

THE SPROUT



NICHES LAND TRUST | SUMMER 2024 | VOLUME 28 ISSUE 3

Restoring Oak Woodlands | Stewardship Facility Groundbreaking | Spring Creek Forest Acquisition

"Monarch Butterfly" Cover art by NICHES Volunteer: Gabriela Sincich

"We are the ancestors of the future. What do you want your legacy to be?"

-Julia Butterfly Hill

Executive Director Update

NICHES Land Trust is living proof of the major impact that a small group of concerned people can have on the local and global environment. Because people like YOU care about local natural areas and give gifts of time, talents, and financial support, together we protect nearly 4,800 acres of biodiverse natural habitat with over 1,110 unique plant species. The generosity and vision of the NICHES community inspires so much positive participation in the quest to protect natural areas; land donations provide access for youth summer campers to explore local creeks; landscape level restoration projects inspire weed pulling workdays with international scholars; strategic plans inspire major gifts for key initiatives including the new stewardship facility that will amplify land stewardship, outreach, and volunteer engagement. Thank you for being part of it all!



NICHES Executive Director, Shannon Stanis, and Board President, Trent Hanthorn, share a vision for the organizations future at the Stewardship Facility Groundbreaking Ceremony.

This Sprout details management reasons for upcoming timber harvests. While a timber harvest can look unsightly in the short term, we know that

targeted harvesting promotes oak/hickory regeneration and herbaceous biodiversity, and regenerating hardwood forests sequester and store more carbon. Trees harvested will have their carbon stored via wood products. The increased herbaceous species diversity following the harvest will store more carbon in the soil via their dense roots. Remaining and new oak trees will grow, sequestering more carbon over time. All this sequestered carbon plays an important role in mitigating the harmful global impacts of climate change while also improving ecosystem function at the local preserves.

This newsletter also features the latest land acquisition and stories from the friends who have chosen to protect their beloved land through a donation to NICHES. We are so grateful for the inspiring generosity and trust of P.F. Enterprises. We are honored to care for this special forest along Spring Creek in perpetuity. This recent donation of land, a "little niche", is only 2 parcels away from NICHES's life estate at Spring Creek Sanctuary. The two donations progress the vision for protected corridors along the waterways in the Wabash River Valley. These donated "little niches" all add up for biodiversity and advance us closer to our strategic goal of protecting 8,000 acres by 2030.

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

Restoring Oak Woodlands

NICHES' stewardship program focuses on a key set of practices that address challenges facing our natural systems. Those challenges include invasive species, loss of top predators, fragmentation, and mesophication. Invasive species management is a complex challenge that takes up the lion's share of resources and must be engaged in early and often to move toward a stable ecological trajectory for our preserves. Loss of top predators is addressed through our deer cull program where each November volunteer hunting crews focus on reducing the local deer herd to relieve browse pressure on native plant populations. The challenge of fragmentation is met with a landscape-level approach to land acquisition and stewardship in which strategic priority acres are protected by expanding existing preserves and by working across boundaries with our neighbors to restore ecosystem processes. Mesophication is the process whereby more xeric (dry) and sun-loving species are slowly replaced by more mesic (wet) and shade-tolerant species over time in the absence of natural disturbance regimes including fire. This can lead to significant loss of biodiversity and loss of oak woodlands. Practices that address mesophication include prescribed fire, thinning of shade-tolerant species like sugar maple from the understory and midstory of oak-hickory dominated woodlands, and reduction of canopy cover through thinning which can sometimes be accomplished through a management timber harvest.

KEY STEWARDSHIP CHALLENGES



These are the top threats facing native understory bio-diversity in NICHES service range and some of the methods we are using to fight against them.

INVASIVE SPECIES

Invasive species pose a significant threat to Indiana's ecosystems by outcompeting native species for resources and altering the habitats in which they reside. Management efforts include early detection, mechanical removal, the use of herbicides, and habitat restoration to control the spread and impact of these invasive plants.



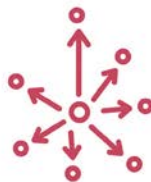
LOSS OF TOP PREDATORS

The extirpation of Indiana's top predators in the early to mid 1800's has allowed populations of herbivores, like white-tailed deer, to grow unchecked, leading to overgrazing and the decline of native plant species. NICHES helps mitigate this ecosystem pressure through an annual deer cull and by installing plant cages to reduce herbivory in restoration areas.



HABITAT FRAGMENTATION

Habitat fragmentation negatively affects native species biodiversity by isolating populations, reducing genetic diversity, and increasing edge effects. NICHES targeted land acquisition efforts help alleviate these effects by protecting an increasingly connected matrix of ecosystems.



MESOPHICATION

Mesophication increases the density of shade-tolerant, mesic (moisture-loving) species in forest understories, which can outcompete and displace native herbaceous plants adapted to more open, diverse conditions. This shift often results in reduced plant diversity and alters the structure and functioning of the forest ecosystem, affecting the wildlife that depends on a varied understory for food and habitat. NICHES uses management practices such as tree thinning, prescribed fire, and selective timber harvests to lessen these effects.



It is of paramount importance that all the above challenges are addressed to meet our strategic goal that “NICHES’ conservation properties will be actively managed and protected in order to become and remain functional, high-quality, natural areas (i.e., be able to retain existing biodiversity for > 50 years).” What that looks like from property to property can be very different.

Some preserves have significant invasive species issues which require sustained effort for years before you can begin to let in more light with understory thinning. Getting in a hurry to increase light while invasive species are still abundant can lead to exasperation of the issue. Sometimes invasive species are sparse enough across a site to get started with a combination of prescribed fire and understory thinning to awaken the native seed bank and begin reviving the health of the system. In this scenario we still need to be aware of invasive species, especially new and emerging threats that can reveal themselves as these practices are completed. Understory thinning is usually essential before removal of canopy trees because established mesic tree species in the understory will quickly respond with rapid growth and seed set upon being released from canopy shade. Management timber harvests are only considered for preserves that meet a strict set of criteria and are truly ready to respond positively to canopy reduction (see Williams Woods recent timber harvest). NICHES has identified two areas which, after a decade of stewardship effort, are

prime for a management timber harvest over the dormant seasons of 2024/2025: Shawnee Bottoms north upland woods and Potawatomi Trail.



Populations of native xeric species, like wild geranium, have rebounded at Williams Woods 2 years after a selective timber harvest.

These preserves have a similar management history of widespread invasive removal including attention to seed sources outside of our boundaries, multiple prescribed fires, extensive understory thinning, and regular deer management. The results of this stewardship include revival of populations of many species in the herbaceous layer that are recovering with reduced leaf litter and shade, especially woodland grasses, sedges, and mid-late season forbs. Recovery of these species leads to an increase in soil tilth and subsequent increase in ant populations, which are responsible for dispersal of many of our spring ephemeral wildflowers. Both target areas are under an easement with the DNR, and timber activities need to be approved through the Division of Nature Preserves to ensure that the projects are in line with the conservation goals; both sites have been approved for management harvest. Once the sites have reached management goals for pre-harvest, and clearance has been given by the DNR, NICHES works with a consultant forester

to explain the goals of the harvest, desired final canopy cover, species to target and to exclude from harvest, plan for timing of the harvest, cutting, staging and removal of harvested trees. We walk the proposed harvest area with the consultant forester and they begin marking the timber, including numbered trees that will be posted for sale, 'slash' trees which we would like to see removed but have minimal value, and trees marked with a yellow line which means do not cut or damage in any way.

The goal with NICHES timber harvests is never to maximize income, but rather to control canopy composition and cover for maximum ecological benefit. The most commercially valuable timber trees are often not marked for harvest, because they are essential as seed trees to begin recruitment of a new generation of oaks and hickories which are disproportionately valuable to wildlife and keystone species of our forests and savannas. Even in an oak/hickory woodland that has seen invasive removal, understory thinning, and prescribed fire, regeneration of young oaks and hickories is still not possible with the canopy nearing 100% closure. To stimulate widespread oak regeneration, one option is to kill the trees in place, gradually

releasing their stored carbon into the atmosphere, which would result in coarse woody debris thickly covering the preserve for years, without reaping the financial benefits of a harvest. Alternatively, selected trees could be harvested strategically, locking their stored carbon into forestry products for decades, and generating some income to reinvest into the management of the preserves.

I have personally given ample blood, sweat, and tears to these preserves over the last decade along with NICHES' staff, partners, and volunteers. I have watched as the work we have done has peeled back the layers of time and revealed the potential for recovery of quality open oak woodland. Now it is time to let the sun truly shine in these special places. While we are careful about our approach to harvest including only working on dry or frozen days from October-March to protect bats and nesting birds and keep soil disturbance to a minimum, there will be temporary impacts to the sites from removal of the trees. In the end, the short-term impacts will be well worth it as we recover the health and structure of one of the most diverse woodland systems in the Midwest.

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

Public Hike: The Ecological Benefits of Timber Harvests Shawnee Bottoms - September 21, 10:00 am - 11:00 am

Join NICHES Land Trust's Stewardship Director Bob Easter for a hike to discuss the process, benefits, and impacts of the timber harvest at Shawnee Bottoms. Easter will lead a walking tour of the timber harvest area and illustrate how this strategy is used to control canopy composition and cover for maximum ecological benefits. All members of the public are invited to see how NICHES is working to recover the health and structure of one of the most diverse woodland systems in the Midwest. Advanced registration is preferred but not required. To sign up or for questions, please email niches@nicheslandtrust.org or call 765-423-1605.

Stewardship Facility Groundbreaking

NICHES and community members celebrated the groundbreaking of a new, 6000 sq ft Stewardship Headquarters on July 22 at Kickapoo Cliffs in Warren County. The \$1 Million construction project marks a milestone for the organization and our 2030 Strategic Plan, which calls for an expansion of protected areas, stewardship activities, and community outreach. The groundbreaking ceremony highlighted the organization's careful, long-term preparation for the project and acknowledged major contributions that spurred the facility into a reality for NICHES. The organization's staff and board have examined opportunities to maximize the efficiency of operations as we expand to protect 8,000 acres by 2030. We identified that the largest barrier for our stewardship team was the lack of a centrally-located storage facility for the equipment and supplies.

NICHES currently leases and borrows storage spaces from partners scattered across the 13 counties in our service area.

This logistical challenge requires that we expend resources (and time) to use our own equipment and supplies. These challenges will continue to grow as the organization acquires additional land, installs new trails, and expands outreach programming. When the project is completed in early 2025, NICHES will be able to own specialty stewardship equipment that is currently rented. NICHES also contracts labor and operators for equipment that we cannot store, which costs significantly more money and takes extra time to coordinate compared to completing the work ourselves. The savings on contractor expenses will exceed the costs of completing the work in-house, allowing us to complete more land conservation projects with the same annual operating budget.

We are excited to have this centralized location because it will increase productivity and sustainability for NICHES' future – and for the larger landscape in northcentral Indiana.



NICHES friends and supporters gathered at our Kickapoo Cliffs preserve on July 22nd to break ground at the site of our future Stewardship Headquarters. This facility will significantly expand the organizations stewardship capacity and lay the groundwork for protecting 8,000 acres of land by 2030.

Most NICHES supporters know that, in addition to protecting the land, NICHES works to improve the health and wellbeing of communities in northcentral Indiana by connecting individuals with nature. The new Stewardship Headquarters will enhance our ability to engage with the public, acting as a place to convene and store outreach supplies like kayaks. We also anticipate that the facility's positive impact on our operations will allow us to reallocate resources to additional outreach programs.

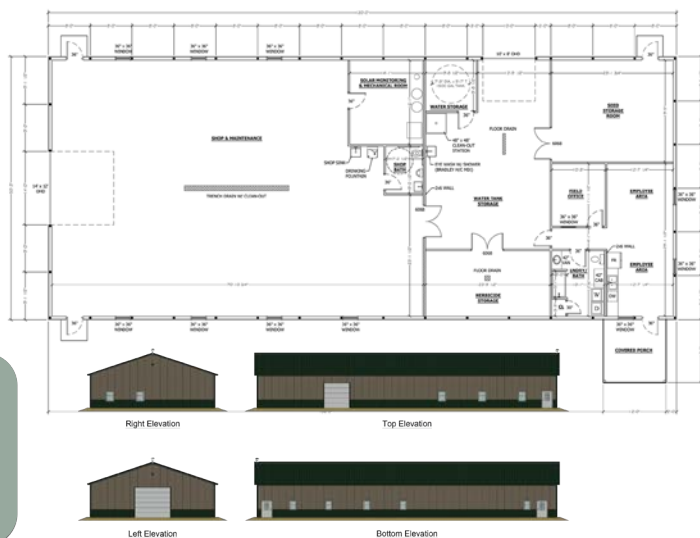
NICHES has carefully planned for the sustainability of the Stewardship Facility. Within the design phase of the building, we collaborated with the project's contractor 1Source Construction Management to create a facility that is well-tailored to our stewardship program. The floorplan features the typical large, open shop area for equipment as well as customized rooms to store supplies like herbicide and seed.

We have opted to make upfront investments in solar and geothermal energy systems, which will pay off in the long term by lowering the annual operating costs of the facility.

The board had the foresight to include \$200,000 within the project's \$1 Million budget for an investment that will sustain the facility's operations and maintenance using earned interest in lieu of the general operating budget.

The project has received support from funders and individuals who understand that the growth of our organization has a direct impact on the sustainable future for the region. We are tremendously grateful to several individual benefactors whose early generosity spurred the project forward. Their planned gifts empowered NICHES and inspired broad community support for the endeavor. We are grateful for the major support of our foundation partners that brings the project to fruition: North Central Health Services, The McAllister Foundation, Roy Whistler Foundation, and Warren County Community Foundation. NICHES will continue building healthy communities that are well connected to thriving natural areas with your support.

Right: The floor plans and elevations for NICHES Stewardship Facility include ample space for equipment, herbicide, water, and seed storage alongside areas for employees to work, meet, and shower. Additionally solar and geothermal energy will power a portion of the facilities operations.



If you would like to contribute to this project or learn more, please contact NICHES Development Director Ann Fields Monical at ann@nicheslandtrust.org or call (765) 423-1605.



Black-eyed Susan's blooming at Weiler Leopold. Photograph by NICHES friend and volunteer: Chad Phelps.



Spring Creek Forest Acquisition

NICHES is excited to announce the addition of Spring Creek Forest, our newest preserve in White County! This 12+ acre preserve was originally protected in the 1970s by a group of young people who lived sustainably on the land and celebrated its natural treasures. Formed in 1974 under the name "P.F. Enterprises," this community has actively stewarded the land for five decades. The following article, written by friends of P.F. Enterprises, details their unique relationship with the land and their decision to entrust its permanent protection to NICHES.

P.F. Enterprises was formed in 1974 as the conception of a group of like-minded young people with a lot of motivation and a little money. The 12.8-acre parcel of land, with Spring Creek running through it, was first investigated in late winter of '74, and the papers giving P.F. ownership rights were signed later that spring. The initial group of founding members were 19 to 23 years old and had little outdoor expertise or camping experience. The '73-'74 Arab oil embargo resulted in several members being laid off who could then collect unemployment insurance, allowing them to fully dive into the work. Others retained their more secure jobs and contributed in other ways.

The first temporary structure on the land was a tipi set up at the north end of the property adjacent to Spring Creek. Next, a site along the creek where three massive sycamores grew in a triangular configuration was determined to be a solid and satisfactory foundation for a treehouse to be built. Five additional cabins were subsequently erected, two along the creek, a third at the far southwest corner of the property, a fourth on the upland overlooking the creek, and a fifth

replacing the tipi. Many of the dwellings were constructed of used lumber that was salvaged from various decrepit outbuildings, including an abandoned grain elevator in Brookston. Among the salvaged building materials were several stained-glass windows. Some were gifted to P.F., some were purchased. These treasures were incorporated in some of the cabins. There were four versions of a bridge to cross Spring Creek. The first was a narrow log with a suspended hand rope to help people cross, although occasionally falls would happen at inconvenient times. After heavy rain swelled the creek and swept that bridge away, it was replaced by a larger log, thicker rope, and plans for a more substantial structure. This evolved into a bridge with two lower ropes supporting wooden planks and hand ropes on each side, anchored by live trees at both ends. This bridge served well for some time until the current concrete, steel cable, and treated lumber bridge was constructed. The current bridge is still functional and has been regularly maintained over the years.

Toileting initially was primitive but sanitary. Eventually a pit toilet was built with a comfortable seat

and weatherproof building. It was centrally located so all the abodes were within easy walking distance, albeit with snow boots at those times of the year. The property continues to have a year-round spring. The water was tested and determined to be potable. Initially a simple spring gallery was built, with the water piped to a more central location. A primitive outdoor shower was replaced by a shower house with gravity fed running water and a wood-fired water heater.

Communal meals were frequent and included residents and guests. We often met for weekday dinners at one of our houses. The garden offered up a variety of contributions to our meals. We hosted a wedding presided over by a local pastor and complete with bridal aisle, forest floral decorations, musicians, and a feast. We also performed more than one funeral, for both dear human and animal friends. Music has been and still is a significant part of all our lives. Many evenings friends would gather in the woods to play together and entertain the forest. Our nearby neighbors occasionally commented on and complimented the music they could hear.

The forest accommodated us, and we tried to have a minimal lasting impact. The natural forest treasures we have enjoyed over the years include occasional foxfire seen as we walked the path after dark, turtles, mudpuppies, a variety of snakes, foxes, many different rodents, deer, and the occasional local stray dog. The forest fauna has changed since our arrival, not entirely for the better. The USDA EQIP program helped us remove Japanese honeysuckle, multiflora rose, and garlic mustard—though each of these invasives will remain problems for the foreseeable future. Maples try to edge out the original stands of oak, hickory, and black walnut. We have had some success girdling the larger maples and thinning out the smaller individuals.

This year is the 50th anniversary of P.F. We are fortunate to partner with NICHES, finalizing the transfer of ownership of the property this past February. We have great respect for NICHES and value the knowledge and special skills they wield. We know that the property will be preserved in a manner that could not have been done without them.



Over its 50-year history, the intentional community at Spring Creek Forest constructed several buildings from salvaged materials (as seen above). These structures served as spaces for living, meetings and celebrations.

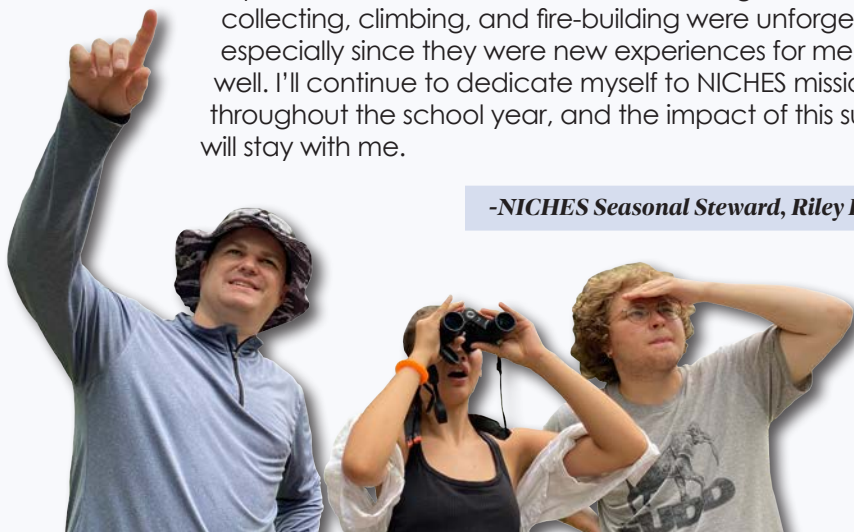
Seasonal Steward Reflections

Before joining the NICHES family, I knew little about land trusts. This summer, with the help of dedicated staff, I gained valuable knowledge of land stewardship practices and plant identification. These experiences positively added to and enhanced my understanding of subjects examined during my degree studies. Additionally, Summer Adventure camp not only added to my knowledge base, but also changed my perception of how conservation education can look while inspiring the next generation. My time with NICHES provided firsthand experiences that will be invaluable for my career goals. The friendships, experiences, and connections I made will have a lasting impact on my personal and professional development. The people of NICHES and those we partnered with throughout this summer are proof that a small group of thoughtful, committed citizens can change our world, and they give me great hope for the future of our community.

-NICHES Seasonal Steward, Kern Darbyshire

Being with NICHES this summer has been a formative experience for me. As an Ecology student at Purdue, I often felt disconnected from theory-oriented classes. However, this immersive experience has reignited my passion for restoration work. Working at NICHES Farris Estate, I saw firsthand the stark contrast between invasive species-laden areas and thriving prairie remnants, giving me a new appreciation for our efforts. A personal highlight included seeing prickly-pear cactus at Granville Sand Barrens in bloom just a few weeks after being planted. My role as a camp counselor alongside Sam is one of my proudest, largely due to the bright minds I had the privilege to guide and share experience with. Activities like electrofishing, insect collecting, climbing, and fire-building were unforgettable, especially since they were new experiences for me as well. I'll continue to dedicate myself to NICHES mission throughout the school year, and the impact of this summer will stay with me.

-NICHES Seasonal Steward, Riley Ramsey



Kern (left) and Riley (right) guiding a birdwatching activity during NICHES Summer Adventure Camp.

Outreach Highlights

Between June 3-21 NICHES hosted 3 sessions of Summer Adventure Camp for local children aged 11-14 years old. Thank you to our camp partners, counselors, and sponsors for making all 3 weeks of camp fun, safe, and possible! Thank you to all of NICHES members and volunteers for helping protect habitat for children and future generations to explore.



Huge thanks to our 2 crews of YMCA Camp Tecumseh Campers in Leadership Training (CILT's) for helping pull invasive species at our Spring Creek Sanctuary and Frogs' Glory Preserves on July 2 and 16. This is the 4th consecutive year that the CILT program has returned to these sites to help maintain the work of past campers!

On July 11, NICHES partnered with local and state conservation organizations to host a group from Family Matters Chicago for a field day focused on understanding and protecting our natural resources. Family Matters is a youth development and community leadership non-profit organization based in the North of Howard community of Rogers Park, Chicago.



Each summer, Wabash Riverfest brings the Greater Lafayette community together to celebrate the longest free-flowing river in the eastern United States. On July 13, NICHES joined the fun and operated an informational booth at the event to share our conservation mission with festival attendees.

On July 20, NICHES hosted an outreach event for Mandela Washington Fellows, part of the U.S. Government's Young African Leaders Initiative. These leaders, aged 25 to 35, participated in hiking tours of several NICHES preserves, land restoration discussions, and a pizza party. Earlier, on June 26, the Fellows participated in a service project at NICHES Granville Sand Barrens Preserve in Tippecanoe County to assist in an invasive species removal project.



Next Year We'll Get a Bigger Cake!

Over 80 people helped celebrate NICHES' 29th birthday at the Wright Center in Martell Forest on June 22! Before enjoying cake and ice cream, the organization held its annual member meeting to elect four new board members. The meeting included several highlights: we thanked Bill Arthur for nine years of service as he completed his term; Stewardship Director Bob Easter discussed progress at the 400-acre Farris Estate, showcasing a successful partnership with the U.S. Fish & Wildlife

service to forestry mulch 110 acres of invasive species; and we formally announced plans and construction details for our future to Stewardship Headquarters in Warren County!



NICHES members gathered at Martell Forest for our Annual Meeting and Birthday Celebration.



In addition to the in-person festivities, NICHES celebrated its 29th year with the annual Birthday Campaign and raised nearly \$25,000 for our work! This was our most successful birthday campaign yet, and it is all thanks to the 94 individuals who contributed to the campaign.

Make a Difference with Match Funds

"NICHES is grateful to be firmly rooted in the communities we serve. We are inspired by the creative and philanthropic spirit of the individuals who give to our organization. Many of you give because you want to make a lasting impact and protect natural habitats.

There are also people who want to encourage friends and neighbors to contribute to NICHES' legacy of conservation. Earlier this year, a community member reached out to us about donating \$10,000 to be used as a "match" for our Birthday Campaign. This meant that if NICHES could raise \$10,000 in

support from other individuals, the anonymous donor would give us an additional \$10,000. We were, of course, excited at this opportunity to inspire community members to give!

The Birthday Campaign's success is a terrific example of how matching funds can successfully motivate others to give. If you are interested in helping us challenge future donors and encourage others to contribute to our lasting impact on the protection of natural areas, please reach out to me at my email below."

**-NICHES Development Director,
Ann Fields Monical
ann@nicheslandtrust.org**

Our Community of Support

NICHES Land Trust is seeking pumpkin carvers of all ages and skill levels for our fifth annual Jack-o-Lantern Fundraiser Hike at Clegg Memorial Garden in Lafayette. We need your help to make this community event a success!

Event Details:

Location: Clegg Memorial Garden, 1782 N 400 E, Lafayette, IN 47905

Dates: Friday, October 25; Saturday, October 26; Sunday, October 27

How to Participate:

To Donate a Jack-o-Lantern: Sign up through the link on our website calendar to let us know how many jack-o-lanterns you will be carving. Drop off your pumpkins on the Clegg Memorial Garden porch anytime on Thursday, October 24, or before noon on Friday, October 25.

Voting and Prizes: Each hiker can vote for their favorite pumpkin. The winning carver will receive a NICHES gift membership, Dan Child's wildflower identification book "Into the Woods," and NICHES swag! Pre-registration is required. Please spread the word and help us light up the trail with your creative carvings!



Thank You to our Sponsors!



Artisan Electric, Candoor Payroll, Centier Bank, Driggs & Associates, Edward Jones - Elliot Hartje, Lafayette Urban Ministry, Isch Insurance Services, The National Group.

In July, NICHES was thrilled to welcome the newest member of our conservation family: Alva Harmeson, the daughter of our Stewardship Manager, Justin Harmeson, and his wife, Ali. Alva had the opportunity to meet many of the NICHES staff, board members, and community supporters during our recent Stewardship Facility groundbreaking ceremony. Her presence was an adorable reminder that NICHES is committed to protecting land for the education, appreciation and enjoyment of current and future generations.



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