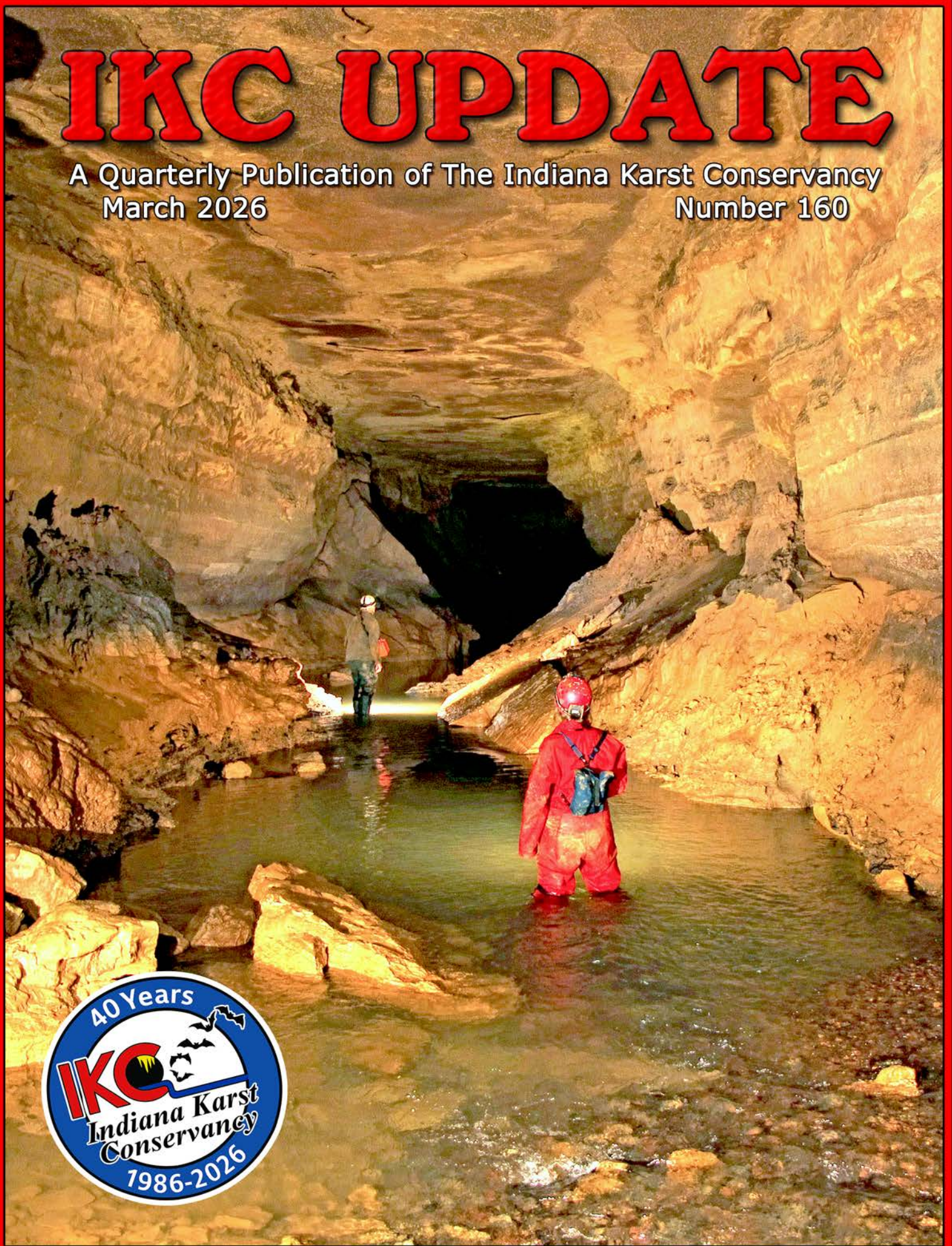


IKC UPDATE

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INDIANA KARST CONSERVANCY, INC

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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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*grottos with liaison agreements

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Cover: Carla Striegel-Winner (foreground) and Tom Sollman in Hamer Cave
in Lawrence County, Indiana. Photo by Chris Schotter (2025)



IKC ANNUAL BUSINESS MEETING REMINDER

Sunday, March 22nd, 12:15 PM Social, 1 PM Meeting (EDT)

Monroe County Library - Ellettsville Branch (Room A/B)

600 W Temperance St, Ellettsville, IN

The Annual Business Meeting is for the purpose of the Executive Board elections. Annual reports from the IKC Cave Patrons and Property Managers will also be presented. And as always, the meeting is for members and other interested persons to have an open forum to talk about the IKC, caves 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: Elections and results; Financial reports; Annual Property Manager and Cave Patron reports; Education/Outreach/Field Days updates; Electronic scheduling and waiver system update; Cave/land acquisition activities; 2026 Indiana Cave Symposium update 40th anniversary planning; Recap of recent and upcoming preserve work projects and related items; and more...

Meeting Details: The Ellettsville Branch is located at the intersection of Highway 46 (Temperance Street) and Sale Street. Free parking in front of the library. Enter the front doors and proceed straight thru the main library and past the service desk, continuing to Meeting Room A/B towards the back.

Pre-meeting Social: Come between 12:15 and 1 PM for refreshments and social time. Feel free to leave when the meeting starts, stay for a few minutes, or join us for the whole meeting. See page 9 for more details.

ACTIVITIES CALENDAR

March 22 – IKC Pre-meeting Social (see above and page 9)

March 22 – IKC Annual Business Meeting (see above)

Mar 28-29 – Orientation to Cave Rescue (see page 19)

April 11 – Discovery Day with TNC at Henderson Park (see page 16)

April 12 – Wayne Cave Preserve Trail Workday (see page 10)

April 18 – 2026 Indiana Cave Symposium and Pre-tour (see page 10)

April 23 – Weed Wrangle at Orangeville Rise Preserve (see page 11)

June 14 – IKC Wyandotte Cave Tour and Board Meeting (see page 11)

July 6-10 – NSS National Convention, Corydon (see page 17)

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 \$20. 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 online 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 #320...

As I sit down to write this Rambling in February 2066, I reflect on how the IKC has grown in so many ways in these last eighty years.

Assuming there are no big surprises in our upcoming Board election, I hope to serve a twelfth term as President. It has been a great honor to work with this organization during this time, and I have seen it grow from five hundred and fifty members when I was first elected President to over one thousand today. This growth is meaningful because it represents more people who believe in our work, and are willing to do it.

Our committed membership shows up when we need them. Workdays continue to symbolize how we come together to care for the caves and karst features we protect. Through fund raising we still have opportunities to protect what I heard one of my predecessors call the “Crown Jewels” of the Midwest’s caves and karst. This work with other organizations and scientists ensures caves and karst features are not an afterthought in law, science, and policy making.

Our Treasurer, Keith Dunlap, informs me the Indiana Karst Conservancy now protects close to twelve hundred acres of karst terrain in Indiana, Illinois, Ohio, and Kentucky. We steward over thirty-seven miles of surveyed cave passage. There is no more trash to haul out of our caves. The graffiti defacing many caves’ beauty when I fell in love with caving is a cautionary tale of the past, for the history books, and for stories old timers will tell at this year’s last and final S.H.I.T. Hoot. To think how easy it was to remove it with the advent of the micro-laser spray paint removers. But that is a tale too familiar to bother telling it here.

We are part of a passionate community of land trusts, and our endowment and capabilities help support their acquisition and stewardship efforts when they involve karst. We help fund karst scientists studying all aspects of speleology – geology, hydrology, archaeology, and biology – helping to backfill what has always been an underfunded area of science.

First and foremost, we are cavers who love

caves. As I proofread issue #320 of the *IKC Update* and I read the articles, I remain amazed with the passion and enthusiasm that shines throughout this newsletter. We are well connected with other cave focused organizations such as local grottoes, state surveys, NCRC cave rescue groups, and educational institutions such as IU and WKU; building a pipeline of dedicated cavers who move from responsible recreational caving to exploration, cave safety, conservation, and karst sciences.

There have been challenges and controversies along the way. We are fortunate we can trace the history of the IKC all the way to its founding in 1986 and can see the conflicts our founders dealt with – cave gate wars, arguments over access, suspicions of the IKC’s motives, and a decided lack of resources. We take for granted the IKC is now a robust, well-respected organization with adequate resources to make a real difference



in protecting the underground from an often ill-informed and sometimes indifferent public. Due to the IKC’s work, no one will ever again say caves are “out of sight, out of mind” when it comes to growth and development.

Some controversies were inevitable. Our name remains the Indiana Karst Conservancy. Long-term members will recall the impassioned debate when it became obvious there were opportunities and a need for conservation work that crossed political and geographical boundaries, which geology doesn’t respect, and where no dedicated conservation groups existed to protect these features.

It was considered scandalous by some when the Board initially voted to acquire property outside of Indiana. We lost members over this change, and some never came back. We had raging debates about whether to change our name to the *Midwest Karst Conservancy* and we had thoughtful leaders who reminded us of our Exempt Purpose, which has always guided our organization, as it already said we are “dedicated to the conservation and preservation of caves and karst features in Indiana and other areas of the world.”



This debate is settled now. No one would now argue that our committed volunteers and karst preserves outside Indiana protect any less fragile karst, encourage any less responsible caving, or speak any less clearly for the silent underground than do our Hoosier volunteers. Our non-Hoosier Property Managers and Cave Patrons are every bit as passionate as any IKC volunteer, and many of the members who left in dismay have returned. And those members who never re-joined were more than replaced by new members from our expanded service areas.

Surprisingly there continues to be a roiling debate every few years about whether we should focus on only the underground and what responsibility we have for the surface above our caves. We continue to invest significant program resources in invasive species treatment, hiking trail maintenance, and surface amenities for activities other than caving, while acknowledging the fair point that many of these involve neither cave nor karst features *per se*. We've learned the hard way that neglecting our surface assets sends the wrong message about conservation to people who may never go underground to see the work we do there.

Over the course of our eighty years, the IKC's primary conservation work has continued and will continue to evolve. What started as an organization primarily concerned with vandalism inside of caves evolved into an organization that takes care of more than just the caves and works to educate and advocate on behalf of the caves and the cavers who love them. We now look beyond individual caves and our preserves to the overall landscape and the water moving through it as a measure of regional environmental health.

Our challenges continue to evolve. With prime conservation land costing \$40,000 to \$50,000 an acre, and urbanization and development continuing in areas of the Midwest that used to be deeply rural areas, acquisitions are more difficult than they were when the IKC acquired its first property an eternity ago in 1998.

But when I analyze the last eighty years of *IKC Updates* in the neuroweb, I see persistent threads I expect will continue to shape the IKC's future efforts:

- First, our Exempt Purpose calls on the IKC to protect, study, and educate. This work is overwhelmingly documented in the *IKC Update*. As our opportunities and challenges evolve, it remains a foundational guiding star. When our efforts are aligned with it, the IKC is at its most alive and vibrant best.

- Second, our work is relentlessly practical. We are cavers who love caves. We don't host elaborate fundraising galas. There is a place for that in conservation, but that has never been who the IKC is. We host workdays, field days, surface trips, and underground trips. We sponsor data collection, manage properties, and spend our effort and resources with hands-on caring.
- And third, our real endowment isn't financial. We are blessed with financial assets and donors who passionately believe in our work, but our primary asset, as it has always been, is the relationships we've built – with grottoes, landowners, agencies, educational institutions, Property Managers, Cave Patrons, and more. We have built the IKC as a trusted partner focused on cave conservation, and so long as we continue to earn that trust, the financial support we need to continue our work will follow.

With these thoughts, after the next year I will pass the baton to our next generation of IKC leaders, and share that I won't seek another term as IKC President. It has been the honor of a lifetime, but I look forward to going back to treating invasives and picking up trash on the side of the road at IKC workdays. I believe in this organization more than when I was nominated for the President's position, and we have leaders who have grown up in the IKC and have wonderful ideas and experience to bring to our work. The baton will be theirs.

These reflections were inspired by looking back at issue #160 of the *IKC Update*, in which the then-President, Matt Selig, wrote about our fortieth anniversary as a time capsule for whoever would serve as President at our eightieth. I never got to meet him or many of the other Board members who led this organization at that time, but I am grateful for their work.

So, I will close by dedicating this Ramblings as a time capsule to whoever will be President of the IKC at its 120th anniversary in 2106. When you write your Ramblings (and yes it is now in our By-laws that the President's letter will henceforth and forever be known as the "Ramblings") for issue #480, I hope you can tell the story of how we built an organization that allowed you to grow and advance your work as the opportunities and challenges the IKC will face continue to evolve and change.

Jordan Mercer

President, 2055-2067

AN ABBREVIATED HISTORY OF THE IKC

by Keith Dunlap and Richard Vernier

Editor's Note: In celebration of the IKC's 40th anniversary, Richard Vernier and I put together this article to describe how the IKC got its start, and to hit some of the highlights along the way. And if you really want to take a deep-dive into the history of the IKC, all 160 issues of the IKC Update are on our website at ikc.caves.org/ikc-updates. What this article doesn't really cover is the unbelievable effort our Executive Board and volunteers have expended over the past 40 years to make the IKC what it is today.

The Indiana Karst Conservancy was formed forty years ago as a response to previous decades of vandalism taking place in a number of caves in the Bloomington, Indiana area, partially as a response to a popular cave guidebook publication widely distributed with cave locations. Several well-known caves had become local nuisances, attracting substantial numbers of "spelunkers" on weekends that resulted in significant impact and landowner alienation. While some of these spelunkers eventually became responsible cavers, others did not. Whatever the outcome for the spelunkers, the outcome for the caves was the same: enormous amounts of beverage containers, batteries, lights, clothing, and camping supplies were laboriously carried in and abandoned as trash and most passage surfaces within reach were covered, sometimes layered, with spray paint graffiti. Bats, including the federally endangered Indiana bat (*Myotis sodalis*), were driven out of their hibernacula, or even purposefully killed. Carbide lamps were in extensive use at the time, and the spent residue was dumped wherever the charge ran low. Often, the caves were permeated with the sickening smell of beer mixed with urine.

In 1985, several organized cavers had reached their limit. They started to discuss the problems and resolved to do some-

thing about the situation, but they needed an organization with a primary mission of conservation to complement the recreational focus of the grottos. Duplicating the organizational structure of the Michigan Karst Conservancy that formed several years prior, the IKC incorporated as a non-profit organization in February 1986. The initial elected Board consisted of President Bill Wilson, Secretary Tom Rea, Treasurer Cindy Riley, and Directors Keith Dunlap and Glenn Lemasters.

Being an incorporated entity, the IKC had the legal standing to negotiate management and access lease agreements with private cave owners, thus allowing visitation to be properly regulated and demonstrating that negative impacts to Indiana's caving resources would no longer be tolerated.

Unfortunately, there were far more vandals than conservationists at work at the time, and these misguided spelunkers clearly were not lazy; many simply lacking the good sense or ethical values to know what they were doing was wrong. As a result, they initially maintained the upper hand in the battle to reclaim the caves. In response, and controversial at the time, the IKC worked in cooperation with the landowners and installed entrance gates on several popular caves to curb the culture of vandalism. While this was effective in slowing the vandalism in the gated caves, some organized cavers who believed in



One of the first IKC projects was fencing Grotto Cave in 1986 to protect Indiana bats.

photo courtesy Bill Tozer



the concept of “sacrificial caves” were vocally against the gates and expressed concerns that this would just drive the spelunkers to other unprotected caves that would then be impacted. However, other organized cavers applauded the preventative actions and were motivated to participate in restoration projects, knowing their hard work in the gated caves would not be undone by vandals the following weekend.

Some of the first initiatives taken were a series of cleanups in Wayne and Sullivan caves.

In Wayne Cave, visitors had hauled literally tons of bottles, cans, clothing, and all manner of other trash through the 1,250-foot entrance crawl where it was then abandoned on the trip out. It was nearly a ten-year effort by many different grottos and the IKC to organize dozens of cleanup trips to pack in haul-bags, and then drag, push, and stuff the bags back out through the multi-mile long cave and the infamous crawlway to a dumpster waiting at the surface.

Similarly, Sullivan Cave has a lengthy stoopway called The Backbreaker, but the relative ease of access to the cave had only served to encourage the never-ending damage. The mostly unrestricted access was due to the cave being operated on a semi-commercial basis for a time. Visitors need only pay a \$1 “parking fee” and beyond that, there were few rules. While there was no actual advertising involved (beyond a huge sign along the state highway where the cave was located), secrecy about the cave location and access was hardly a policy. Eventually working with the landowner, an entrance gate was installed in 1990 and cleanups trips were scheduled. This evolved into the annual IKC eco-service tradition dubbed “Under-Earth Day” that was the caver’s recognition of Earth Day.

As the IKC matured and expanded its mission, it added an educational component to make the public aware of the consequences of cave vandalism and sinkhole dumping. Several groundwater

system demonstration models were procured with the assistance of an NSS grant, with volunteers making the rounds at local schools and civic organizations showing graphically that whatever you dump in sinkholes ends up in your drinking water.

Supporting Our Mission Through Actions and Projects

In the mid-1990s the IKC, along with several other environmental groups, became involved in a lawsuit against the Indiana Department of Trans-



The first Under-Earth Day in 1990 at Sullivan Cave had 97 volunteers lined up to enter the cave to perform graffiti and trash removal.

photo courtesy Angie (Manon) May

portation (InDOT) over inappropriate highway construction in karst areas. While the lawsuit was eventually dismissed, the significant outcome was a Memorandum of Understanding agreement that InDOT would follow “best practices” in pre-planning road projects, and during the design and construction phases. While not perfect, this agreement is still in place thirty years later and has been a cornerstone of state highway design and construction in Indiana’s karst regions.

Another major and long-term initiative the IKC undertook in the 1990s and 2000s was a karst inventory project on the then 200,000-acre Hoosier National Forest (HNF). The Federal Cave Resources Protection Act (1988) mandates that federal properties inventory cave resources within their boundaries and develop management plans for those deemed significant. IKC members ridge-walked to locate the caves, evaluated them for biological, geological, paleontological, and cultural



values, then nominated the qualified caves for designation as significant, and finally wrote management plans for the caves accepted as significant. Thousands of volunteer hours were invested in this project by IKC, area grottos, and Indiana Cave Survey members. The HNF staff were extremely supportive of all this effort and in 2005 the Eastern Region of the USDA Forest Service selected the IKC to receive their award for Volunteer of the Year. We acknowledge the HNF for its progressive attitude towards its karst resource management and access policies and ask that cavers respect the fragile nature of these caves and understand that some have often inconspicuous biological values that can be impacted by overuse or careless activities.

Another exciting project in the 2000s was the IKC being a co-sponsor, along with the Hoosier National Forest, the NSS, and Ravenswood Media, to produce the educational video: *Caves: Life Beneath the Forest*. The goal was to make this professionally-produced video available to schools, nature centers, environmental organizations, civic organizations, and anyplace where it could get the message out about the importance of the life found in caves.

Since 1993, the IKC, along with the Indiana Cave Survey, has co-sponsored the annual Indiana Cave Symposium. The Symposium consists of Indiana-focused presentations on cave exploration, conservation, and acquisition projects. Other topics have included scientific research, cave history, and agency cooperation efforts. The Symposium incorporates a pitch-in meal, time for networking/socializing, and in recent years, a pre-symposium field trip organized by the IKC.

Since its inception, the IKC has been involved with the recovery effort for the Indiana bat, taking part in the biennial population surveys, managing access to several known hibernacula, and

acquiring and protecting a USFWS Priority III hibernaculum. We also worked with the Indiana Department of Natural Resources to install 22 bat-friendly gates on abandoned coal mines in Indiana to provide and protect alternative habitat for a number of bat species. The IKC has also been involved in several research projects including extensive temperature monitoring in bat caves, as well as developing and manufacturing a compact and inexpensive passive SpeLogger device for monitoring human visitation patterns in bat caves to facilitate effective access management.

Another recent initiative for the IKC has been to sponsor annual training classes for Indiana cavers. These have included the NSS NCRC's Orientation to Cave Rescue (OCR) and Small Party Assisted Rescue (SPAR) classes, as well as SOLO Wilderness First Aid classes. Generally the IKC covers the cost of the classroom facility and offers a discount for IKC members. And the mock in-cave portions of the NCRC training are often held in one of our caves.

Becoming Landowners and Managers

In 1998 the IKC entered another aspect of its mission with the opportunity to purchase its first cave preserve: Sullivan Cave. Since the IKC had been involved with the cave for over a decade, the decision was obvious, but still not without significant concerns over our ability to raise funds for the initial costs and then manage the stewardship of the property in the long-term. Of course, our fear of raising the money was quickly dispelled as the caving community responded with enthusiasm and the property was paid off in short order. After the brief "mission accomplished" moment, we had the reality that we now had to deal with things like liability insurance, property taxes, invasive spe-



Volunteers working on a sinkhole cleanup at the Shawnee Cave Preserve and the pile of trash removed.

photos courtesy Keith Dumlup



cies, abandoned trailers, collapsed culverts, mowing the camping area, access lane improvements, parking lot maintenance, and the dozens of other things that come with property ownership.

Since then, six additional preserves have been added and some of those preserves expanded multiple times, totaling 295 acres in our portfolio. The IKC also holds one conservation easement, protecting a significant karst feature, the Sinks of Indian Creek, that we annually monitor for compliance. We continually seek additional acquisitions that would further our mission.

And not forgetting our roots, we still have access agreements on several private caves, including Shiloh and Suicide caves. Also in 2014 the IKC and the Indiana Department of Natural Resources, Division of State Parks entered into a Letter of Understanding to have the IKC manage access to four of its most popular caves associated with Spring Mill State Park/Cave River Valley in Lawrence and Washington counties. And more recently, in late 2023 the IKC also signed a three-way agreement with TNC and the City of Salem to manage cave access for the caves in Hender-



photo courtesy Jerry Lewis

IKC volunteers planting trees at the Buddha Karst Nature Preserve in 2008.

son Park in Washington County.

Looking to the Future

As the IKC enters its fifth decade as a cave conservancy and land trust, we will continue on our mission of protecting our caves and the fauna within, while allowing appropriate recreational access. We will also continue to maintain and enhance our “top side” landscape – managing those resources for wildlife habitat, watershed quality, and setting exemplary examples of karst stewardship with our peer organizations.

And as always, we plan to continue to judiciously acquire new cave/karst properties and expand our existing preserves. 🦋

JOIN US FOR AN IKC PRE-MEETING SOCIAL

SUNDAY, MARCH 22nd – 12:15 to 1 PM EDT

Monroe County Library - Ellettsville Branch (Room A/B)

600 W Temperance St, Ellettsville, IN

Join us for refreshments and give a pre-meeting hello to the IKC Board, fellow members, and supporters. We'd love to hear your thoughts on the IKC and how we can make the organization even better. We will have info available on our upcoming activities – including field events and the Indiana Cave Symposium. **Bonus:** IKC merch will be available to purchase. Feel free to stay for the meeting – for a few minutes, or if you are brave and caffeinated, for the whole meeting!

Questions? Contact Danyele Green (mudandogs@gmail.com).

2026 INDIANA CAVE SYMPOSIUM PREVIEW – APRIL 18

by Keith Dunlap

The 32nd Indiana Cave Symposium, co-sponsored by the Indiana Karst Conservancy and Indiana Cave Survey, will be held on Saturday, April 18, at the Orange County Community Center (1075 N Sandy Hook Road adjacent to the 4-H fairgrounds) in Paoli, Indiana. This is the same venue as the past few years.

As in the past, the symposium will offer a free cookout (burgers, brats, and other assorted meats and non-meat offerings) and we encourage attendees to share pitch-in side dishes (a covered dish, salad, or dessert). The meal will start at 5 PM EDT with presentations beginning at 6:10. Below is the tentative list of presentation titles and presenters (the order may change):

- 2026 NSS Convention Update – Co-chairs Laura Demarest and Dean Wiseman
- Hamer Cave: 2025 Cavefish Study and the Quarry Life Award – Carla Striegel-Winner, Keith Dunlap, and Tom Sollman
- Bears, Boars, and Bombifrons – What Caves and Karst Tell Us About the History of Life and Climate – Dr Dave Polly
- IKC/ICS Combined 40th Anniversaries – Matt Selig and Dave Everton
- Cave Development in Indiana as a Product of Structural Geology – Lee Florea
- Pless Cave Exploration and Mapping Update – Dave Everton



photo courtesy Keith Dunlap (2024)

For questions about the Symposium, contact Dave Everton (DEverton@iu.edu). Also, in order that we may plan for the event, please RSVP using the following link: form.jotform.com/260488012495157.

The IKC and ICS will again offer a karst surface tour prior to the Indiana Cave Symposium: caves, dance halls, fruit storage, gravestones, and more will be the topics of this year's tour. Come along on the tour and find out! Join long-time IKC and ICS members Carroll Ritter and John Benton to chat about geology and history at Peachers Cave, with another stop at a special whetstone quarry, a local cemetery, and even a stop at Orangeville Rise if we have the time. Participants will depart at 12:30 from the Orange County Community Center (site of the Symposium) and be back with enough time to be ready for the 5 PM meal. This is a driving tour with some walking off trail up to sites of interest. The event requires registration and is limited to 20 participants (registrants will receive additional details about the tour). It will go rain or shine. For more information and to register, go here: SymposiumTour2026.eventbrite.com.

Finally note that prior to dinner from 4:00 - 5:00 PM, the 2026 NSS Convention Co-chairs Laura Demarest and Dean Wiseman will be available for one-on-one questions that people may have about the convention to be held in Corydon from July 6 to 10, 2026. This is also an opportunity to sign up to be a volunteer. 🐦

NEWS BRIEFS...

Please join us on April 12th from 10 AM to 5 PM EDT as we continue working on the new hiking trail at the Wayne Cave Preserve's Connection tract. No experience necessary and trail construction tools will be provided. You do not have to commit to the whole day, so come late or leave early. Please RSVP to Property Manager Cris Seuell (CSeuell82@gmail.com) for more details and with any questions.

If you would like to know more about managing invasives, consider attending the State of Indiana



Cooperative Invasives Management (SICIM) Annual Meeting which is really more of a day full of interesting short sessions. It is in Noblesville this year on Monday, March 30 www.eventbrite.com/e/growing-together-evolving-strategies-to-manage-invasive-species-tickets-1979466037203

- ❑ Speaking of invasives, the Orangeville Rise will benefit from another Weed Wrangle on Thursday, April 23 from 5 to 7 PM EDT. The event is hosted by Orange County Invasives Species Partnership (OCIP) and the IKC. Contact Emily Finch (Emily.Finch@in.nacdn.net) or Carla Striegel-Winner (CarlaStriegel@gmail.com) for more details.
- ❑ If you have enjoyed the IKC's partnerships with Indiana Audubon and Indiana Land Protection Alliance, save the date of October 10th for the annual Big Day for birding. The IKC hosted location has not been selected yet, and of course there will be many other Indiana land trusts that host an outing this day as well.
- ❑ As you will see in the article on page 33, the IKC won a huge cash award (€10,000 = \$11,232) from Heidelberg Materials at the end of 2025. The prize money has been received and the IKC Board has chosen to set it aside for land acquisition. We are so thankful to Heidelberg Materials Global for taking an interest in our North American Quarry Life Award project entry.
- ❑ The IKC is proud to be a lead sponsor to bring CaveSim to the 2026 NSS Convention in Corydon this summer. Support for this world-class, one-of-a-kind educational tool conveys the IKC's commitment to cave conservation and public outreach by providing a unique, high-tech way to teach visitors about fragile underground environments. Efforts are currently underway to raise additional funds to support CaveSim's approximate \$10,000 travel/logistics expenses to attend the Convention. If any grottos,

Continued page 39...

WYANDOTTE CAVE TOUR WITH THE IKC

SUNDAY, June 14th – 9 AM EDT

7315 S Wyandotte Cave Rd, Leavenworth, IN 47137

Join us for a special IKC tour of Wyandotte Cave! We will be guided by O'Bannon Woods staff with added commentary by IKC Board member Keith Dunlap and Wyandotte Cave historian John Benton. The standard tour is typically two hours in duration, but the last time we did this special IKC tour, we were in the cave for almost four hours. Although we will stay on the main tour route, keep in mind this is a strenuous trip of 1.5 miles.

Following the cave tour, there will be an optional light lunch around 1 PM, followed by our IKC quarterly Executive Board meeting starting at 2 PM. Both at the shelter next to the cave's lower parking lot.



Richard Vernier

This tour is by pre-registration only and limited to 20 participants (we will also have several more Board members attending). Participants will pay the discounted \$14 group tour rate directly to the park ticket office on the morning of the tour (regular tour price is \$18). Registration opens on May 15, but you may go to IKCWyandotteCaveTour2026.eventbrite.com before that day for more information and click "remind me".

Questions? Contact Carla Striegel-Winner (IndianaKarstConservancy.info@gmail.com).

POPULATION STATUS OF THE HOOSIER CAVEFISH IN HAMER CAVE, LAWRENCE COUNTY, INDIANA

by Keith Dunlap and Tom Sollman

Editor's note: This research project was conducted as part of the Quarry Life Awards sponsored by Heidelberg Materials. The original, longer report was submitted on October 4, 2025 for judging by an international jury. The following article is an abbreviated version of that report that focuses primarily on the cavefish. The original version described the census areas within the cave in detail, described the other species observed and counted, and contained additional maps, photos, and graphics that were excluded here in consideration of article length.

Introduction

Hamer Cave, Lawrence County, Indiana has a long history of its water being used to power gristmills dating back to 1816, and to supply water for cement manufacturing. The cave entrance and its water rights have been owned by a series of cement companies since the 1890s to supply water for cement production. All the known passages of Hamer Cave (7890 feet) are located within the boundaries of Spring Mill State Park, although the

cave's entrance is contained in a 4.2-acre inholding currently owned by Heidelberg Materials. The karst topography watershed of the cave extends at least three miles to the west/southwest and consists of at least 8.2 square miles under mostly agricultural and residential land. Spring Mill State Park also has two other major cave systems, Shawnee and Whistling, which also have significant Hoosier cavefish (*Amblyopsis hoosieri*) populations. These three systems make up the largest concentration of these cavefish within their range. Protecting these caves and their watersheds is paramount in the long-term health and preservation of this rare, State-endangered species.

The actual range of the Hoosier cavefish is not fully defined despite many previous published reports, but is best described as being in the Mitchell Plain and eastern edge of the Crawford Upland, north of the Ohio River and south of the East Fork of the White River. The best estimate is 81 localities (caves and springs) in six Indiana counties: Lawrence (22), Harrison (19), Orange (16), Wash-

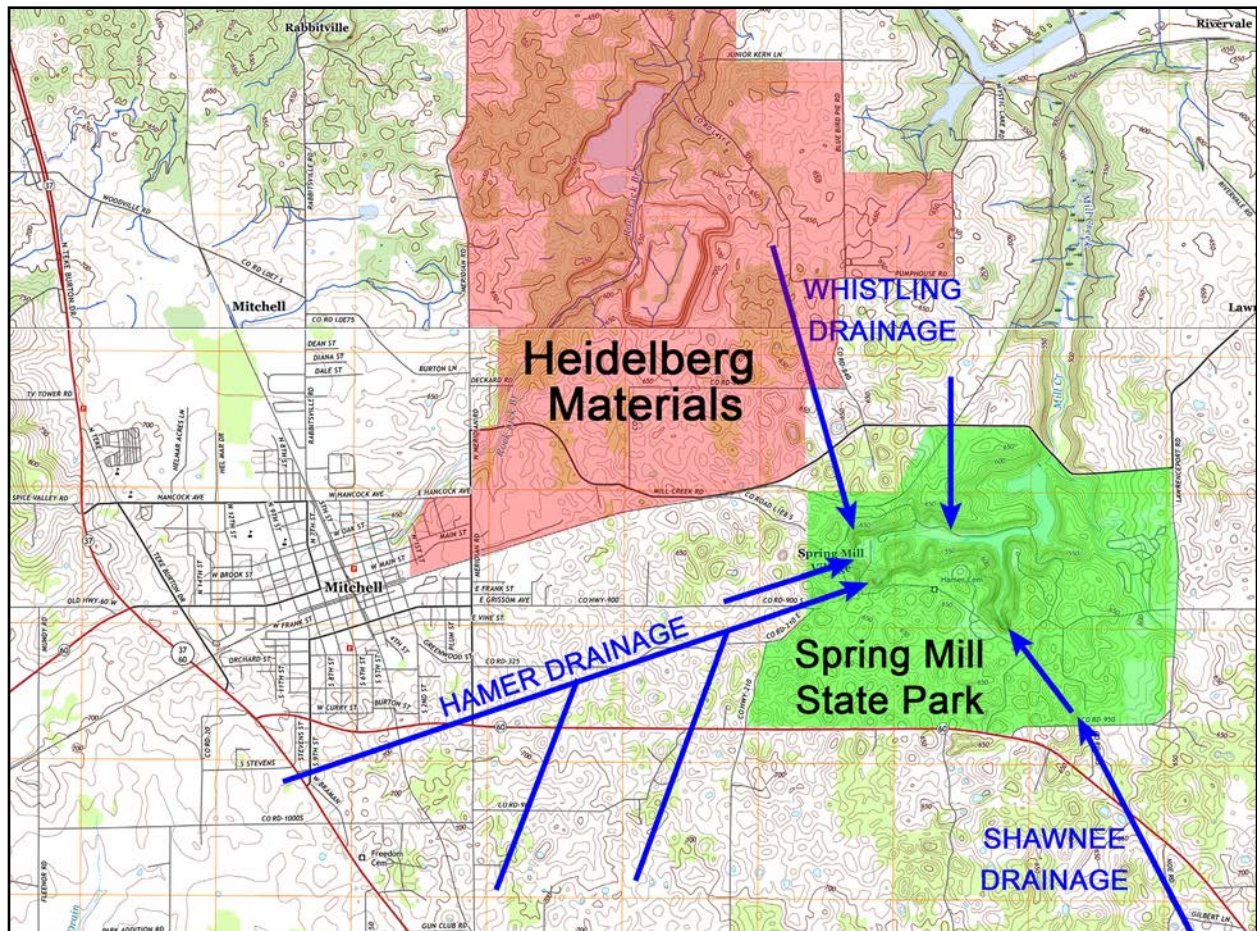




photo courtesy Scott Frosch

ington (14), Crawford (9), and Martin (1).

This population study was a multi-visit visual encounter survey of the aquatic macro-stygofauna of the cave, and in particular the Hoosier cavefish. The purpose of this study was to determine the populations of the aquatic obligatory (stygobitic) inhabitants, where they are in the cave, and compare the populations to historical observations to determine if the populations are stable, and to make possible recommendations for their protection. Additionally, animals that can live both in and out of the cave environment (stygophilic) were also inventoried and documented. Their presence can provide nutritional inputs to the overall ecological system.

Methods and Materials

Equipment

For the first four census trips (1/30/2025 to 5/27/2025), illumination was with a Fenix HP25 headlamp using a Cree XP-E LED bulb with a high beam of 180 lumens. For the fifth through seventh trips (6/12/2025 through 8/9/2025), a handheld flashlight (a Dive Rite CX2 on high beam of 1,700 lumens with a Luminous SST40 LED bulb) was also used in the deeper pools. For the last two trips (9/3/2025 and 9/28/2025), a Fenix HP35R headlamp was used, typically in spotlight mode with an 800 lumens output, but in deeper pools the turbo mode was utilized with an output of 3,000 lumens. The bulb was a XHP70 neutral white. The Dive Rite CX2 handheld flashlight was also used in deeper pools on these last two trips.

Field-collected water quality data (conductivity, ORP, total dissolved solids, pH, temperature) was obtained with a Myron L Co. model 6P Ultrameter (auto temp compensation, accuracy: $\pm 1\%$ of reading for conductivity and TDS, $\pm .01$ for pH). The meter was calibrated at least monthly per manufacturer recommendations. The meter cell was twice rinsed with stream water before each use and care was taken not to disturb the substrate. The temperature was also recorded at each sampling.

Techniques

Attempts to record size of the larger fauna proved impractical as frequently they could not be approached close enough for size determination due to pool depths or passage restrictions. When walking in shallow water or riffles, the technique was to take ten steps looking just at the stream, then stop and scan the rest of the passage behind and ahead for the non-aquatic life. The cavefish were counted only on the traverse into the cave and would take on average just over two hours, with total time in the cave typically around four hours.

Cavefish and troglotic crayfish can be confused at a distance in deeper pools. The only way to tell them apart is to wait. When the observed animal does move, a crayfish will suddenly “jump”, while a cavefish will languidly move away usually in a curving upward path.

Variables

Every effort was made to reduce survey variables. The light(s) used did change on trips as brighter lights were used to better observe in the deeper pools. The lights used on each trip were documented in the included results table.

A major variable was water depth, which directly affected both water clarity and velocity, thus overall viewing conditions. A minor difference of a few inches at the cave entrance would mean a major difference in the velocity of the stream.

Water clarity is a combination of several factors including visual clarity and current. Using a variety of turbidity meters in the past to elucidate this factor yielded poor results. The turbidity measured simply did not describe what was seen. In this report a narrative approach to water visibility was used that incorporates all factors: Very clear (unusually perfect visibility), clear (normal visibility), cloudy (poor visibility), very cloudy (very poor visibility), muddy (terrible, to no visibility). This variable is included in the results table.

Results and Discussion

The cave was surveyed nine times from January 30, 2025 to September 28, 2025 directly counting selected species. The cave was segmented into five census areas. The Hoosier cavefish was the primary focus with a low of 3 and a high of 19 observed. Cavefish have been documented in the cave since 1873, but detailed censuses only date back to 2020. The 19 cavefish observed on September 3, 2025 is the largest number known to have been documented in the cave. A few of



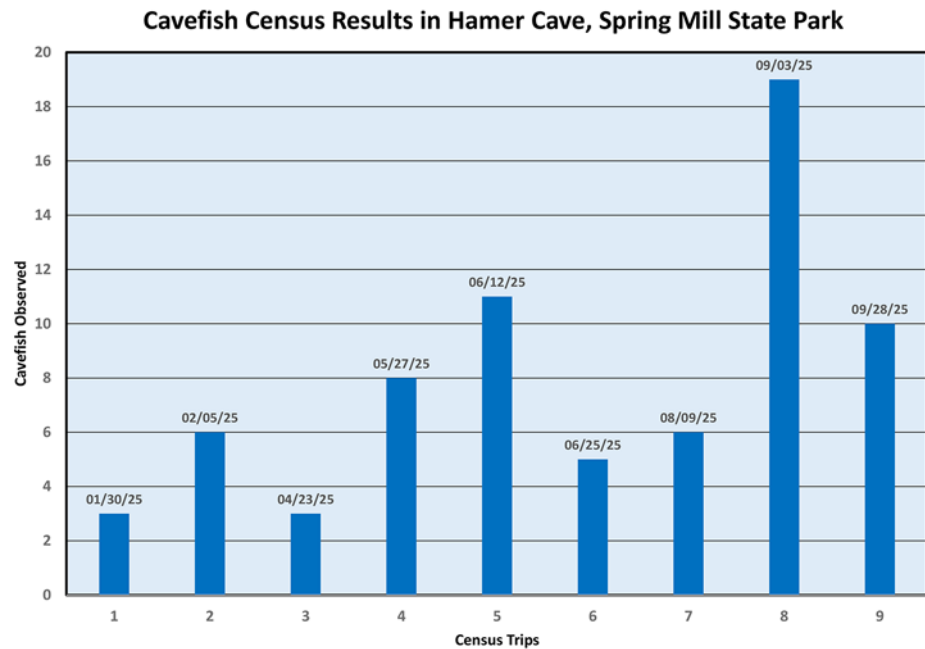
the early visits during this project had less than ideal clarity, thus lower counts.

While cavefish were not handled to document their size, no small fry cavefish were ever observed. This lack of young cavefish being present, with adult cavefish being documented in the cave for over 150 years, implies that the observed cavefish population is a sink population that is transiting into the observable passage from an upstream source.

The obvious input is the large rise from which all the mainstream water upwells at the back of the cave. The stream flow through the cave is unusually fast-moving for cavefish habitat and sometimes violent during flood events, causing sediment to be washed out in the downstream section of the accessible aquatic environment, resulting in poor habitat in that section of the stream bed. It is also speculated during very high flow conditions, some cavefish may be flushed out of the cave system, thus explaining the more modest population counts in the accessible part of the cave, compared to larger populations documented in the nearby Shawnee and Whistling cave systems. With that all said, the Hoosier cavefish population appears healthy in Hamer Cave with no disease or mortality observed.

Hamer Cave actually has two completely different and independent streams. In the upper level cross over is a small stream of completely different water chemistry, clarity, and flow that it is believed to inflow from nearby Dripping Sinks Cave that then exits via Wind Cave, located approximately 900 feet to the north of Hamer Cave's entrance. This small upper stream was not censused regularly, but a small number of cavefish were observed there.

Also censused were stygobitic ghost crayfish (*Orconectes inermis*) with a low of 3 and a high of 31 observed; stygophilic cave spring crayfish (*Cambarus tenebrosus*) with a low of 0 and a high of 10 observed; troglonexic cave salamanders (*Eurycea lucifuga*) with a low of 0 and a high of 10 observed; and troglonexic pickerel frogs (*Lithobates palustris*) with a low of 0 and



a high of 29 observed. Several bats were also noted in the results table.

Conclusions / Recommendations

The cavefish population in Hamer Cave appears stable since detailed censuses have been conducted. The prior historic observations were poorly quantified, but they also indicated small, but observable populations. The added censuses from this project help to establish a reliable and valuable baseline to gauge future habitat quality in the cave. Extracting water from the dammed area outside the cave entrance does not appear to be impactful, as it does not affect the flow of water coming out of the cave. The main concern/threat for this cave system and its fauna is its watershed and water quality degradation. The recommendations are to continue periodic census of the cave's fauna, continue protection of the cave and entrance, and encourage protection of the watershed through conservation acquisitions and promoting land use best practices through educational outreach and other proactive activities. An additional consideration is to work with State and Federal authorities to maintain and enhance the protection status of this cavefish species.

Acknowledgements

This project was performed as part of The Quarry Life Award. We thank Heidelberg Materials for the opportunity and permission to systematically census the aquatic life in Hamer Cave. We also thank Spring Mill State Park staff for their continued support of our cavefish population studies within the Park. 🦇

STRIKE TEAM KITS AND MORE: BAT HABITAT MANAGEMENT CONTRACT IS A BIG WIN FOR CONSERVATION!

by Carla Striegel-Winner

The IKC was incredibly pleased when in October of 2024, state mammalogist Brad Westrich reached out to us and said he'd like to offer us some financial assistance through a current white-nose syndrome grant. The grant allowed for "assistance to help restore, maintain, or manage habitat near bat hibernacula or in areas critical for fall/spring swarming of WNS-impacted bats." Brad said he would like to use the funds to help us achieve our goals because "the karst and surface habitat you all protect are very important for WNS-impacted bats in Indiana." Wow, we were humbled and so appreciative! Not only that, but the funding would be up to \$10,000!

As with many government grants, the speed of the funding was molasses compared to our plethora of ideas... we could contract out for stewardship work and invasives control, we could buy equipment, we could.... ok, well it took a bit to get it all figured out. I sent Brad some suggested expenditure ideas and he liked a few of them and found that they would be acceptable for the grant. In the end, we needed to set up a contract with the state. By the time all was set up and ready for us to spend, a full year had passed and it was October of 2025! Brad had been very clear that we needed to spend the money, turn in invoices and get reimbursed by end of December 2025. Okay then, that was not much time!!

We did not have time to contract out for stewardship work at this point, so we fell back on the other items that Brad had informally approved. These items were Invasives Strike Team Kits for our property managers, chemicals, and backpack sprayers, and even a really nice brush mower which could be used to keep some of our prairie remnant habitat open. Keith Dunlap and I had to get busy to get quotes from businesses and get those orders in! We managed to get the first invoice complete by November 5th and the

final one by December 4th – and our last reimbursement check came through on December 31st! Whew! We spent all \$10,000!

Our six Invasives Strike Team Kits include: Stihl electric chainsaws, Stihl electric string trimmers, an extra Stihl battery, Stihl helmet with face shield, Stihl chainsaw chaps, leather gloves, replacement chain, chain file, chain oil, trimmer line, Fiskars loppers in two sizes, Fiskars pruners, Fiskars folding saw, Fiskars garden clippers, chemical spray bottle, a Buckthorn Blaster dauber, and five safety vests; all in a storage bin and bucket.

In addition to those kits, we also purchased enough herbicide and related chemicals to last us a few years, purchased three new backpack sprayers, and the item we are very, very excited about... our own DR Walk-behind Field and Brush Mower. Keith has been using his personal one for many years, and this is a huge addition to our stewardship capabilities.

I am not sure if Brad realizes what a game changer this is for all of us. We are all volunteers, and our Property Managers and regular volunteers often use all of our own personal equipment to manage our preserves. The managers are going

to be so excited to have this equipment to use and to have available for other volunteers on various stewardship days.

Our next step is to get the most active managers together in person to do a use and safety presentation and divvy up the Strike Team Kits. Some of them will be stored and also shared between managers. With the winter what it has been so far, we have not set that date yet. We are certainly looking forward to using everything to help steward our preserves and continue to make them great habitat for endangered bats and other wildlife! We want to again especially thank state non-game mammalogist Brad Westrich for this opportunity. Thanks Brad!! 🦇



emphasizes practical skills, clear thinking under pressure, and adapting first aid principles to realistic outdoor conditions. Ideal for hikers, cavers, and anyone interested in safety and preparedness in wild places. Registration for this field trip will open on September 18, but you may go to [IKCFieldTourOctober2026.eventbrite.com](https://www.eventbrite.com) at any time and have a reminder sent to you.

photo courtesy Carla Striegel-Winner



From Field to Form: Cave Data Collection Hike

Location to be announced

Saturday, November 7, 10 AM to 1 PM EST

Come along with Carla Striegel-Winner on a field hike to learn how to collect cave data and fill out report forms for our sister organization, the Indiana Cave Survey (ICS). We'll hike to a cave feature and walk through what data to gather, how to record it in the field, and how it all fits into the ICS database. This is a hands-on, learn-by-doing outing – perfect for anyone interested in helping document Indiana's caves. Registration will open on October 2, but you may go to [IKCFieldTourNovember2026.eventbrite.com](https://www.eventbrite.com) at any time and have a reminder sent to you.

Our upcoming events, stewardship days, and related links are on the IKC website home page at [ikc.caves.org](https://www.ikc.caves.org) so please check there for additional opportunities! For questions on any of this year's events, contact Outreach/Education coordinator Carla Striegel-Winner at IndianaKarstConservancy.info@gmail.com or 812-639-9628. Also follow the IKC on Facebook at [facebook.com/indianakarstconservancy](https://www.facebook.com/indianakarstconservancy). 🐦

THE 2026 NSS CONVENTION IS COMING SOON!

by Laura Demarest and Dean Wiseman (2026 Convention Co-chairs)

The wait is almost over! Our Ohio Valley regional planning team spanning multiple states is incredibly excited to host the 2026 National Speleological Society (NSS) Convention in Corydon, Indiana, from July 6–10, 2026. It has been nearly two decades since the last convention was held in Marengo, Indiana (2007), making this a monumental occasion for our growing community to gather and showcase all that the Ohio River Valley has to offer!

Attendees can look forward to diverse cave trips, scenic show caves, and beautiful rolling hills and valleys, perfect for hiking or paddling. We are also curating a series of unique field trips, tours, and spe-

cialized workshops for a variety of interests – photography, cave formation repair, survey contest, cartography, exploration, vertical climbing contests, Junior Speleological Society, art sal-

ons, and more! History buffs will find plenty to explore as well, with the historic town of Corydon and the iconic Wyandotte Cave serving as significant local landmarks. Evening entertainment will be rockin' with some great musical features. Convention is also a social event and an excellent place to network as we expect an attendance of at least 1,300!

Registration is officially open ([caves.org/convention/2026-nss-convention](https://www.caves.org/convention/2026-nss-convention)), and you'll want to act fast – the pre-registration



discount ends on April 24th! Stay all week or buy a day pass! Discounts are available for new NSS members and students. New merchandise and field trips have recently been added, and more is expected in the upcoming months!

Registration includes primitive camping at the Harrison County Fairgrounds, while the core convention events – including daily programs, vendors, and the Cave Sim – will be held just one mile away at Corydon High School.

This event is a massive undertaking, and we need many hands to make it a success; if you are interested in volunteering, please reach out to Danyeale Green (mudandogs@gmail.com), our Volunteer Coordinator, to get your name on the list to help with this “big lift.”

Keep an eye on our website (link above) and Facebook page (facebook.com/NSSconvention) as we continue to add new items and updates to the schedule. We can’t wait to see you there! 🐦

RECENT STEWARDSHIP ON OUR PROPERTIES

compiled by Keith Dunlap

The winter months slow our stewardship activities but we still have a few projects to report over the past few months:

- ☑ Cris Seuell, the Wayne Cave Property Manager reports that on November 17, seven volunteers worked to install a section of the new loop trail at the Wayne Preserve “Connection” property. Also a section of barbed wire fence near Jim’s Hole was removed since it was mostly on the ground and was getting embedded in the trees. Eventually all of the old fencing between the IKC and NSS properties will be removed. See page 10 for details on the next trail work day.
- ☑ On November 30, Chris Schotter and Keith Dunlap completed the access lane gate replacement project at the Robinson Ladder Cave Preserve. This project was started several weeks before during the Harrison-Crawford Grotto workday at the preserve when they replaced the hinge post. Because a limestone layer was hit such that the new post could not be buried full depth, Chris and Keith added braces from the post to two adjacent cedar trees. Hinges were then installed on the post and the new farm gate was hung. The old gate was then cut up and hauled off for recycling.
- ☑ On January 10, Cris Seuell and Keith Dunlap unsuccessfully looked for one of the 2023 property corner survey pins related to Wayne Cave Preserve “Connection” property. It is suspected that the adjacent landowner had removed it, as he was not happy about the location of the property line. More old fencing was also removed on that day to continue Cris’s de-fencing project.
- ☑ On January 21, Property Manager Carla



photo courtesy Danyeale Green

Mark O’Daniel benching the new trail in November at the Wayne Cave Preserve

Striegel-Winner and her uncle Chris Wigand did the first 2026 Orangeville Rise property visit. They picked up trash and recyclables which included a case of full, but busted open beer cans. Nice (not). What was actually pretty nice was the Rise itself, with a beautiful blue green color, very low water level, and decorated with some hefty icicles! This was after a cold spell and just before the big snow. The Rise will benefit from another spring Weed Wrangle to manage the invasive garlic mustard and poison hemlock on Thursday, April 23. See page 11 if you are interested. 🐦

ORIENTATION TO CAVE RESCUE TRAINING – MARCH 28-29

by Laura Demarest

The Indiana Karst Conservancy, in coordination with the Harrison County Emergency Management Agency, is proud to host a two-day Orientation to Cave Rescue (OCR) seminar on March 28-29, 2026. This awareness-level course will be held at the Harrison County Government Center in Corydon, Indiana.

Whether you are a recreational caver, a local emergency first responder, or a cave-owning agency staff, this training is designed to provide a foundational understanding of the complexities involved in cave rescue operations. There are no prerequisites for this class; it is open to anyone interested in learning how to manage, prevent, or respond to underground incidents.

The seminar balances classroom learning with practical, hands-on experience:

- Saturday (classroom and hands-on) - Topics covered include challenges of the cave environment, hypothermia, medical considerations, patient packaging, and water-related problems. Also discussed will be the Incident Command System (ICS) specifically as it relates to cave rescue, as well as logistics, communications, and media interaction.
- Sunday (mock rescue in-cave): Students will put their new knowledge to the test by participating in a full-scale mock cave rescue incident, simulating a real-world scenario in a local cave.

As a board member with the Indiana Karst Conservancy and an Instructor for the National Cave Rescue Commission (NCRC), I've seen how this training builds an essential bridge between the caving community and traditional rescue agencies. It is a unique opportunity for cavers and first responders to share knowledge, build mutual trust, and identify local resources before an actual emergency occurs. The IKC has a keen interest in promoting safe practices for those who visit our properties and wishes to show support for trainings such as OCR that can help prevent rescues and minimize complications should an incident occur.



photo courtesy NCRC Central Region

Registration is currently open, though there are only 40 spots available, with half initially reserved for local emergency first responders.

Thanks to the IKC and several generous donors, there are discounts available to IKC members, licensed First Responders, and select agency staff. The NSS also offers a discount for their members. The fee schedule is as follows:

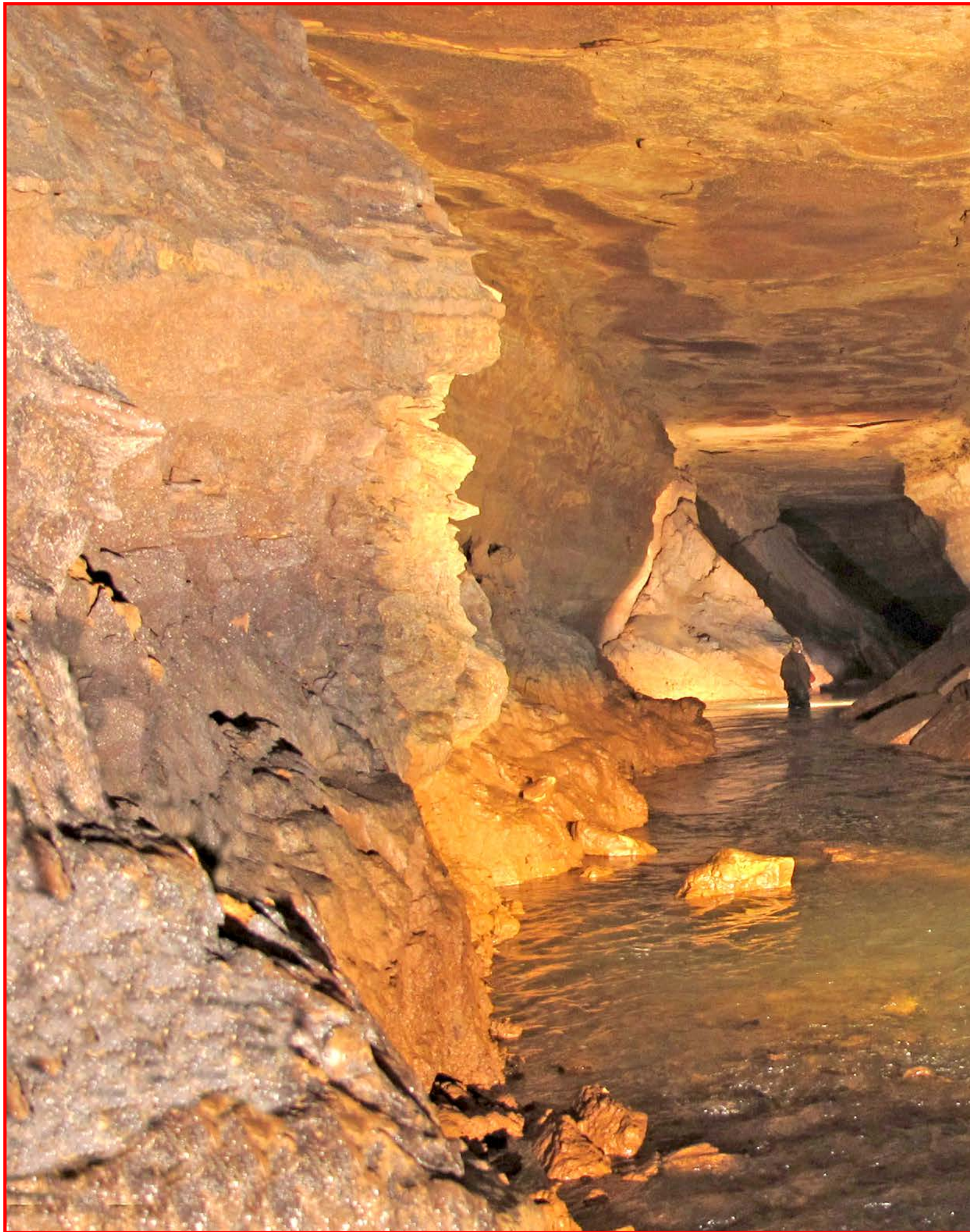
- \$90 – Full fee (no discounts)
- \$65 – IKC member (\$25 discount)
- \$50 – NSS member (\$40 discount)
- \$25 – NSS and IKC member (\$65 discount)
- \$65 – First Responders/Agency (note, this fee will be waived for First Responders who have to pay out-of-pocket to attend or are affiliated with Harrison County EMA)

This OCR class is conducted by volunteer instructors and specialists trained by the National Cave Rescue Commission. The NCRC (caves.org/ncrc) is not a cave-rescue team, but rather an organization under the National Speleological Society that facilitates training for interested groups and individuals. Questions or to register? Please contact me at LDemarest@caves.org 🐦

Center spread: Chris Schotter (foreground) and Tom Sollman in the stream passage of Hamer Cave, Lawrence County.

Photograph by Chris Schotter (2025).







THE “LOST” 1931 MAP OF DONALDSON CAVE AND A HISTORY OF THE CAVE’S OTHER MAPS

by Tom Sollman

I was reading the beautiful hardbound *Yearbook of the State of Indiana* for 1931 (published in 1932) one evening and in the report on the Department of Natural Resources, Division of Engineering on page 959, I found: “An inspection was made of all the caves at [Spring Mill State Park] and a complete transit and tape survey was made of Donaldson Cave with the idea of developing it. This investigation showed it would be very difficult economically to develop the cave by the addition of electric lights, walks, boats, and adequate guide service for the safety of the public.”

Subsequently, I found that James Guthrie in his 1984 book *A Quarter Century in Lawrence County* also mentions a plan for commercializing Donaldson Cave, and perhaps other caves in the park: “Additional plans for '31 included \$8,800 for cave lighting and improvements and construction of a seven-room custodian's house. A number of things were accomplished, but the caves were never lighted...”

Upon further investigation, this 1931 transit and tape survey (and assumed subsequent map) mentioned in the *Yearbook* was unknown to park personnel, cavers experienced with the park, or the Indiana Cave Survey (ICS). *A “lost” map! I had to find it!*

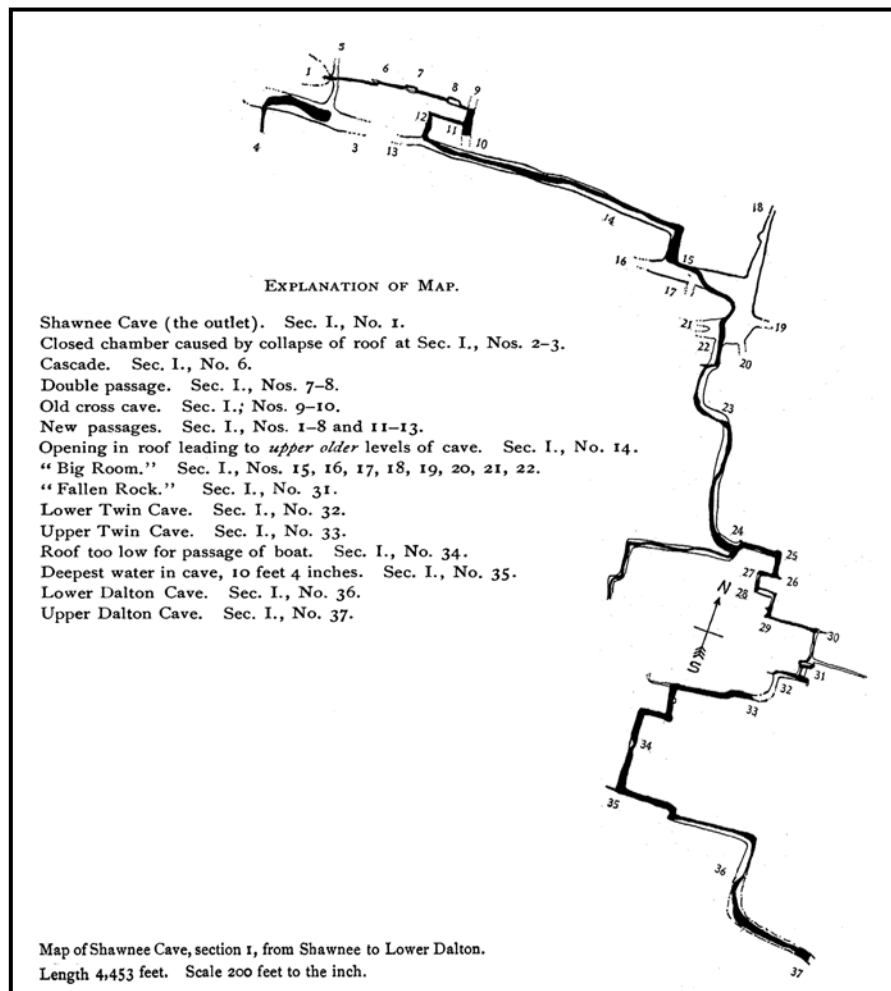
I submitted a public records request through Indiana's Access to Public Records (APRA) website on October 7, 2025 asking for the map with no success. They responded the requested document does not exist. I then contacted the Indiana DNR directly and they responded that I had to make the request through the APRA portal site. So, I tried again, but this time emphasizing which agency I was requesting the information from. *Voilà*, on January 16,

2026 I received an email from the DNR with a digital scan of this 95 year old unpublished map!

While there are dozens of maps of Shawnee Cave (aka Donaldson Cave) referenced in the ICS cave database, there have only been four original surveys/maps of the cave. The four maps are described and compared herein. Note, over the years, the cave and entrance names of the Shawnee System have changed a lot (that's an article all into itself), so I'm using the current cave/entrance names in the descriptions here to minimize confusion.

Notes About Map #1 (1908)

Map scale and length: drafted at one inch = 200 feet scale. The map was presented in two sections on separate sheets. Section One, Shawnee/Lower Twin caves, points #1 to #37, 4,453 feet. Section Two, Upper Twin Cave, points #37 to # 64, 4,674 feet (not included in this article).



Map #1 (1908)



Cartography: Naomi and Will Scott. While today the 1908 map is almost universally referenced to Will Scott, it is believed that Naomi actually did most of the cartography work. Carl Eigenmann in his 1917 combined sections map noted: “Map prepared by Mr and Mrs Will Scott”.

Surveyors: Will Scott and his wife Naomi did the majority of surveying in Section One (Shawnee/Lower Twin). Norman McIndoo and Frank Green surveyed Section Two (Upper Twin).

Survey dates: Section One – Autumn of 1907, Section Two – October of 1908.

Published: The 1908 map was in Will Scott’s *An Ecological Study of the Plankton of Shawnee Cave* (*Biological Bulletin*, Nov 1909) and McIndoo’s *Biology of the Shawnee Cave Spiders* (*Biological Bulletin*, Nov 1910). Eigenmann in his *The Homes of the Blindfishes* (*Geographical Review*, Sept. 1917) had the two maps combined on a smaller scale using the same points for descriptions. The simplified combined version of the original 1908 maps have been almost universally used since then in publications.

Comments: An interesting item on the map is at point #14 “Opening in roof leading to upper older levels of cave”. This is not pointed out on any other map and is very rarely noticed by cavers today. This hole in the ceiling is shortly before the Big Room (going upstream). I’ve stood on tiptoes and held a camera up into the room and taken pictures and it appeared to be mostly mud walled with crystals. It’s possible a passage leads off from it, hard to tell... A very determined and skinny person with help reaching it might be able to squeeze up and into virgin cave.

Another interesting item is #31: “Fallen rock”. This is also noted on the 1978 map as “Walk Around Stone”. A picture of someone sitting on this rock is on plate 4 of Hawn’s 1908 *The Mammals of Indiana* with the caption “Fallen rock just within the entrance of Lower Twin Cave near Mitchell. Bats congregate on both sides of these places in large numbers”. Bats do not overwinter in this area today, perhaps because of the large number of people who enter the Bronson entrance and are stopped by this large rock as it is bordered by a deep pool of water. This pool is one of the only places in Indiana where you can casually walk into a cave and see cavefish.

Scott used a rather large and cumbersome folding

canvas boat that was drug and floated through the cave during trips. Waldo McAtee in the July 1946 *NSS Bulletin* commented on the boat: “I recall that carrying this to the stream, putting it in cruising order, and lifting it over obstructions in the cave, were accompanied by groans and lamentations on our part”. Lighting was just candles usually or kerosene lanterns (carbide lamps were just coming into use and were thought of as unreliable).

An interesting side note is that in an attempt to determine the headwaters of Upper Twin Cave, Scott had five hundred small wooden blocks, about one inch in size and soaked in paraffin, dumped into small openings in the Sinks of Mosquito Creek located about four and one-half miles to the southeast of the Upper Cave entrance. None were ever recovered in the cave (although I keep looking for them today).

Notes About Map #2 (1931)

Map scale and length: drafted at one inch = 100 feet scale; Donaldson to Bronson entrances = 3,238 feet length

Cartography: unknown

Surveyors: unknown

Survey dates: unknown. The map is dated January 1931, so probably 1930.

Published: Apparently it was never published. Except for the reference in the 1931 *Indiana Yearbook*, I haven’t found any other reference to this survey/map.

Comments: The map also includes an overland survey of roads near and over cave. It’s a nice map with several passage outlines and showing deep water locations, but no descriptions.

Notes About Map #3 (1978)

Map scale and length: drafted at two inches = 100 feet scale; THC 6,907 feet length

Cartography: Probably Terry Crayden (he did almost all the ISS maps)

Surveyors: Indiana Speleological Society (ISS) members Pete Cecelius, Ken Hoover, Darwin Groves, Ron Metz, Will Ott, Sam Reynolds, and Gary Roberson.

Survey dates: circa 1977-1978

Published: The map was not published anywhere I could find.



Comments: This map is from the Donaldson entrance to the Bronson entrance. By 1978, surveyors had progressed from the heavy folding canvas boat used in 1907 to a light two-man rubber raft that they took turns going through deep water in, and from candles to now reliable carbide lights (Will Ott, personal communication).

The map shows several interesting features in the cave such as Walk Around Stone, Silver Domes, the mud steps in the Big Room, and Slick Rocks. In the karst valley before the Bronson entrance, it shows “steps”. Apparently the park had steps leading down into the karst window in the 1970s. Today there’s a wooden platform overlook with a railing (that everyone climbs over).

Notes About Map #4 (1991)

This map has Lower Twin Cave separately mapped

and described on the same sheet.

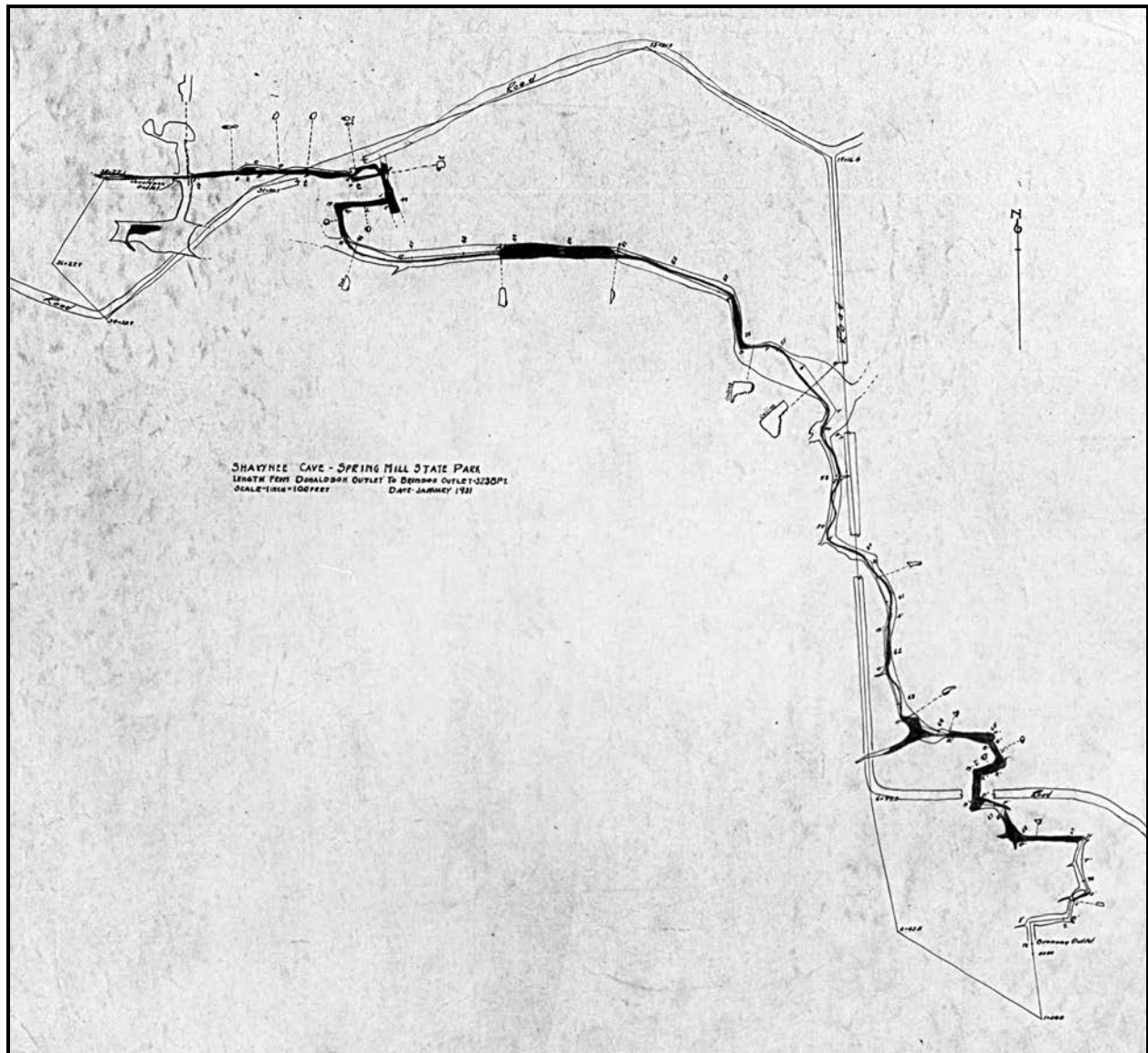
Map scale and length: scale not given; Donaldson: THC 8,024’, TVD 67’; Lower Twin: THC 1,211’, TVD 8’

Cartography: Tina Shirk.

Surveyors: Bill Baus, Kevin Bruno, Kenney Carigan, Steven Collins, John Dannovich, Scott Fee, Scott Foster, Sam Frushour, Lovetta Godfrey, Paul Johnson, Jeff Miller, Tom Miller, Tina Shirk, Susie Sweeney, J.R. Wheatly, and Craig Williams.

Survey dates: Donaldson: 5-24-1989 to 6-25-1989 (although I have survey notes as late as 10-27-1989 and Stephen Collins reported a 1-20-1990 survey trip into Donaldson (CIG 34#3). Lower Twin: 5-24-1989 to 6-25-1989.

Published: 2020 and 2022 Cave Capers guide-



Map #2 (1931)

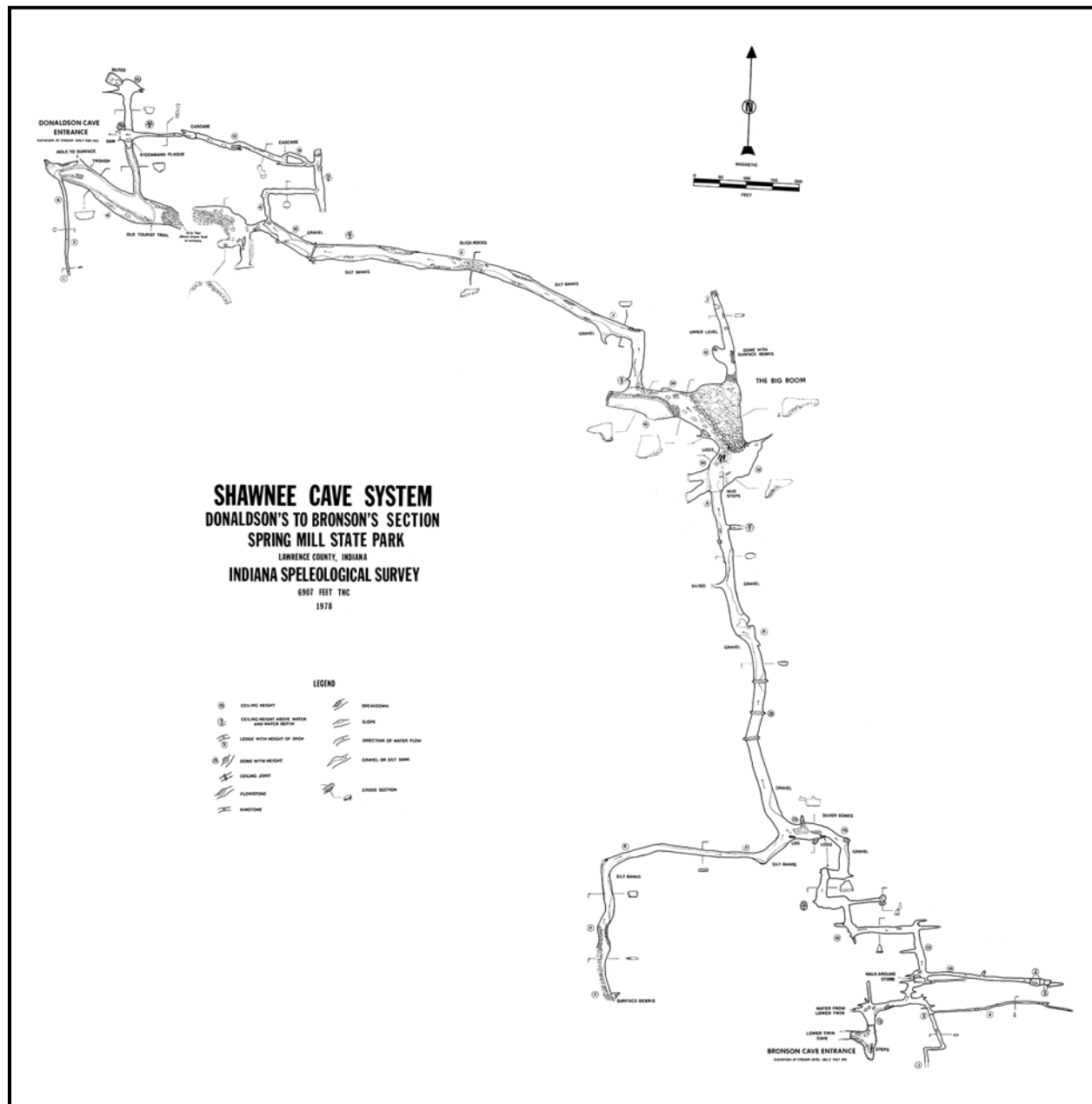


books. Variations of this map have been published in numerous articles.

Comments: The surveyors would sometimes have multiple survey teams in different parts of the cave at the same time. While carbide was still in use, the majority of the surveyors had switched to incandescent electric lights. Bill Baus didn't remember any boats being used. He did remember floating next to a survey station on the wall, bobbing up and down in the water in his ¼ inch wetsuit trying to hold still long enough to get the sight reading to the next station.

An interesting thing on the 1991 map is the "X" marked about 150 feet downstream from

the Silver Domes. This exactly marks the location of a 1¼ inch diameter solid steel pin sticking up 20 inches from the floor about four feet from the right wall going upstream in a hands and knees crawl area. It's quite a coincidence that this pin happens to very accurately mark the end of the area extending from here to near the upstream entrance that contains most of the cave's cavefish population. Who would go to all the work to hammer down a big steel rod just where the large cavefish population ends? Eigenmann comes to mind, perhaps marking the end of one of his study areas. I asked Tina Shirk, the cartographer of the map in 2021 about the X on the map and she didn't remem-



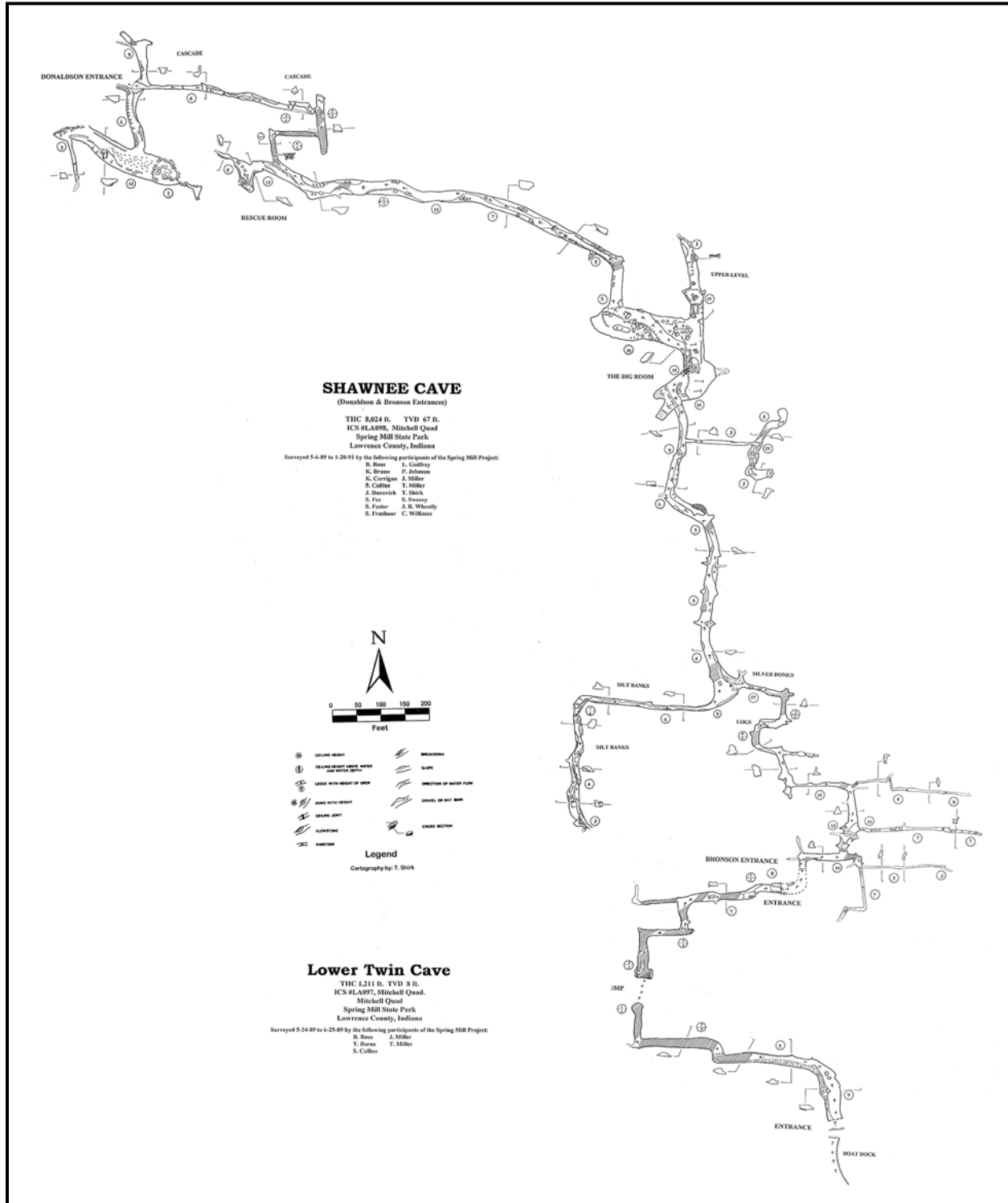
Map #3 (1978)



ber it. The X was also marked on page four of their May 6, 1989 survey notes.

In Lower Twin Cave, this 1991 map depicts two separate caves with a sump between. On the 1908

map at point #34 this is identified as "Roof too low for boat passage". Did they make the connection in 1908? From personal experience, this "sump" is traversable in low water levels. 🦇



Map #4 (1991)

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THE RESTORATION OF TWO-TON PIT

article and photos by Chris Schotter

When my wife Monica and I bought our old farmhouse, we didn't just get a house that had been in her family for over 100 years, we also got three generations' worth of accumulated junk! Our house was built around 1905 and looking at old maps, there was a house there earlier in the 1890s that I suspect was a one room log cabin built over a cellar behind our house. In rural Harrison County, it was common for ravines, sinkholes, and pits to be used for trash disposal. You see it time and time again at old homesteads. Somewhere nearby there's a trash hole. It's not that they didn't care about the environment; it's a safe bet they were more connected to nature than most people today – they just didn't know any better, nor did they have many options. This area was populated long before there were public landfills or trash pick-up services. When something wore out beyond repair, the easy solution was to abandon it in the woods or dump it in an inconspicuous hole.

Our property had several old trash piles; seems each generation found a new spot to get rid of their trash. Junk machinery was parked in the edge of the woods. Old bottles and cans went to a ravine, sinkhole, or were thrown in a small pit. And tires – *lots of tires*. They were stacked in the outbuildings and scattered randomly in the woods. Our house is on top of a steep hill and it is just something irresistible for kids to want to roll old tires down a hill. In my youth, I sent my fair share of tires over hillsides, and I have to admit it is fun and incredible to see how far they can go. I guess karma caught up to me when we bought our land and I had truckloads of tires to collect from the bottom of hills. I even found the metal hoop of an old wagon wheel half buried in a ditch far below our house and I would bet it was a kid that rolled it down there long ago to see how far it would go.

It is more of a marathon than a sprint to clean up generations' worth of accumulated junk. We started with the big stuff and loaded several trailer-loads of old machinery off for scrap. We kept

the old horse-drawn hay rake that I found in the woods, but the old combine, corn picker, and other odds and ends were too rusted away for anything but the scrap yard. The tires I continue to pick up as I find them. They really did seem to scatter them at random across the property, and many truckloads of them have gone to the recycle center. Just when I think I have them all, I'll find another. I'm starting to think they multiply on their own. There were also several small sinkholes scattered over the property that I cleaned up. For most, the trash was old enough to predate plastic and all that was left was broken glass jars and larger pieces of metal that hadn't rusted away yet, easy one day projects. Most of this went to the recycle center.



Chris Schotter next to Two-Ton Pit with his six five-gallon buckets and haul rope

The worst sinkhole was close to the county road and had the most recent trash from the 1970s and early 1980s. This one was a real eyesore with a mix of household glass, metal, and plastic. Knowing this was a bigger project, my plan was to pick at it over time. I started on Earth Day in 2020. Not wanting to rent a dumpster, I made it a weekly task, spending about an hour or so on it each week. I'd fill buckets with glass and metal. Anything I couldn't recycle I loaded into old chicken feed bags and packed our trash can full for the week. Weather permitting, I did this most weeks for over a year, filling our trash can and stacking up buckets of glass and metal for my next trip to the recycle center. Finally, I found the bottom of the sinkhole. What was once a pile of trash two feet above ground ended up being a four foot deep by ten foot



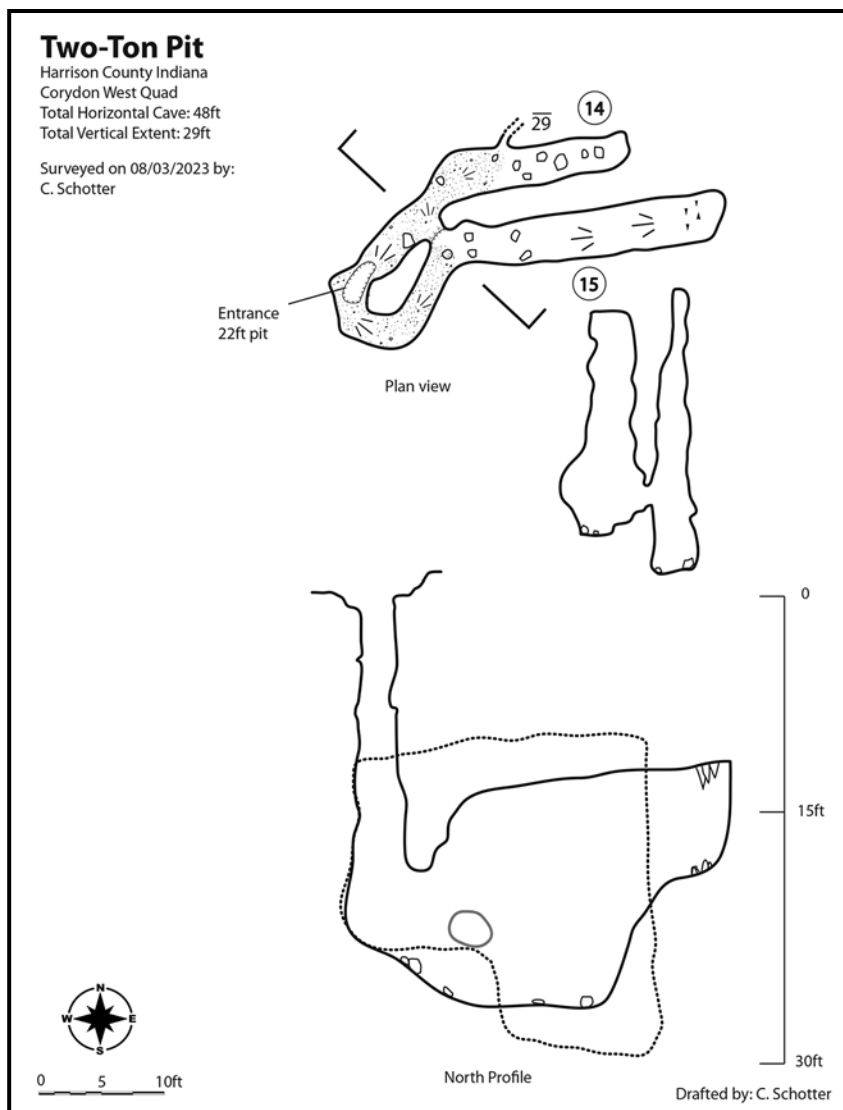
diameter sinkhole. Honestly, I was a little disappointed to find the bottom. The deeper it got, the more I was hoping to find a rock ledge and cave entrance under the pile. I may not have found a new cave, but I did get a good collection of glass bottles and creepy doll heads along with a better appreciation of our plastic problem. Forty years in a sinkhole and nothing plastic had broken down. You could still easily read the ingredients on old toothpaste tubes.

Stepping back in time on a summer day in June 2008, I was riding around with my father-in-law Dallas talking about caves and he casually asked if I'd seen the one in the woods below our house. I had not, so we stopped and walked 30 feet into the woods where he showed me a trash filled hole. A quick peek and I could see that the trash was actually a plug at the top and through a hole along the edge I could drop rocks down a small pit!

The trash was dumped here long before my wife's time and she didn't know there was a cave there either. We spent several hours cutting back some trees off the top and moving trash out of the hole. By lunch we had most of the surface trash moved away and I was getting down over the top of the pit. We took a break to eat and get a rope and vertical gear for safety. After lunch, we got our cave gear and went back down to see if we could open it up. Monica's brother Kevin lives just a mile down the road and he came up to join in the fun. Clipped into a rope, I started filling buckets with trash and handing them up to Monica and Kevin to dump in a pile a few feet away. Lucky for us, an old front seat out of a car was wedged a few feet down and had made a nice plug to keep a lot of trash from falling further down. Once I got down to the seat and pulled it out, the pit was open. I hate to think how much more debris would have been thrown in the pit had the seat not plugged the hole!

Monica was elected to go first and rappelled into the cave. As soon as she was off rope, I fol-

lowed her down. When I landed beside her, the whole floor of trash felt like it dropped a couple of inches. Fearing we were standing on another trash plug and not the true bottom, I had visions of us knocking it loose and plummeting to our trashy deaths. We both quickly clipped back onto the rope till we were sure we were safe. It is not a big pit, just over 20 feet deep, but it had a big pile of trash at the bottom. Working my way down the pile I got to the solid floor below and saw that the trash pile may have settled, but disappointingly it wasn't going to give way to a deeper hole. Other than the health risks that go along with a big pile of broken glass and rusty metal, it was safe to move around. Kevin rappelled down to join us and we started exploring. It turned out to be a short cave, but interesting. The cave is a narrow hairpin canyon about 50 feet long with the entrance and trash pile right in the bend. A small window in the middle connects the two sides. We spent a few minutes poking around and taking some photos and were



ready to get out. There's just not that much to see. As we were getting ready to climb back out, we found a little eastern hog-nose snake (*Heterodon platirhinos*). I put her in a ditty bag for a lift back to the surface. Knowing this was not going to be an easy cleanup, I saved this pit for a future project and worked on all the surface cleanups first. I always wanted to own a cave, but this one was embarrassing, so I kept it quiet.

Back to 2022, with most of my surface cleanup projects done, I decided it was time to tackle the trash pit. In the aftermath of COVID, we still weren't doing things in groups so I didn't ask any of my caving friends for help; rather I decided to chip away at the pit as a solo project, slow and steady. I took an old cave rope and knotted it at 30 foot lengths so I could daisy chain three five-gallon plastic buckets at a time. Each trip to the cave I would lower down six buckets then rappel down on a second, nicer rope. In the cave, I'd fill the buckets, sorting out trash from recyclables. Then I'd stage three of the full buckets and clip them to my haul rope, taking care to arrange the rope so it wouldn't tangle as I pulled them up. Next, I climbed up the clean rope, and pulled the three buckets out. The pit is a little over 20 feet deep, so the buckets clipped in every 30 feet let me pull them out one at a time and set off to the side without fighting the weight of the next bucket. Once I had the first three hauled out, I'd lower the haul rope back down, rappel back down and repeat the process for the other three buckets. As a side note, 100 feet of rope makes an ugly pile of spaghetti to sort through at the bottom of a 20-foot pit. I could have used a longer rope to daisy chain all six buckets and not have to do a second trip down, but it would have been a disaster of a mess at the bottom to sort through. Three at a time was about perfect.

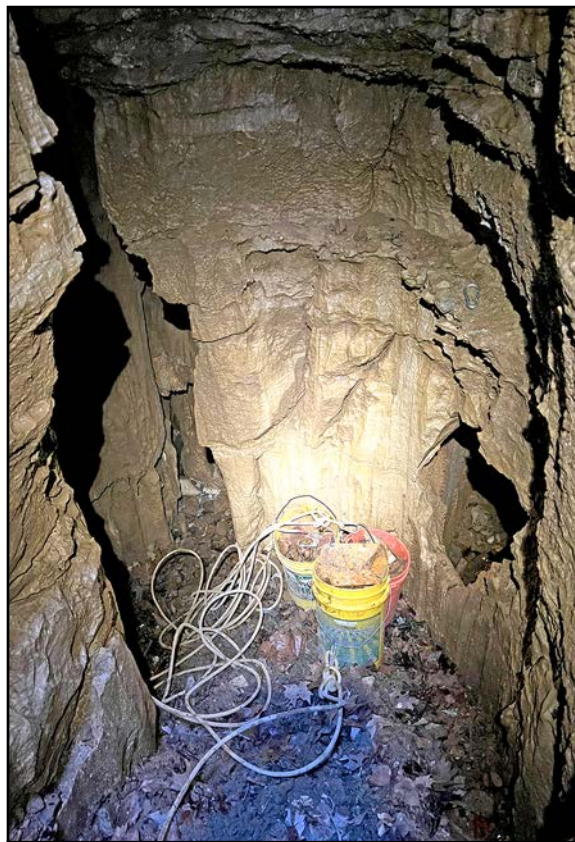
The pit is small, with the upper ten feet a narrow crevice, four feet long and one-and-one-

half feet wide, just wide enough for five-gallon buckets to pass. At the top I had a perfect ledge on each side of the pit so I could stand, straddling the hole, and pull the buckets straight up. Start to finish a typical work session took about three hours to get six buckets filled and out of the cave. Then another hour or so on the surface to sort the recycle and bag up the trash. This was about the right amount for our trash can, anymore and the garbage man would have hated me for the heavy load. Six buckets at a time... this was going to take a while.

I kept at it. Mostly repeating the same process. Trip after trip, once or twice a month for about a year and a half I'd go down and haul a

load out of the pit. Slowly I started to see progress. The vast majority of it was rusted metal cans or broken glass, but there were a few treasures. I found some cool bottles that had somehow survived being tossed down the pit. These, I cleaned up and added to my collection of items found in caves. One of them was a Sloan's Liniment bottle, which I believe is the same brand advertised on a rock along the tourist trail in Wyandotte Cave. Used for muscle pain, it must have been strong stuff. The rusty lid came apart in my hands, but had kept it sealed and I could still smell the liniment in the bottle. Probably 60 years in a pile

of trash at the bottom of a pit and it still had a medicine smell! There was one cork-topped ink well and a couple other interesting bottles worth keeping; the rest of the glass was recycled. I was really surprised and lucky that I only found three things at the bottom of the pit that would not fit in a five-gallon bucket. I think because the entrance was too small to throw something big down: an old galvanized wash tub, a large truck tire, and a really big rusty muffler. The tire and muffler were incredibly heavy and awkward to haul out. The tire barely fit and got snagged on the walls several



The bottom of Two-Ton Pit with rope and haul buckets

times on the trip out. It made me grunt and I was glad there was only one down there! If there were more, I would have rigged a haul system.

On every trip I was amazed at the amount of life in the pit. I expected a trash pit to be an inhospitable environment, and I suspect that 50+ years ago when they were actively dumping in it there wouldn't have been as much living down there. But nature is resilient, the chemical residues from paint cans and other household chemicals are probably long gone and it is once again a happy place for cave life. The pit has a healthy population of the typical cave salamander species and at times I saw a lot of eastern newts (*Notophthalmus viridescens*). On a November trip, I started unearthing a lot of slow-moving newts under the trash. I stopped work and waited a few months till spring to resume my efforts to let them finish hibernating. I also rescued several animals that don't belong underground, including some seldom seen snakes. There was the hog-nose snake from the first trip, and on my seventh trip I found both a red-bellied snake (*Storeria occipitomaculata*) and a common wormsake (*Carphophis amoenus*). I also gave several American toads (*Bufo americanus*) a ride to the surface and on my survey trip I found a young eastern box turtle (*Terrapene carolina*) that had recently fallen in. She was unharmed, but ready

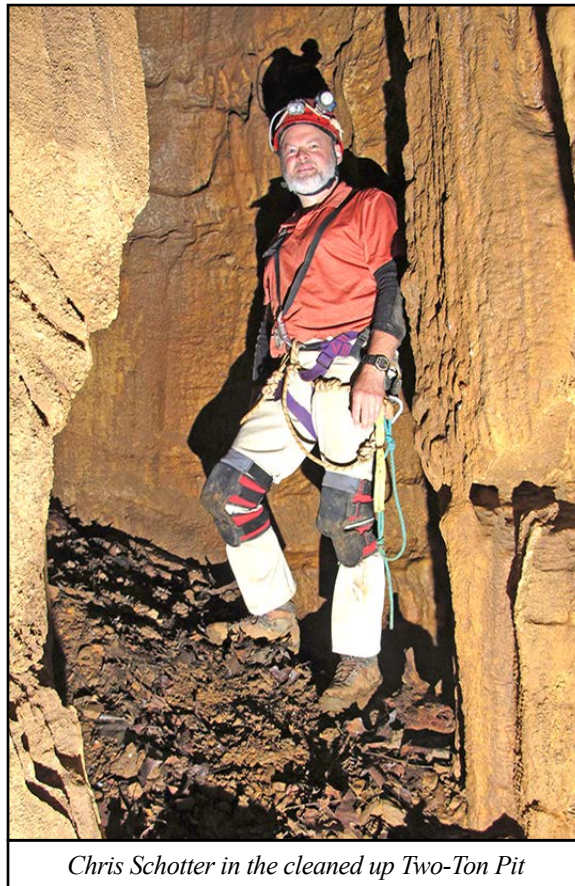
to get out. The snakes and toads I put in bottles found on the bottom and carefully placed them in a bucket wedged upright so the critters couldn't escape halfway up. I did one more snake rescue in 2024. The pit is located in the woods right behind my bee hives. After checking my hives, I'd often walk over to look at the pit – just a caver thing, I guess. Anyway, as I got close to the pit, I startled a two-foot long gray ratsnake (*Pantherophis spiloides*). It shot out from the woods and literally jumped into the pit! *Dang it*. I hadn't planned on doing the pit that day, but I couldn't leave the little

guy in there. Rat snakes are excellent climbers, so he'd probably get himself out, but just to be sure he wasn't injured in the fall, I went back up to the house and got my cave gear and a stuff-sack to go rescue yet another snake from this little pit. The snake was fine, and I got it out and carried it away from the pit before releasing it. I've rescued many snakes from pits over the years, but this was the first time I'd ever witnessed a snake jump in one!

From February of 2022 to August of 2023, I did a total of 12 solo trips to work on cleaning up the pit (not including the first trip to dig it open in 2008). I know solo caving is bad, but a 20-foot pit that I can almost see from my house didn't seem that risky. Plus Monica knew where I was and I wouldn't

have been stuck there for long should something had happened. I did have a total light failure on one trip, but there was enough light filtering in that I could find my way to the rope without trouble. It was a nice solo project, and fun to really get to know the cave and critters in it. In total I pulled 47 buckets of trash from the cave and another 18 buckets of recyclable glass and metal. I sample weighed several of the full buckets to get a conservative estimate of 2,800 pounds of trash and 1,200 pounds of recycled glass and metal, hence the name "Two-Ton Pit". I did a solo survey of the cave after I finished all the trash hauling trips. The cave is basically a 15

foot tall canyon that is almost 50 feet long with a total depth of 28 feet. I'm calling the project done, but I doubt I will ever have it 100% clean. Shattered glass in mud is not easy to sort through and find. There is always another piece there somewhere. My plan for the foreseeable future is to make a trip once a year or so with a bucket to pick up any glass shards that weathered their way to the surface. Without the trash, it's just another little Indiana dud hole, and I doubt it ever gets many visitors. But at least now I'm not embarrassed if someone wants to see it! 🦋



Chris Schotter in the cleaned up Two-Ton Pit

A LOOK BACK AT INDIANA KARST

by John M. Benton

Over 30 Years of Digging at Megenty Peccary Cave with the Indiana State Museum

Two weeks a year, for over 30 years, there was a paleontology dig project in a small, but significant cave nestled in the hills along Patoka Lake in southern Indiana. The digging is done, but this project is still yielding clues to ice age animals that once lived here, some of which are now extinct in

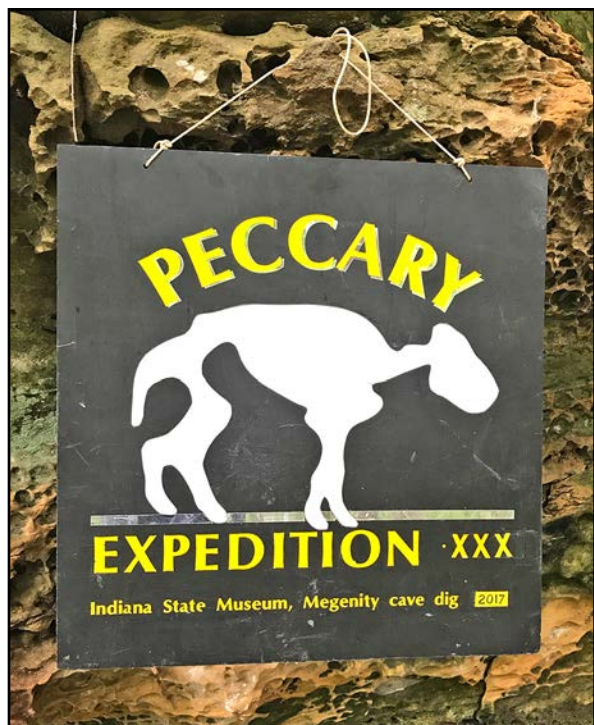


photo courtesy John Benton

this part of Indiana. Radiocarbon dates have indicated the bones are anywhere from 11,000 to 100,000 years old. Researchers have dug up hundreds of thousands of fossils and animal bones, some large, some medium, and many tiny ones. All the collected bones need to be cataloged, a process that continues at the Indiana State Museum (ISM) even though the dig project ended in 2018. During each dig, bones and sediment would be collected in plastic five-gallon buckets, then screen-washed and hand sifted for potential animal materials. Those materials would then be brought back to the ISM lab for analysis. The project began in 1987 under the guidance of Ron Richards, Curator of Paleobiology at the ISM. Ron, also a long-time caver, saw the dig through its completion in 2018, when at last, all the sediments in the cave had been removed down to bedrock.

Ron Richards passed away, unexpectedly in

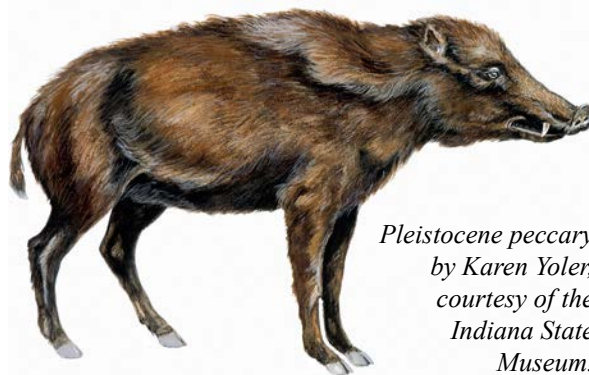
2021 at age 73. He had worked at the ISM for over 40 years. During the digs on this project, the remains of over 300 individual flat-headed peccaries were removed from the “Pig Dig” as the project became affectionately known to the work crew. Approximately 60 species of animals were uncovered at the dig. The bones and fossils were all tagged and either identified on site or stored for future study and inspection back at the Museum. The small micro-fauna pieces are still being identified by museum staff and volunteers, a task that will probably take many more years to complete.

Flat-headed peccaries inhabited open woodlands just south of the glacial ice 11,000 to 100,000 years ago in southern Indiana. Just why they became extinct is unknown. Other animal remains including black bear, otters, coyotes, plains pocket gopher, mice, shrews, and snakes have also been uncovered from the ice age, but none of these animals are currently extinct.

Vertebrate animal bones/fossils that are now extinct or extirpated from Indiana that have been found in the cave include the giant land tortoise, beautiful armadillo, dire wolf, Pleistocene jaguar, Pleistocene horse, Pleistocene tapir, long-nosed peccary, American mastodon, Arctic shrew, fisher, pine marten, boreal red-backed vole, heather vole, yellow-cheeked vole, northern bog lemming, and snowshoe hare.

It is interesting to look back at what animals roamed the southern Indiana countryside during the Ice Age. The oldest radiocarbon date determined from some of the peccary remains was 50,000 years before present! And as Ron Richards stated before his untimely passing, that date may not be the oldest.

Note: Permits to dig in the cave were acquired on this project throughout its entirety. Had the group encountered any human remains, the proj-



Pleistocene peccary
by Karen Yoler,
courtesy of the
Indiana State
Museum.



ect would have paused and the coroner called in. Also under Federal cultural regulations, an investigation is required anytime human remains are discovered. There were a few Native American artifacts (flint and arrowheads) found in the cave, but no human remains.

References:

- *Outdoor Indiana*, July-August, 1988, pages 4-7.
- *Outdoor Indiana*, May-June 1995, pages 12-15.
- *Outdoor Indiana*, July-August 1996, pages 42-47.
- Ron Richards, Pig Dig participation, personal communications, emails, correspondence.



photo courtesy Indiana State Museum

- Peggy McGinnis Fisherkeller, Curator of Geology, ISM, personal communication. 🐦

IKC GOES TO GERMANY TO CLAIM INTERNATIONAL QUARRY LIFE AWARD

by Carla Striegel-Winner

In an article in the December 2025 issue of the *IKC Update* I chronicled how busy the *Population Status of the Hoosier Cavefish in Hamer Cave, Lawrence County, Indiana* project team members Tom Sollman, Keith Dunlap and I had been fulfilling all the requirements and requests of global company Heidelberg Materials, for their International Quarry Life Award initiative. At that time, we already knew we had been invited to attend the Quarry Life Award Ceremony in the company's hometown of Heidelberg, Germany. However, we were sworn to secrecy and asked not to reveal to anyone outside of the project team, as being invited meant that we were one of the award winners!

We had been told a month or so earlier that there was a good chance we might be invited, so we were asked to ensure that one of our team members had a valid passport and would be able to travel (expenses paid) to Heidelberg for the award ceremony on Thursday, November 27... Thanksgiving Day! Well, that did it for Tom, no way was he leaving his family on the United

States' favorite holiday. Keith led me to believe he had no valid passport (but in reality he just preferred to not travel on the US's busiest travel weekend, go figure). So that only left me, and honestly, I was ready for a little adventure. Although Thanksgiving happens to be my favorite holiday too (I had not missed one since my early twenties), it was a week that I could take a couple of extra days off work to go. And I was able to request to my mom that we have Thanksgiving delayed to Sunday, when I would be back in Indiana. She said yes! So Carla was going to Germany!

Good thing I was up for that adventure, as every single one of

my flights was late, but I did manage to land in Frankfurt Airport and find my driver – I had a driver! I was so appreciative that Heidelberg Materials provided this service so I did not have to figure out how to get to Heidelberg and my hotel over an hour away. My driver had a sign with “Heidelberg Materials” on it and I felt incredibly thankful for that! Oh, and he took my



bag? I clearly am not used to anything other than independent travel, on the cheap.

I left on Tuesday and arrived in Germany Wednesday morning. After a long and relaxing nap in my hotel room, I went for a walk and out to eat. The next day was Ceremony Day – I was to meet Heidelberg Materials staff and the other award winners from across the globe. After our short meet-and-greet, each winner had a time slot to do a recorded interview about our project. After that we had a slight bit of free time before the ceremony that evening, which I spent in my room, sipping nice strong German coffee.

I was feeling a little bit alone, as some winners had their own local country's Heidelberg Materials staff with them, but surprise, the US staff we had worked with all along also did not want to miss Thanksgiving, so none were in attendance – I certainly did not blame them for that. I made the most of it and the hors d'oeuvres and networking went well as I got to learn a bit more about my fellow award winners' projects. Soon it was time for the ceremony and although I thought we were going to win a cash award, I was not exactly sure.

Here we learned that of the seven project finalists, six of us would be awarded €10,000 (one in each of six categories) and one grand prize winner of €30,000. I one-hundred percent knew who the grand prize winners would be: the Polish team who showed up to the meet-and-greet in project t-shirts with trendy suit jackets, project pins on their lapels, and carrying a children's book they had published in two languages about the project! Honestly, I wasn't even sure what their actual project was about, but these guys were out of this world lovable over-achievers and passionate about it.

It was a really nice evening, and Heidelberg Materials put so much time and effort into the ceremony. What made me so proud was how not one, but two of the international judges mentioned Tom Sollman's passion about the caves and cavefish. Both judges had come over from Europe to southern Indiana and met Tom to learn about the Hamer Cave project and one had actually accompanied Tom into the cave. It was great to see photos of our project on the big screen, and how it had impressed

them. We won the "Beyond Quarry Borders" category. And of course, the Polish project won the €30,000 grand prize as I knew they would. I really enjoyed talking to the representative from Morocco about his project... he is a herpetologist... and his project that created habitat in vacant quarries for endangered snakes was so interesting and creative. Another project was the Stuck in the Mud project from the UK. This one takes mud cores and samples diatoms to record the sediment in the abandoned quarry lakes that are long term pollution traps. The professor behind the project was very interested in learning about cave sediments as well, and we had some great conversation on this.

After the ceremony, we had dinner and I was so excited to see good old American Thanksgiving traditional sweet potatoes on the buffet. That is until I tasted them and realized they were not so traditional – very spicy hot! And not that sweet either! But delicious sweet potatoes they were, and of course several folks wished me a happy Thanksgiving, as I was the only US citizen there.

I had chosen to stay an extra night at my own expense, so Friday was my day to explore Heidelberg and its famous castle, Altstadt (Old Town) and the Weihnachtsmarkt (Christmas Market)... I fell in love with the cozy outdoor market and the Glühwein, a spiced hot wine similar to our hot apple cider or to a hot toddy. Being of German-American heritage, I had thought of traveling to southern Germany someday, so it was just lovely to experience it. After walking about 12 miles on Friday, I slept pretty well and was again happy to see my driver come to pick me up for the beginning of my journey home... which turned out to be stressful because my flight from Frankfurt to Dulles left so late that I missed my connecting flight to Louisville. I did not make it home until 3:30 AM Sunday morning, just in time for a couple of winks before my 1 PM Thanksgiving Sunday Dinner with the family! Thanksgiving with Heidelberg Materials was certainly one to remember!

To see more about the 2025 Quarry Life Awards and all the category winners, go here heidelberg-materials.com/en/pr-2025-11-28. 🦋



INDIANA KARST CONSERVANCY TREASURY REPORT

Income/Expense Statement From October 1, 2025 to December 31, 2025

INCOME:

Dues Apportionment and Residuals	1,643.33	
Donations - General	1,305.99	
Donations - Land Acquisition Fund	16,500.00	
Quarry Life Award Prize	11,232.00	
DNR Habitat Grant	10,000.00	
General Investment Earnings	1,899.23	
		\$42,580.55

EXPENSES:

IKC Update (printing, production, mailing)	804.45	
Education / Outreach	251.79	
Stewardship / Conservation	290.56	
Business (PayPal fees, postage etc)	20.01	
Insurance Premium (liability, D & O, volunteer)	1,818.00	
DNR Habitat Grant	10,000.98	
Transfers to/from restricted funds/other adjustments	27,732.00	
		(\$40,917.79)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD: \$1,662.76

Balance Sheet December 31, 2025

ASSETS:

Checking / CD / Brokerage / Endowment accounts	970,961.32	
Wayne Cave Preserve (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>\$1,857,974.48</u></u>

FUNDS & OPERATING EXCESS:

Land Acquisition Restricted Fund	125,064.39	
Deferred Dues Restricted Fund (335 members)	11,515.00	
Stewardship Endowment Fund (+2.4% for Q4)	165,881.19	
Gale & Ray Beach Endowment Fund (+2.6% for Q4)	564,759.86	
Previous General Fund (total)	102,091.28	
Net Excess (Deficit) This Period	1,662.76	
Current General Fund (unrestricted)	103,754.04	
Current General Fund (committed)	9,152.05	
Real Estate Basis (excluding value of CE)	<u>887,000.00</u>	

Total Liabilities & Operating Excess \$1,857,974.48

IKC EXECUTIVE BOARD MEETING MINUTES

Sunday, December 13, 2025 – 1:00 PM EST

Virtual (Zoom) Meeting Due to Inclement Weather

Board Members Present:

- Matt Selig, President
- Goniela Iskali, Secretary
- Keith Dunlap, Treasurer
- Bill Baus
- Bruce Bowman
- Brandon Chasteen
- Jeff Cody
- Laura Demarest
- Scott Frosch
- Danyeale Green
- Joe Kinder
- Cris Seuell
- Tom Sollman
- Carla Striegel-Winner
- Richard Vernier

* represented by proxy (see below)

Board Members Absent:

None

Others Present: Pat Burns, Suz Gagnon, Kevin Strunk, Sue Vernier, and Nate Vignes.

Call to Order – IKC Exempt Purpose & Introductions

The meeting was called to order by Matt Selig, President, at 1:02 PM EST.

Acceptance of Proxies

No proxies, all Board members present.

Approval of Previous Minutes

No edits were proposed to the last meeting minutes as published in the December 2025 *IKC Update*. *Carla made a motion to approve the minutes. Danyeale seconded. Unanimously approved.*

Email Motions Since Last Meeting

None.

Treasurer Report

Keith outlined the current financial status of the organization:

Assets:

Cash assets totaling	\$957,225.01
Land assets totaling	\$887,000.00
Total Assets	\$1,844,225.01

Dedicated Funds:

Land Acquisition Fund	\$107,332.39
Stewardship Endowment	\$166,877.21
Gale & Ray Beach Endowment	\$567,364.39

Deferred Dues (as of 10/1/25)	\$12,630.00
General (unrestricted) Fund	\$103,021.02
Total Cash Funds	\$957,225.01

Current members: 333 with 27 members yet to renew.

Keith has reached out to members who have yet to renew, but has not received a great response rate.

The annual growth rate of the stewardship endowment fund is 12.7%. The annual growth rate of the Gale and Ray Beach Endowment is 9.8% (the original investment was \$400,000), and this is lower because this money was invested about 6 months later at a higher buy-in price than the stewardship endowment fund.

Nominating Committee Appointment

Matt asked for volunteers for the Nominating Committee. Danyeale, Bill, and Cris volunteered to be on this committee to ask Officers and Directors if they're re-running for election, solicit other candidates, and put the ballot and candidate information together.

Potential Acquisitions

Details on a current potential acquisition project were distributed to the Board prior to the meeting and there were no follow-on questions at the meeting. The *ad hoc* committee will continue to communicate with the landowner to explore this opportunity.

Approval of the Sullivan Cave Management Plan

The Cave Patron (Goni) and Property Manager (Joe) worked on updating the Management Plan for Sullivan Cave, which had last been updated in March 2022. The main changes to the plan reflected the new online system and the addition of recommended minimum and maximum number of cavers for each group. *The motion was made by Bruce to approve the Management Plan. Jeff seconded it. The motion passed unanimously.* The updated Management Plan will be posted to the IKC website.

Education/Outreach Committee

Review Fall Outreach and Events – The fall events included the “Big Day for the Birds at Buddha Preserve” on October 11 with the Indiana Audubon, followed by the November 8 winter event “Fauna and History of Lawrence County Caves and Karst” led by Board members Tom and Keith. On October 25, the IKC partnered with The Nature Conservancy (TNC): “Bats and Rocks” at Henderson Park. Board members Scott, Matt, Goni, and Danyeale participated and presented on karst, geology and bats. The event was a success and TNC is interested in partnering with the IKC for future events.



The Indianapolis Public Library is looking for volunteers to help with a presentation for a home school program in 2026, and Nate Vignes volunteered to help with this event. The Indiana State Library summer reading theme for 2026 is “Unearth a Story” and they are looking for cave-related programs; Carla is coordinating to schedule a webinar to relay cave info. Carla will coordinate with Goni about doing some outreach with a home school group out of Bloomington. Carla also noted that she has experienced an increase in outreach about caves and the IKC from potential participants of the 2026 NSS Convention.

IKC 40th Anniversary Planning

Carla is looking for ideas on how to celebrate the IKC’s 40th anniversary in 2026. For example, the *IKC Updates* can focus or highlight historical photographs and articles. Members of the Board also expressed interest in ordering 40-year Anniversary swag (hats, stickers, t-shirts, pins) so that they could be sold at events such as the Indiana Cave Symposium. The Indiana Cave Survey is also celebrating their 40th year anniversary so it makes sense to celebrate together at the symposium and order a cake. Lastly, Keith suggested that we create a 40th Anniversary sticker to send to members in the February renewal/election mailing. Laura mentioned that Charlie Veters had made the last round of stickers and they were of good quality. *Carla made a motion for the board to spend up to \$500 for the 40th Anniversary stickers for members and/or for potential sale to other events. Laura seconded it and the Board approved the motion unanimously.*

Carla made a motion to approve up to \$1,000 to buy merchandise or promotional items for sale with the 40th Anniversary theme. Danyelee seconded it. The motion passed with 12 yeses and 3 abstentions.

Bat Habitat Management Grant

The Indiana Department of Natural Resources (IDNR) allocated funding (\$10,000) for the IKC through a White-nose Syndrome grant to help us with bat habitat improvement and management. The money was approved by the IDNR in November and they required that it be spent fully by the end of 2025. Carla and Keith received and spent the funds on equipment such as a mower, chainsaws, PPE and other safety equipment for Property Managers, and chemicals for invasives control.

Quarry Life Award Project Update

The IKC won the *Beyond the Borders* category of the 2025 Quarry Life Awards (sponsored by Heidelberg Materials) with a cash prize of 10,000 Euros for the cavefish inventory research completed at Hamer Cave. The Hamer Cave entrance is owned by Heidelberg Materials and is located within Spring Mill State Park. The Award Committee notified the IKC that we were selected as a finalist and requested that someone

from the project team (Tom, Carla, or Keith) appear in person in Germany to accept the award on November 27 (Thanksgiving). Carla represented the IKC and accepted the award on behalf of the IKC. The money has not been received yet. The Board agreed for the funds to be added to the land acquisition fund when received.

ILPA Update

Monday, February 23rd will be the annual winter conference and reception, and Board members are encouraged to attend. However, pre-registration is required. The event this year is again at the Indiana Historical Society building in downtown Indianapolis and it includes free parking. Carla also noted that the ILPA annual membership increased from \$500 to \$750 for 2026. The Board discussed the pros and cons of participating in ILPA and the Board believes that this is a great benefit to land trusts such as the IKC. The Board also considered giving \$1,000 to ILPA (\$750 for membership and \$250 possible donation) but after discussing, it was decided to only contribute for the membership fee. *Carla made a motion to approve the renewal of the ILPA membership (\$750). Danyelee seconded the motion. The motion passed unanimously.*

2026 Indiana Cave Symposium

The date for the Symposium has been set as April 18th, 2026 and Carla is working on finalizing the plans for the field event before the symposium. *Matt made a motion to approve \$200 to co-sponsor the Symposium. Bill seconded the motion. The motion passed unanimously.*

2026 NSS Convention

Laura announced that there will be free vendor spaces at the NSS Convention (July 6-10 in Corydon) for educational booths and the IKC may sign up for one of these booths. Laura will send Carla the information so that the IKC can consider signing up. In addition, Ron Adams is in charge of scheduling caving trips for the convention and will reach out to landowners, which may include the IKC, sometime in the spring to schedule trips. Laura also provided more info about “CaveSim” at the NSS convention and requested that the IKC support it by being a sponsor. The total estimated costs to host “CaveSim” at the convention is \$10,000 and she will also be soliciting donations from other organizations. *Bill made a motion to approve \$2,500 donation for “CaveSim”. Bruce seconded the motion. The motion passed with 14 yeses and 1 abstention.*

2026 Orientation to Cave Rescue

Laura reported that the next Orientation to Cave Rescue class will be held in Harrison County on March 28-29th. Harrison County Emergency Management Agency is providing the meeting space at the Government Center free of charge. The IKC has sponsored this training event in the past and offered a discount for IKC members and first responders. Laura asked if the IKC would want to sponsor the event again. The Board discussed



and expressed interest in sponsoring the event, although one board member questioned how this aligns with our conservation mission, but was still in favor as long as the amount was not too high. Laura will gather more information on the number of participants and approximate cost for the IKC to support it, and the Board will vote on this before the March meeting via email.

The Online Permit Request System

Goni gave an update on the online registration system for Sullivan Cave and said that the system has greatly streamlined the registration and waiver process, and has helped reduce the liability for the IKC because waivers now get reviewed by both the trip lead and Cave Patron/admins prior to the trip. While gathering and reviewing waivers is still the primary responsibility of the trip lead, the Cave Patron or admin approving the permit serves as a secondary check. This is how the system is also used by other conservancies. The feedback from users has been great so far and the number of questions about the system has greatly reduced as users get used to it. Matt asked if there has been any negative feedback. Goni said that she is not aware of any recent negative feedback and the majority of people have just asked questions about how to use the system. The Board was in favor of continuing to roll the online system in order of priority from most visited to least visited IKC caves, with the goal of adopting the system ideally by the time of the NSS Convention. Brad Barcom and Tim Harris have been working on drafting a user manual for Cave Patrons/Property Managers on how to use the system and can be available to train people. Matt, Keith, and Goni will meet to discuss next steps as far as the rollout with the Cave Patrons/Property Managers.

Recap of Preserves Work Projects and Upcoming Preserves Projects

Buddha Karst Nature Preserve – Keith did some trail management and took out the small foot bridge at the back of the property because it was falling apart, and he plans to replace it.

Lowry Karst Preserve – No updates relayed by the Property Manager. Carla thought she may have noticed new graffiti and asked the Board if we can consider mechanisms on how to monitor and deter potential vandalism. Joe brought up trail cameras as a potential deterrent.

Orangeville Rise Nature Preserve – No updates from Carla.

Robinson Ladder Cave Preserve – The Harrison Crawford Grotto completed a workday at the property, and we greatly appreciate their help. They replaced the post for the access lane gate and trimmed the vegetation along the driving lane, among other tasks. Subsequently, the access lane gate was replaced by Keith and Chris Schotter.

Shawnee Karst Preserve – Keith continues to do invasive species management and this work will continue in the spring.

Wayne Cave Preserve – Cris removed barbed wire near Jim's Cave from the property and also hosted a "how to make trails" event at the property in November. The event was a success and additional trail was added to the property.

Indian Creek Conservation Easement – The annual inspection and paperwork has been completed.

Sullivan Cave Preserve – Keith has been continuing to mow the camping area. Joe cleared some downed trees and split firewood for campers. The porta-potty was also serviced. Keith submitted the paperwork to the County to combine the two tax parcels associated with the preserve. Joe mentioned that Keith had personally acquired additional land adjacent to the Sullivan Preserve so the "conservation area" has now been expanded to a total of over 100 acres.

Nate Vignes has continued to do clean up and restoration work at Sullivan. The last trip focused on mud-washing the second dome along the Backbreaker. Nate will continue to notify the Board of any future trips and project plans.

Items from the Floor

- Danyeale wondered if parking should be more obvious/marked at Suicide Cave to avoid any issues or complaints with landowners or local authorities. Keith reported that Kevin Smith got permission from the landowner to trim the bushes back so that the parking space can be more obvious, and cars can avoid blocking the road. Danyeale will follow up with Kevin to see if this has been completed.
- Danyeale brought up a potential acquisition because she was pinged by the landowners about sectioning off his parcel to potentially allow the IKC to a portion that includes the cave entrance. Danyeale relayed that the cave has some interesting features and potential historical value, but wouldn't be safe for visitation due to breakdown. There is also another cave on this landowner's property that would be better for caving, but it may be too far/too large of a parcel for the landowner to agree to include. The Board decided to not pursue this acquisition for now, but discussed contacting other land trusts to see if they see any value in protecting this area.

Next Meeting Date and Place Selection

The next IKC Quarterly meeting is scheduled for Sunday, March 22, 2026 at 1:00 PM EDT at the Ellettsville Library (600 W Temperance St, Ellettsville, IN 47429, Ellettsville, Indiana), with a social hour being planned for around noon. All members are welcome!

Adjourn

The meeting was adjourned at 4:30 PM EST.

Respectfully compiled and submitted by Goni Iskali, IKC Secretary 🐦

...News Briefs, continued from page 11

conservancies, other cave organizations, or **individuals** would like to learn more about CaveSim and/or extend their support for CaveSim, please check out cavesim.com.

- ❑ On the evening of February 10, Noble Crossing Elementary School in Noblesville hosted their annual family night, which attracts up to 600 local families. The theme this year was Outdoor Adventure. IKC Board member Scott Frosch took our table display of Indiana cave life, caving gear, and a squeeze box, representing the BIG, CIG, and IKC. CIG Chair Nate Vignes also attended and the two teamed up with Catalina Tomes of the Indiana State Museum who had brought some awesome fossils. Thanks to these volunteers for taking on this event, and for Noblesville Crossing for inviting the IKC!



photo courtesy Scott Frosch

- ❑ Speaking of squeeze boxes, the Indiana caving community would benefit from a couple of these that could be used and shared by grottos (and the IKC!) across the state. In addition to being fun, they are great educational tools for non cavers. If any members have good woodworking/construction skills, plans for a good portable squeeze box, or would like to help fund the purchase of one, IKC Outreach Coordinator Carla Striegel-Winner (IndianaKarstConservancy.info@gmail.com) would love to talk with you about a couple of loaners.
- ❑ New for the 2026 tax year, charitable contributions such as your IKC dues and donations may be deductible on your federal tax returns **even if** you claim the standard deduction (which most people take). This change was made to encourage charitable giving to non-profits. The deduction totals are limited to \$1000 for singles and \$2000 for married couples filing jointly. Other restrictions may apply.
- ❑ The IKC has gained *ten* new members in the last quarter. Welcome Chris Bell, Shayne Campbell, Ross Carlson, Gabe Hammond, Nathan Langworthy, Jeffery Nielson, Nathan Swigart, Rishab Syed, Courtney Walker, and the Cleveland Grotto. IKC membership currently stands at 352. 🦋



INDIANA KARST CONSERVANCY – NEW MEMBERSHIP / DONATION FORM

I would like to help the IKC protect Indiana’s unique caves and karst features. Use the QR code below or complete this form and mail to: **IKC, PO Box 2401, Indianapolis IN 46206.**

\$ _____ for IKC membership dues at \$20/year (please pro-rate \$1.66/month to expire on March 31st).

\$ _____ donation to the general fund (to be used for education, stewardship, etc).

\$ _____ donation to the restricted cave/land acquisition fund.

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: _____ cell

Email: _____

Newsletter: digital PDF printed/mailed





This issue contains the research report summarizing a recent cavefish census conducted in Hamer Cave in Spring Mill State Park (see report on page 12). Hamer is an impressive stream cave. In the top photo, Tom Sollman is collecting data (temperature, conductivity, pH) on the stream. In the bottom photo, Tom is at the back of the cave where all the water in the main stream up-rises from parts unknown, as this sump has never been dived. Photos by Chris Schotter