SYCAMORE LAND TRUST

THE TWIG

THE BIODIVERSITY ISSUE // FALL 2019

ENVIRONMENTAL EDUCATION HIGHLIGHTS
pages 14-15

THE DIVERSITY OF PLANET EARTH, AND SOUTHERN INDIANA
pages 2-12

FROM THE LAND PRESERVATION DIRECTOR
pages 18-19

THE DIVERSITY OF PLANET EARTH

STORIES OF SPECIAL SPECIES ON SYCAMORE PRESERVES

BY ABBY HENKEL, *COMMUNICATIONS DIRECTOR*

Beyond the 1.8 million species discovered on earth, scientists estimate there are many more times that yet to be found and named. Perhaps 3.6 million more species, maybe as many as 100 million. In fact, a newly discovered species of firefly was seen at Sycamore's Beanblossom Bottoms Nature Preserve this past June! See page 3 for more information on this fascinating insect that has only been identified in four US states.

Amid exciting discoveries, scientists warn of the disturbing rate of species loss across the globe, and the consequences to our home planet if this trend continues its exponential growth.

As E.O. Wilson writes in *The Diversity of Life*:

> "Field studies show that as biodiversity is reduced, so is the quality of the services provided by ecosystems... As extinction spreads, some of the lost forms prove to be keystone species, whose disappearance brings down other species and triggers a ripple effect. The loss of a keystone species is like a drill accidentally striking a power line. It causes lights to go out all over."

Wilson also states that habitat destruction and the spread of invasive species are the greatest threats to biodiversity. Thanks to the support of our donors, Sycamore staff and volunteers are working hard to reverse these trends. Together we are preserving and restoring habitat that is critical to biodiversity in southern Indiana.

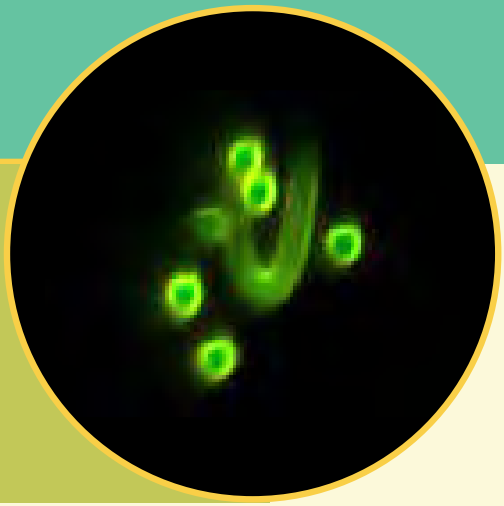
A little bit of digging reveals a mind-boggling multitude of species native to Indiana. In this issue of *The Twig*, The Biodiversity Issue, we explore a few that stand out because of their conservation status, unique place in the ecosystem, or downright fascinating qualities. All of them can be found on land protected by Sycamore.

CYPRESS FIREFLY

Photorus walldoxeyi

SYCAMORE SIGHTINGS:
Beanblossom Bottoms Nature Preserve (Monroe County)

CONSERVATION STATUS:
Newly discovered species; not enough data



Cypress firefly | *Lynn Frierson Faust*

In 2017, Lynn Frierson Faust was hiking at night through a cypress swamp in Mississippi's Wall Doxey State Park. A well-known firefly expert and author of *Fireflies, Glow-worms, and Lightning Bugs*, she noticed that some fireflies had a different flash-train than she'd ever seen before.

flash-train: the pattern of flashes a male firefly emits in regular intervals during courting; each species' flash-train is subtly unique

Lynn had indeed stumbled upon an unknown species of firefly (which are actually beetles, not flies). Research in 2017 and 2018 confirmed this finding and identified the fascinating details of this special species, which are explained in her paper written with Jeff Davis and published in *The Coleopterists Bulletin* (73(1): 1-17, March 2019).

The cypress firefly's flash-train consists of four to nine bright, green-yellow pulses of light followed by a one-second glow. This long glow stands out because of its shape: during the pulses, the male stays almost stationary, but the one-second glow consists of a "swoosh or flourish" that forms a J shape, arc, or sinuous line.

Until June 2019, the firefly had only been seen in habitats with cypress trees and year-round flooding, and only as far north as Posey County, IN. Indiana biologist Max Henschen and Lynn researched Beanblossom Bottoms and believed the firefly could be found there, despite only seasonal flooding and no bald cypress trees. She made the drive from her home in eastern Tennessee to Bloomington on June 14.

That night she witnessed the unmistakable flash-train of the cypress firefly, but noticed that it lacked the second glow, suggesting a unique local dialect for this species! Sycamore's Chris Fox confirmed seeing them at Beanblossom Bottoms two weeks later. Because they only begin this courtship light show after sunset, hikers won't be able to see it on their own at Beanblossom Bottoms, which closes at dusk. Sycamore will host a hike to witness the special phenomenon in 2020.

Beanblossom Bottoms Nature Preserve is special for many reasons, but the unique habitat it offers for a vast diversity of species might be its most consequential feature. Preserving this remarkable ecosystem is paramount to Sycamore's mission, and it's all thanks to our members that we're able to do this work!

ON THE COVER

Ellen Bergan, Summer Conservation Intern, took this photo of a purple fringeless orchid at Beanblossom Bottoms Nature Preserve while helping with clean-up and repairs after the tornado in June.

PIXIE CUP LICHEN

Cladonia pyxidata

SYCAMORE SIGHTINGS:
Dilcher-Turner Canyon Forest (Greene County), Laura Hare Nature Preserve at Downey Hill (Brown County)

CONSERVATION STATUS:
Widespread in North America

Pixie cup lichen at Dilcher-Turner Canyon Forest | *Gillian Harris*

During any walk through the woods, at any time of year, there's a tiny ecosystem growing at your feet and even at eye level. Most of us look right past the fungal-algal organisms growing on rocks and bark, but after talking with Gillian Harris, a botanical artist and lichen enthusiast, my eyes have been opened.

Lichen is a composite organism representing a symbiotic relationship. Gillian describes it as a sandwich: thin, compressed fungal layers on top and bottom, with algae held in a matrix of loose fungal threads just below the top layer. Fungi don't produce their own food, and often feed off of dead or decaying matter. In lichen, the algae provides food for the fungus through photosynthesis.

This unique relationship allows lichen to grow on barren boulders, tree bark, and rocky or sandy soil where little else can grow. That makes lichen a pioneer species, an organism that can enter and inhabit a new area. As lichen move in, they prepare the way for plants like mosses and ferns by retaining water and collecting bits of soil which supports more life.

Lichens absorb water, air, light, and nutrients directly through their fungal cortex, making them natural indicators of air quality. When the fungus absorbs

enough water, the algae breaks dormancy and "switches on," or photosynthesizes, providing sugars to the fungus (and if it's cyanobacteria, fixes nitrogen). You can see this in gray lichens that become bright green when wet. It also makes lichen easy to enjoy in any season, because the colors pop from the bark, rock, or soil substrate even in midwinter.

A common misconception is that trees with lichen on the bark are diseased; in fact, they are perfectly healthy. While lichen don't benefit the trees and rocks they grow on, they don't harm them and *do* provide important benefits for wildlife:

- Habitat for small insects
- Hunting ground for birds to eat insects
- Nesting material for birds
- Food for squirrels, voles, snails, and even deer

The structure and appearance of lichen is surprisingly diverse. They can be flat and crusty, spindly and shapely, gelatinous, shrubby, or leafy. They come in all sorts of colors, from red to blue to green to gray.

Are you *likin'* what you're learnin' about lichen? (Couldn't resist...) Join Gillian Harris and your Sycamore friends for a lichen hike at our Laura Hare Nature Preserve at Downey Hill on Sunday, November 3. Learn more on page 20.

Andy King holding an Indiana bat at Beanblossom Bottoms in 2012
John Lawrence

INDIANA BAT

Myotis sodalis

SYCAMORE SIGHTINGS:
Beanblossom Bottoms Nature Preserve (Monroe County)

CONSERVATION STATUS:
Federally and State Endangered

Andy King holding an Indiana bat at Beanblossom Bottoms in 2012 | *John Lawrence*

The Indiana bat is so named because it was first discovered in Indiana's Wyandotte Cave in 1928. That's quite recent in terms of naming bat species, but that's not the only thing that makes this tiny flying mammal so special.

Andy King, Fish and Wildlife Biologist for the US Fish and Wildlife Service (USFWS) at the Indiana Field Office, talked to me about the work he's been doing for nearly two decades to save endangered species like the Indiana bat. Like many other endangered species, Indiana bats were placed on the list in the 1960s due to habitat destruction and disturbance by humans. They hibernate in a relatively small number of caves and mines, and are quite vulnerable during that time. One or more major disruptions can wipe out their fat reserves before spring arrives and insects are available, and so the bats starve to death.

Indiana bats are more susceptible to winter disturbances these days due to a deadly fungal disease known as white-nose syndrome (WNS). It originated in Europe, first arrived in New York in 2006, reached Indiana by 2011, and continues to sweep across the country. Indiana bats seem to be less vulnerable than some other bat species thanks

to the specific types of bacteria that grow naturally on their skin, and their habit of hibernating in colder and drier areas of caves. But the disease still threatens them, and researchers are seeking ways to slow the devastating population declines.

For decades, erecting gates at cave entrances and protecting roost trees helped restore the species' population, which likely would have gone extinct without intervention, but now they remain endangered due in large part to WNS. Indiana bats give birth to just one pup per year, in midsummer, when the females gather together to form "maternity colonies" and roost within a dozen or more trees. One or two trees act as the primary roost trees, where 30-300 bats share collective thermal benefits to raise their pups.

In the summer of 2012, Andy led a USFWS study of Indiana bats at Beanblossom Bottoms. They affixed radio transmitters to the three Indiana bats they caught using medical-grade glue (the transmitters fall off in a day or two) and were able to locate several roost trees, confirming the existence of a colony of Indiana bats there.

To Andy, it's "no surprise" that Beanblossom Bottoms is home to Indiana bats. They do best in areas that have a mixture of habitats: mature forest, young forest, wetlands, and waterways. They roost in newly dead trees that haven't yet fallen, with plenty of shaggy bark for the little bats to hide under.

"And they need insects," he points out, "and those bottoms are pretty buggy!" A monoculture like a corn field won't cut it, because most bats are opportunistic and seek out a diversity of bugs to eat.

When asked how people can help preserve bat habitat, Andy tells it simply: there's nothing more effective than contributing to land conservation, like being a member of Sycamore Land Trust.

"Sycamore is investing in wild areas," he says. "That's going to have a bigger impact than anything you can do in your yard, especially for Indiana bats, which shy away from developed areas."

BALD CYPRESS

Taxodium distichum

SYCAMORE SIGHTINGS:
Eagle Slough Natural Area (Vanderburgh County)

CONSERVATION STATUS:
State Threatened

Bald cypresses at Eagle Slough Natural Area | *Jaime Sweany*

What has knobby knees, lives in a swamp, and looks like a giant? You might have guessed Bigfoot, but I'm talking about bald cypress trees. These stately conifers can grow up to 120 feet tall and, unlike most trees, tolerate year-round flooded conditions. They develop "knees," or roots that rise above the water, for which scientists are still trying to figure out the exact purpose. Some say the knees help transfer oxygen from the air to the roots that remain constantly under water. Others suggest they keep the trees stable in the muck, since those that grow in dry habitats don't have knees.

Bald cypress trees got their name from the fact that unlike most conifers, they are deciduous and lose their leaves in the fall. Most conifers are evergreen, but the leaves of the bald cypress turn bright orange in autumn.

A stand of bald cypresses grows at Sycamore's Eagle Slough Natural Area in Evansville. They're some of the largest such trees in the state. Ryan Keller, Southwest Region Ecologist for the Indiana Department of Natural Resources, says the largest ones he's seen in Indiana are about three feet in diameter. But there are historical records of bald cypresses in this state reaching diameters of nine feet. And in North Carolina, where an ancient forest has been studied for decades, researchers recently discovered the bald cypresses there were among the oldest in the world. They date back to 2,624 years old!

These remarkable plants tolerate nutrient-poor soil in conditions where most other trees can't live,

and they can grow very slowly. But whereas Indiana once had about 50,000 acres of cypress swamps, now we're down to about one percent of that. Most of the ground that was once swamp has been drained for agriculture and development, and the sturdy wood of the bald cypress harvested for timber. Bald cypresses provide unique habitat for wood ducks, bald eagles, osprey, and nesting water birds. Reptiles and amphibians like copper-bellied water snakes, frogs, and salamanders use the roots for cover and to forage for bugs to eat.

Thanks to funding from Alcoa and Sycamore members, an overlook deck gives visitors to Eagle Slough Natural Area a wonderful view of this unique stand of bald cypresses.

TIMBER RATTLESNAKE

Crotalis horridus

SYCAMORE SIGHTINGS:
Yellowwood Farm (Brown County)

CONSERVATION STATUS:
State Endangered

Timber rattlesnake at Brown County State Park | *Elizabeth Nicodemus, Creative Commons*

Imagine an earthquake shaking your home every day. Would you move away, or wait it out? What if you couldn't find anywhere else to go?

This might be what it feels like to be a timber rattlesnake, a state endangered species. Snakes are highly sensitive to vibrations in the ground, which they use to navigate. A major disturbance like construction as far as a mile away can disorient them and cause them to seek a new home, be it temporary or permanent.

But timber rattlers, as they're often called, are also deeply tied to their homes. Most will never travel more than half a square-mile beyond where they were

born. So when Jim Eagleman, a Sycamore board member and retired Park Naturalist at Brown County State Park, heard that construction of a new campground at the park could impact timber rattler dwellings, he and his colleagues took notice.

This was in the 1970s, and the new campground is the now-beloved Taylor Ridge Campground. Naturalists at the park had anecdotal evidence of rattlesnake dens along the ridge, which they later confirmed through studies conducted by Dr. Bruce Kingsbury of Purdue University Fort Wayne and his students in the 1990s. Remarkably, construction did not push away all the rattlesnakes, and they remain there to this day.

Another surprising finding of the research was that the snakes were living in former chipmunk dens. Jim had expected to find them in the crevices of rocky outcroppings, which would make it easy for the snakes to sunbathe. But through studies in which researchers implanted tiny beepers into snakes' bellies, they found snakes dwelling in the dens of one of their main sources of prey. They have rooms for mating, sleeping, and defecating, and even a kitchen of sorts, all connected by tunnels. The dens must be below the frost line for the snakes to survive the winter.

Ridges like the one at Yellowwood Farm, a private property in Brown County protected by a Sycamore conservation easement, offer ideal timber rattlesnake habitat. There they get plenty of sunlight, and on conserved land they're safe from human disturbance. As Jim points out, leaving their current habitat intact and keeping it safe is the best way to protect the small but mighty population. In a clutch of six to ten eggs, only about 20% will survive. Over the decades, they will slowly grow in numbers if we protect their home.

The DNR is pleased to receive more reports of timber rattler sightings in previously unknown locations, like the backwoods favored by mountain bikers. It's highly unlikely that anyone hiking on a trail will come across one. Hikers should stick to well-used trails and not wander off into tall grasses where you can't see where you're stepping. And although they are venomous, rattlesnake bites are extremely rare. For nerds like me who *do* want to see one up close, the nature center at the state park cares for one that was confiscated from an individual who had been illegally breeding the snake and selling her offspring. Because they don't know the snake's past, they are keeping her safe in the nature center, and reports say she's doing well.

PURPLE FRINGELESS ORCHID

Platanthera peramoena

SYCAMORE SIGHTINGS:
Beanblossom Bottoms Nature Preserve (Monroe County)

CONSERVATION STATUS:
State Watch List

On the cover (see page 4) | *Ellen Bergan*

There's no place like home, and we like to think a little pride in the land others call "flyover country" is healthy for Hoosiers. So it might strike you to know that Indiana is home to 45 native species of orchid! Not to brag, but Hawaii can claim only three.

Eager to see all 45 of them right away, I called up Michael Homoya, retired Botanist and Plant Ecologist for the Indiana DNR, recipient of Sycamore's 2019 Barbara J. Restle Lifetime Conservation Award, and most importantly, my plant buddy.

Mike literally wrote the book on Indiana orchids (*Orchids of Indiana*, 1993). He can still recall the first wild orchid he ever saw, a rattlesnake plantain growing in a sandstone canyon in Illinois. Just a teenager at the time, he remembers the thrill of discovering that a true orchid could grow wild right here in the Midwest. Many Hoosiers are surprised to learn a temperate place like Indiana has so many native orchids. In fact, orchids grow in the wild all the way up to the Arctic Circle!

Indiana orchids display a dizzying variety of natural artistry that make them some of the most fascinating plants in the world. The purple fringeless orchid is one of the more common orchids in Indiana, including right along the boardwalk at Beanblossom Bottoms. They grow in poorly drained floodplain habitats, and also along ponds, lakes, and ditches. The young forests

and open areas at Beanblossom Bottoms are perfect for this sun-loving plant that boasts a showy, bright purple bloom in July.

Sycamore staff were excited to post photos of the purple fringeless this summer, until we returned and found that one had been picked and left on the boardwalk, and others had been removed entirely. It's critical that people understand how to respectfully enjoy orchids. The first rule is *leave no trace*, which means leaving nature exactly as you found it. Conservationists struggle with sharing identifying information about rare plants and animals, for fear of this exact sort of occurrence. So please, tread lightly and leave nature in place so others can enjoy it, and so these special plants can continue to grow forever.

For those who want to observe orchids in the wild, Mike Homoya offers many helpful tips (and we recommend buying his book for the best field guide around!):

- **Mike's preferred way: find out specifically where it grows from someone who knows!**
- **Next-best thing: know what kind of habitat an orchid needs and in what season it blooms, and have a mental image of what you're looking for**
- **Have patience: some don't bloom every year, like crested coral-root, and some are very small, like green adder's-mouth**
- **Get your timing right: late spring through early summer offers the most blooming orchids at once, but from April through October, there's always at least one species in bloom**

I'd like to thank everyone who took the time to talk with me for this article, and for all the Sycamore members and volunteers who help us protect our nature preserves full of amazing plants, animals, and category-defying lichen!

ENVIRONMENTAL EDUCATION HIGHLIGHTS

BY SHANE GIBSON, *ENVIRONMENTAL EDUCATION DIRECTOR*

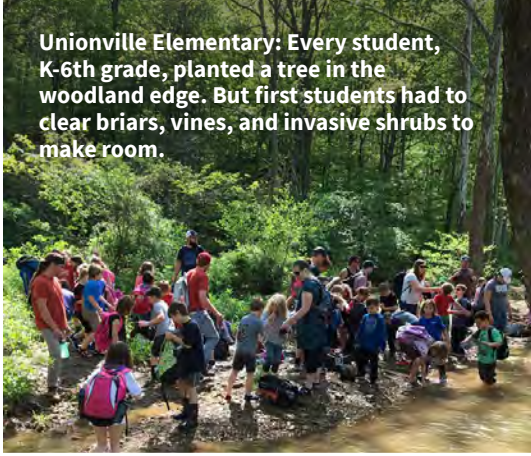
Our Environmental Education program aims to get people of all ages comfortable in the outdoors, interested in nature, and dedicated to protecting it. This spring and summer we were pleased to bring our free, hands-on programming to lots of groups in beautiful southern Indiana! Here are some of my favorite recent adventures.

Boys and Girls Club of Monroe County: Teen campers discovered a box turtle, tried some wild edible plants, and learned about Monroe County history and the Mt. Carmel fault line.

Rogers Elementary: Sycamore partnered with Cindy Creek's second-grade class for an Archer Foundation Grant that funded the planting of six trees at school, tree ID books, and tree interpretive signs.

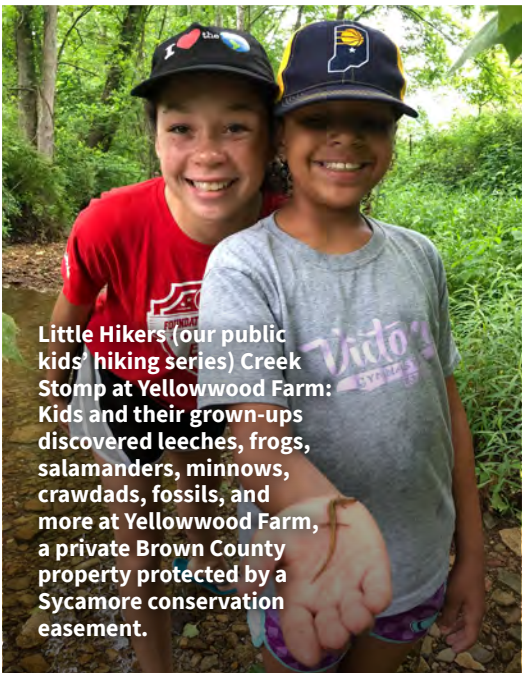
Harmony School: The uplands of Porter West Preserve (Monroe County) were in full bloom. Perfect for a spring hike and lunch in the woods with fifth and sixth graders.

IU Hiking Club: We've partnered with this private hiking group, which includes several Sycamore members, to lead fun outings in the past year. This spring included a hike at Dilcher-Turner Canyon Forest (Greene County).



Unionville Elementary: Every student, K-6th grade, planted a tree in the woodland edge. But first students had to clear briars, vines, and invasive shrubs to make room.

Stone Belt Camp SOAR: In an ongoing partnership with this summer camp for teens with disabilities, we had a great time fishing, doing insect sweeps and scavenger hunts, studying trees through story time and crafts, planting native flowers, and more hands-on fun outdoors.



Little Hikers (our public kids' hiking series) Creek Stomp at Yellowwood Farm: Kids and their grown-ups discovered leeches, frogs, salamanders, minnows, crawdads, fossils, and more at Yellowwood Farm, a private Brown County property protected by a Sycamore conservation easement.

1st and 2nd graders immersed in the creek, woodland, and meadow habitats of Yellowwood Farm.

To learn more about bringing Sycamore programming to your classroom or community group, visit sycamorelandtrust.org/learn or contact me at ***shane@sycamorelandtrust.org****.*

CHRISTIAN FREITAG TRAIL DEDICATION AT SYCAMORE HEADQUARTERS

BY ANN CONNORS, *DEVELOPMENT DIRECTOR*

In June, a group of good friends of Sycamore came together at our office, Cedar Crest, for a reception and ceremony to honor Christian Freitag, Sycamore's Executive Director for 18 years who left Sycamore in August 2018. At last fall's Annual Celebration, we announced plans to name the Cedar Crest nature trail in honor of Christian, and many people contributed to the fund.

During Christian's tenure, Sycamore had tremendous growth in acres protected and number of staff, volunteers, and members. He negotiated complex land deals and brought together disparate groups and entities to protect land. Some of these properties are set aside as habitats for plants and animals, while others also have public trails to connect people with nature and allow Sycamore members to get in touch with the land they're helping to preserve.

As President and Executive Director of the Conservation Law Center at Indiana University, Christian is continuing to provide legal counsel to Sycamore on conservation projects.

"It was great working with Christian for many years, and we are glad he will always be part of the Sycamore family. We are very happy to honor him and his legacy", said George Huntington, Board Chair, at the trail dedication ceremony.

John Lawrence, Executive Director, thanked Christian for the opportunity to work together at Sycamore for nearly thirteen years, and added: "Christian should be very, very proud of his legacy, and everyone who supports Sycamore should be very proud of it, too. Because, as Christian has always been the first to say, Sycamore's success is because of all of you."

Sycamore provides many opportunities to name our endowments, nature preserves, trails, and benches. For information on how you can support conservation and education while honoring a person or organization, contact me at 812-336-5382 ext 104 or ann@sycamorelandtrust.org.

Board chair George Huntington welcomes guests at the Christian Freitag Trail dedication ceremony at Cedar Crest.

Sycamore's Land Stewardship Manager, Chris Fox, uses a chainsaw to remove a fallen tree from the boardwalk after a tornado struck Beanblossom Bottoms Nature Preserve in June

Sycamore Sightings

A southern leopard frog finds a perfectly tiny leaf to sit on at Beanblossom Bottoms | *Ellen Bergan*

Development Director Ann Connors and Sycamore member Nancy Ralston bond over conservation and coffee at the Sycamore Social at Needmore Coffee Roasters in August.

FROM THE LAND PRESERVATION DIRECTOR

ROB JOINED SYCAMORE'S STAFF IN JUNE. WELCOME, ROB!

BY ROB MCCREA

Many conservationists have a favorite passage from Aldo Leopold. One of mine is about how the outdoor experiences we have as children resonate with us, and how we try in vain to improve upon their significance throughout our lives. It struck a chord with me one autumn while I was back home in Indiana during a break from college in Arizona. I was walking down a gravel road a childhood friend and I had named the "old road," located along my family's land in Monroe County. We used the old road as a waymark for our hunting spots.

That fall, the angle of the light, color of the leaves, crispness of the air, and sound of the gravel underfoot took me back to a time and place from my youth that I have never experienced since. I realized the importance of my home in southern Indiana and how the experiences of growing up in the outdoors here were intrinsically part of me.

While I've been fortunate to travel and live in other states, my heart has always been here in Indiana. Or you might say that Indiana is part of me. That's what I think Aldo Leopold was talking about: that the outdoor experiences we have as kids resonate throughout our lives and inform our sense of place more powerfully than the experiences we have when we are older.

I grew up in Bloomington and attended Bloomington High School South. I went to college at Prescott College in Arizona and received a degree in Ecology and Natural History. Later on, I studied law at Lewis & Clark Law School in Portland, OR. What a lovely coincidence that one of the areas of law I specialized in is

42 USC § 4321 or the National Environmental Policy Act, a federal law written by Linton Keith Caldwell. Keith was also a founder of Sycamore Land Trust and father of the family that donated Cedar Crest, where our office is located.

After law school I began practice at my family's law firm in Bloomington. I joined the Sycamore board of directors in 2017. When the opportunity to join the staff opened up this past spring, I saw a chance to get back to my roots and work toward protecting the southern Indiana landscape that is so meaningful to me.

As Sycamore's new Land Preservation Director I will be filling a modified version of the role John Lawrence had as Assistant Director before he stepped into the role of Executive Director, focusing on land acquisition, preservation, and stewardship. I look forward to dusting off my botanical Latin to interpret our properties and utilizing my background in law for land acquisitions and protection.

Sycamore protects some of the most biologically rich areas in southern Indiana. We also create opportunities for natural history exploration and recreation at many of our preserves. During the early days of Sycamore, as someone concerned about environmental and land issues, I felt lucky that southern Indiana had such a trustworthy organization looking out for the beautiful natural world that takes care of us all. Now I feel privileged to work for this organization, and for all the members whose support helps us protect nature *for Forever*.

GIVE A HOLIDAY GIFT TO NATURE

There's one gift you can give this holiday season that will make an impact on your whole community, for years to come.

We invite you to make a year-end donation to Sycamore Land Trust! Your support helps us restore habitat right here in southern Indiana, so that native plants and animals can thrive, and so future generations can enjoy these beautiful preserves and landscapes *for Forever*.

sycamorelandtrust.org/donate

Join us for a hike, workday, or special event! Hikes are free for Sycamore members; suggested donation for non-members is $5/person or $10/family unless otherwise specified. Volunteer days are always free. For more details on an event and to RSVP (required for hikes and volunteer days), visit **sycamorelandtrust.org/events.**

OCTOBER

10/9

DENDROLOGY 101

Wednesday, October 9, 10:00am – 12:00pm

Scarlet Oak Woods (Monroe County)

Dendrology is the scientific study of trees. Josh Wagner of Wagner Forestry will take us through the basics of tree identification and the nuances of distinguishing similar species. We will also be "reading" the forest to make educated guesses about its history. Has fire impacted these woods? How was this land used 100 years ago? How old are these oaks?

10/17

THIRD THURSDAY PRESERVE-A-PRESERVE DAY

Thursday, October 17

The details of our monthly volunteer workday will be announced as the date draws closer. No experience or tools are needed; just remember to check our website for more info and to sign up!

NOVEMBER

11/3

LIKING LICHEN

Sunday, November 3, 1:00 – 3:00pm

Laura Hare Nature Preserve at Downey Hill (Brown County)

Join botanical illustrator and naturalist Gillian Harris to discover the wonderful world of lichens and explore these questions: What exactly is a lichen? Where and how do they grow? How do other organisms benefit from lichens?

11/3

REEL ROCK FILM TOUR

Sunday, November 3, 6:00 – 9:00pm

Buskirk-Chumley Theater (Bloomington)

Sycamore Land Trust presents our third-annual REEL ROCK Film Tour, a one-day international touring film event celebrating rock climbing and outdoor adventure. Sponsored by Loren Wood Builders, Hoosier Heights, JL Waters and Co, and Visit Bloomington. $15 general admission; $10 students. All proceeds support Sycamore!

11/21

THIRD THURSDAY PRESERVE-A-PRESERVE DAY

Thursday, November 21

The details of our monthly volunteer workday will be announced as the date draws closer. No experience or tools are needed; just remember to check our website for more info and to sign up!

DECEMBER

12/5

OWLING

Thursday, December 5, start time TBA (starts at dusk, 2 hours)

Beanblossom Bottoms Nature Preserve (Monroe County)

As the sun sets and the last crow caws, the night comes to life. With a waxing moon at 72% full, we will navigate the renovated pathways of the Bottoms and tune our senses to the creatures of the night. As Jane Yolen writes in her book *Owl Moon*, "Sometimes there's an owl and sometimes there isn't." But you never know what you might encounter when you immerse yourself in nature.

12/6

HOLIDAY CELEBRATION

Friday, December 6, 5:00 – 8:00pm

The Fields (1333 S Fenbrook Ln, Bloomington)

Gather together with fellow Sycamore members and our staff for a wintry celebration. Our annual Holiday Open House has been moved to a new location because this party has outgrown our office space! Enjoy appetizers donated by Laughing Planet and local drinks donated by Upland Brewing Co, Oliver Winery, and Cardinal Spirits as you have good conversations, listen to carolers, and warm up by the fire at this festive Bloomington venue.

JANUARY

1/4

NEW YEAR'S HIKE: FRESH AIR AND FITNESS

Saturday, January 4, 11:00am – 1:00pm

Laura Hare Nature Preserve at Downey Hill (Brown County)

Kick off the New Year with a vigorous hike in the rolling hills of Brown County. The past two New Years' hikes have varied from below freezing in 2018 to 50+ degrees in 2019, and were equally enjoyable for all!

BECOME A SYCAMORE SUSTAINER

Help Sycamore plan for the future and make sure your membership never lapses by becoming a Sycamore Sustainer.

Your ongoing, monthly gift means the world to us and the habitats we protect! And it's easy to set up at **sycamorelandtrust.org/donate**.

THANK YOU!

BUSINESS AND FOUNDATION SUPPORTERS

AUGUST 1, 2018 - JULY 31, 2019

$20,000 AND ABOVE

DNR Indiana Department of Natural Resources

DUKE ENERGY

LOREN WOOD BUILDERS

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