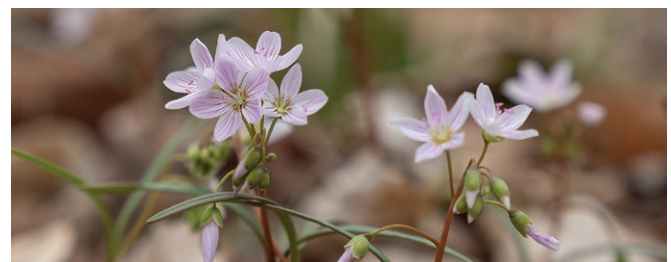
Hosted by ACRES Stewardship Manager Jenna Bair. RSVP by April 26.

**SATURDAY, MAY 2** 1-2:30 pm

**Edna W. Spurgeon Woodland Reserve Noble County**

Hosted by volunteers Dave Hicks and Deborah Hustin.


RSVP by April 30.



Preserve maps available online at [acreslandtrust.org/preserves](https://www.acreslandtrust.org/preserves)

## Tai Chi & Qigong

 **SATURDAY, APR. 25**  **1:30–2:30 pm**

 **Tom & Jane Dustin Nature Preserve** *Allen County*  
Flow like water as you follow Board Certified Tai Chi Instructor Alan Clayton through Tai Chi and Qigong practices. Learn basic exercises and postures, inviting renewal and restoration of mind and body. Space is limited. *RSVP by April 23*

## Invasive Weed Pulls

This is a great time of year to remove easy-to-pull invasive weeds. The workday will begin with a short introduction to plant identification and removal techniques; no prior experience necessary. Gloves, bags and light snacks provided. Space is limited, please RSVP.

**Garlic Mustard Pulls** (*Allen County*)

 **SUNDAY, APR. 12**  **1–3 pm**

 **Spring Lake Woods and Bog**

 **WEDNESDAY, APR. 15**  **9–11 am**


 **Bicentennial Woods**

 **SUNDAY, APR. 19**  **1–3 pm**

 **McNabb-Walter Nature Preserve**

**Dames Rocket Pulls** (*DeKalb County*)

 **WEDNESDAY, MAY 6**  **4–6 pm**

 **James P. Covell Nature Preserve**

 **SATURDAY, MAY 9**  **1–3 pm**

 **James P. Covell Nature Preserve**



## LaSalle Family Natural Area Celebration

 **SUNDAY, MAY 17**  **1–2:30 pm**

 **LaSalle Family Natural Area** *Allen County*

Address available with RSVP

Celebrate the permanent protection of one of ACRES newer properties along Cedar Creek. Guests will have the opportunity to thank the donors of this special place in person, join a short hike through the woods and celebrate the joy of protecting local land together. This preserve is closed to the public. Space is limited. *RSVP by May 15.*



## PREMIERE EVENT

### Kayak Float

 **SUNDAY, MAY 31**  **10–1 pm**

 **Oliver Lake Public Access** *Lagrange County*

Experience two ACRES nature preserves on a guided kayak tour through three interconnected lakes: Oliver, Hackenburg and Messick. This intermediate-level paddle includes frequent wildlife-watching stops, a catered lunch on the water and expert guidance from ACRES Stewardship Director Evan Hill.

Choose to rent a kayak or bring your own. Previous kayaking experience required. Space is limited.



## PARTNERSHIP EVENTS

### Grief Hikes with Stillwater Hospice

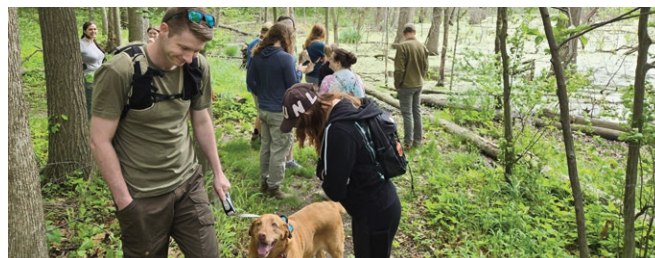
 **3rd Friday of the Month**  **10 am**

Stillwater Hospice is partnering with ACRES for guided Grief Hikes. Join a group hike to process grief in nature.

260-435-3261

[GriefCenter@stillwater-hospice.org](mailto:GriefCenter@stillwater-hospice.org)

Scan the QR code or go to [stillwater-hospice.org/complementary-grief-programs](https://www.stillwater-hospice.org/complementary-grief-programs),



### Boots & Brews—Come Join Us!

 **3rd Saturday of the Month**

Boots & Brews is an ACRES Land Trust hiking group for nature-loving young adults in their 20s and 30s. Come solo or bring a friend; hike and stay for a brew or two afterwards! See [acreslandtrust.org/series/boots-brews](https://www.acreslandtrust.org/series/boots-brews).

# Vanishing Pools, *Thriving Salamanders*

Article & photos by Michael Finkler, Ph.D.



During warm, rainy nights in late winter and early spring, the air around wetlands is filled with the loud peeps, trills and chuckles from early-breeding frogs like Spring Peepers, Western Chorus Frogs and Wood Frogs. But there are also other amphibians — silent ones — that migrate into woodland pools and drainage ditches.

## Genus *Ambystoma*

Indiana is home to several species of mole salamander (genus *Ambystoma*). These are relatively large salamanders that spend much of their adult life underground, and are rarely seen except during this time of year. Males often arrive at the breeding areas earlier than the females, waiting at the bottom of the pools under cover until the females arrive. When a female arrives, she is often courted by several males, who follow her, nudge her and deposit capsules of sperm (spermatophores) on the substrate for the female to subsequently insert into her vent.



Free-swimming larvae with featherlike external gills hatch from the eggs and will spend the next two to four months as aquatic predators, feeding primarily on various invertebrates and other larval amphibians

Within the next couple of days, the female will find a branch or other underwater anchor and begin laying her jelly-like eggs, fertilizing them with the sperm from the spermatophore as they leave her vent. Usually, within a couple of months (depending on water temperature), free-swimming larvae with featherlike external gills hatch from the eggs. They will spend the next two to four months as aquatic predators, feeding primarily on various invertebrates, but also, when opportunities present themselves, on other larval amphibians. They eventually metamorphose, losing their gills and tail fins, and begin life as a capital predator in the detritus food web.

### ***Ambystoma* at Asherwood**

I have had the privilege of working with two different *Ambystoma* species at Asherwood intermittently for over 20 years. One species, the Spotted Salamander, is relatively uncommon in the Central Till Plain of Indiana but abundant at the site.

In years past, my students and I studied the physiological and morphological differences between adult males and females that reflect differences in the cost of reproduction. More recently, we have explored how daily cycles of temperature fluctuation influence growth and development in the larvae.

As climate change will likely result in more variable weather patterns during late winter and early spring in the years ahead, such work may provide some insight into how these animals may be affected by the new reality.

### **Kleptogenesis**

The second type of *Ambystoma* we have studied at Asherwood is truly fascinating. These salamanders are members of an all-female group that uses spermatophores from other *Ambystoma* species to trigger egg development. In some cases, the chromosomes from the sperm are not incorporated into the embryo, but they still trigger development nonetheless. In other cases, chromosomes from males are used to replace paternal chromosomes from the female. Still, in other cases, the chromosomes of the male are added to those of the female, increasing the ploidy of the embryo.

As a result, females can have chromosomes from different species (genes of Tiger Salamanders, Smallmouthed Salamanders, Blue-spotted Salamanders and Jefferson's Salamanders all appear in this unisexual complex) and different numbers of chromosomes (diploid, triploid and even tetraploid). Remarkably, this can all occur in the same clutch of eggs laid by a single female who appropriated spermatophores that were laid by a male who was not courting her. This reproductive strategy, known as "kleptogenesis," is unique to this fascinating Midwestern salamander complex.

The continuation of these fascinating animals depends heavily on the presence of ephemeral wetlands. The temporary nature of such wetlands prevents fish populations from becoming established. This removes a key predator of eggs and larvae, and a key competitor for the invertebrate prey upon which the larvae depend. Through their feeding and growth, salamanders accumulate nutrients that originally entered the food web of the wetland as leaf litter. In turn, the dispersion of salamanders out into the surrounding woodlands after metamorphosis returns many of those nutrients back to the broader forest ecosystem.

*Ephemeral wetlands, therefore, not only support populations of these amazing amphibians and a host of other organisms, but they are integral to the overall health of the forest communities themselves.*

## NATURE'S ARTERIES:

# Floodplains are the *MVPs of Connectivity*

Article & photos  
by Tony Fleming

**Few natural features embody the idea of connectivity more perfectly than floodplains, which are most readily understood as a continuum of low-lying, periodically submerged lands bordering rivers and lakes.**

Water, of course, is both the essential ingredient and the most visible expression of that connectivity, forming continuous networks of streams and lakes that may extend across half a continent in large watersheds. Floodplains also provide the groundwork for many other essential physical, chemical and biological processes, from sediment and nutrient cycling to the dispersal of plants and animals. Here is a brief rundown.

Even the mightiest of rivers begins with the flows of thousands of tiny, ephemeral streams in its headwaters, which may originate hundreds or even thousands of miles away. The drop of water that falls on ACRES service area eventually ends up in the Great Lakes or the Gulf of Mexico, a few weeks, months or even decades later, depending on the detours it encounters along the way.

### Meanders and Migration



The large meanders visible in this aerial photo of the Maumee River illustrate the essential foundation of a floodplain: **transporting sediment downstream**. This sediment, consisting of loose soil, sand and organic matter, influences the appearance and behavior of streams and floodplain ecosystems. Our visible ground, which is ecologically and hydrologically diverse, sits atop this enormous mass of sediment that is constantly being eroded. This diverse earth moves downstream to eventually become the sedimentary rocks of the future.

The constant rearranging of sediment is responsible for shaping the appearance and behavior of streams and floodplain ecosystems. Each meander is the expression of a sand wave migrating downstream. It is also largely responsible for the distinctive, idyllic appearance of floodplains romanticized in many works of art. But meandering streams are not just an object of aesthetic fulfillment: the snaking movement reflects how a stream moves all that sediment. Each bend signifies the downstream migration of a sand wave that may contain more mass than a large building!

These incessantly moving rivers of sediment beneath the world's floodplains play a crucial role in global geochemical cycles, such as carbon, nitrogen and phosphorus, among others. Stream flow is from left to right.

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## Floodplains & Fliters



A receding annual flood in the floodway of Cedar Creek below the ACRES office. Note the high-water marks on the swamp white oaks, a species tolerant of extended inundation and waterlogging.

Floodplains store incomprehensibly large volumes of water, both on the surface during large floods and as groundwater that filters into the aquifers below. No other landform has this ability, which greatly reduces flood levels and supports the steady flow of water needed for healthy streams and lakes.

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Dygert, mid-late April.

### Floodplains & Fliters

Floodplain plants are remarkable for their ability to tolerate repeated disturbance from waterlogging, inundation, scouring and battering by ice jams and other objects. With a highly evolved reproductive cycle, they are exquisitely synchronized to annual flood cycles. In short, floodplains are biodiversity hotspots.

Virginia Bluebells and Blue-Eyed Mary, seen here at Evelyn and Wendell Dygert Nature Preserve, are quintessential floodplain plants that rapidly mature and drop their buoyant seeds after flowering, ready to be dispersed by the next flood.

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### Habitats & Inhabitants

In many regions, floodplains are the primary corridors for the passage of wildlife, following their ancient migration rituals in a landscape otherwise severely fragmented by human habitation. Even in intact ecosystems, the rich diversity of habitats provided by floodplains naturally attracts a plethora of wildlife.

These contiguous ribbons of riparian (riverside) habitat provide crucial stopover sites for migratory birds. And, in the case of large streams with wide, forested floodplains, homes for songbirds that require a deep-forest habitat.



Oxbow ponds, sloughs and other temporary stagnant areas with little current are referred to as “backwater” sections of the river. These sections support a unique convergence of aquatic and terrestrial ecosystems, while the interface between land and water at the floodplain edge provides cover and spawning habitat for myriad fish and herp species. Pictured above is a Northern Water Snake in the Elkhart River floodplain at Lloyd W. Bender Memorial Forest.

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So, the next time you visit a body of water, consider the floodplain not as an isolated tract of land that occasionally floods, but as part of a system of liquid, sedimentary and biological arteries that knits our regional landscape together.

**Learn more from Tony during Recharging Our Wetlands Hike** (details on page 12).

# ACRES YEAR IN REVIEW

*Looking Back at 2025*



## STEWARDSHIP



**20,000**

Trees planted  
across 35 acres

**120+ acres**

Enhanced through prescribed fire,  
mulching and selective thinning of trees

**712 acres**

Invasive species  
managed

**23**

Rare, Threatened and  
Endangered Species found

2025 was a record-breaking year for # of acres covered by stewardship team (invasive management & enhancement)

## VOLUNTEERISM

**2,566** ♥

Volunteer hours reported

**745 (29%)**

**Admin**

(archiving, board/committee,  
office help)

**281 (11%)**

**Outreach**

(hikes, booths, events, Quarterly,  
volunteer work days)

**1540 (60%)**

**Stewardship**

(preserve help,  
trail monitoring)

**\$79,674**

Value of hours reported

## PROTECTING MORE LAND

**461 acres**

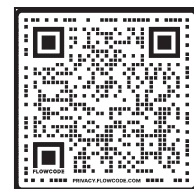
Newly protected land

*ACRES was able to achieve so much in 2025 thanks to you!*

## wish list

Your generous donations of these supplies help keep our overhead costs down to focus on our mission. Thank you!

[acreslandtrust.org/wishlist](https://acreslandtrust.org/wishlist)





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Huntertown, IN 46748

[acreslandtrust.org](http://acreslandtrust.org)

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# Annual Celebration

**MARCH 5<sup>TH</sup>**

**6 - 8 PM**

**COUNTRY HERITAGE WINERY**

185 Co Rd 68, Laotto, IN 46763



For full details and to purchase tickets:  
[acreslandtrust.org/annual-celebration](http://acreslandtrust.org/annual-celebration)