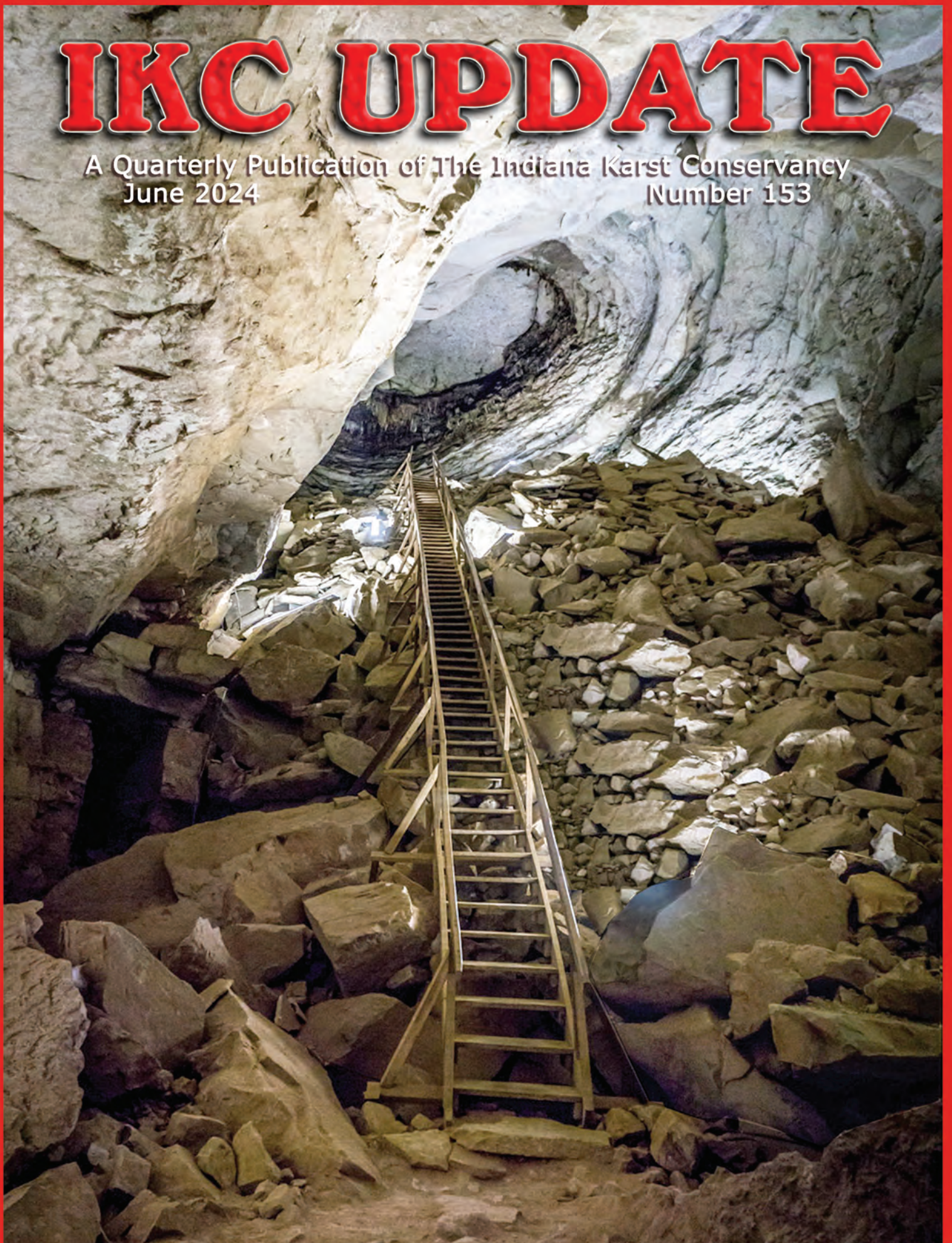


IKC UPDATE

A Quarterly Publication of The Indiana Karst Conservancy
June 2024

Number 153



INDIANA KARST CONSERVANCY, INC

PO Box 2401, Indianapolis, IN 46206-2401

ikc.caves.org

Affiliated with the National Speleological Society



The Indiana Karst Conservancy is a non-profit organization dedicated to the conservation and preservation of caves and karst features in Indiana and other areas of the world. The Conservancy encourages research and promotes education related to karst and its proper, environmentally compatible use.

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IKC QUARTERLY BOARD MEETING REMINDER

Sunday, June 16th, 1 PM EDT

Wayne Cave Preserve

8307 W Gardner Rd, Bloomington, IN

The quarterly meetings are for the Executive Board to conduct business, and for our members and other interested persons to have an open forum to talk about cave and karst conservation, and related topics. Past, present, and future IKC projects are discussed to solicit comments and input from our members and the caving community as a whole. The meetings are informal, and everyone is encouraged to attend and participate. The IKC Board wants your input.

Preliminary Agenda Items: Financial reports; Recap of recent preserve work projects; Promotion of upcoming preserve projects; Education/Outreach/Field Days updates; OCR training debrief; Electronic scheduling and waiver system; Cave/land acquisition activities; and more...

Meeting Details: The meeting will start promptly at 1 PM. If rain is forecasted to be likely, the meeting may be moved to the nearby Richard Blenz Nature Preserve shelter (8070 W Eller Rd). The decision will be made by 9 AM. If you have questions about the meeting, please contact Matt Selig (see contact information on page 2).

Pre-Meeting Stewardship Activities: Those wishing to participate in pre-meeting stewardship activities on the property should arrive by 11 AM. Tasks include invasive spraying, autumn olive cutting and stump treating, sign repairs, park bench rejuvenation. If you have questions contact Danyele Green (see contact info on page 2).

ACTIVITIES CALENDAR

June 15 – Limestone Fest, Bloomington (see page 9)

June 16 – IKC Quarterly Board Meeting (see above)

June 30 – IKC Wyandotte Cave Tour (see page 10)

Aug 15-18 – Indiana Cave Capers, IKC booth (see page 15)

Sept ?? – IKC Quarterly Board Meeting (date and location TBD)

Oct 12 – Big Day Birding Hike at Robinson Ladder Preserve

Nov 9 – Winter Tree ID Hike at Shawnee Karst Preserve

For more information on the Indiana Karst Conservancy, visit our website at ikc.caves.org, our Facebook page at www.facebook.com/IndianaKarstConservancy, or write to our PO box. Membership to the IKC is open to anyone or any organization interested in supporting cave and karst conservation. Annual dues are \$15. Please see inside the back cover for a membership application form or to make a much-appreciated donation. Memberships and donations may also be made electronically by credit card or PayPal using our on-line services on our website (see the Join Us! tab in the menu) or ikc.caves.org/join-the-ikc.

The *IKC Update*, distributed for free, is published quarterly for members and other interested parties. The purpose of this newsletter is to keep the membership and caving community informed of IKC activities and other news related to cave/karst conservation. Submission of original or reprinted articles for publication is encouraged. Back issues can be found at ikc.caves.org/ikc-updates.

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RAMBLINGS FROM THE PRESIDENT...

When I took Dr. Chris Groves' Karst Geomorphology workshop at Western Kentucky University's Karst Field Studies program in 1998, he was insistent we not limit our understanding of karst to only the part that was underground. Meaning the caves, which was the part I was most interested in at the time.

He wanted us to understand the karst processes which operate on the surface, as well. We were at Mammoth Cave National Park as we began to learn how to interpret what was happening both underground and on the surface by what we could observe, whether we were crawling in a cave or walking the hills and valleys of the park:

- The ceiling of this part of the cave passage is dry? Because the sandstone caprock over it prevents water infiltration and the formation of stalactites.
- The borehole in this area stops suddenly in a pile of breakdown? The valley on the surface cut the passage in two as it incised its way downward.
- There's a steep cliff overlooking the sinkhole plain? This is the edge of the retreating escarpment.
- A surface stream disappears into a hole in the ground? It's draining into limestone joints and flowing underground through cave passages.
- There are surface fish in this part of the cave? The nearby surface stream is back-flowing into the cave.

This opened an entire new aspect of karst for me to study. Before this, I didn't understand how the surface and subsurface worked together as a system. We were learning about the equally important surface features. The escarpment, cuestas, sinkholes, springs, blind valleys, sinking streams, drainage basins, water flow.

I was thinking about this recently as I reflect-

ed on the surface tour we took of the Lost River drainage basin as part of the Indiana Cave Symposium in April.

The surface tour didn't go underground. We were limited in our ability to interpret the karst system in this region by only what we could see on the surface. And it is impressive to see the Lost River flowing on the surface on the eastern part of the sinkhole plain, to see it fade away and disappear through a series of sinks until the river bed is dry, to re-emerge briefly in Wesley Chapel Gulf, and then to know it finally returns to the surface at the True Rise of the Lost River.

We could also see the conservation challenges faced by the sub-surface karst ecosystems: crop

farming brings the risk of fertilizer and pesticide run-off being introduced to cave systems. Development brings more impermeable surface to the region along with residential and industrial activity in addition to construction and engineering challenges. Underground storage leaks and transportation tanker spills bring extraordinary groundwater contamination risks. Confined feeding operations spread massive amounts of animal waste in farm fields that can potentially leach into the subsurface.

What's happening on the surface matters for what's happening under-

ground, not only in geological terms, but in conservation terms. In Indiana's cave regions, a healthy underground depends on prudent use of surface resources. "Out of sight, out of mind" is not a useful way of thinking about karst processes and systems.

I am no expert on development, crop agricultural and livestock farming operations, and the environmental challenges they present. Therefore, I was thankful we were joined on this surface tour by Ginger Davis and her colleagues from the Indiana Geological and Water Survey.

Ginger's deep experience studying and working with conservation challenges in Indiana's karst brought



something to our discussion which we would not have had if we were limited only to our own expertise.

I believe reaching out to other persons and organizations who are subject matter experts and who also work with karst and its conservation is important for the IKC. It multiplies our knowledge base, it expands our resources, it can bring others who are passionate about conservation into our discussions and work, and it can improve our efforts to conserve and manage Indiana's karst resources.

This thinking about partnerships was brought home to me again at the May 4th hike with The Nature Conservancy at Henderson Park near Salem, Indiana. Kevin Stunk, Keith Dunlap, and I negotiated with The Nature Conservancy and the City of Salem to produce an agreement where the IKC assists the other two parties to manage access to the wonderful caves in Henderson Park.

These caves had been closed to visitation until we developed a plan together for responsible visits to them. Not one of our organizations could have come up with as good a plan, left to our own resources.

The IKC is stronger when we work with others who have an interest in Indiana's caves and karst. These partnerships are essential to our work. The IKC is an all-volunteer organization, which limits what we can do to the knowledge and abilities of those who are passionate enough about Indiana's caves to contribute their hard work and generous donations to our organization.

We work with many organizations. Participating in the Indiana Land Protection Alliance allows

us to network with and learn from other Indiana land trusts. We work with Spring Mill State Park and other cave owners to manage cave access on their properties. The Indiana Department of Natural Resources has studied flora and fauna on our preserves. Foundations have taken a deep interest in our work and generously supported our acquisitions of significant pieces of karst landscape. We have far too many partners than we can list in this brief article.

At the IKC, we continue to conserve not only our underground resources, but also the surfaces of our preserves. There are plenty of workdays and field trips at our preserves in the near future. If you'd like to take a hike at one of our preserves or a trip in one of our caves, please contact our Cave Patrons and Property Managers. To stay informed about what is happening with the IKC and Indiana's karst, please follow the IKC on Facebook and visit our website at ikc.caves.org (and read the *IKC Update!*).

If you find yourself driving through an area with caves, in Indiana or elsewhere, spare a few thoughts to think not only of the caves, but also the karst processes, the rocks, the water, the plants and animals in the caves and on the surface, and how we humans use (and abuse) and interact with these systems.

The IKC will continue to work with individuals and organizations who we can serve with our conservation work, and who in turn can help us accomplish the IKC's Exempt Purpose.

Matt Selig

NEWS BRIEFS...

- ❑ One of the prescribed functions of the Annual Business meeting in March is the results announcement of the Executive Board elections: Matt Selig was re-elected President, Laura Demarest was re-elected Secretary, and Keith Dunlap was re-elected as Treasurer, all serving one-year terms. Joe Kinder was re-elected as a Director, while Bill Baus, Brandon Chasteen, and Cris Seuell were newly elected Directors (all serving three-year terms). These seven Board members join Directors Bruce Bowman, Jeff Cody, Scott Frosch, Danyeale Green, Goni Iskali, Tom Sollman, Carla Striegel-Winner, and Richard Vernier. Our sincere gratitude to out-going Directors Dave Haun (after 29 years of service), Rand Heazlitt (3 years), and Paul Uglum (3 years). Also thanks to this year's Election Tellers Goni Iskali and Danyeale Green.
- ❑ The IKC is sad to report that long-time Fort Wayne caver Bruce DeVore unexpectedly passed away on February 21, 2024 at the age of 70. Bruce was instrumental with the northern Indiana Grotto and was an early supporter of the IKC and joined in 1990. Bruce served on the IKC's Executive Board for 13 years from 1993 to 2005, assisting with many IKC activities during that time. Bruce had a devoted wife, Deb (also a caver), was a veteran, and worked in the telecommunications industry for 25 years before retiring.
- ❑ The Indiana Land Protection Alliance received grant funding for a Photo Tour Project that the IKC has

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DISCOVERY DAY AT HENDERSON PARK

by Sue Vernier

When a joint event sponsored by the Indiana Karst Conservancy and The Nature Conservancy (TNC) was announced in March to be held at Henderson Park near Salem, I immediately registered myself and my husband, Richard, for the May 4th event. Who would not want to attend a guided nature hike in a unique karst forest landscape with the promise of a possible short trip into Mill Cave! I knew that I had been in Mill Cave many years ago and was interested in going back (see the March, 2005, IKC Update #76 cover photo of me in Mill Cave), but I was actually more interested in exploring Henderson Park above ground where I expected to see abundant spring wildflowers. I was not disappointed!

The nearly 400-acre Henderson Park has an interesting history in that it was once the water source for the City of Salem. The historic old pump house and a spring house can still be seen when hiking along Twin Creek. The park is still owned by the City of Salem and is now managed by TNC through a conservation easement designed to protect the forest limestone glades and caves at the site. The long-term goal of TNC at Henderson Park/Twin Creek Valley Preserve (TNC owns another 1,050 acres on three sides of the park) is to protect and enhance the glades and forest surrounding Twin Creek. The primary conservation activities at the properties are prescribed burns, controlling invasives, and curbing ATV trespass.

There are a series of spring caves at Henderson Park – Waterfall, Middle, and Mill – and access is now managed by the IKC for TNC and the City of Salem. This allows a systematic way



photo courtesy Carla Striegel-Winner

to visit the formerly closed caves, provide guidance for safe visits, minimize impact to natural resources, and monitor usage. Anyone wishing to arrange a caving trip should contact the IKC's designated Access Coordinator – Scott Frosch. The optional Discovery Day entry into Mill Cave was facilitated by Scott.

On Discovery Day we drove through rain on the way to Henderson Park, but the weather held off for most of the rather nice day. An estimated 35 people participated in the event. As a delightful bonus, TNC offered each individual the choice of a free native plant to take home! After partaking of the much appreciated snacks and drinks and receiving a brief welcome from IKC's Matt Selig and Carla Striegel-Winner, and TNC's Esme Barniskis, we divided into two groups for the leisurely two-plus mile loop hike viewing a mix of habitats. The hike leaders Mike Everidge and Ryan Goetz, TNC Land Stewards, discussed TNC's management of the outstanding forest and glade habitat, identified various wildflowers and trees, and pointed out historical points of interest regarding the mills and water system structures. We were forewarned that we would be fording the stream a few times (ankle deep at most). Because Richard and I intended to take advantage of the optional Mill Cave visit, we wore our cave footwear and outer wear (our helmets and lights tucked into a day pack), making us ready for the stream crossings and eventual wading into Mill Cave.

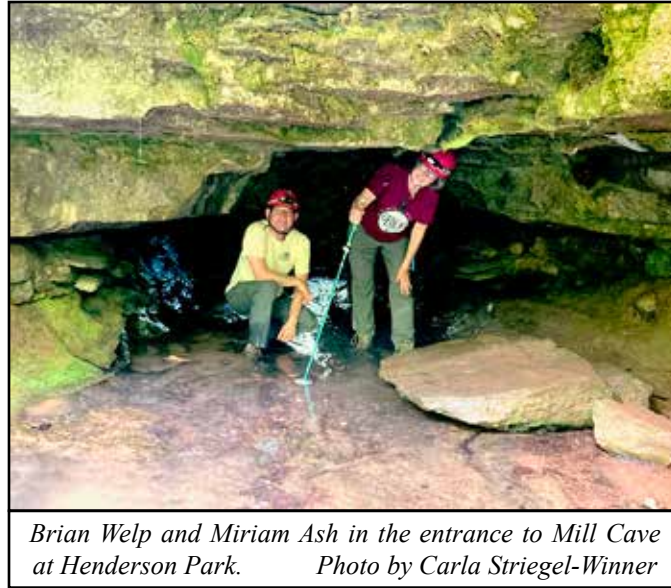
The stream that we had been fording in the valley floor came mostly from the mouth of Mill Cave. At the turnoff on the trail to the cave,



photo courtesy Keith Duntap



Scott Frosch had a tarp laid out with helmets and gloves for the participants who had not brought their own. Scott offered instructions and assistance for those who wanted to enter the cave. Mill Cave has a lovely and scenic entrance. I did remember that it required wading in the stream and some stooping with about a five foot ceiling



Brian Welp and Miriam Ash in the entrance to Mill Cave at Henderson Park. Photo by Carla Striegel-Winner

and eight feet wide passage at the beginning, which eventually opened up to walking passage. There are a series of small potholes to negotiate; the water was crystal clear. Scott did accompany us into the cave and immediately pointed out the common cave salamanders and a tiny zigzag salamander that looked to be

the perfect size for a cave salamander snack. We got as far as a small cataract in the stream where Scott had previously strung flagging tape across the passage as a good turnaround point.

After departing the cave, we returned to the loop trail to finish our hike back to the parking area where everyone was sharing stories and

partaking of more snacks and accepting more free native plants (TNC did not want to take the remaining plants home).

A wonderful group of IKC and TNC volunteers made Discovery Day possible. Thanks to everyone who made it happen. As a dear caving buddy often said, "A good time was had by all!"

A GREAT PARTNERSHIP WITH TNC

by Carla Striegel-Winner

The Discovery Day on May 4th was our first opportunity to work with The Nature Conservancy (TNC) on an event at this property since we finalized our cave access agreement this past year. The event celebrating our partnership went over very well. Both the IKC and TNC were quite satisfied with the outcome! TNC's Volunteer and Events Coordinator, Esme Barniskis, was a dream to work and plan with! She has such passion and energy for what she does. Mike Everidge, the land steward at the property, truly loves the work he does there, and Ryan Goetz, borrowed from nearby Harrison County projects TNC manages, was great as well. On the IKC side, President Matt Selig excelled at his "IKC Welcome". Our parking volunteers, Danyele Green and Keith Dunlap, did a superb job and Cave Access Coordinator Scott Frosch really was right in his comfort zone - introducing folks to caves and caving, stationed all day at the entrance to Mill Cave. Eight of our fifteen IKC Board members were able to participate in the event, which was terrific.

Mike thought the event went so well that at our



photo courtesy Carla Striegel-Winner

after-event review, he suggested making it an annual event, with Scott Frosch offering a similar set up. The TNC would like to be more welcoming to local residents and sees the Discovery Day idea as a way to reach out. Scott said he is all in and I am sure we will be asking for a volunteer or two if this comes into fruition next spring! I am so pleased the event went well and look forward to future ventures with our partners on this property!

2024 INDIANA CAVE SYMPOSIUM RECAP

by Keith Dunlap

The Orange County Community Center in Paoli was the venue for the 30th Indiana Cave Symposium, which was held this year on April 20th. The Symposium was again co-hosted by the Indiana Karst Conservancy and Indiana Cave Survey, with each organization splitting the venue's rental and food expenses. The event started at 5 PM with a pitch-in dinner that included burgers (beef and veggie), brats, pork loins, and pork rib entrées, along with buns, grilled onions, condiments, and soft drinks. Approximately 90 attendees brought side dishes, desserts, chips, and the like to complete the feed. The program portion of the Symposium began promptly at 6:15 PM. The following summarizes the presentations:

- The Indiana Cave Survey: What's in it for you? - Carla Striegel-Winner. Carla covered many of the benefits for members and non-members including a look at the brand new ICS public website developed by Aaron Valandra. She then explored the ICS's private site for members including the many "tools" and the extensive eLibrary available to all members, and then showed the cave database accessible to Regular members. She also demonstrated some new features that have been added to the private site over the past few years.
- Wayne-Studebaker Cave Dye Tracing to Blair Hollow, Monroe County, Indiana - Mike Drake and Kevin Romanak. Mike and Kevin gave a quick description of the dye tracing process and then got into the details of their project that consisted of injecting two different dyes in two different locations (Camp 1 and Camp 3) on July 22, 2023. Unfortunately, due to the lack of subsequent rainfall, the transportation of the Camp 1 dye did not occur until February, 2024. With that said, the project was still successful in developing a better understanding of the hydrology of Wayne Cave and the resurgence springs along Blair Hollow. The project used over 20 volunteers, 230 field-hours, and 9 series of detector swaps.
- Henderson Park Caves at Twin Creek Valley: A TNC/IKC Partnership - Scott Frosch. Scott's presentation covered much of the history of

the park, with the first mills being constructed circa 1816 and the caves being described by Powell in 1958. Waterfall, Middle, and Mill caves have been popular with cavers since the 1960s. The recent MOU access agreement between the IKC, TNC, and City of Salem will allow continued access to these caves.

- The Wayne Cave Preserve Connection and Future Management - Danyele Green. Danyele gave a brief history of the Wayne Cave Preserve including the previous expansions before detailing the activities associated with the new 20-acre "connection" expansion that bridged the gap with the Richard Blenz Nature Preserve. The combined preserves now protect over 120



photo courtesy Keith Dunlap

acres of significant karst landscape. She also highlighted numerous future activities including invasive species control and trail building.

- Monroe County Karst Conservancy Land Planning Ordinance: Proposed Updates, Definition & Implications - Ginger Davis. Ginger, a Commissioner on the Monroe County Drainage Board, covered the revisions being proposed for the Stormwater ordinance that could possibly include the current "Sinkhole Conservation Areas" becoming "Karst Conservation Areas" that are better defined to protect and regulate stormwater flow into karst features.
- Navigating the Springs Database of the Indiana Geological and Water Survey - McKailey Sabaj. McKailey, Research Geologist, gave an interactive tour of the new online Springs Database developed



by the IGWS. Water chemistries are available to view publicly (igws.indiana.edu/research/water) and over time more springs will be added.

- The Discovery and Exploration of Buck Creek Lodge Cave, Harrison County, Indiana - Chris Bell. Chris explained how this cave, first discovered in 1979, was finally pushed in 2016. It had multiple tight and low bathtubs that eventually opened up to what Chris proclaimed was “The discovery of a lifetime!” While the length of the cave is estimated at perhaps 3000 feet, due to landowner changes access was lost, so the cave has not been surveyed.

As was done the last couple of years, there was a pre-symposium karst field trip, led by Matt Selig. The tour looked at the hydrology of the Lost River, beginning where the Lost River flows on the surface, sinks underground and then re-emerges near Orangeville. The regional geology and karst processes that form the caves and surface features of this landscape were also discussed. Ginger Davis, of the IGWS, gave par-



photo courtesy Dave Black

ticipants deep insight into the conservation challenges presented by development and agricultural activities in this sensitive karst environment.

A hearty thanks to everyone who made this year’s Indiana Cave Symposium a success, including the Symposium presenters, the sponsors, the burger grillers, the food line organizers, the MC, the set-up and cleanup crews, and all the attendees! The venue was well received and we likely will use this facility in the future.

LIMESTONE FEST – JUNE 15th

Come explore the geologic, cultural, and artistic heritage of Indiana limestone with this fun, family-friendly event! We are excited to again take part this year, so come visit our booth to say hello to Board members Brandon Chasteen (and family) and Goni Iskali! We will have the IKC display with info on all our upcoming events, our preserves, and the projects that we are currently involved in. Make sure and stop by all of the other cool booths at this Indiana Geological and Water Survey sponsored event! You may also follow this event on Facebook to learn more or receive any updates (search for **Limestone Fest** or go to www.facebook.com/events/950694173367458).

Who: Open to all ages and abilities

What: Activities include:

- Limestone heritage presentations
- Fossil crafts
- Cave critter exploration
- Bouncy house
- And more!

When: June 15 from 10 AM to 3 PM EDT

Where: Indiana Geological and Water Survey – Geology Building, 1001 E 10th St, Bloomington, IN 47405

Note: **Free parking** at the IU Forrest Avenue Parking Garage

Why: Because who doesn’t love limestone!

Questions? Contact Brandon Chasteen (bschasteen@gmail.com) or Goni Iskali (BattyCaver85@gmail.com).



SEE WYANDOTTE CAVE WITH THE IKC! – JUNE 30th

Join us for our third field event for 2024 as we focus on our work with our conservation partners. Register for a special IKC-only tour of Wyandotte Cave on Sunday, June 30 from 9 AM to noon EDT. We will be led by Wyandotte historian and O'Bannon Woods Property Manager Stanley Baelz and accompanied by IKC Board members Keith Dunlap and Tom Sollman. Plan for three hours in cave, and although we will stay on the main tour route, keep in mind this is a strenuous trip.



photo courtesy Richard Vernier

This tour is by pre-registration only and limited to 20 participants. The tour price is the regular group tour rate of \$14 and will be paid directly to the park staff at the ticket booth on-site. However, you **must** pre-register here ([IKCFieldTourJune2024.eventbrite.com](https://www.eventbrite.com/e/ikc-field-tour-june-2024)) to reserve your spot.

Also note there will be an optional stewardship opportunity after the tour so please stick around to assist the state park with a few tasks. A light lunch will be provided by the IKC for anyone who stays.

You may contact Carla Striegel-Winner, IKC field day organizer and Outreach Chair, at IndianaKarstConservancy.info@gmail.com with any questions.

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opted-in on! ILPA solicited photographers from around the state, received almost 60 applicants, and selected one professional photographer for each of six regions within Indiana. The IKC is part of the southern region and is excited to share Bloomington photographer Gary Morrison with the Sycamore Land Trust and the George Rogers Clark Land Trust. Gary says he loves “anything south of where the glaciers stopped” in Indiana. Each of the six photographers will be working with their assigned land trusts through the rest of 2024 to photograph our preserves, projects and events. ILPA and the land trust members will have loads of amazing photographs for our use, and the photographers get a stipend, a half of year of discovering land trust properties, and the publicity the project brings. It’s a win-win! For more info on the project, see: www.protectindianaland.org/photographers-selected-for-statewide-photo-tour-program.

- ❑ On March 16, IKC Board members Keith Dunlap and Goni Iskali hosted a group of approximately 30 Lawrence County residents on a “Sinkholes, Caves, and Karst” hike at our Buddha Karst Nature Preserve. The local agencies that organized the event included the Lawrence County Soil and Water Conservation District, the Natural Resource Conservation Service, the Salt Creek Watershed, and the DNR Division of Forestry. The purpose of the hike was to have the participants learn more about the karst topography that surrounds them and best practices for conserving the landscape.
- ❑ May 1st triggered a number of Indiana caves available for visitation so as to not conflict with winter bat use. First on the list is the IKC’s Robinson Ladder Cave (see ikc.caves.org/robinson-ladder-cave-preserve for more details). Also Langdon’s Cave in the Harrison-Crawford State Forest (note a DNR cave permit is required) and most Hoosier National Forest caves are now open (no permit necessary for small groups). There are also a number of privately-owned hibernaculum caves that are available during the summer with the owner’s permission. Enjoy them while you can though, as most of these seasonal caves close on September 1st.

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BUDDHA KARST NATURE PRESERVE KIOSK REPAIR

by Jeff Cody

At the March IKC Annual Business meeting, Keith Dunlap informed me that the Buddha Karst Nature Preserve kiosk was leaning backwards and needed attention. I told him I would assist however I could. He said he needed to go back and further examine the problem, formulate a plan, and would then get back with me. A short time passed and he informed me the four cedar posts were rotting away where they went underground. He then explained he would need to fabricate brackets to attach to the bottoms of each post with rebar welded to the brackets that would extend downward to secure the posts in new concrete footers. Keith knows me well enough to understand my availability in May is limited due to me being at the Indianapolis 500 track each day of track activity. So we set a Saturday date in late April. That time came around and I had a family emergency medical situation come up, so we rescheduled for Sunday May 12, Mother's Day.

We met at the Buddha property at 10 AM. Keith came loaded with all the tools and materials, I was just there for the "grunt labor". We began on the rear left post, using a farm jack to support the kiosk and remove the weight from the post. We then used a spade and post-hole digger to dig out around and under the post to a depth of about 24 inches. This was the bulk of the work. Keith then used a battery-powered sawzall to cut off what was left of the rotted post about two inches above ground level and removed the rotted stump. We then clamped and attached the bracket to the post with high-strength lag screws. Next we mixed the concrete in a tub (one 80-lb bag at a time) and filled the hole, taking approximately three bags to bring the concrete up to ground level. We then repeated the whole process on the rear right post. Keith wanted to let the concrete in the two rear holes cure for a couple hours before removing the two jacks. Thus we drove into Bedford to eat lunch and pick up more bags of concrete. We then returned to Buddha

and did the two front posts. Due to the amount of rotting, some posts were easier to repair than others. Counting a two hour "lunch" break, this entire process took us two old guys about eight hours. We ended up mixing eleven bags of concrete to fill the four post hole footers, with one bag left over.

The IKC learned a valuable lesson here. No more structures with wood posts (cedar or otherwise) buried in the ground on future projects. While cedar is rot resistant, even it will rot when buried in the ground, if the ground is not well drained. The Buddha kiosk posts lasted nearly 20 years, but the rest of the kiosk probably has a lifespan of at least



Left photo is the Buddha kiosk in early April with a significant lean due to the posts rotting off in the ground. Right photo is after the repairs on May 12th.

photos courtesy Keith Dunlap

twice that, so the decision to bury the posts was a poor one and should not be repeated.

Two years ago Bambi Dunlap, Mel Litson, and myself repainted the kiosk. It too was a long, hard day's work, but was rewarding to give back. Keeping our education structures in good shape matters, as it is often the first thing you see when you enter one of our properties. It shows prospective members and donors our level of commitment to what we do and why they should support the organization.

SPRING STEWARDSHIP: BETTER TOGETHER

by Carla Striegel-Winner

There is something about getting together and ridding our fine preserves of invasive plants that is just so satisfying...

Lowry Karst Preserve

We have the greatest volunteers ever. Jasper Beavers reached out to me wanting advice on when garlic mustard would need pulled at Lowry Preserve, where he is Property Manager. I suggested a time frame and said, "Let me know and we will promo it for you!!" He chose a Sunday with only a few days notice... the only day he could get free due to other obligations. I had "volunteered" Keith Dunlap, knowing that Keith will always be there for resource work when asked. I know that both Jasper and Keith thought surely they might be the only two to show up on that day. And let me tell you from experience... as satisfying as it is to get rid of the stuff and see those pulled plants pile up in the form of filled trash bags... many hands make light work... and



Adam Stanich, Adrienne Able, Jasper Beavers, Annie LeClair, Mark O'Daniel, and Jon Lawson.

photo courtesy Keith Dunlap

it is a beast to do on one's own. We did a post on our FB page, much bolstered by Jasper sharing that out to the grottos and his own page, and I mentioned it at the Symposium, and lo and behold, you all came through for Jasper! He was so pleased... "The whole back of my Explorer was stuffed full... we covered the entire property which Keith said was a first."

Orangeville Rise Nature Preserve

The IKC and Orange County Invasives Partnership (OCIP) co-hosted a Weed Wrangle at Orangeville Rise. It was the first time I had tried a week night event there. We had a great crew that



photo courtesy Carla Striegel-Winner

Keith Dunlap, Kaila Laplace, Carla Striegel-Winner, Emily Finch, Gwyn Zimmer, and Wes Roeder.

not only included a couple of my regulars (Wes Roeder and Keith Dunlap), but I was excited to have Orange County's new invasive species specialist Emily Finch attend as well as our regional representative for State of Indiana Cooperative Invasive Management (SICIM), Kaila Laplace, and Lost River Watershed Coordinator, Emily Russell, Orange County SWCD Director Missy Elgin, and local NRCS technician Gwyn Zimmer as well! It is great for us to partner with these other agencies to do good in our local communities! Our crew managed to pull 130 pounds of invasive garlic mustard and we dug up at least 15 invasive poison hemlock plants and a dozen bunches of Star of Bethlehem. To make the task even sweeter, our pull was an official Weed Wrangle, and by doing events at Orangeville Rise and at nearby Wesley Chapel Gulf, OCIP was able to get a grant from SICIM for \$2000 to help them educate residents and battle invasives throughout the county.

I so appreciate everyone coming out for the pull! We are seeing less bulk now after several years of removal on this preserve. This makes pulling a bit more tedious... but well worth it to see all the native plants coming through in our wooded floodplain.

Wayne Cave Preserve

Property Manager Danyele Green and her husband Tymme Laun hit the only known area on the preserve for a garlic mustard pull of mostly the first-year rosettes, which are a lot more tedious to pull. They ended up with two full garbage bags, which will certainly help curb them from spreading farther into the preserve.



Are we ever going to get all the invasives? Does it even matter that we try? A great question, and the answer is that no we will not get all the invasives, but yes it does matter! At our preserves, we can keep the worst invasive plants from the most sensitive parts of our properties, allowing the native plants... and ecosystem... to survive and even to thrive. While we spend many hours man-

aging our properties, often alone, garlic mustard pulls are something most volunteers can do without training and are a wonderful way to accomplish a task together, get folks out to our preserves, and share our love of the outdoors. So yes, it does matter and we are making a difference!!

For more information about invasives in Indiana go to: www.sicim.info.

CAVERS CAN HELP...

It's as simple as watching where you walk to prevent garlic mustard from spreading in summer and fall

Watching where you walk when hiking to cave entrances this summer and fall can help reduce the spread of invasive garlic mustard. It is spread by dozens of tiny black seeds that basically pop out of each long, slender seed pod (called siliques). One plant can have a dozen siliques... so that's a great mechanism for the plant to reproduce! The seeds are on plants that are just the perfect height for large mammals like ourselves to walk by and release them. Even worse, those seeds are viable for up to ten years. This is why it can take many years to eradicate a population! In addition to spreading out the area of the infestation, they can easily hitch a ride in folds of clothing and in and on shoes.



photo courtesy Richard Gardner, Bugwood.org

What cavers can do?

- Know how to ID invasive garlic mustard – especially what it looks like in summer and fall (great resource here: [bugwoodcloud.org/mura/mipn/assets/File/Wisconsin DNR Garlic Mustard.pdf](http://bugwoodcloud.org/mura/mipn/assets/File/Wisconsin%20DNR%20Garlic%20Mustard.pdf))
- Avoid touching any garlic mustard plants that are ready to release seeds (summer and fall)
- If you realize you have walked through a patch and may have seeds on you, try to shake and brush out your clothing at the infested site before spreading it to the cave entrance or elsewhere.
- If the infestation is on the trail, near the cave, or in another ecologically sensitive area, take a photo, save the coordinates, report it to the landowner, and ask permission to come back in the spring to pull.

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- Also note that Wyandotte Cave and Little Wyandotte Cave in Crawford County are now open through Labor Day for guided tours on Friday, Saturday, and Sunday. The two-hour walking tour into “Big” Wyandotte Cave leaves at 11 AM and 1 PM EDT and costs \$18 for adults and \$9 for kids ages 6-11. Tickets are only available at the on-site ticket booth and reservations are not needed. If you have never been in Big Wyandotte, it is very much worth your while. The huge underground “Monument Mountain” is a highlight of the 1.5-mile trip through the deeper sections of the cave (see this issue’s cover). Rare formations called helicitities, plus gypsum, epsomite, and prehistoric flint quarries add variety. “We are looking forward to introducing a new generation of visitors to this unique cave system and its features while remembering the significance of this site as a winter hibernating location for the federally endangered Indiana bat,” said Terry Coleman, Director of Indiana State Parks. If you do not have time or physicality for the long

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ORIENTATION TO CAVE RESCUE TRAINING RECAP

by *Laura Demarest*

On May 18-19th, the Indiana Karst Conservancy hosted a two-day Orientation to Cave Rescue (OCR) seminar for a full class of 30 students. This class was coordinated by representatives of the National Cave Rescue Commission (NCRC), a volunteer organization under the National Speleological Society, that offers cave rescue instruction. The OCR class requires no training prerequisites for students, making it an ideal introduction for anyone who may find themselves involved with a “call-out” rescue, whether as a caver (experienced or novice), emergency first-responder, property manager, or trip leader. As an organization managing cave and karst properties, the IKC has a vested interest in promoting safety and accident prevention, as well as emergency preparedness should an incident occur.

The first day of this class took place at the Lawrence County Independent School and consisted of a series of quick, intensive classroom lessons on a variety of rescue-related topics, including medical assessments and patient care, Incident Command System and how it applies to cave rescue management, hypothermia prevention and treatment, patient packaging for evacuation, considerations for extreme situations (crack & crevice entrapment, water problems, etc.), pre-planning for an incident, how the cave environment influences rescue proceedings, in-cave communications, media interaction, cave search tactics, and more. Following the classroom sessions, the students were invited outside for some demonstrations and hands-on practice involving how to package a patient in the “litter”, as well as techniques for patient maneuvering through the playground “cave” obstacle course. The NCRC offers a variety of more advanced classes that delve more deeply into these topics and many more (visit www.NCRC.info for more details). Organiza-

tions such as NCRC and the Indiana Cave Rescue Scholarships group may have funding available to help offset costs for participants.

Instructors for the weekend’s training included NCRC Central Region Coordinator Stephen Bishop, Jessica Deli (former NCRC Central Region Coordinator), Laura Demarest, Anmar Mirza (former NCRC National Coordinator), and Don Paquette (former NCRC National Coordinator). Each NCRC Instructor must receive approval from the NCRC Board of Regional Coordinators after having completed an estimated 400+ hours of intensive training that includes NCRC week-long levels 1-3, and the Instructor Qualification class and final test. Several NCRC ‘specialists’ also assisted with the class including Chris Bauer, Kate Coleman, Kelly McDermott, Cris Seuell, Stephanie Suen, and Lindsey VanDeMark. These specialists have completed NCRC Level 1 week-long (or higher) and are working to further develop their skills and possibly become future NCRC Instructors. All NCRC Instructors and specialists are volunteers, which helps to greatly reduce the costs of these trainings. The students for this class



were a diverse group of mostly cavers and some emergency personnel from all over Indiana as well as some traveling from Illinois, Michigan, Kentucky, Ohio, Missouri, and Tennessee.

Day two of this training was perhaps the most exciting: a full-scale mock rescue scenario in Sullivan Cave! The Instructors discussed and pre-planned a plausible rescue scenario the night before and arrived early on Sunday to go into the cave for an educational game of rescue hide-and-seek. Students and NCRC specialists arrived onsite shortly after, having no clues regarding the pretend incident other than a worried friend reporting two cavers overdue.



Students and specialists had to determine ways in which to best organize themselves into roles and task forces, figure out how to assess the situation underground, manage equipment and personnel, and set up communication between the surface and the patient(s). For this mock scenario, one caver (Laura Demarest) had taken a fall down a crevice on the way to the Popcorn Crawl, resulting in an injury that would require being carried out in a litter. Her caving friend, Danyelee Green, had gotten lost near the Merry-Go-Round while trying to exit the cave for help; a great reminder to always go caving with 3-4 people. She was given a medical assessment and escorted to the surface. Laura, however, required the full evacuation service, with students

working in teams to pass her through some tight and awkward areas and then carry her through the Backbreaker toward the entrance. Careful coordination took place to ensure the mock patient was not injured for real during the training, and NCRC Instructors silently observed or gave occasional feedback to keep the operation running smoothly and safely for all.

The class gathered at the cave entrance before dismissal to debrief so that all would understand the full scenario and the Instructors could provide feedback and give each student an OCR certification card. It can be said that “experience is the best teacher” and students attested to many eye-opening realizations as they worked to overcome challenges in a dynamic,

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IKC-RELATED CAVES NEAR CAVE CAPERS

by Carla Striegel-Winner

Heading to Indiana’s best known caving event, Cave Capers, this year? We are pleased as punch that more than ten caves near Camp Rivervale are either owned by or have access managed by the IKC! We are sure there will be led trips, as well as self-guided options for many of these caves. Now would be a great time to do a little research on which caves you might want to visit. Then at Cave Capers check out the cave trip area for caving info (and waiver signing) and see our booth for directions, surface trail maps, and info on our Cave Patron and Access Managers for your future trips. Some of the cave properties include:

Buddha Karst Nature Preserve (6 minutes, 3 miles) – IKC owns and manages access for Buddha Cave. Also a very nice one-mile loop hiking trail on the preserve.

Shawnee Karst Preserve (7 minutes, 4 miles) – IKC owns and manages access for IKC Entrance of the Upper Twin Section of Shawnee Cave System. Also multiple hiking trails (2+ miles) on the preserve.

Spring Mill State Park (7 minutes, 4 miles) – cave access management by the IKC for the Donaldson-Bronson section of the Shawnee Cave System. Many hiking trails, entrance fee.

Cave River Valley (22 minutes, 12 miles) – cave access management by the IKC for Endless and River caves (this satellite property is managed by Spring Mill State Park). Some hiking trails.



photo courtesy Keith Duntlap

Shiloh Cave (27 minutes, 16 miles) – access management by the IKC for the private landowner.

Henderson Park (30 minutes, 20 miles) – cave access management by IKC for Waterfall, Middle, and Mill caves (property owned by the City of Salem with conservation management done by The Nature Conservancy). Nice 2+ mile loop hiking trail.

Sullivan Cave Preserve (35 minutes, 30 miles) – IKC owns and manages access for Sullivan Cave. Picnic tables and port-a-john available.

Suicide Cave (37 minutes, 30 miles) – access management by the IKC for the private landowner.

Are you thinking of visiting another time? Please see page 2 of this *IKC Update* for Cave Patron contact information. Or visit ikc.caves.org/ikc-managed-nature-preserves on the IKC website.

A LOOK BACK AT INDIANA KARST

by John M. Benton

Richard Owen's Geological Reconnaissance of Indiana, 1859-1860

The first geological survey of Indiana was done by David Dale Owen (of New Harmony, Indiana) in 1837 and 1838. In 1859 a second field survey was approved and \$5,000 was appropriated for field expenses and salaries. Once again, David Owen was asked to head the survey. He agreed, on the condition that the field work would be done by his younger brother, Richard Owen (1810-1890) who had just returned to New Harmony after teaching in Tennessee for nine years. At that time, David Owen was occupied with the completion of reports on the geology of both Arkansas and Kentucky, states he had served as the State Geologist. However, David Owen passed away in November 1860, after the field work for the second survey of Indiana geology had been completed by his brother. Thereafter, in 1862, Richard Owen was appointed the State Geologist for Indiana.

The objectives of the survey were several. Richard Owen was to conduct a full survey of the Indiana coal fields, to analyze the soils of the State, investigate the cause of milk-sickness, possible sources of iron ore were to be sought, and examine the gold region of Brown County. In addition, the site for a new state prison at Michigan City was examined, as were harbor facilities at the request of the governor. Finally, a collection of rocks, minerals, and fossils was to be obtained and later labeled and arranged at the State House. All of this was to be accomplished in 18 months, for no more than the allotted \$5,000 with "a strict regard for the economy." Richard Owen fulfilled

virtually all of these objectives with the exception of finding the source of milk-sickness (it was later determined to be the poisonous snake root plant, when eaten by cows).

For transportation, the field party consisted of a horse-drawn wagon, two mules, two horses, a buggy and a carriage, most of which belonged to David Owen, who rented the equip-

ment and animals to the State for the field work. David Owen charged the State \$1.50 a day for the rental on the equipment and animals. The few railroads that existed in Indiana at the time (1859-1860) were also used where possible for travel. Monthly food costs ranged from a low of \$6.65 for food for field party, and \$5.95 cost for food for animals for a 10-day period, to a high of \$18.43 cost for food for field party and \$18.65 for the cost for food for animals for a full 31-day period. The ability of the geology team to move about the



Richard Owen (1810–1890)

State by train and road was surprisingly good (they visited 85 of Indiana's 92 counties during the 18 month study). It is also clear that care of vehicles and animals was a constant source of trouble and expense. Shoeing costs for the animals were over \$5.00 for one of the months. Ferry crossings and toll roads encountered during their travels ranged from 4 cents to a high of 60 cents per use.*

From his 1862 report, Richard Owen spent several days studying the Lost River region in Orange County. He visited with a Mr. Elrod (believed to be where Elrods Cave got its name). Owen wrote:

Leaving Orleans, after examining some specimens collected by Mr. Elrod, Mr. Braun and

* Most of the information in the first three paragraphs was extracted from Richard Owen's field notebook now in the manuscript collection at the Indiana State Library in Indianapolis, and compiled by N. Gary Lane, IU Department of Geology, and published in the *Proceedings of the Indiana Academy of Science* Vol 96 (1986), pages 353-359. Professor Lane was born in French Lick Indiana in 1930; he was an IU Professor of Geology and Paleontology 1973-1994; passing in 2006.

others, we reached the farm of Mr. Owen Lindley, (some four miles south - west from town) who politely furnished us some particulars. This disappearance of Lost River is in section 11, township 2 north, range 1 west; and the bed of the river, here 40 to 50 feet wide, was dry at our visit, although sometimes it is over its banks eight or ten feet, as shown on the trees... Mr. Lindley informs us there is a still deeper "Gulf", with some water constantly running and disappearing in a cavity, the depth of which has never been ascertained; this is in section 9 of the same township and range as above...

This gulf, shown on the 1951 French Lick topo quadrangle map is labeled "Elrod Gulf" but is now commonly called Wesley Chapel Gulf, owned by the Hoosier National Forest.



Lost River (Orange County) lithograph

sketch by Richard Owen from report

Owen also mentions the unique cavefish that had been found in the subterranean waters in the area, "We were informed that sightless fishes had been found in the subterranean waters of these localities..." although he did not report actually seeing any of the fish himself on the visits.

Also in Orange County, just east of West Baden, Owen refers to "... a nitre cave near here about 50 feet lower than these quarries, section 35, township 2 north, range 2 west." It would be interesting to learn what possible saltpeter cave this may have been? A search in the Indiana Cave Survey database reveals there is no record of any caves in section 35.

All in all, Richard Owen's 1862 report gives a well-done and exhaustive study of what he set out to do. It should also be noted that in addition to Owen being a geologist, he also held a medical doctor degree (as did his geologist brother David Dale). Richard Owen later became a professor at IU for fifteen years (1864-1879) and also briefly held the position of the first President of Purdue University while it was being formed. The third geological survey funded by the State of Indiana was in 1869 when E. T. Cox was appointed the State Geologist.

On this same 18-month adventure, Owen also visited Shawnee Cave (current day Spring Mill State Park) and Wyandotte Cave in Crawford County. I am planning future articles about those visits.

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underground learning environment.

This is the second OCR seminar the IKC has hosted, with much positive feedback received. Rescue training is currently in high demand in this region, evidenced by the class filling up in less than 24 hours after registration opened! The IKC would like to thank participants, instructors, and specialists for taking the time to make our caving community stronger and safer! Many thanks also to Lawrence County Independent Schools who allowed us to host the class in their facility, and to IKC Directors Joe Kinder, Paul Uglum, Keith Dunlap, and Carla Striegel-Winner who helped prepare the Sullivan Cave Preserve for camping and provided additional IKC information for participants. Special thanks to the owners of Bar Keepers Friend who made a generous donation that allowed the IKC to offer registration discounts for members, and full



photo courtesy Laura Demarest

scholarships for four licensed First Responders. Rescue trainings such as OCR provide valuable opportunities for the cave community and local rescue personnel to work together to build trust and familiarity before needing to work together in the event of a real rescue. However, we can all agree that the best rescues are the ones that are prevented! Stay safe out there, folks!

ANNUAL PROPERTY MANAGER/CAVE PATRON REPORTS

Each year at the Annual Business meeting, the IKC Property Managers and Cave Patrons are asked to present a verbal summary and submit a written report describing the prior calendar year's activities and incidents, and to make any future goals and recommendations needing implemented. The following is a compilation of their 2023 reports:

Buddha Property Report (Keith Dunlap)

This was the IKC's 22nd year of ownership of the Buddha Karst Nature Preserve and we continue our long-term stewardship projects, but otherwise we are in "maintenance mode".

The parking area and perimeter trail were mowed two times (early June, and early October). Some trimming along the trails was also done.

No invasive treatments were completed in 2023.

The area where we culled the over-crowded oaks in 2019 looks really good with the crowns spreading out. There are some other areas that need selective thinning as the trees become larger.

The planted trees are hitting their stride everywhere on the property.

There is a very large Chinkapin oak on the north side of the property that fell across the perimeter trail in 2021 and will eventually need to be removed from the trail, although currently hikers can pass under the tree trunk.

A quarterly IKC preserve tour (BIG Day bird hike) was conducted at the property on Oct 14th with approximately two dozen attendees.

There were no major management problems or concerns encountered during 2023.

2024 activities I hope to accomplish:

- Stabilize the kiosk. Two of the supports are sinking (or rotting)
- Clean-up and paint the parking lot gate.
- Continue mowing the trails.
- Continue working on the grapevines (area near the Buddha Cave entrance).
- Continue bushy invasive treatments as necessary (herbicide treatment).
- Continue addressing the Stiltgrass on the trails (herbicide treatment).
- Remove the fallen oak tree off the trail (once it blocks the trail).

- Plan for the removal of the dying Ash tree by the parking lot gate.

Buddha Cave Patron Report (Jeff Cody)

In 2023, Buddha Cave saw a total of nine trips. These trips had a collective 36 people who filled out waivers. This is the same number of trips we saw in 2022, but with a few less people in 2023. One trip for which I had collected waivers did not go due to a threat of rain back on March 25. About a month later on April 23, Justin Thompson reported going in after a significant rainfall and did not notice much change in the water level compared to going in dry times. A few days after that trip Jasper Beavers led a group of two to collect water samples. Although Cave Capers was held near Corydon, Bill Baus led a trip on the Sunday of Capers (Aug 6) for those heading back north to go home. Most trips were smaller groups with the exception of a Feb 25 trip of 10 led by Charlie Workman. All trips were spread out throughout the year with a notable gap of no trips in the dry fall months. All trips were arranged through me this year. No one reported anything unusual or any issues. I always ask each leader to take note of any excessive trash or graffiti and ruts in the parking area. I always get a couple requests each year from people who are not aware of the nature of the cave or not aware of a ladder needed at the entrance, or not aware of the need for vertical gear. Everything appears okay with the cave.

Buddha Trips 2023:

- Feb 25 – Charlie Workman party of 10
- March 21 – Jasper Beavers party of 4
- April 23 – Justin Thompson party of 2
- April 28 – Jasper Beavers party of 2
- April 30 – Dean Wiseman party of 2
- Aug 6 – Bill Baus party of 3
- Aug 26 – Charlie Workman party of 4
- Nov 25 – Jasper Beavers party of 7
- Dec 4 – Justin Thompson party of 2

Lowry Property Report (Jasper Beavers)

I was officially appointed as the Lowry Karst Preserve Property Manager/Cave Patron at the March 2023 IKC Board meeting. Since then, I have visited the property about once per month to check



on things. On most of the visits, I would make an effort to pick up broken glass at the entrance and random trash on the property.

On April 29th, the IKC hosted an outing/tour of the property followed by a volunteer workday to pull garlic mustard. We had ten volunteers who pulled seven large contractor bags full of the invasive.

On June 28th, Keith Dunlap applied invasive treatment at the property, covering almost all of the property. He worked 5 hours spraying five backpack tanks (~20 gallons) of broadleaf herbicide (Crossbow). Target species were multiflora rose (45%), bush honeysuckle (45%), autumn olive (5%), misc other (5%). This is the fourth year of invasive treatment and significant progress has been made. Now mostly small, new seedling plants are being found. It was also observed the storms from the past week brought down some limbs and two large trees in the woods. The largest was a large maple with a rotten trunk that fell parallel to the interior lane opposite the trailhead down to the cave. One small limb was lopped as it protruded into the lane. The maple took down several smaller trees too.

On August 29th, Keith Dunlap spent about 4-1/2 hours spraying Japanese stiltgrass with Clethodim (a grass specific herbicide). It was perfect weather for the treatment activity. Approximately 15 gallons of spray mixture was applied. Keith got over all of the property south of the interior lane. He did not cover the area north of the lane or down by the cave because he had not seen stiltgrass there previously.

On Christmas Eve at about 9 PM the neighbor called me complaining of seeing someone enter the property. I immediately went to check on the property to see what was going on. When I got there, the gate was still locked, but it had been lifted from its hinges. There was a person there camping with a fire blazing. I had met the person once before. I asked what was going on. Since I was alone, I tried to keep the conversation light and wished him a merry Christmas. I returned two days later to see if maybe the person was homeless and was living on the property, but he had cleared out. I informed Matt Selig and Keith Dunlap of my interaction and was advised to tell the person he isn't welcome back due to the neighbor complaints, visiting and camping without approval, and damaging the gate. I made it a point to go to the property the following few weekends to see if he had returned, but he was never there. On Febru-

ary 7th (2024) the person reached out to me through Facebook and said he wanted to camp and asked for the gate code. I told him that he was not welcome to visit the property and gave him the reasons why. He was a little frustrated, but quickly dropped the subject and moved on to asking me if I had been to some other caves he knows of in the area.

Lowry Cave Patron Report (Jasper Beavers)

Including those who just went into the cave's entrance room during the IKC's April 29 outing/workday, there were a total of six cave trips with a combined total of 30 people.

Orangeville Rise Report (Carla Striegel-Winner)

Year five as Property Manager was relatively calm. We had a couple of interesting turns of events, but for the most part, smooth sailing!

- **Property Visits** – I continue to visit about once a month. It has worked great to pick my uncle up at the First Chance Center Day Program in Paoli and he and I then hang out and get a snack at Lost River Market before heading to the Rise. He walks the roadside areas picking up litter while I weed-eat in season, then if no weed-eating is to be done, I pick up trash as well. We always have a few pieces of litter, much of it gets recycled. We have come to enjoy these monthly visits together.
- **Symposium Tour** – Orangeville Rise was once again a stop on the April 2023 tour, this one led by Matt Selig. There were 18 on the tour, an amazing group of very knowledgeable folks!
- **National Natural Landmark Sign** – Wow! This was interesting. After a recent spring flood I stopped by and after taking a nice photo of the heavy bronze plaque, I realized it was completely loose from its limestone base! I left it there, hoping no one would steal it, and took my photo to a local sign shop where they created an amazing replica with a corrugated plastic backing. I swapped out the signs and then travelled with the bronze plaque in my trunk until handing it over to Keith Dunlap. The replica plastic sign lasted long enough for the first attempt of Keith and me to drill out the epoxy from the holes in the base and put new epoxy in but it turned out we did not have the appropriate tools. On the second attempt, the epoxy hardened too quickly on us! By the third and final attempt, the plastic sign was no



longer a beautiful replica, luckily the third time was the charm and after once again drilling out the epoxy from the second attempt, it worked and is as good as new!

- **Scientific Research Permit** – We finished year two of ten on Indiana Geological and Water Survey (IGWS) having a permit to collect a sample from Orangeville Rise once during dry season. Tracy Branam and Sam Frushour have been doing the sampling and in Tracy’s report for 2023, he says 2024 will be his last year of sampling for this project. He mentioned they are training another staff member, McKailey Sabaj, to take over the springs monitoring. Tracy also noted that they purchased new equipment for nitrate detection which led them to realize the 2019-2020 nitrate counts were incorrect from their sampling. Tracy also shared a couple of links to papers: Part 1 (Sarah Burgess’s thesis work) www.mdpi.com/2073-4441/15/19/3410; and Part 2 (Tracy’s grant project) www.mdpi.com/2073-4441/15/19/3436. Additionally, the IGWS springs database is available here: igws.indiana.edu/research/water and click on “Springs Database.”
- **Invasives Management** – I continued to work on the invasive plants at the property, and appreciate Keith meeting me once a year to help spray multiflora rose (treatment for this is working well!), stiltgrass, and air potato. I have sprayed and pulled winter creeper with limited success and our garlic mustard is not as bad as it had been. No volunteer workday was scheduled in 2023, but I plan one for 2024.
- **Advocacy** – I continued to correspond with local folks and also with agencies such as the Indiana Division of Nature Preserves, Hoosier National Forest, and the Lost River Watershed Coordinator. I reached out to the HNF land acquisition person to get a better idea of how land is acquired, as I think about how the Rise might become a better corridor to other protected lands. I was also approached this year via email from an individual who stated he bought the neighboring property that has the old Orangeville Store on it. I was able to chat with him for 30 minutes or so. He marked the line and also cleaned up some of the vegetation on his side of the line. He had commercial plans for the property which may have since changed.

There is an intermittent stream of visitors that stop

by the Rise to view it – locals and tourists alike.

2024 Goals – Garlic Mustard Pull (April 25) - this will be in partnership with the Orange County Invasives Partnership (OCIP) and will be an official Indiana “Weed Wrangle”. I also plan to continue monthly visits, invasives management, and continue advocating for the property.

Robinson Ladder Property (John Benton)

May 11, 2023 – Wyatt Williams, Indiana Department of Natural Resources, met at property with Carla Striegel-Winner and Keith Dunlap to look for rare and endangered plants. They looked primarily at ledges above the Blue River that border the property on the east side. Several rare plants were found including Allegheny stonecrop and southern dewberry, although a complete list has not been provided to date by Williams.

May 11 – Keith Dunlap did a fungicide treatment of the chestnut trees in the plantation in the upper field. He then installed two T-posts along with white PVC covers over the T-posts at the northwest corner of the Young tract and at the next “spike” to the east of the northwest corner. There has been some recent survey work done on the property to the north and the railroad spikes called out in the legal description of the Young parcel were located and flagged for reference, thus making more visible and longer lasting corner markers.

June 2 – Jamie Winner mowed the drive lanes, camping areas, and around the barn in the upper field.

July 15 – Jamie Winner mowed the usual areas at RLCP in prep for upcoming Cave Capers to be held nearby in Crawford County.

August 11 – IKC member and bat biologist Goni Iskeli conducted a surface study in the evening looking for bat activity. There were more bat species reported at RLCP than any of the IKC properties. Twenty-nine bat detections were heard in about one hour of listening. A detailed report was not provided.

October 6 – Jamie Winner mowed the usual areas at RLCP with his tractor and mower.

February 6, 2024 – Five ESI (Environmental Solutions & Innovations) employees visited RLC for the biennial bat census. Tom Sollman, IKC, stayed in the dome room area and Keith Dunlap, IKC, remained outside at the entrance. Dunlap has not received the final data, but there were no



clusters of Indiana bats observed. A few other species were noted.

Future – The wildlife pond is holding water and appears stable. Continue to mow drive and camping areas as needed. Three cuttings a year seem to work well. Ongoing treatment of invasives as needed, mainly autumn olive and Tree of Heaven (seedlings keep popping up). The entry drive needs to be watched for low hanging limbs which may need removal.

Thanks to all volunteers especially Jamie, Carla, Keith, and Bambi Dunlap for using their equipment at RLCP. It is appreciated! A few hand tools have been stored in the barn.

RL Cave Patron Report (John Benton)

June 11, 2023 – Eight cavers visited the cave. Trip leader was Rhonda Matteson. Cavers were from Indiana and Ohio. Ages ranged from 21 to 66.

August 5-6 – In conjunction with Cave Capers, there were at least two groups of cavers who visited the cave.

Robinson Ladder Cave is closed for visitation each year due to hibernating bats from September 1 to April 30.

Shawnee Property Report (Keith Dunlap)

This was the IKC's 12th full year of ownership of the original 50-acre tract and the 3rd full year of owning the expanded (17 acre) property.

All of the trails were mowed in early July and some of the trails in the sunnier areas were mowed later in the fall. Several downed trees were removed from the hiking trails.

The open prairie on the 17-acre tract was mowed in early March in lieu of prescribed burning. Also part of the open field near the "4000" driveway gate. The mowing in these fields and the original prairie (mowed in the March of 2022) seemed to be effective in controlling many poplar and other saplings trying to take over, and stimulating the native warm-season grasses. Mowing these fields biennially will keep the field open to add biological diversity to the property.

In November, some of the cedars and pine trees that were trying to "take over" the smaller field by the "4000" driveway gate were removed. More work is needed here.

In April about 25 red oaks were planted near the

2022 chestnut planting. This pretty much "plants out" all the areas on the property. There may be a need to re-plant some of the areas planted the last three years as there seemed to be a lot of mortality.

There were a couple of requests that were granted permission to camp at Shawnee during this report year. The largest group was a weekend camp out by the Shallow Grotto. They completed some service projects that weekend.

The property hosted a field tour/hike on July 8th that included visiting the Upper Twin entrances on the property, then a pre-arranged trip over to the Spring Mill entrance to the cave. There were approximately two dozen participants.

There was some invasive treatment (three? backpack tanks) completed in July along the trails. Also several tanks of Stiltgrass treatment in August.

Two work days to continue cleaning out the shed were accomplished. The shed was also wired so an external generator could be "plugged in" for overhead lights and outlets.

No progress on the kiosk was made during 2023. We need to decide if the location should be moved to the new driveway.

The IKC entrance to Upper Twin continues to enlarge with each rain. The ravine feeding the entrance swallow hole continues to erode and need some stabilization attention.

There were no known management problems or concerns encountered during 2023.

2024 activities hoped to accomplish:

- Complete the kiosk.
- Mow the original prairie area in late February or early March in lieu of burning.
- Install a driveway gate on the 17-acre tract.
- Continue work to clean out the garage and replace the door frame for better security.
- Work on removing the trash pile near the apple tree.

Upper Twin Cave Patron Report (Dave Everton)

Per IKC policy, all trips to this cave are Patron-arranged. There were 5 trips (one less than last year) with a grand total of 31 cavers, with the Patron going once.

Most of the trips were taken at a time during which the IDNR allows access to their portion of



the cave, so cavers can make a through-trip entering the IKC entrance and exiting the Park's entrance between November 1 and May 15. That has been a fairly-popular thing to do, and the usual trip also includes entering the Bronson Cave entrance and exiting the Donaldson entrance for a double through-trip.

As always, thanks to the IKC for its continued support and preservation of and access to Upper Twin Cave!

Sullivan Property Report (Joe Kinder)

This was the IKC's 25th full year of ownership and we continue our long-term stewardship projects, but otherwise we are in "maintenance mode".

January 14th & 15th:

- I camped on the property while the ICEE group camped in the cave. I worked on splitting & stacking wood from the dead elm in the parking area I had recently cut down in late 2022. I picked up sticks and debris around the property as well as a small amount of trash from visitors.
- I restocked the porta-potty with TP.

February 24th – 26th:

- I camped at the property and worked on blowing and raking leaves as well as splitting and stacking wood with the help from Jay Jeskewich and Laura Demarest.

May 19th:

- Goni Iskali, Brad Barcom, Jay Jeskewich, and I arrived at the preserve with the goal to replace the old metal roof with new metal roofing recently donated and placed next to the shed by Keith Dunlap and Dave Everton. After further investigation, Brad and I determined the old roof appeared to be in pretty good shape, all it needed was to be cleaned off and nailed back to the frame. Prior to doing that we cut a few sections of treated lumber to better support the structure and provide additional wood to help nail down the old roof. We did just that and the only thing needed was a coating of paint on the shed and the roof to look as good as new.
- I was able to mow and trim the property during this visit.

June 20th:

- I reached out to Izzy's (porta-potty service company) and requested they service the por-

ta-potty soon and if they could do again prior to a larger group camping in late July. They replied and mentioned they would service the unit that week and prior to the late-July group of campers arriving.

July 3th:

- I was able to mow and trim the camping areas as well as along the drive, the entrance areas, and parking areas with the help from Dave Everton and Jay Jeskewich.
- There was a dead branch hanging over the parking lot, I was able to use my flexible hand saw by tossing a throw line over the branch, then I sawed and cut the branch down making it safer for our guests.
- I also replaced the locks on the cave gate and entrance gate (per Paul Uglum's request) and trimmed overhanging tree branches along the path down to the cave entrance.

July 24th:

- Keith messaged me and mentioned he was able to visit the property and use his mower to mow the overflow parking area as well as a flat spot near this area for an alternative camping spot. He also mowed a small area for a couple of cars to park near the entrance gate.
- Keith also reported that Bambi Dunlap sanded, primed, and painted the entrance drive lane gate. The dark green paint was free and donated/re-purposed from the Dubois County Solid Waste District. (It looks great!!!)
- Carla Striegel-Winner also messaged and mentioned she and others from the EMG helped with mowing the flat spots in the camping area and checked the porta-potty. Carla mentioned everything looked good for upcoming Wilderness First Aid campers. (Thanks so much to all of you for the hard work!)

September 30th:

- Goni Iskali dropped off paint I had previously purchased for painting the shed. I was then joined by Jeff Cody, Jay Jeskewich, and Jamison Kinder who worked on painting the shed with the "Middle Earth Brown" paint. (The shed looks so much better!)
- While they were painting, I mowed and trimmed the camping areas as well as the parking areas, along the gravel drive, and near the entrance.



- I installed a bat box that was recently donated on a beech tree facing south in between the parking area and the woodshed.

October 30th:

- I reached out to Izzy's (porta-potty service company) and requested they service the porta-potty. They replied and mentioned they would get to it this coming week.

November 4th:

- With the help from Carla and Keith, we scheduled an IKC field hike around the property. We discussed the history, an overview of stewardship activities such as woodland management, invasive species removal, and various watershed protection efforts.
- After the hike several volunteers stuck around and worked on various tasks including splitting and stacking wood, cleaning up debris piles near the camping areas, and installed a new road sign post where the 2088 address sign was installed. Also, Jamie Winner cut down the problematic large mutli-trunk poplar tree and dropped one of the trunks across the old driveway. (Thank you, Jamie!!!)
- I brought two leaf blowers and was able to work on blowing the leaves off the camping areas to help preserve the grass and reduce erosion.
- I restocked TP and we also picked up any trash noticed around the property. (It was a great day with much accomplished thanks to so many wonderful volunteers.)

Additional Notes:

- Several members and a few groups took advantage of the camping area and firewood over the past year. Paul Uglum, the Cave Patron, generally manages permission for camping. Locks are also serviced by Paul.
- There were no major management problems or concerns encountered during 2023.

2024 activities hoped to accomplished:

- Paint the roof on the "woodshed".
- Looking to install a gutter on the woodshed and utilize the rain barrel Danyele and Tymme donated so there can be some non-potable water on site for fire suppression, etc .
- Cut up, split, and stack downed tree near the old entrance.

- Work with Keith and volunteers to potentially construct an informational kiosk.
- Work with other IKC Property Managers and members to help me better understand forest management and dealing with invasives.
- Schedule workdays with volunteers to continue cleaning up the property and start working on constructing a loop trail.
- Perhaps spray the camping area again in August to control the Stilt grass infestation (*left this task in the report from Keith, will work with him on this*).
- Over-seed the camping area in the fall with a hardier grass seed (*left this task in the report from Keith, will work with him on this*).

Sullivan Cave Patron Report (Paul Uglum)

This report covers the cave activity and visitation from January through December, 2023. As in past years, people and groups with a wide range of caving experience and expectations have requested visits to Sullivan's cave. Groups experience levels range from very experienced cavers traveling upstream to the Rise, to various youth groups with limited or no wild cave experience making trips to the Mountain Room and back with an experienced caver as a guide. The ability to scale trips based on the experience level of the cavers makes Sullivan Cave ideal for groups with varied experience levels and larger groups.

For 2023 there were 60 trips with a total of 510 participants. Seventy-five percent of the trips were arranged through the IKC and most of the remainder through the BIG. The number of trips were less than last year, but the number of participants were about the same. The number of nights surface camping increased from 13 last year to 27 this year. Some of the nights camping did not involve caving in Sullivan. There was one request by a youth group to camp in the cave and this was per IKC rules denied.

There were additional inquires, that did not result in a trip. These were generally non-cavers who did not respond to replies after I explained that Sullivan was a wild cave and what the IKC rules are. Sullivan Cave has been known for some time and this leads to some unusual expectations and requests. There are many ways outside of the caving community that lead people to request trips. A quick internet search leads to such information that Sul-



livan Cave is a tourist attraction in Bloomfield, Indiana and it temporarily closed. Various other sites listing attractions, or caves (primarily commercial) also list Sullivan together with advice such as “The Sullivan Cave is not really a cave most people explore (unless you are an expert/advanced cave explore). The cave is beautiful, but it is not really deemed safe for exploring.” There are many short videos on YouTube ranging from trying to recover lost keys to trips to the rise. The article on caving in Sullivan Cave in Scouting Magazine has also led to more inquiries for youth groups. There of course are some listings that lead to the IKC and provide the correct contact information.

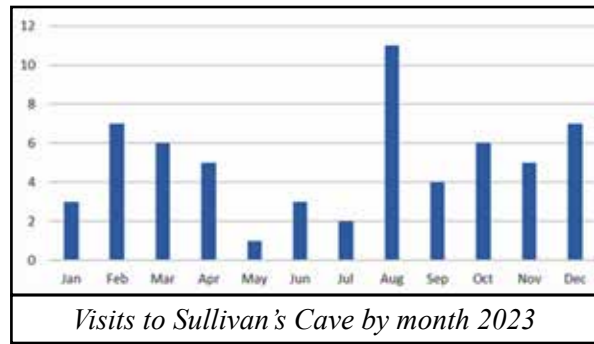
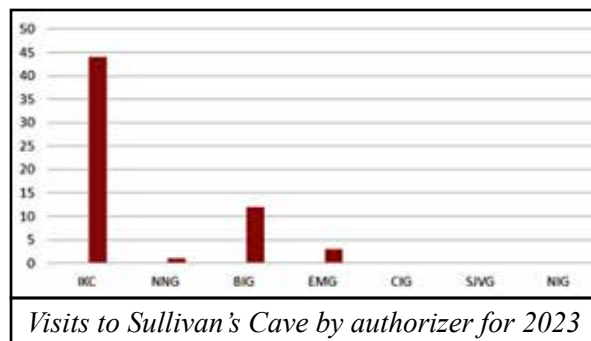
There is one approved research request which is being requested for a renewal. Dean Wiseman has a project to remap and update the Sullivan map. The project is currently on hold until the new BRIC survey gear arrives.

Most trips were requested via e-mail and keys mailed to the trip leader and returned by mail. I encourage anyone wanting to visit Sullivan Cave to plan ahead. Locks have been replaced as needed. The lock series has been changed to the SG series in late December.

Opportunities:

As in past years, an in-cave cleanup/restoration project would be a good idea. There are parts of the backbreaker that have far too much graffiti in some locations – this tends to encourage more damage in my estimation. It would also be good to have a general clean up. I have several volunteers, but need to identify information best practices in cave restoration.

Individuals and groups who are interested in wild caving but have little or no experience continue to contact the IKC Sullivan email seeing opportunities of go caving. It would be good to have an outreach program to direct them to area grottos and encourage them to become responsible cavers as well as recruit them to be involved with cave conservation.



Wayne Property Report (Danyeale Green)

2/20/23 – Applied for and received a Bioinventory grant from the Indiana Land Protection Alliance (ILPA) and Indiana Academy of Sciences (IAS) for a vascular plant study at the Wayne Preserve. This grant was awarded to Nic Garza and took place over multiple trips during different seasons in very specific locations culminating the end of 2023 in a fascinating report (posted on our website).

5/6/23 – Tracts 2 & 3: Spring Upland Wildlife Habitat Management Monitoring hike. This is part of the Environmental Quality Incentives Program (EQIP).

5/16/23 – Keith Dunlap met Wyatt and Danielle Williams – both ecologists with the DNR

5/28/23 – Informal workday with a few friends in town. Worked on Tracts 1 & 2 locating and eradicating invasive plants.

7/4/2023 – Purchased and installed new gate for driveway at the property with the help of several volunteers. Turned into an informal workday due to several people showing up.

7/8/2023 – Summer Upland Wildlife Habitat Management Monitoring hike. Started the fundraising campaign for the Connection (20 acre expansion property).

Throughout the summer – Several volunteers worked on the property connecting Wayne Cave Preserve and Richard Blenz Nature Preserve by removing old fencing, etc.

The Chasteen’s helped with mowing which was greatly appreciated! Cris and Mike regularly keep an eye out for any issues along with an entourage of friendly neighbors!

Invasives have been treated multiple times throughout the spring/summer/and fall. Thank you to all who donated your time and energy to this project. Every person we have had visit the property has made note of how great the forest looks!



Bat survey by Goni Iskali and Danielle Brady-Hafele included Wayne Cave Preserve. (see September 2023 *IKC Update*).

7/19/23 – Wayne Preserve and potential Connection property hike by Andrea Huntington and Gabby Robles from the Indiana Land Protection Alliance. (see article in Sept 2023 *IKC Update*).

8/11/23 – Wayne Preserve and future Connection property hike with Cliff Chapman, Stephanie Paine Crossin, and Jamison Hutchins from the Central Indiana Land Trust.

8/15/23 – Wayne Preserve and future Connection property hike with Alan Pursell, Cassie Hauswald, and CJ Jackson from Sam Shine Foundation.

9/24/23 – Pre-Board Meeting Workday and IKC Board meeting held at the Wayne Cave Preserve.

Many hands made light work of the huge tree that fell over the Wayne Cave entrance gate. A large group of volunteers met before the 9/24 meeting to uncover the gate to allow access to go caving and then the workday on 9/24 consisted of creating a large pile of firewood up at the fire pit!

9/27/23 – Property inspection for EQIP grant compliance with National Resources Conservation Service (NRCS) Daniel Welage and Allison Shoaf.

9/29/23 – Received a call from a neighboring landowner that another neighboring landowner had an unknown vehicle parked in their yard and they saw someone that appeared to be ginseng hunting (which is not permitted on any IKC properties). I called the local dispatch to see if a conservation officer could come out and not only did they come, they brought a scent detection dog who came in useful that day. Because the perpetrator's vehicle was parked in a yard, they waited a bit knowing the person would eventually come walking back to their car. End result, the perpetrator was found to have an outstanding arrest warrant in another county and was taken into custody... along with ginseng taken without a permit or permission from ours and likely surrounding property.

10/7/23 – Fall Upland Wildlife Habitat Management Monitoring Hike and Geology of Garrison Chapel Karst Area Field Trip open to the public. We had approximately 12 attendees attend with Matt Selig leading the event.

10/27/23 – Danyele met Lee Casebere to search for four-toed salamanders (*Hemidactylium Scuta-*

tum) in the sinkhole pond and to determine if the pond qualifies for habitat conducive to their life cycle. Sadly, no luck with finding any salamanders, nor finding the right type of habitat.

11/15/23 – Closed on the purchase of an additional 20 acres called The Connection bringing the Wayne Cave Preserve up to a little over 77 acres and connecting to the Richard Blenz Nature Preserve.

12/1/23 – Keith and Danyele met with District Forester, Ralph Unversaw, to review The Connection to finalize the Classified Forest (CF) application and determine if we might be able to apply for a future EQIP grant. It was determined it might be best to combine all land into one tract and apply for a Conservation Stewardship Program (CSP) over the entire tract once the EQIP activities are complete.

There were eight requests for camping. One neighbor complaint of fire not properly extinguished, which was dealt with and remedied in a timely manner.

I feel like if I were to start naming amazing volunteers who have spent considerable time working on the property, if I left anyone out it would crush me. You know who you are... and I thank you from the bottom of my heart.

Wayne Cave Patron Report (Dave Everton)

Last year saw the following numbers:

Eight separate cave trips with a grand total of 45 visitors (some were repeat visitors), all but one of which was facilitated by me (the BIG Liaison and Cave Patron). One trip was arranged by the Near Normal Grotto.

The Cave Patron did not visit the cave during 2023, although he did assist the Gate Master Keith Dunlap and his assistant Carla Striegel-Winner with the installation of a new and considerably lighter-weight gate on January 11.

As always, thanks to the IKC for its continued support and preservation of and access to Wayne Cave!

Shiloh Cave Patron Report (James Adams)

The Indiana Karst Conservancy has continued, with the permission of the landowner, to permit up to six recreational trips into Shiloh Cave for the general caving community per calendar year. Each trip is limited to 10 participants with three vehicles on the property. During 2023, all six of these trips were taken into the cave. In addition to



the recreational trips, a work day was coordinated with the Evansville Metropolitan Grotto (EMG) to install new emergency informational signage along the trail to the cave, re-locate the final leg of the trail to the entrance, and to generally clean-up any litter along the route and in Shiloh Cave. An abundance of ticks were also located during this visit and for several days after.

Two scheduled trips were cancelled by the requesting grottos. One was successfully re-scheduled, but the other was not, and I've had no further contact with them. These seven visits allowed 62 cavers to visit Shiloh Cave.

As Patron, I visited with the Quarry Manager on site on two occasions plus another employee of the quarry on a third visit. I also collected ticks on the work day. Our relationship remains solid and no negative issues were mentioned. In another more recent contact, the Quarry Manager reached out to the IKC and Keith Dunlap was able to provide him with an overlay map of the cave.

Suicide Cave Patron Report (Kevin Smith)

In 2023, Suicide Cave hosted seven documented trips with a total of 52 cavers from six different caving groups.

No significant issues were reported during these trips, except for some debris that needed removal around the cave gate for one of the excursions.

Recommendations include installing a lock with a longer shackle in the future for easier access and opening. Additionally, there are plans to investigate the lubrication of the gate hinges.

The Indiana Karst Conservancy (IKC) expresses gratitude for the opportunity to provide stewardship activities for this cave, thanks to the generosity of Charlie and Will Biel, owners and stewards of the Arrow Hill Ranch Forestry & Wildlife Sanctuary.

Henderson Park Access Coordinator (Scott Frosch)

Months of discussions spearheaded by IKC President Matt Selig, IKC Treasurer Keith Dunlap, and longtime IKC member Kevin Strunk bore fruit in the form of a signed and executed, three-way Memorandum of Understanding (MOU) between the City of Salem, The Nature Conservancy (TNC), and the Indiana Karst Conservancy (IKC). The central theme of this MOU is that the Henderson Park caves at Twin Creek Valley will remain

open for educational and recreational purposes. Only registered visitors are authorized to enter these caves. The City of Salem owns Henderson Park and Mayor Green understands the property is an important community resource. TNC holds a Conservation Easement for Henderson Park and takes an active interest in protecting and restoring the property. TNC understands the ecological value of karst features such as the caves and limestone barrens that are found at Henderson Park. As per the MOU, TNC graciously allows IKC to be the "gatekeeper" for educational and recreational caving at Henderson Park. For more information, including how to register your visit, see this IKC webpage: ikc.caves.org/henderson-park-cave-access.

In the first (partial) year of this agreement, IKC authorized six cave trips with a total of 48 cavers. No incidents or problems were reported. Most groups stuck to Mill Cave and those portions of Middle and Waterfall Caves "before" the waterfalls. That represents a nice day of horizontal caving suitable for most cavers. You really can't get past the big waterfalls in Middle and Waterfall Caves without long ladders and most groups arrive without ladders. Many trip leaders expressed thanks that their groups were able to go caving at Henderson Park.

Looking forward into 2024, several groups already have trips on the schedule. In February, the Indiana DNR sent a team of cave biologists to Henderson Park as part of their biennial bat count and cave biota survey. IKC Secretary Laura Demerest proudly supported that mission. On May 4, TNC and IKC will co-host a Discovery Day at Henderson Park featuring two guided nature hikes with extended stops at the entrance to Mill Cave. IKC Directors Carla Striegel-Winner and Scott Frosch are supporting that outreach event. IKC recently acquired a metal sign displaying information about cave access. That sign will soon be installed near the front lane gate.

Spring Mill SP Access Coordinator (Dave Everton)

I believe this will be the first report from the Access Coordinator to be included in an IKC meeting. In January 2014, the Indiana Karst Conservancy and the Indiana Department of Natural Resources signed a Letter of Understanding to create an Interim Cave Access Program to facilitate access to Bronson-Donaldson and Upper Twin Caves in Spring Mill State Park, and Endless and River

Continued on page 31...

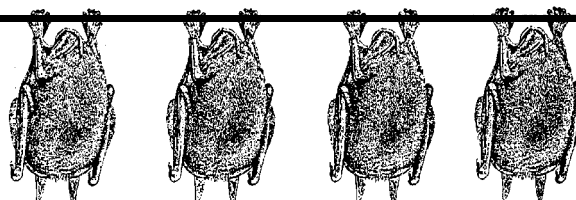
INDIANA KARST CONSERVANCY TREASURY REPORT

**Income/Expense Statement
From January 1, 2024 to March 31, 2024**

INCOME:		
Dues Apportionment and Residuals	1,161.25	
Donations - General	3,948.24	
Donations - Land Acquisition Fund	25,101.00	
General Investment Earnings	1,639.94	
		\$31,850.43
EXPENSES:		
IKC Update (printing, production, mailing)	337.19	
Education / Outreach	28.80	
Stewardship / Conservation	60.00	
ILPA dues	500.00	
Business (PayPal fees, renewal/election letters, etc)	708.86	
Transfers to/from restricted funds/other adjustments	25,101.00	
		(\$26,735.85)
NET OPERATING EXCESS (DEFICIT) THIS PERIOD:		<u><u>\$5,114.58</u></u>

**Balance Sheet
March 31, 2024**

ASSETS:		
Cash in Checking/CD/Brokerage accounts	742,197.45	
Wayne Cave Preserve ¹	(77.46 acres) 393,000.00	
Robinson Ladder Cave Preserve	(73.48 acres) 162,000.00	
Shawnee Karst Preserve	(67.78 acres) 175,000.00	
Buddha Karst Nature Preserve	(36.84 acres) 29,000.00	
Sullivan Cave Preserve	(30.00 acres) 88,000.00	
Lowry Karst Preserve	(6.66 acres) 33,000.00	
Orangeville Rise Nature Preserve	(3.01 acres) 7,000.00	
Indian Creek Conservation Easement (valued at \$1/acre)	13.16	
		<u><u>\$1,629,210.61</u></u>
FUNDS & OPERATING EXCESS:		
Land Acquisition Restricted Fund	80,202.38	
Deferred Dues Restricted Fund	(323 members) 8,385.00	
Stewardship Endowment Fund	(+8.36% for Q1) 128,667.82	
Gale & Ray Beach Endowment Fund	(+8.55% for Q1) 437,827.83	
Previous General Fund (total)	82,013.00	
Net Excess (Deficit) This Period	<u>5,114.58</u>	
Current General Fund (unrestricted)	87,127.58	
Current General Fund (committed)	4,490.92	
Real Estate Basis (excluding value of CE)	<u>887,000.00</u>	
Total Liabilities & Operating Excess		<u><u>\$1,629,210.61</u></u>



IKC ANNUAL BUSINESS MEETING MINUTES

Sunday, March 17th, 2024 – 1:00 PM EDT

Ellettsville Public Library – 600 West Temperance Square, Ellettsville, IN

Board Members Present:

Matt Selig, President
 Laura Demarest, Secretary
 Keith Dunlap, Treasurer
 Bruce Bowman*
 Jeff Cody
 Scott Frosch
 Danyele Green
 Dave Haun
 Rand Heazlitt*
 Goniela Iskali
 Joe Kinder
 Tom Sollman
 Carla Striegel-Winner
 Paul Uglum
 Richard Vernier

* represented by proxy (see below)

Board Members Absent:

None

Others Present: Bill Baus, Chris Donohue (pre-meeting), Bambi Dunlap, Andrea Huntington, Cris Seuell, Sue Vernier, and Jamie Winner.

Call to Order – IKC Exempt Purpose & Introductions

Meeting was called to order by Matt Selig at 1:00 PM EDT.

Submit Remaining Ballots to Tellers

It was requested that all ballots delivered in-person be submitted to the Tellers for final tabulation.

Acceptance of Proxies

Sue Vernier for Rand Heazlitt, Cris Seuell for Bruce Bowman.

Approval of Previous Minutes

Danyele Green made a motion to approve the minutes from the December meeting as published in the March 2024 IKC Update. Paul Uglum seconded. Unanimously approved.

E-mail Motions Since Last Meeting

Goni moved to accept the slate of candidates. Laura Demarest seconded. Unanimously approved on 2/5/24.

2024 Elections Results (Tellers' Report)

Three Officers, Four Directors (to be seated April 1, 2024) – Goni and Danyele served as 2024 Election Tellers and the results were as follows: Matt Selig (President), Keith Dunlap (Treasurer), Laura Demarest (Secretary); Bill Baus, Brandon Chasteen, Joe

Kinder and Cris Seuell were elected as Directors (3 year terms). Outgoing Directors were recognized and thanked: Dave Haun, Rand Heazlitt, and Paul Uglum.

Treasurer Report

Dunlap outlined the current financial status of the organization:

Assets:

Cash assets totaling	\$714,179.69
Land assets totaling	\$887,000.00
Total Assets	\$1,601,179.69

Dedicated Funds:

Land Acquisition Fund	\$67,006.38
Stewardship Endowment	\$125,611.02
Gale & Ray Beach Endowment	\$428,283.47
Deferred Dues	\$6,446.25
General (unrestricted) Fund	\$86,832.57
Total Dedicated Funds	\$714,179.69

Additional information on the Stewardship Fund and Beach Endowment investments was provided. Membership currently stands at 316 paid members, which is the highest total in IKC history and continues to grow.

990 Income Tax Return Status – Keith has not yet started the paperwork, but will do so after this meeting.

2024 Indiana Cave Symposium

Keith Dunlap moved to approve \$200 for Indiana Cave Symposium. Cris Seuell seconded. Unanimously approved.

Education/Outreach Committee

Carla asked if more IKC brochures could be printed. She recently received a quote for \$256 for another 500 brochures with other options checked for comparison prices. Minor edits may need to be made to include updated details about the Wayne Preserve expansion. *Carla moved to spend up to \$260 for the printing of 500 more brochures. Goni seconded. Unanimously approved.*

Carla gave a summary of upcoming events and provided a handout to show dates and information. The focus in 2024 will be on partnerships with other organizations that share overlapping goals and interests. Registration info is available on Eventbrite.

- April 20 – Pre-Symposium Lost River Karst Surface Tour (Orange County)
- May 4 – Discovery Day at Henderson Park with TNC
- June 30 – Wyandotte Cave Tour
- November 9 – Winter Tree ID Hike at Shawnee Karst Preserve



The Indiana Cave Symposium in partnership with the Indiana Cave Survey will be April 20th in Paoli. RS-VPs are requested.

Lawrence County SWCD organized a karst tour with several local partners on the Buddha Preserve on 3/16/24 with a great turn-out of mostly local landowners. Keith and Goni hosted.

ILPA Updates

Carla introduced Andrea Huntington, Executive Director of ILPA, and provided some updates that are relevant to IKC and the entire land trust community. The ILPA winter conference was a great event in Indy that provide a great opportunity to network and learn about what other land trust leaders are doing in their respective organizations. ILPA recently received a grant to issue stipends to professional photographers to take photos at state nature preserves that can be used in various promotional materials. Carla also shared information about a compensation study that ILPA recently conducted. Another 'State of the Lands' publication will also be released soon that can be shared with legislators and partners and will highlight our Wayne Cave Preserve expansion project.

Safety Committee – Chainsaw Safety Course

Danyeale has a neighbor who provides chainsaw safety courses for other outdoor organizations and has offered to provide a small class for IKC folks who may be interested (\$25/participant). Danyeale has reserved a room for a half day class in Bloomington with plans to visit the Wayne Cave Preserve afterwards for some hands-on practice (April 27th or 28th, weather dependent). *Keith Dunlap moved that the IKC pay for this training for IKC volunteers. Scott Frosch seconded. Some discussion ensued. Unanimously approved.*

Orientation to Cave Rescue Training Update

Laura gave some updates on the progress of the training currently being planned at Lawrence County Independent School system and a nearby cave. Registration opens at noon on April 1st, 2024, and more information will be publicized soon.

Electronic Scheduling & Waiver System

Paul is working with Ray Knott to continue working on this task and will be collecting content on other IKC caves with the help of some volunteers. Paul will follow through with getting this started but would like to step back from continued administration of this system in the next couple of months, so another volunteer is needed to carry this forward in the future. Some discussion ensued about the merits of electronic waiver systems and who might be willing to take on the task of future system management.

Cave-Land Acquisition Activities

Wayne Cave Preserve Expansion – Keith shared the

final summary of finances related to this acquisition which ended up being 4.33% greater than the goal that was set. The excess of \$7,921.74 will be rolled over into the IKC Land Acquisition fund.

IKC Bat Surveys and Updates

Goni would like to continue conducting acoustic bat surveys on IKC properties this summer and would like to open it up to small groups of volunteers who may be interested in assisting. This would be a good way to garner interest and educate members. She also shared that the tri-colored bat is going to be listed as federally endangered. Goni was approached by USFWS to serve as a consultant regarding cave access and will continue to bring updates to IKC so we can educate our membership and decide what's best going forward. USFWS may also be interested in appearing at cave community meetings in the future to educate. They also asked about using IKC properties to train staff on mist netting in late August.

2023 Cave Patron & Property Manager Reports

Comprehensive annual reports were sent to the Board for review prior to the meeting and will be printed in full in the June *IKC Update*.

Buddha Karst Nature Preserve (Property Manager – Keith Dunlap, Cave Patron – Jeff Cody) – Keith said the kiosk has started to lean over. Jeff commented on water levels noted in the cave last year.

Lowry Karst Preserve (Property Manager, Cave Patron – Jasper Beavers) – none submitted.

Orangeville Rise Nature Preserve (Property Manager – Carla Striegel-Winner) – no additional discussion.

Robinson Ladder Cave Preserve (Property Manager, Cave Patron – John Benton) – no additional discussion.

Shawnee Karst Preserve (Property Manager – Keith Dunlap, Cave Patron – Dave Everton) – no additional discussion.

Sullivan Cave Preserve (Property Manager – Joe Kinder, Cave Patron – Paul Uglum) – Joe Kinder wanted to thank everyone for help with the property improvements in 2023. Paul noted that camping requests have increased considerably since improvements have been made on the surface.

Wayne Cave Preserve (Property Manager, Cave Patron) – Danyeale Green sent major thanks to all the volunteers at Wayne this past year. Matt enjoyed assisting with the dye tracing efforts in the cave in 2023.

Shiloh Cave (Cave Patron – Jim Adams) – no additional discussion.

Suicide Cave (Cave Patron – Kevin Smith) – no additional discussion.

Indian Creek Conservation Easement (Monitor –



Rand Heazlitt) – Note: a new Monitor will be needed for 2024. Duties include notifying the current owners of any issues that may not be in alignment with the easement requirements and inspecting the property once per year (June-July). A notice letter and follow-up letter will also need to be issued. Bambi Dunlap volunteered to assist with these efforts in the future and Matt Selig officially appointed her to carry out these duties.

Henderson Park (Cave Patron) – Scott Frosch said the first year of managing access has been going well!

Spring Mill State Park (Cave Patron – Dave Everton) – The biennial MOU paperwork will need to be renewed and he is working on that.

Recent (2024) Preserves Work Projects & Upcoming Preserves Projects (excludes 2023 reports and activities)

Buddha Karst Nature Preserve – Keith noted that the kiosk is leaning over and needs to be corrected ASAP. Jeff and Bambi have volunteered to assist with repairs.

Lowry Karst Preserve – Jasper Beavers – nothing new to report.

Orangeville Rise Nature Preserve – Carla said there will be a garlic mustard pull on Thursday, April 25th as part of a local event that will occur as part of a statewide “weed wrangle” event with multiple partners. They will also visit Wesley Chapel Gulf prior to visiting Orangeville Rise.

Robinson Ladder Cave Preserve – John Benton – nothing new to report.

Shawnee Karst Preserve – Keith said the bigger field in the back was recently mowed, thanks to Jamie Winner and Bambi Dunlap. Late winter mowing is in lieu of a prescribed burn.

Sullivan Cave Preserve – Joe said the roof of the shed still needs to be painted. Tentative workday slated for early May to install a gutter and rain barrel and do some general maintenance, including splitting the large tree that was felled by the entrance. Bill may have some guttering to donate. Paul has been researching methods and costs to clean up graffiti using laser equipment. There was also some discussion about future kiosk construction.

Wayne Cave Preserve – Danyeale plans to host some trail building workdays throughout the year. She estimates at least 10 volunteers will be needed to accomplish this task. On the third Saturday of every month, Hoosier Hikers Council has a volunteer trail building workday. She recommended this as a good way to network with other conservation groups while gaining training on trail building techniques. Currently the trail on the new expansion property has been flagged. A scout group will be on-site in the fall to remove some large tires and trash with cooperation from a willing

neighbor. At some point the kiosk map and some of the descriptions will need to be updated. Danyeale met with Ellen Jacquart and Julia of the Monroe County IRIS (Identify and Reduce Invasive Species) group to schedule a future “weed wrangle” on the property. New protocols will need to be followed for chemicals being applied to invasive species around the sinkhole pond. EQIP wildlife monitoring will also need to be conducted in 2024. Research info and results will soon be added to the IKC webpage, too.

Henderson Park – Scott promoted the upcoming May 4th field day with TNC and would like a couple of volunteers to assist with the caving aspect of this event. A new sign has been printed but there still seem to be some communication issues with locals when it comes to cave access protocol. As a baseline observation, some minor impacts were noted in the caves including mud writing/art, but no spray paint or major trash.

Items from the Floor

- Danyeale and Keith provided some updates about the huge Sudbury housing development being planned in Bloomington in a significant karst area. There is a public meeting with Zoom option on March 19th and currently there is a lot of opposition from locals.
- Bruce DeVore, a former IKC board member (1993-2005) and long-time Indiana caver passed away recently.

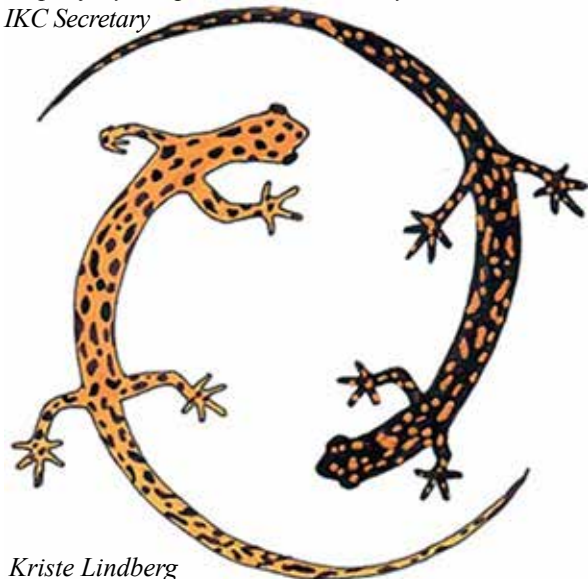
Next Meeting Date and Place Selection

The next IKC Quarterly meeting was tentatively scheduled for Sunday, June 16th at 1:00 EDT – meeting at the Wayne Cave Preserve with RBNC as a back-up rain location. There likely will be some work activities prior to the meeting.

Adjourn

The meeting was adjourned at 3:33 pm EDT.

Respectfully compiled and submitted by Laura Demarest, IKC Secretary



Kriste Lindberg

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tour, the alternative is the 30-minute stroll thru the highly-decorated Little Wyandotte Cave (aka Sibert's Cave) which is offered at 10 AM, 11 AM, 1 PM, and 2 PM and costs \$8 (12 and older), \$4 for children (6-11), and is free for those under age 6. To see more details and direction, go to: www.in.gov/dnr/state-parks/parks-lakes/obannon-woods-state-park/#Wyandotte_Caves. Also see page 10 for a special IKC-only private tour of Big Wyandotte on June 30. The tour is limited to 20 participants and requires a RSVP.

- ❑ Don't forget Indiana's other excellent commercial caves that are definitely worth visiting. These include Bluespring Cavern (Bedford), Indiana Caverns (Corydon), Marengo Caverns (Marengo), Squire Boone Caverns (Corydon), and Upper Twin Cave in Spring Mill State Park (Mitchell). Learn more about all these caves and their website links here: ikc.caves.org/where-are-caves.
- ❑ The IKC has gained *twenty-four* new members in the last quarter. Welcome Emily Bingaman, Travis Chase, Chris Donohue, Michael Gallo, Monica Galvez, Jordan Jaques, Nate Johnson, Carrie Kinder, Jamison Kinder, Lily Kinder, Robert Jones, Jordan Lacy, Christopher Peace, Caleb Riser, Martin Ryan, Nathan Schonegg, Valerie Schummer, Spike Selig, Adam Stanich, Travis Templin, Peter Thomas, Andria Toole, and Kent Wilson. The IKC membership currently stands at 332.

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Caves in the Cave River Valley Natural Area. The agreement was initially a two-year one, but has been renewed four times since then, although it continues to require renewal.

During 2023, the following trips took place to those caves:

- Upper Twin:** 6 trips, 30 cavers
- Bronson-Donaldson:** 22 trips, 141 cavers
- Endless Cave:** 18 trips, 113 cavers
- River Cave:** 12 trips, 90 cavers
- Total number of trips: 92 with 291 cavers (some

repeat visitors)

The Access Coordinator made five trips to Endless and two trips to River Cave while they were open in 2023.

It was only while preparing this report that the Coordinator realized the current two-year agreement had expired. [The new agreement was signed on April 15, 2024]

Indian Creek CE Report (Rand Heazlitt)

Matt Selig sent out the landowner pre-inspection letters and Keith Dunlap and Carla Striegel-Winner performed the inspection on Dec 19th with follow-up letters sent out by Keith.

INDIANA KARST CONSERVANCY, PO BOX 2401, INDIANAPOLIS, IN 46206-2401

I would like to help the IKC protect Indiana's unique caves and other karst features. Enclosed is:

\$ _____ for IKC membership dues at \$15 per year (dues expire March 31st of each year, please pro-rate @ \$1.25/month).

\$ _____ donation to the general IKC fund.

\$ _____ donation restricted to a specific IKC project. Please specify: _____

_____ I know of an area worthy of protection. Please contact me.

_____ I would like to volunteer to help. Please contact me.

NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

PHONE # _____

Make checks payable to the Indiana Karst Conservancy, Inc. and mail to the IKC Treasurer, c/o Indiana Karst Conservancy, PO Box 2401, Indianapolis, IN 46206-2401. The IKC is an IRS recognized 501(c)(3) non-profit organization with membership dues and donations fully tax deductible.

