THE

SPROUT

NICHES LAND TRUST | SPRING 2023 | VOLUME 27 ISSUE 1 Looking Back at 2022 | Kohnke's Little Pine Valley Expands | Black and Brown Outdoors Cover Painting By NICHES Volunteer: Gabriela Sincich

"No winter lasts forever; no spring skips its turn." - Hal Borland

Greetings NICHES Land Trust members!

I write to you in late February with a special elation from having just seen Skunk Cabbage flowers here at Clegg Memorial Gardens.

Skunk Cabbage is a native wetland plant who evokes wonder and excitement. They are fascinating for many reasons: they are among the first plants to flower, grow with a spathe surrounding a spadix with petalless flowers, produce their own heat that can melt surrounding snow, exhibit deep maroon to light green color morphs depending on genetics, and attract insects into their fold with heat and unique odors.

To find them in flower I must shift my perspective from looking up and far through the leafless winter woods to looking down to the soil. They are small and easily blend into the oak leaf litter. Skunk Cabbage teach me to slow down, be patient, be still, and look close again. I am rewarded by their sight. They also tell me to be bold and different, to thrive in harsh conditions (the wet, cold, and slightly acidic), to make my own space and warmth. And that by doing so, I will bring others in and a community together.

By the time you read this, Skunk Cabbage leaves will have bloomed and the flowers have disappeared. The spring wildflowers will be on display and soon we will begin our annual garlic mustard removal effort. NICHES will host garlic mustard pulling shifts every Friday, Saturday, and Sunday from April 14-May 21 from 10am-1pm and 1-4pm. We hope you can lend a hand and join this fun, all ages, stewardship task to improve biodiversity in the woods.



Skunk Cabbage (*Symplocarpus foetidus*) Painted by: Gabriela Sincich

Please save the date for NICHES' annual members' meeting on April 22 from 4-6pm in Delphi. I am as eager to share accomplishments from the past incredible year at the annual meeting as I was to find the flowers this morning.

Enjoy this packed edition of The Sprout and let Skunk Cabbage and I remind you that when we are holistically ourselves and bring our unique gifts together, we create our own special niche to call home.

> -NICHES Executive Director, Shannon Stanis shannon@nicheslandtrust.org

2023 Board Slate & Annual Meeting

Mark Your Calendars: Join us on April 22nd from 4 to 6 pm. for our Annual Membership Meeting! The meeting will take place at the Wabash and Erie Canal Interpretative Center (1030 N Washington St, Delphi, IN 46923). We will vote on new board members (or you can vote absentee by sending the enclosed remittance envelope into our office), present 2022 financials, share organizational updates, and celebrate another successful year of conservation. Special hikes and other events hosted by NICHES friends and staff will occur throughout the day. Check the NICHES website Calendar for updates and full schedule to come.



Dr. Richard Johnson-Sheehan

Hello, NICHES membership! As a 2023 board candidate, I am excited to share my knowledge, professional skills, and passion for the natural world to help NICHES thrive and meet its goals. In 2004, I joined the faculty of Purdue University as a Professor of English. My area of focus within the department is Environmental Rhetoric, Medical and Healthcare Rhetoric, Editing and Publishing, and Writing Proposals and Grants. In a previous life, I was the President of the Albuquerque, New Mexico Chapter of the Sierra Club.

Tippecanoe County has been my home since I began attending Purdue in 1971. I brought along my love of being outdoors, which permeates most parts of my life. As a student, my friends, my eventual husband Rod, and I hiked and enjoyed many beautiful natural spaces in the county and the surrounding region. Some of those cherished spaces are now NICHES-owned! When NICHES became an organization in 1995, Rod served as a member of the first board, and I have been a member, volunteering and enjoying the properties since then. It would be a pleasure and an honor to serve on the NICHES board and help further its mission of protecting and sharing our natural heritage.



Jill Evans

Looking back at 2022

A month to month recap of stewardship, volunteering, and outreach highlights.

January: NICHES Land Trust hired Shannon Stanis to serve as the organization's second Executive Director. Shannon previously worked as the Watershed Coordinator with the Wabash River Enhancement Corporation (WREC) and has been deeply involved with NICHES in the past as a member, volunteer, and community partner.





February: Sandra Toruno is hired as NICHES Administrative Manager and brings with her over a decade of administrative experience working as an office manager for her family's tax and accounting firm. In Warren County, 40 acres of invasive autumn olive shrubs are removed from our Fall Creek Gorge Nature Preserve.

March: With the help of volunteers and local conservation partners, NICHES conducted 10 controlled burns between November 4th, 2021, and March 17th of 2022. In total, NICHES has conducted 112 prescribed fires between the spring of 2014 and the spring of 2022, covering a combined 3,818 acres.





April: NICHES hosted its first annual hunter potluck at Cicott Park with our deer cull volunteer crews. Every year hunting crews provide over 1,000 hours of additional volunteer stewardship assistance outside of the hunting season.

May: For the first time ever, NICHES 'War of the Weeds' program brought in over 1,000 volunteer hours. Over the course of 2 months, volunteers stepped up to fill 369 3-hour shifts hand-pulling early springtime invasive species like garlic mustard and honeysuckle.





June: NICHES hosted members of the Mandela Washington Fellowship for a volunteer workday, hike, float, and community meal. The fellowship is the flagship program of the U.S. Government's Young African Leaders Initiative (YALI). July: NICHES partnered with the Wabash River Enhancement Corporation to host public raft trips as part of this year's Wabash Riverfest celebration. Later in the month, we partnered again to host a 100-person volunteer workday at Shamrock Park and Granville Sand Barrens.





August: NICHES celebrates its 27th birthday at Clegg on Aug 21st. NICHES Summer Seasonal stewards Jada Laycock and Reagan Muinzer complete a productive season assisting with stewardship and outreach. NICHES is re-accredited through the Land Trust Accreditation Commission.

September: Black Rock Society members gather at the Wells Center in Lafayette to share stories and celebrate the organization's progress. NICHES acquired our Laura Hare Bend of the Wabash East preserve. This newest parcel, just shy of 200 acres, is NICHES longest single addition ever of Wabash River frontage in Tippecanoe County (1.2 miles)!





October: On Saturday, October 1st NICHES helped Purdue's Natural Resources and Environmental Science (NRES) Program celebrate its 50th anniversary with guided hikes and volunteer events for students and returning alums. The Purdue NRES program is the oldest of its kind in the country!

November: NICHES volunteer hunting crews took to their stands to assist the organization in maintaining healthy populations of whitetailed deer. During the fall burn season NICHES stewardship staff and volunteers work to complete 6 prescribed fires across 230 acres of habitat.





December: Representatives from Land Trusts across the state gathered for the Indiana Land Protection Association's annual meeting and special reception in Indianapolis. Attendees worked together to share knowledge and explore avenues for cooperation on statewide acquisition funding initiatives.

Hunter Highlight

Each November, NICHES' hunters take to their stands in a combined effort to reduce local deer populations and provide food for their families. Over the last 12 years, NICHES' hunting program has grown from 1 property with a limited crew, to 36 properties and 160 hunters. The program has successfully decreased the overbrowse of native plant populations and slowed the spread of invasive species. Smaller overwintering populations of deer help to limit the transmission of diseases and increase the overall health of the herd. This past November NICHES conducted its most successful deer cull yet with 121 deer harvested over 3,000 acres of habitat.

NICHES' hunting crews are comprised of selected local neighbors and community members. As hunters, these individuals have spent countless hours quietly observing NICHES' prairies, woods, savannas, and wetlands. Most have had unique wildlife experiences with bobcats, beavers, badgers, otters, and the like. Over the course of many years, they have connected with the preserves, observed ecosystems responding to our stewardship initiatives, and developed personal relationships with the mission of our organization. These deep connections to the land have helped our hunting crews grow to be passionate and dedicated volunteer forces.

From the VanBlaircoms completing fire break preparation at Shepherd Swamp to the Hannas helping remove garlic mustard at Shawnee Bottoms, each one of our hunters across NICHES' service range volunteers to help the organization complete stewardship goals. Our hunters have spent many hours maintaining our trail systems, cleaning up old farm dumps, removing invasive species, and being advocates for the organization. Something that might take NICHES staff a week to accomplish can be completed in a single afternoon with a dedicated group of hunters and the proper equipment.

The impact our hunting program has on our local ecosystem extends far beyond the month of November. As NICHES continues to expand in the coming years, we expect our hunters to play an integral role in helping the organization achieve its stewardship and public education goals



-NICHES Land Steward, Justin Harmeson (justin@nicheslandtrust.org)

Kohnke's Little Pine Valley Expands

In 1949, Helmut and Gerda Kohnke purchased a beautiful piece of forest in the Lower Little Pine Creek Valley of Warren County. The Kohnke's intent upon purchasing the land was to use it as a retreat from town, as well as a place to enjoy the sights and sounds of nature. Much of the sandy bottomland was planted in pine, fir, and spruce with the aim of selling Christmas trees. The ridge above the west side of the creek was their own devil's backbone, and hikes along this ridge led to the "Grand Canyon" where icicles hung thick and long in winter. When Christmas trees matured, friends were invited out to the valley to cut their own. Those December weekends would often turn into family outings including sledding, hiking, and warming up around a bonfire. Gerda's face would light up when recounting fond memories of "waves of wildflowers" that covered the steep ravines in the spring. In fact, the legendary Indiana State Botanist and author of 'Flora of Indiana,' Charles C. Deam considered the lower valley of Little Pine Creek the best place in the state for wildflowers.

The family loved the property and wanted to ensure that its natural beauty would be protected from future development. In 1993, two years before NICHES Land Trust was formally incorporated, Fred Hoffman, the attorney for Gerda Kohnke and her son Peter, asked the Sycamore Audubon Society to accept a conservation easement on the land. The Audubon Society wasn't set up to handle easements—a function usually served by a land trust--but supported the idea and agreed to accept the easement since there wasn't any other group available. Conversations about the protection of the Kohnke's family land were part of the original inception of NICHES Land Trust in 1995. NICHES was able to purchase part of the original property from Doug and Judy Knudson in December 2003 and it was given the name "Kohnke's Little Pine Valley."

In late 2022, NICHES acquired a 19.2 acre addition to the preserve with support from the Kohnke family, the Roy Whistler Foundation, and an anonymous donor. This addition includes high-quality oak woodlands, low invasive species cover, and multiple sandstone outcroppings. Long-term stewardship for the 52 acres combined preserve would include prescribed fire, invasive species management where needed, mid- and overstory thinning, and rare species promotion.



2003 Original Acquisition (33 acres) 2022 Preserve Addition (19.2 acres)



Waterfowl in Flight at NICHES Cranberry Marsh Easement. Photograph by: Chad Phelps.



"This issue's stewardship highlight was graciously crafted by Nick LaBonte, Regional Geneticist for the U.S. Forest Service. Nick and I crossed paths on white pine conservation a few years ago and worked out a reciprocating partnership to elevate white pine conservation efforts locally and regionally.

NICHES' preserves have disjunct remnant white pine populations that provide unique genetic material for the project described in Nick's article. In the first round of propagation and planting for NICHES' white pine project, material was grown from seed collected from multiple trees at NICHES' Crow's Grove property. While Crow's Grove is likely our most genetically diverse stand with the most mature trees, sourcing material like this is difficult and still provides only limited genetic diversity.

In February 2022 Nick and I met at NICHES' preserves with accessible local remnant white pine stands to collect scion material from the crowns of the largest trees. NICHES will receive a mixed-genetics set of trees grafted from this visit. The grafted trees that NICHES receives back from USFS will be used to start an in-situ seed nursery on NICHES' land, which will simultaneously restore the most genetically diverse stand of local white pine possible and will provide genetically diverse seed for expanded restoration efforts well into the future. A special thanks to Nick for seeing the importance in this work for the Forest Service and for helping NICHES with an improved approach to work on the conservation of local white pine."

-NICHES Stewardship Director, Bob Easter rleaster@nicheslandtrust.org

What Midwesterners call the "Northwoods" — the mixed hardwood/ coniferous forest in northern Michigan, Wisconsin and Minnesota — is really the southern fringe of a much larger sub-boreal forest. It exists along a climate frontier, where the cool side favors conifers and northern hardwoods and the warm side favors a mixture of hardwood trees and grasslands. However, there are small stands of native conifers scattered on the warm side of this frontier, which includes the southern part of the Midwest. Eastern white pine is the most widespread and abundant of these native conifers.

Is there some feature of these white pines that make them more resilient to a warmer climate? As the northern Midwest experiences

warming due to climate change, which may threaten many native sub-boreal tree species, could this more resilient type of white pine thrive there? And how can land managers promote resilient forests and landscapes for the future? These are the questions driving our project to collect cones and produce seedlings from white pines native to the southern Midwest.

Most, but certainly not all, of the native white pines in Indiana, Illinois, Iowa, and southern Wisconsin are associated with sandstone outcrops. Sandstone is relatively soft and breaks down into a sandy, nutrientpoor soil favorable to pines. The steep slopes and mini-canyons formed by eroded sandstone also helped white pines persist historically by slowing down ground fires, creating areas with slightly cooler soil



This white pine is growing at the base of a large exposed chunk of sandstone in Warren County, IN. There are many pines on and around the rock, but the surrounding forest is dominated by oak, hickory, and black cherry.

Photo by NICHES Volunteer: Chad Phelps.

temperatures, and allowing seed trees to persist in especially steep or rocky spots, while the most accessible trees were logged by settlers.

Southwest Wisconsin has a high concentration of sandstone outcroppings and small native pine stands ("relicts") because it was not glaciated. Ecologist Robert P. McIntosh produced evidence for the importance of slope and soil temperature in determining where pine relicts occur on the hardwood-dominated landscape. As noted in the conclusion of his 1948 University of Wisconsin–Madison dissertation, "One possibility suggested but not explored is the existence of a physiological difference in the white pine occurring in this area. The white pine seems vigorous in its growth and reproduction, and is the most numerous of the northern species."

It's reasonable to hypothesize that white pine populations in the southern Midwest have some genetic and physiological adaptations to handle temperature and drought stresses associated with the local climate. White pine has high genetic diversity — the raw material for adaptation — and it's likely that the pine relicts have perpetuated themselves in their present locations for many generations.

It's also possible that these unique adaptations could help white pine forests in the northern Great Lakes thrive as warmer climate conditions shift northward. At the same time, it is unlikely that these isolated pine populations would be able to migrate north on their own through many miles of unsuitable habitat. The climate of northwest Wisconsin is expected to resemble the historic climate of southwest Wisconsin within the next 30 to 40 years —a short time for a long-lived tree!

One way to help isolated pines migrate north is to collect cones from parent trees in the native stands. However, there are a couple of drawbacks to this approach. Collecting cones causes disturbance because they need to be picked from high up in the tree before they open and release their seeds. The mother tree is known in a cone collection, but the father could be a nearby planted tree of unknown origin, or a closely related individual.

An alternative is a seed orchard. In this type of planting, one or two small collections are used to grow progeny off-site, in an area easily accessible to cone pickers where the trees can be tended to maximize seed production. In addition to producing seed for new plantings and restoration, seed orchards serve as living gene banks for restoration of lost or damaged native stands. Because orchards are designed to ensure thorough mixing of pollen among parents, the seed from an orchard has higher genetic diversity than seed from a wild stand. Seed orchards are optimized for the genetic diversity needed to foster resilient tree populations, and for the volume of seed production needed to meet national reforestation goals, such as the REPLANT act.



The author with a large white pine and sampling slingshot at Portland Arch in 2022.

Seed orchards can be developed using seedlings from cone collections or by grafting twigs from mature wild trees onto seedling rootstocks from a nursery. For white pine, we are using both methods to develop seed orchards. In areas where wild white pine stands are small and isolated, we prefer grafting because it ensures that a good natural-origin genotype is captured. Grafted trees also produce cones and seed more rapidly than seedlings. Both methods require cutting small branches from high up in tall trees, which requires climbing, shooting, or using ropes and a giant slingshot.

Our seed orchards are based at a facility in northeastern Wisconsin—the Oconto River Seed Orchard—that supplies seed for reforestation on national forests in the Great Lakes area. Collections of native pines from NICHES preserves as well as similar sites in Indiana, Illinois, Iowa and southern Wisconsin are expanding the genetic options available for national forests to continue restoring white pine to the Great Lakes landscape and provide a gene conservation and tree seed resource for land management partners in the southern part of the Midwest.

-USFS Eastern Region Geneticist, Nick LaBonte

2022 Volunteer of the Year

NICHES Land Trust is excited to announce that Ken Jordan has been named the Volunteer of the Year for 2022! When he's not whitewater kayaking, spelunking with the Indiana Karst Conservancy, or lending a hand to members of his community, he can usually be found on a NICHES preserve working to further our mission of protecting and sharing native habitats. Every year NICHES receives thousands of hours of volunteer assistance from all corners of our service range, which makes selecting an individual to be honored as our Volunteer of the Year a difficult task. Throughout 2022, Ken's demonstrated passion for the natural world and unwavering commitment to preserving and protecting the land has made this difficult choice clear.

One of the standout moments of Ken's contributions in 2022 was his incredible effort in removing an old barn from NICHES Shawnee Bottoms Preserve in Fountain County. A few weeks after the organization approached him to get his thoughts on dismantling the structure, he called to let us know that it was gone! Ken has also participated in almost every prescribed fire that the organization conducted in 2022, serving as an ATV water resource operator.

In addition to his work with NICHES Land Trust, Ken is also an avid practitioner of yoga. He has spoken about the concept of karma and how it relates to his volunteer work. For Ken, doing good deeds and giving back to the community is an essential part of living a meaningful life. His dedication to his community, both social and natural, is a true testament to his character and his commitment to making the world a better place.

In recognition of his contributions, Ken will be honored at NICHES

Land Trust's upcoming annual meeting. The event will be an opportunity for the organization and its supporters to thank Ken for his incredible time, spirit, and passion. Ken's dedication to the mission and his impact on the NICHES Land Trust community have been invaluable, and we can't wait to continue working with him for a greener future in 2023 and beyond!

-NICHES Volunteer and Outreach Coordinator, Sam Cody sam@nicheslandtrust.org

Black and Brown Outdoors

At the core of Black and Brown Outdoors, an initiative created in 2021, is outdoor connection for people of color, by people of color. But perhaps more central to our mission is that it is also a monthly gift of dedicated time that we not only present to one another, but that we also offer back to the earth and the land. For us as community builders of color in Younger Women's Task Force of Greater Lafayette, it is important to honor our individual and group desires to have more time in nature, in all the ways these desires may manifest. The more people of color in our lives we talked with, the more this yearning surfaced. So, beginning with our inaugural mushroom hike, we extended the invitation to Black and brown folks of all genders to join us in creation and practice.

On the last Saturday of each month, we set aside at least two hours in order to meet up at a park, a garden, a trail, or even a peaceful backyard. Sometimes we bring tools and get to work, but there is no pressure to show up in any specific type of way. We believe that we can come back to nature as we are and that is enough.

This is why, in our reminder posts on social media (@ywtf_lala), we say "we make this path by walking," in order to convey that there is no right or wrong way to navigate one's reunion with nature and the land, but also that we as a community can decide what our boundaries and parameters look like, try out new things, and approach our experiences with vulnerability and generosity towards ourselves.

Every month brings us a chance to tell the Land how much its very existence and survival means to us. In the past year and a half we became acquainted with various fungi at Happy Hollow and the Celery Bog, witnessed the sandhill crane migrations, studied field guides, planted juneberry trees in a local downtown sharing garden, and joined NICHES at the annual jack-o-lantern hike. We look forward to collaborating with NICHES to highlight all that this community has to offer.

-Emily, Samira, and Vanessa from The Collective



If you are Black, Indigenous, or a person of any color and want to connect with us and nature, please email ywtfgreaterlafayette@gmail.com, DM us on Instagram or on facebook @Younger Women's Task Force of Greater Lafayette.

Become a Monthly Donor!

It's easy: go to nicheslandtrust.org/join and click "Recurring Donation" or call our office at 765-423-1605. *Any amount is ok:* anything from \$5 to \$25 to \$250 to more *You set the schedule:* weekly, biweekly, monthly, quarterly, or annually

You can cancel anytime: simply email or call the NICHES office.

Use a credit card or direct debit from your account. Like all your online donations, your information is safe and secure using multiple levels of encryption. These regular, automated gifts provide NICHES with the resources and stability to protect and steward natural areas year-round. Thank you for your ongoing commitment and generosity!

- Cumulative giving of \$25 or more entitles you and your family to NICHES membership and members-only events.
- Cumulative giving of \$1,000 or more entitles you and your family to membership in the Black Rock Society.

Thank You to our Additional Sponsors!



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For more information on sponsorships, contact our Executive Director, Shannon Stanis at shannon@nicheslandtrust.org or call 765-423-1605.





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Postcard!

the Indiana Land Protection Association's postcard campaign. conservation in Indiana. State programs such as the President With a personal photo and a positive message, your postcard Help support state and local conservation efforts by joining Benjamin Harrison Conservation Trust Fund have helped will tell your elected officials that you care about land protect land and water for over 30 years.

1. Upload a photo from your favorite park, nature preserve, or It's easy to send an impactful message to your legislators. outdoor place in Indiana.

2. Write a brief, positive message showing you care about conserving land in Indiana.

3. Enter your name and address.

message you provide. Then, when the time is right, they mail ILPA will print high-quality postcards with the photo and



no cost to you!). Scan this QR code link with your phones camera or visit ILPA's website your postcards to your elected officials (at at www.protectindianaland.org/postcardprogram to create your postcard now!

