

Field Notes

Magazine of the Archaeological Research Institute

Volume 5 Issue 1 Winter 2026



In This Issue:

A Pictorial Guide to Identifying Spring Wildflowers of the Ohio Valley

Meet the Team 2	First Lego League 3	Podcast Interview Metin Eren 3	Pumpkin STEM 2025 4	The Woodland Period 6	Spring Wildflowers Guide 8	2025 Field Season 13	Folklore of Bats 14	Latest Happenings 15	Events Calendar 16
-----------------------	---------------------------	---	------------------------------	-----------------------------	-------------------------------------	----------------------------	---------------------------	----------------------------	--------------------------



Meet the Team

Nathan Thomas Director of Land Stewardship

This month, ARI is proud to introduce one of our newest team members, Nathan Thomas, who stepped into the role of Land Stewardship Director in October. Though new to ARI, Nathan brings with him a lifelong passion for archaeology—one that began unusually early. As he recalls, “Visiting mummies in The Children’s Museum of Indianapolis and ancient artifacts in the Indiana State Museum from the age of two has a way of skewing your view towards digging for the past.”

Nathan grew up in Indianapolis, Indiana, where his early fascination with history and material culture continued to develop. His path eventually crossed with ARI through prior work with Rachel Sharkey, ARI’s Director of Public Archaeology, during his time at the Indiana Historical Society. That connection, combined with his growing experience in land and resource management, ultimately led him to ARI.

Before joining the organization, Nathan worked maintaining trail networks for a suburb of Indianapolis and tending historic gardens at an archaeological site in Hamilton County, Indiana. These roles deepened his understanding of landscapes, ecological health, and how environments shape—and are shaped by—human history. His archaeological interests reflect that blend of natural and cultural curiosity. Nathan is especially drawn to lithics, including flintknapping and chert identification, as well as paleobotany, ancient plant identification, and reconstructed gardening practices.

At ARI, Nathan works alongside two teammates on the Land Stewardship team. Their efforts include removing invasive species, planning future planting efforts, and developing educational programming that highlights the native plants and animals of the Tri-State region. When asked which activities at ARI he enjoys most, Nathan doesn’t hesitate—he loves them all.

His field experiences beyond ARI include participating in excavations with the Indiana State Museum and Hamilton County Parks & Recreation, as well as cataloging specimens with the State Museum registrar. Among his favorite memories is finding the kinds of artifacts that reveal intimate, human moments—like a stone tool that broke just before completion, a glimpse into what must have been a very frustrating day for its ancient maker.

Looking ahead, Nathan hopes to pursue a master’s degree in botany, aiming to deepen his understanding of the natural world surrounding the communities who once lived at the Guard Site. Outside of archaeology, he enjoys cooking, hiking, and music, and he is the proud dog dad of his 9-year-old pup, Edie.

ARI Staff

Editor

Larry Sandman

Associate Editor

Lee Strange

Executive Director

Elizabeth Sedler

Director of Public Archaeology

Rachel Sharkey

Archaeology Coordinator & VALOR Program Director

Louis Herzner

Director of Education & Programming

Samy Norris

Director of Land Stewardship

Nathan Thomas

Director of Resource Development

Christina Waddle

Communications & Office Manager

Field Notes Design Artist

Molly Miniard

Gift Shop Manager & Volunteer Coordinator

Casey Cleary



Archaeological Research Institute

Field Notes is published
quarterly by the
Archaeological Research
Institute

126 W High Street
Lawrenceburg, IN 47025
Phone: 812-290-2966
Email: info@exploreari.org
Web: www.exploreari.org

The Archaeological Research Institute is a 501(c)(3) nonprofit organization working in cooperation with the Indiana Department of Natural Resources.

All fees collected are used to offset the costs of programs offered.

FIRST LEGO League Teams Partner With Archaeologists

By Lillie Daniel, Programming & Outreach Manager

FIRST LEGO League is an educational program focused on connecting youth with STEM (Science, Technology, Engineering, and Mathematics) through exploration, collaboration, and discovery-based learning. Each year, an annual theme is integrated into the programming model for participants to examine real-world challenges. The 2025-2026 theme, "UNEARTHED" partners students with public archaeologists. The goal is to look at challenges archaeologists face in the field and come up with something to help solve them. Archaeological partners support this process by identifying challenges, offering feedback that teams can choose to implement, and fostering a collaborative approach to engaging the public in archaeology.

ARI was honored to work with teams and educate students through virtual presentations, consultations for project feedback, and student field trips to ARI for a Q&A discussion panel with archaeologists. Overall, the ARI team educated over 350 students on more than 30 teams located all over the country. The teams responded with a number of creative and praiseworthy ideas such as artifact databases, games to educate others, drones, measuring devices, and so much more. Five of the teams demonstrated projects at ARI's annual Pumpkin STEM event in November.



One of the teams, Team Byte Force, (pictured above with ARI staff), recently received a Championship Award at the district-level FIRST LEGO League competition and has advanced to the State Championship. At an initial visit in September 2025, the team learned that sifting screens used in the field to capture small artifacts wear out quickly and need frequent repair. The team returned to ARI in January 2026 with a newly developed aluminum sifter. Building on feedback provided by ARI staff, the team plans another visit to demonstrate further refinements, emphasizing an ongoing cycle of collaboration and improvement.

The Midwestern Archaeology Podcast Interviews

Kent State Archaeologist, Dr. Metin Eren

The latest episode of the Midwestern Archaeology Podcast is out! This episode ARI Education Programming Manager Lee Strange sits down with Dr. Metin Eren of the Kent State University Experimental Archaeology Lab to discuss his research. Dr. Metin Eren studies how early human technologies evolved and helped hominins survive as they moved into new and unfamiliar environments. By viewing Paleolithic stone tools through a Darwinian framework of descent with modification, his research reveals how incremental changes in technology shaped human adaptation and dispersal.

Specializing in flaked-stone technology, Dr. Eren examines the full span of the Paleolithic, from its earliest beginnings to the Upper Paleolithic. He also draws on comparative research involving non-human primates, later Holocene societies, and historical contexts to place deep-time technological patterns in a broader perspective.



His work spans four continents, including research at landmark sites such as Olduvai Gorge. As founder and co-director of the Kent State University Experimental Archaeology Laboratory, Dr. Eren combines global fieldwork with hands-on experiments to better understand tool function, craft production, and post-depositional processes. With more than two decades of experience as a flintknapper, he continues to shed light on the technologies that helped shape the human story.

Tune into MAP anywhere you get your podcasts!

1500 People Turn Out to See Pumpkins Fly at Pumpkin STEM 2.0

The second annual Pumpkin STEM Festival was, by every measure, a high-flying success! On a beautiful November day, people came to Carriage House Farm in North Bend, Ohio to enjoy the event that featured live music, local artisans demonstrating their crafts, several vendor booths, a petting zoo, pumpkin painting, a spear-throwing atlatl range, good food and beverages, and much more. And the highlight of the event was the trebuchet that launched pumpkins two-thirds the length of a football field. The event, hosted by the Archaeological Research Institute along with Carriage House Farm and the Lost Bridge Beverage Company, was part fundraiser, part educational experience, and part family-friendly entertainment. The inaugural event in 2024 attracted 400 visitors; the 2025 attendance was nearly four times as large!

Two trebuchets, one large and one small, were designed and built by ARI staff and volunteers, demonstrating how STEM subjects (Science, Technology, Engineering, and Mathematics) influenced history and continue to shape our world today. As co-hosts, we want to thank everyone who came to the event. And a special thanks to all the staff and volunteers who made it happen. Mark your calendar—the Pumpkin STEM Festival will be back on November 7th, 2026!



Richard Stewart, Carriage House Farm Manager, moves the trebuchet frame into position.



Tim Van Leeuwen assists blacksmith Evan Cox in wrapping metal bands around the 19-foot trebuchet throwing arm.



ArchaeoCorps members help Matt Harmeyer (Left) lower lead-filled boxes into the trebuchet's weight basket.



Visitors enjoy an up-close experience with one of the animals brought by the Hillview Farm Mobile Petting Zoo.



Members of a FIRST LEGO League team present their project aimed at addressing an archaeological challenge.



Blake Hon, Land Stewardship Manager, explains the purpose and methods of the ARI Stewardship Program.



Lee Strange, Education Programming Manager, shows a young visitor how to use an atlatl spearthrowing device.



ARI Board Member and children's book author, Connie Sedler reads from her book, Rex – Official Barkeologist.



The ARI trebuchet team prepares to launch one of 267 pumpkins that took to the air at the 2025 Pumpkin STEM.



A pumpkin, seen in the clouds (top center), flies toward the most distant sign 225 feet away.

The Woodland Period of the Ohio River Valley

By Lee Strange, Associate Editor

The Woodland period of eastern North America, spanning roughly 1000 BCE to 1000 CE, represents a time of profound transformation in Indigenous lifeways. Archaeologists define the beginning of the period primarily by the widespread adoption of pottery, but research shows that the changes of the Woodland period were far more complex than the simple addition of a new technology. Instead, the period reflects shifting relationships among subsistence, mobility, social organization, and ritual life.



A Hopewell pottery sherd from the Jennison Guard site in southeast Indiana shows that ceramic vessels were not just utilitarian, but were often works of art.

One of the earliest and most visible Woodland innovations was ceramic technology. Though thought at one point to be diagnostic and unique to the Woodland period, archaeologists now know that some ceramic technology was utilized during the terminal Late Archaic as well.

However, it wasn't until the Woodland period that pottery began to play an integral part in the lifeways of the people of the Midwest during this time. Pottery allowed for new forms of cooking, particularly boiling and simmering, which improved the processing of nuts, seeds, fish, and other foods. While pottery is often associated with sedentary village life, evidence suggests that Early Woodland groups remained fairly mobile, challenging earlier assumptions that ceramics immediately led to permanent settlements or population growth. In fact, some regions experienced population decline during the Early Woodland, indicating that technological change did not always produce straightforward social or demographic outcomes.

The Adena people, located across central and southern Ohio, also emerged as a recognizable material culture during the early Woodland. The Adena are notable for

the beginning of the Ohio tradition of mound-building. They were not the first to construct mounds, however they are the first to invest large-scale resources and manpower towards their creation.



The 65-foot-tall Adena mound in present-day Miamisburg, Ohio is the second-largest burial mound east of the Mississippi River.

Another major development during the Woodland period was the gradual expansion of plant cultivation. Indigenous crops such as goosefoot, maygrass, sunflower, knotweed, and squash were increasingly managed and grown as part of a mixed subsistence strategy that combined hunting, fishing, gathering, and gardening. Rather than full-scale agriculture, Woodland subsistence is best described as "foraging-gardening," with communities adapting flexibly to local environments. Though ubiquitous in the modern landscape, maize corn was slow to enter the region and even slower still was its adoption as a main subsistence crop by Midwestern communities. Maize appeared late in the Woodland period and initially played a limited role in most regions.

The Middle Woodland period (ca. 200 BCE–500 CE) is especially notable for the emergence of the Hopewell people and their large-scale, constructed ceremonial landscapes. Across much of the Eastern Woodlands, Hopewell communities built earthen mounds and geometric earthworks that served as ritual and burial centers. These sites were not densely populated towns, but communal gathering places tied to religious practices, social identity, and regional alliances. The construction of these monuments required cooperation across multiple communities, pointing to new forms of social integration.



The undulating earthen walls at Fort Ancient in Warren County, Ohio, were built by Hopewell people between 200 BC and 400 AD. At 3.5 miles in length, covering an area of 100 acres, it is the largest ancient hilltop enclosure in the United States.

Long-distance interaction networks expanded dramatically during this time. Materials such as copper from the Great Lakes, mica from the Appalachians, obsidian from the Rocky Mountains, and marine shell from the Gulf Coast moved across vast distances. Rather than simple trade, scholars interpret these exchanges as part of broader social and ceremonial relationships that linked communities into shared cultural “social fields”.



Copper was the most utilized metal in Ohio Hopewell society. It was acquired from the Great Lakes and Southern Appalachians through trade and social networks, and was used in making tools, personal adornments, and ceremonial items.

Despite increasing complexity, Woodland societies generally lacked rigid political hierarchies. Leadership appears to have been situational, tied to ritual knowledge or social influence rather than permanent authority. By the end of the Woodland period, however, long-term trends toward sedentism, intensified food production, and

regional integration laid the groundwork for the emergence of the Mississippian societies that followed. The Woodland period thus represents a crucial era of experimentation and adaptation, demonstrating the resilience and ingenuity of Indigenous communities across eastern North America.



Projectile points of the Woodland period: Top Row – Adena, Bottom Row – 1-3 Hopewell, 4 Intrusive Mound Culture. The cluster of triangular points at the far right represent a transition from spears to bows and arrows.

Sources:

Fiedel, Stuart J. “WHAT HAPPENED IN THE EARLY WOODLAND?” *Archaeology of Eastern North America*, vol. 29, 2001, pp. 101–42. JSTOR, <http://www.jstor.org/stable/40914448>. Accessed 14 Nov. 2025.

Abrams, Elliot M. “Hopewell Archaeology: A View from the Northern Woodlands.” *Journal of Archaeological Research*, vol. 17, no. 2, 2009, pp. 169–204. JSTOR, <http://www.jstor.org/stable/41053261>. Accessed 14 Nov. 2025.

Redmond, Brian G. “INTRUSIVE MOUND, WESTERN BASIN, AND THE JACK’S REEF HORIZON: RECONSIDERING THE LATE WOODLAND ARCHAEOLOGY OF OHIO.” *Archaeology of Eastern North America*, vol. 41, 2013, pp. 113–44. JSTOR, <http://www.jstor.org/stable/43868947>. Accessed 14 Nov. 2025.

Keener, Craig S., and Kevin Nye. “Early Woodland Upland Encampments of Central Ohio.” *Midcontinental Journal of Archaeology*, vol. 32, no. 2, 2007, pp. 263–95. JSTOR, <http://www.jstor.org/stable/20708249>. Accessed 14 Nov. 2025.

A Pictorial Guide to Identifying Spring Wildflowers of the Ohio Valley

Photos and text by Larry Sandman

For nature lovers, there is no more inspiring time to walk in the woods than early spring. The reawakening of nature from its winter slumber has been, since time immemorial, an inspiration to hikers, poets, songwriters, and artists, and for many of us, it is a source of spiritual renewal. For some people, the joy of walking through the woods and seeing spring flowers is reward enough, but for others the site of wildflowers elicits a desire to become familiar with them and to know them by name. Following is a visual guide to identifying spring wildflowers you are likely to encounter in the Ohio-Kentucky-Indiana tri-state area. It is not an exhaustive account, but it features the most common flowers you are likely to see on a walk in the woods between the months of March and June. Each flower is identified by its common name, its genus and species, the tri-state location where it was found, and the date it was photographed. The photos are presented in order of the month and day on which they were photographed to give the reader an idea of when to expect to find them in bloom.



Cut-leaved Toothwort
(*Cardamine concatenata*)
Shawnee Lookout Park
Hamilton County, Ohio
March 14, 2024



Grape Hyacinth
(*Muscari botryoides*)
Governor Bebb Park
Butler County, Ohio
March 14, 2024



Germander Speedwell
(*Veronica chamaedrys*)
Lawrenceburg levee
Dearborn County, Indiana
March 29, 2024



Toadshade
(*Trillium sessile*)
Whitewater Memorial Park
Union County, Indiana
April 11, 2010



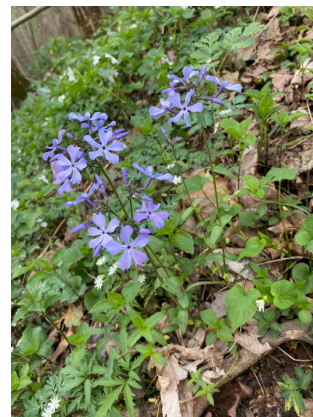
Star Chickweed
(*Stellaria pubera*)
Fort Hill Nature Preserve,
Highland County, Ohio
April 14, 2023



Virginia Bluebells
(*Mertensia virginica*)
Fort Hill Nature Preserve
Highland County, Ohio
April 14, 2023



White Trillium
(*Trillium flexipes*)
Fort Hill Nature Preserve
Highland County, Ohio
April 14, 2023



Wild Blue Phlox
(*Phlox divaricata*)
Fort Hill Nature Preserve
Highland County, Ohio
April 14, 2023



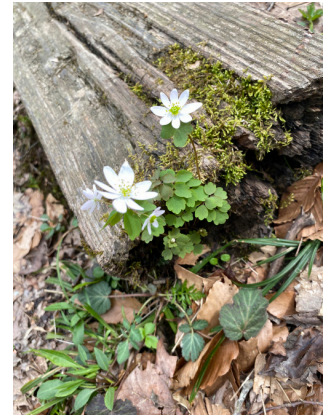
Wild Geranium
(*Geranium maculatum*)
Fort Hill Nature Preserve
Highland County, Ohio
April 14, 2023



Trout Lily
(*Erythronium americanum*)
Yellowwood State Forest,
Brown County, Indiana
April 15, 2022



Dutchman's Breeches
(*Dicentra cucullaria*)
Yellowwood State Forest,
Brown County, Indiana
April 15, 2022



Rue Anemone
(*Anemone quinquefolia*)
Yellowwood State Forest,
Brown County, Indiana
April 15, 2022



Spring Beauty
Claytonia virginica
Yellowwood State Forest
Brown County, Indiana
April 15, 2022



Fire Pink
(*Silene virginica*)
Muscatatuck Park
Jennings County, Indiana
April 18, 2024



Periwinkle
(*Vinca minor*)
Miami U. Natural Areas
Oxford, Ohio
April 22, 2022



Blue-eyed Mary
(*Collinsia verna*)
Clifty Falls State Park
Madison, Indiana
April 22, 2007



Ground Ivy
(*Glechoma hederacea*)
Versailles State Park
Ripley County, Indiana
April 22, 2001



Bloodroot
(*Sanguinaria canadensis*)
Miami U. Natural Areas
Oxford, Ohio
April 22, 2022



Squirrel Corn
(*Dicentra canadensis*)
Versailles State Park
Ripley County, Indiana
April 22, 2001



Lesser Celandine
(*Ficaria verna*)
Miami U. Natural Areas
Oxford, Ohio
April 22, 2022



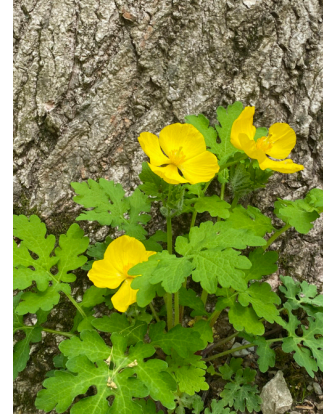
Nodding Trillium
(*Trillium cernuum*)
Brookville Lake
Franklin County, Indiana
April 26, 2014



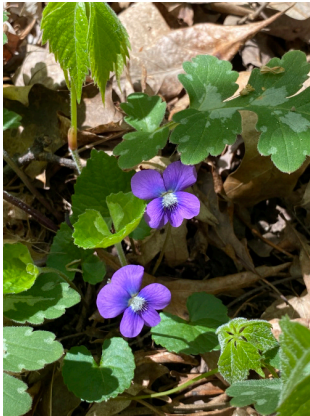
Golden Ragwort
(*Packera aurea*)
Oxbow Nature Conservancy
Lawrenceburg, Indiana
April 26, 2024



Canada Violet
(*Viola canadensis*)
Author's Residence
Ripley County, Indiana
April 27, 2023



Celandine Poppy
(*Stylophorum diphyllum*)
Miami Whitewater Forest
Hamilton County, Ohio
April 27, 2023



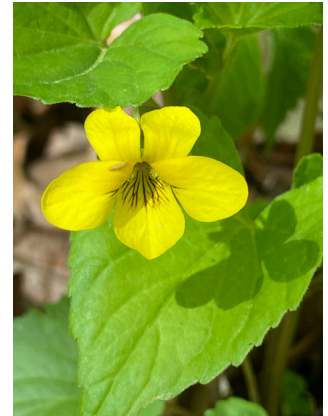
Common Blue Violet
(*Viola sororia*)
Miami Whitewater Forest
Hamilton County, Ohio
April 27, 2023



Mayapple
(*Podophyllum peltatum*)
Miami Whitewater Forest
Hamilton County, Ohio
April 27, 2023



Mock Strawberry
(*Potentilla indica*)
Miami Whitewater Forest
Hamilton County, Ohio
April 27, 2023



Yellow Violet
(*Viola pubescens*)
Miami Whitewater Forest
Hamilton County, Ohio
April 27, 2023



Shooting Star
(*Dodecatheon meadia*)
Muscatatuck Park
Jennings County, Indiana
April 27, 2014



Winter Cress
(*Barbarea vilgaris*)
Versailles State Park
Ripley County, Indiana
April 27, 2024



Larkspur
(*Delphinium tricorne*)
Ceasar Creek State Park
Warren County, Ohio
May 01, 2019



Jack-in-the-Pulpit
(*Arisaema triphyllum*)
Brown County State Park
Nashville, Indiana
May 02, 2018



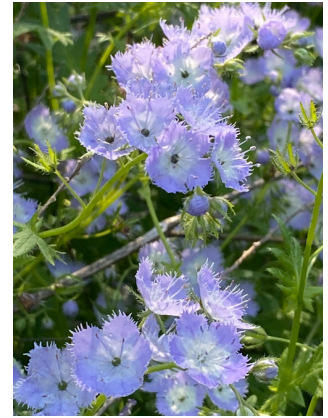
Bluets
(*Houstonia caerulea*)
Author's Residence
Ripley County, Indiana
May 02, 2024



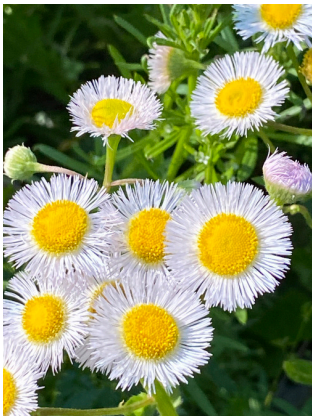
White Baneberry
(*Actaea pachypoda*)
Yellowwood State Forest,
Brown County, Indiana
May 02, 2024



Star of Bethlehem
(*Ornithogalum umbellatum*)
Oxbow Nature Conservancy
Lawrenceburg, Indiana
May 03, 2023



Miami Mist
(*Phacelia purshii*)
Oxbow Nature Conservancy
Lawrenceburg, Indiana
May 07, 2023



Philadelphia Fleabane
(*Erigeron philadelphicus*)
Oxbow Nature Conservancy
Lawrenceburg, Indiana
May 07, 2021



Purple Dead-Nettle
(*Lamium purpureum*)
Shawnee Lookout Park
Hamilton County, Ohio
May 14, 2023



Purple Rocket
(*Iodanthus pinnatifidus*)
Shawnee Lookout Park
Hamilton County, Ohio
May 14, 2023



Spiderwort
(*Tradescantia virginiana*)
Shawnee Lookout Park
Hamilton County, Ohio



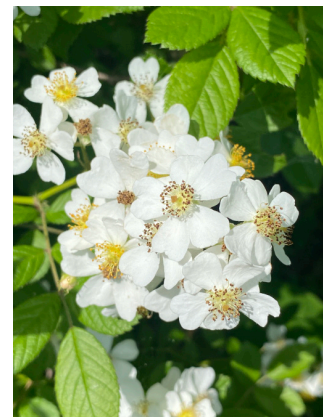
Wild Blackberry
(*Rubus allegheniensis*)
Shawnee Lookout Park
Hamilton County, Ohio
May 14, 2023



Cow Vetch
(*Vicia cracca*)
Brookville Lake
Franklin County, Indiana
May 16, 2024



Wild Columbine
(*Aquilegia canadensis*)
Brookville Lake
Franklin County, Indiana
May 21, 2006



Multiflora Rose
(*Rosa multiflora*)
Shawnee Lookout Park
Hamilton County, Ohio
May 22, 2023

Reflecting on Flowers

By Nathan Thomas
Director of Land Stewardship

Closing your eyes and thinking, “archaeology,” flowers are an unlikely first mental image. Dirt, yes. Flowers, perhaps not. And yet, as we walk the trails this spring, we’re sharing the woods with living links to an ancient past along the Ohio River. The pawpaw seed found during recent digs at ARI’s Guard Archaeological Preserve came from a fruit eaten by the people who called that village home from 1000-1200CE. And that pawpaw fruit started as a brick-red blossom, some rainy April nearly one thousand years ago. That seed’s survival can tell us so much about the plants and flowers known to these ancient indigenous people. Using flotation machines and careful sorting, we can find and identify seeds and pollen: the amaranth, blackberry, black cherry, pawpaw, and wild onion seeds found at sites across the Tri-State area enable modern people to imagine ancient springtime fields and forests, full of color. How welcome the green and growing things were to the people living in the Ohio River Valley.

I’m new to ARI and to Dearborn County, but I keep finding old friends growing everywhere. This spring, as you hike our local trails for your favorite forbs and flowers, you are continuing a relationship that we can place surprisingly far back in time.

(Spring Wildflower Guide - Continued from page 11)



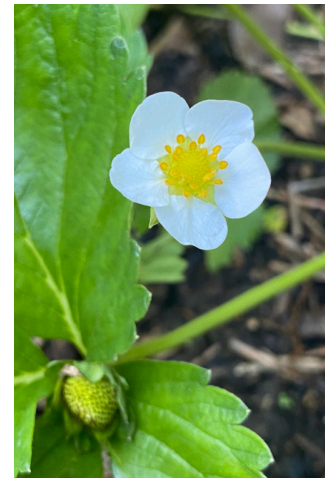
Dame's Rocket
(*Hesperis matronalis*)
Four Mile Creek Area
Oxford, Ohio
May 22, 2010



White Dead-nettle
(*Lamium album*)
Yellowwood State Forest
Brown County, Indiana
May 22, 2019



Common Speedwell
(*Veronica officinalis*)
Author's Residence
Ripley County, Indiana
May 25, 2023



Wild Strawberry
(*Fragaria virginiana*)
Author's Residence
Ripley County, Indiana
May 25, 2023

The 2025 ARI Field Season Wrap-Up

By Rachel Sharkey, Director of Public Archaeology

In our Summer issue, we were in the hiatus between field schools and still working to understand the Mt. Nebo Site. Since then, we have completed our fieldwork and learned a lot about the site through survey and excavation.



Field students and volunteers working in excavation units along the North ridge of the Mt. Nebo Site

First, a quick recap of our project area - The Mt. Nebo site is a multicomponent (spanning multiple time frames) site that is located on the property that is now Carriage House Farm/Lost Bridge Beverage Company ("Carriage House") in North Bend, Ohio. In the past, the site was a hot spot for artifact collectors to walk and have successful days in the field. The information that we know of the site comes from their collections and a study that took place in 1987. This site was listed on the National Register of Historic Places but has since been heavily disturbed by gravel mining activities. The goal is to help Carriage House determine what, if anything, remains of the site and how to protect it moving forward.

At the beginning of the summer, we focused our efforts on the northeastern part of the property, conducting a shovel test survey and using magnetometry to explore anomalies below the ground's surface with exploratory excavation units. In the second half of the summer, our efforts were placed on a ridgeline on the north side of the property. After 112 shovel tests and 5 excavation units, we feel more confident in our understanding of the Mt. Nebo site. It seems that the eastern portion of the property was heavily disturbed by heavy machinery during the mining years, and no intact archaeological deposits exist in the areas we surveyed. The north ridge, however, is a much different story. Every shovel test we placed produced lithic debitage (the cast-off materials from making stone

tools), and we even recovered a couple of projectile points and a few pieces of pottery. This ridgeline has always separated the property from the field to the north and so has had the least amount of disturbance from other areas of the property. It was also on this ridge that we placed three excavation units in areas that yielded the highest amounts of artifacts. Unfortunately, we did not find any evidence of houses, firepits, or long-term occupation of the area. Through these excavation units, we were able to see how the land was built up over the years, which helps us with our interpretations of the property.

Now that we are done digging, we have moved indoors and are working on cleaning and analyzing the artifacts recovered from the site. This is where we learn about the types of materials that were used to make the stone tools and can answer questions about where these things came from. We get counts and weights for everything and create maps that show us exactly where each object was found. Fieldwork provides the "a-ha!" moments of discovery, but the lab is where we really learn about the objects that are recovered.



ARI staff and field students sifting soil to find artifacts

This season was a new adventure for us as we tiptoed into the world of doing work in areas outside of the Oxbow. It was our first time doing excavations in Ohio. While it was an amazing experience and we cannot thank our friends at Carriage House Farm enough for having us out, we are anxious to return home and explore the archaeology in our immediate community. We still have a lot of work to do here, and I cannot wait to see what we find.

Guardians of the Night

By Lillie Daniel, Programming & Outreach Manager

Quietly slipping through the twilight shadows, a guardian of the night whispers secrets of times past and worlds in-between. Fluttering unseen over sacred mounds, it offers a connection to spiritual thresholds. Bats play an important role in Indigenous cultural stories.



Big brown bat (Eptesicus fuscus) found in North America

Indigenous oral traditions include a creature of the night that blurred the lines between worlds, acting as a messenger between day and night, life and death, and the seen and unseen. Bats exist between the two worlds of birds and mammals as intermediaries or perhaps in ambiguity, blurring the line between the two worlds. Their nocturnal nature and echolocation capabilities are connected to heightened senses, intuition, and the ability to perceive beyond what's visible. The connection to night and emergence from darkness can symbolize rebirth, transformation, and embracing the unknown. Bats can help us learn the lesson to trust our dreams and navigate challenges by finding strength in uncertainty.

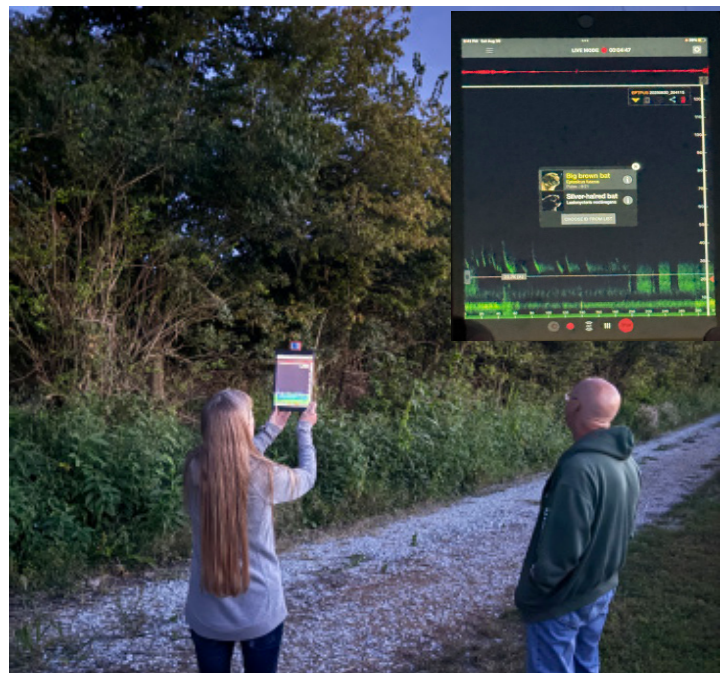
Fossil bat remains provide clues about climates, ecosystems, environmental changes, and past human activity, including the understanding of cave history and ritual activity. Bats also hold a strong symbolic importance, depicted in artwork showing an understanding of their ecological role in pollination and agriculture. Scientists today confirm their vital role in our ecosystems as insect control, pollinators, seed dispersers, and a strong indicator of forest health.

Bats and Bonfires took place at the Guard Archaeological Preserve site in August. We conducted a citizen science data collection BioBlitz and used devices to detect echolocation calls at the site. Bats use echolocation to navigate and find objects in their environment with sound waves.

14 Field Notes - Winter 2026

Using specialized Sonobat software, Susan Brown from the Boone County Conservation District conducted a quick analysis of the bats that were recorded during the blitz. While multiple species were noted, including the Big Brown bat, Eastern Red bat, Hoary bat, Silver-haired bat, and Gray bat, the species encountered most often was the Big Brown bat. We would love to head out again and collect additional data to identify other species frequenting the area.

Bats are an important part of our ecosystem, and they can be welcomed by providing food, water, and shelter. Planting native trees and plants that attract moths provides a natural food source, while installing bat houses offers a safe place to roost. A well-designed bat house should be made of untreated wood and placed at least 12-15 feet above the ground in a sunny location. There are many resources and plans available to build a bat house or purchase one, creating a space that encourages bats to thrive in our local communities. A great website to check out for additional information is Bat Conservation International (www.batcon.org).



Detecting the presence of big brown bats at the BioBlitz in the Guard Archaeological Preserve

When the night falls, we catch glimpses of unseen worlds on whispering wings. These mysterious guardians carry ancient stories through silence and shadow, dancing along the edges of twilight. Both essential to nature and folklore, bats remind us of the wonder and mystery woven into the night.

Latest Happenings at ARI!

By Samy Norris & Molly Miniard

Happy New Year from your ARI team! We can't believe it is 2026 already. While the end of 2025 was still super busy for us, it was also extremely rewarding. Please enjoy a look back into the final months of 2025. We can't wait to share everything we have in store for 2026!



Forrest Schmitt, Experimental Archaeology Manager, is holding one of several clay salt pans he has been making for experiments in salt acquisition. Forrest is collecting water from local saline springs and boiling it down to acquire salt, applying methods used by Native Americans and pioneers in years past.



Our Land Stewardship team has been hard at work setting up greenhouse spaces to get our seeds ready for spring! A huge thank you to the NCCC team from United Way for helping us on this project!



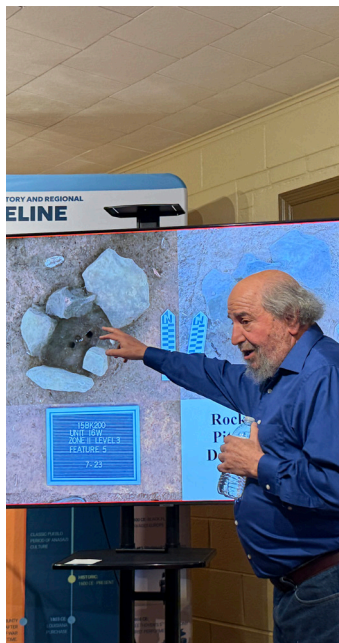
"Wildcrafted" is ARI Outfitters series of monthly workshops. January's topic was Botanical Dyes. Keep an eye out for these fun events!



Atlatl spear throwing was one of the activities at the ARI pig roast held in conjunction with the Archaeological Society of Ohio - State Line Chapter's 2025 Artifact Show in Lawrenceburg, IN



The community came together to celebrate the Winter Solstice with ARI on December 20th, 2025



February

- 14th.....Artifact, Rock, & Fossil Identification Day 10:00 AM - 2:00 PM
- 14th.....Workshop: Hafting - methods of attaching tools to handles 10:00 AM - 2:00 PM
- 20th.....ARI Outfitters Workshop: Watercolor Class 6:00 PM - 7:30 PM
- 27th-March 1st.....Kentucky Heritage Council

March

- 3rd.....Happy Hour History: Speaker Series-Dr. Michelle Lessard 5:30 PM - 7:30 PM
- 7th.....Workshop: Escape Room 10:00 AM - 2:00 PM
- 14th.....Artifact, Rock, & Fossil Identification Day 10:00 AM - 2:00 PM
- 14th.....Workshop: Atlatl - spear thrower making 10:00 AM - 2:00 PM
- 28th.....Workshop Garden Preparation & Seed Starting 1:00 PM - 3:00 PM

April

- 4th.....Workshop: ARI Science Fair 10:00 AM - 2:00 PM
- 7th.....Happy Hour History: Speaker Series- Dr. Jack Blosser 5:30 PM - 7:30 PM
- 11th.....Artifact, Rock, & Fossil Identification Day 10:00 AM - 2:00 PM
- 11th.....Workshop: Dart Making & Fletching - Create darts & watch them fly 10:00 AM - 2:00 PM
- 18th.....Workshop: Dig Ready - How Archaeologists Gear Up 10:00 AM - 1:00 PM
- 25th.....Annual Fundraising Gala

**To stay up to date on events, book your experience,
become a volunteer and more check out our website!**

