

# **IKC UPDATE**

A Quarterly Publication of The Indiana Karst Conservancy  
March 2025 Number 156



**Bill Tozer (1941-2024)**

# INDIANA KARST CONSERVANCY, INC

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[ikc.caves.org](http://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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Cover: A young Bill Tozer starting his survey book for Spider Cave in Harrison County.  
 Read our tribute to Bill starting on page 10. Photo by Jay Arnold (1968)



# IKC ANNUAL BUSINESS MEETING REMINDER

**Sunday, March 23rd, 12:15 PM Social, 1 PM Meeting (EDT)**

**Monroe County Library - Ellettsville Branch (Room A)**

**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; *Ad hoc* committee recommendations on membership levels and dues; Recap of recent preserve work projects; Promotion of upcoming preserve projects; Education/Outreach/Field Days updates; Indiana Cave Symposium; Electronic scheduling and waiver system; Cave/land acquisition activities; 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 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 27 for more details.

## ACTIVITIES CALENDAR

**March 23 – IKC Pre-Meeting Social (see above and page 27)**

**March 23 – IKC Annual Business Meeting (see above)**

**April 26 – Pre-Symposium Tour, Orange County, Indiana (see page 8)**

**April 26 – Indiana Cave Symposium, Orange County, Indiana (see page 8)**

**May 3 – Field Event: Moth Hike at Wayne Cave Preserve (see page 6)**

**June ?? – IKC Executive Board Meeting (location, date, and time TBD)**

**July 12-13 – Wilderness First Aid, Lawrence County, Indiana (see page 24)**

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

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## RAMBLINGS FROM THE PRESIDENT...

For this Ramblings, I've invited a guest author to reflect on their quest for a scientific understanding of caves, and more. Please welcome my friend Jean-Claude to this issue of the *IKC Update*!

*I pause, as my headlamp flickers across the rugged contours of the passage, feeling the damp air cling to my skin. Hours ago, I stepped beyond the threshold of sunlight, instruments in hand. Now, time feels fluid, as if the cave itself stretches and twists the minutes.*

*I move forward carefully. Beyond my narrow beam of light, the darkness seems alive – swallowing my footsteps, concealing unknown chambers. I'm here to measure and record, yet a deeper part of me is enthralled by the silent enchantment in these corridors. It's a quiet call, drawing me deeper into the labyrinth.*

*A draft of cool air brushes my face, hinting at a larger space ahead. I crawl through a narrow gap, sliding on my belly, feeling my adrenaline surge. There's no turning back without effort; this place rewards those who endure discomfort in the pursuit of discovery.*

*When I emerge into the next chamber, my lamp illuminates a vast ceiling covered with delicate formations. I catch my breath. Despite hours mapping, sampling, and analyzing in other caves, I'm still overcome by wonder at a world lying just beyond everyday life. It's as though I've stepped into a dream.*

*I set up my equipment, and note the environment around me. Even as I collect information, I can't ignore the profound stillness. Part of me longs to remain in the subterranean hush, trading the roar of the surface for this meditative darkness. Yet these chambers are fragile. My data might one day help protect them.*

*I move on. My boots slide through the mud, my arms ache from hauling gear, but I'm driven by the promise of new wonders around each bend. Every passage reminds me that true discovery demands*

*openness to what I cannot yet imagine. A small side corridor might open into a hidden space, or a subtle shift in the rock might lead to deeper mysteries.*

*I see a faint glow ahead – the entrance that returns me to sunlight, even as I feel the cave's pull. I pause, listening to the echo of water droplets vanish in the distance. This underworld is both timeless and fleeting, a realm I am reluctant to leave.*

*Stepping into the open air, I squint in the brightness, my ears adjust to the wind and birdsong. Mud-crusted gear clinks at my side, and my skin tingles in the sun's warmth. Even so, the memory of that hush lingers. In the coming days, I'll review my findings and plan expeditions, carrying with me the quiet reverence for those hidden chambers.*

*I'll return. Something in those silent passages calls to me. Something promises not merely data, but insight and wonder. I discover the scientist in me still believes in magic.*

\* \* \* \* \*

Ok, I admit, Jean-Claude is a fraud. The preceding text and image was produced with generative artificial intelligence. A human didn't write a single word of it. It was generated by following the directions of prompts I entered and then refined.

It isn't a perfect piece of writing. It isn't how I personally would write it, and I reached the limit of my ability to refine the output by changing the prompt. All in all, it took me about the same time to write the above piece using generative AI as if I had started with a blank Microsoft Word document and started typing.

But still, there are those who would feel it is cheating, just as there were those who felt the same way about word processors and typewriters and fountain pens and cuneiform script pressed into wet clay with a wood stylus. Technology, much like our journey as cavers from reed torches to oil lanterns to carbide lights to our modern headlamps, has changed, but the IKC's purpose to educate and conserve remains (and will remain) the same.



I believe artificial intelligence will have profound effects on our world. At the IKC we should think about how we can best use this tool to further our work. However, we still need the hearts and minds of our passionate members, volunteers, and those who cave in our caves and enjoy our preserves.

As I write, our 2025 elections for Officers and Directors are underway. We have a slate of candidates whose commitment to service and cave conservation is remarkable. I won't recommend who you should vote for, but I encourage you to consider the candidates and their qualifications, their propensity to volunteer (in the past and future), and why they want to serve our organization's members.

Because artificial intelligence can't pick up trash

from the side of the road or remove graffiti or pull garlic mustard. It can't form a clear vision for our organization and decide how to accomplish it. It can't fundraise or network with other people who are passionate about our natural environment. And it can't feel the wonder of what we experience underground and how it affects us when we return to the world of sunlight.

Please also consider our invitation to join us this year. In real life. We have a full schedule of awesome things happening at the IKC in 2025 and we highly value your very human participation because it is something the machines will never be able to replicate!

*Matt Selig*

## A WONDERFUL NEW DOCUMENTARY ON HOOSIER CAVES AND THE FOLKS WHO GO IN THEM

*by Carla Striegel-Winner*

In case you have not yet heard, Indiana's caving community is pretty excited about a new documentary that has been in the works for over a year. The documentary is from the makers of the beloved *Journey Indiana* PBS television show which features vignettes of unique Hoosier people, culture, history, and artistry experiences across the state, road trip style. *Journey Indiana* is produced by Indiana Public Media WTIU station in Bloomington. Occasionally the producers work on a special, longer documentary focusing on one topic. According to producer Jason Pear, initially they thought they would focus on the commercial show caves in Indiana, but as they talked to the owners and the employees of those caves, they discovered an entire community of cavers who invited them on trips and said, "Well you need to talk to Jerry Lewis" and "Have you reached out to the Indiana Karst Conservancy" and "Don't forget the BIG." The producers realized this topic

was much more substantial than they first envisioned! If the two-minute teaser/trailer they have released is any indication, this will be a fabulous piece, and one that can be enjoyed by any nature lover. The premiere is March 6 at 8 PM EST on WTIU HD (30.1) in Bloomington, and will be shared with other PBS stations around the state (but may be shown at a different date/time). Indiana Public Media has put together a nice web page which shows the airdates, the promotional/teaser video, and also has a resources page with links to cave and karst non-profits. Check out [IndianaPublicMedia.org/underground](http://IndianaPublicMedia.org/underground). 🦋



*image courtesy Indiana Public Media*

## 2025 IKC FIELD EVENTS – FOCUS ON FAUNA

by Carla Striegel-Winner

*Our field tours in 2025 focus on the amazing wildlife we help protect through our work on our preserves and with other conservation partners.*

### Welcome to the Dark Side - Mothing with the experts!

Wayne Cave Preserve, Monroe County  
Saturday, May 3, 7:30 PM to 10:00 PM EDT

Join us at Wayne Cave Preserve for a fascinating evening with moth experts Steve Morris, Jim Vargo, and Jeanette Jaskula. The evening starts with a presentation about the joy of moths, from their stunning colors, patterns, and behaviors to their important role in our ecosystems. We will get to see first-hand the techniques these three used last summer to attract and identify over 210 species, including 6 species new to Indiana! As darkness falls, moths will be attracted to lights for viewing and we'll walk a bait trail to look for moths attracted to a mixture of beer, brown sugar, and over-ripe bananas spread on tree trunks. Registration opens April 4, but you may go to [IKCFieldTourMay2025.eventbrite.com](https://www.eventbrite.com/e/ikc-field-tour-may-2025) at any time and have a reminder sent to you.



photo courtesy Steve Morris

### Hike with a Bat Biologist

Robinson Ladder Preserve, Crawford County  
Saturday, August 16, 7:00 PM to 9:00 PM EDT



photo courtesy Scott Frosch

Enjoy a hike with our own board member and bat biologist Goni Iskali as she takes us on an evening hike to discover great bat habitat. Discover what we do at our preserves to ensure bats have great summer roosting and foraging habitat and what you can do at your own home and community to do the same! After the hike, Goni will be completing an acoustic and visual survey at the Preserve. Everyone can have a chance to stay and assist or observe. Registration opens July 18, but you may go to [IKCFieldTourAugust2025.eventbrite.com](https://www.eventbrite.com/e/ikc-field-tour-august-2025) at any time and have a reminder sent to you. *Optional pre-hike stewardship opportunity: Join us at 5:00 PM for a few stewardship tasks, and we will provide a light meal before the hike.*

### Big Day for the Birds at Buddha Preserve

Buddha Karst Nature Preserve, Lawrence County  
Saturday, October 11, 9:00 AM to 11:00 AM EDT

Join us for a bird walk and citizen science as we partner once again with Indiana Audubon for October Big Day. Our event this year takes us back to the Buddha Karst Nature Preserve with an expert birder guide provided by Indiana Audubon. Indiana Land Protection Alliance member trusts throughout the state participate. This event is great for newbies, experts, and non-birders alike! Registration opens in September through the Audubon website. Watch our website and Facebook Page for that link, or contact Whitney at [wyoerger@indianaudubon.org](mailto:wyoerger@indianaudubon.org).



### Fauna and History of Lawrence County Caves and Karst

Near Mitchell, Lawrence County

Saturday, November 8, 10:00 AM to noon EST

Join us for a guided surface tour and hike exploring the unique wildlife and history of Lawrence County's karst and caves. This tour includes both driving and hiking on public and private property. Board member Keith Dunlap, who has been involved in bat census work since the 1980s, will share insights on the bats that currently and historically inhabit the area's caves, while Board member Tom Sollman will delve into some of the fascinating karst history of the area and cave fauna like cavefish, crayfish, and other unique species. One key focus will be the findings from our nine-month, multi-visit population study of the state-endangered Hoosier cavefish (*Amblyopsis hoosieri*) in a nearby cave, conducted in partnership with Heidelberg Materials and set to conclude in October. Much of the tour will take place within Spring Mill State Park, where registered participants will be responsible for their own entrance fees. Registration opens October 3. You can visit [IKCFieldTourNovember2025.eventbrite.com](https://www.eventbrite.com/ikcfieldtournovember2025) at any time and have a reminder sent to you.



photo courtesy Carla Striegel-Winner

For questions on any of this year's events, contact Outreach/Education coordinator Carla Striegel-Winner at [IndianaKarstConservancy.info@gmail.com](mailto:IndianaKarstConservancy.info@gmail.com) or 812-639-9628. Also follow the IKC on Facebook at [facebook.com/indianakarstconservancy](https://www.facebook.com/indianakarstconservancy) or see our webpage at [ikc.caves.org](https://www.ikc.caves.org). 🦇

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## NEWS BRIEFS...

- ❑ At the September IKC Board meeting, the Wayne Cave Preserve Property Manager, Danyeale Green, announced she would like to step down after serving in that capacity since March of 2019. Danyeale provided great leadership in completing our three EQIP contracts at the Wayne property and navigating the preserve's third expansion, making it our largest preserve that now connects to the NSS's Richard Blenz Preserve. She also took on the large task of ensuring the preserve's hiking trails were cleared from downed trees after a significant wind storm last year. Finally she upgraded the camping area at the property including adding the much appreciate porta-john. Cris Seuell was appointed as the new Property Manager and started her role January 1st. Cris has been a long-time volunteer at Wayne, has significant experience with trail building and invasive control, and lives much closer to the property. Please thank Danyeale for her past service and welcome Cris as she takes on this new responsibility.
- ❑ The IKC is currently working in a Lawrence County cave on a nine month multiple-visit population study of the state-endangered Hoosier cavefish (*Amblyopsis hoosieri*) to determine the current status, establish a new baseline going forward, and make recommendations to protect this cave population. This project is part of an international scientific and educational contest, Quarry Life Awards, sponsored by Heidelberg Materials, who have a presence in Lawrence County. More about this project as it develops in a future issue of the *IKC Update* and details will be featured on our November field tour (see top of this page).
- ❑ The Midwest Bat Working Group (MWBWG) will be hosting its 17th annual meeting at Purdue University Fort Wayne, in Fort Wayne, Indiana, April 2 - 4, 2025. This meeting rotates between the various Midwestern states and provides a venue for participants to present results from studies, provide updates on long-term research projects, and plan future multi-state collaborative endeavors,

Continued on the bottom of page 8...

## 2025 INDIANA CAVE SYMPOSIUM PREVIEW – APRIL 26

by Keith Dunlap

The 31st Indiana Cave Symposium, co-sponsored by the Indiana Karst Conservancy and Indiana Cave Survey, will be held on Saturday, April 26, 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 last year.

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 6:15. Below is the tentative list of presentation titles and presenters (not in particular order):

- 2026 NSS Convention Teaser – Laura Demarest & Dean Wiseman
- The Early Modern Era Cavers of Indiana – Gary Roberson
- A Brief Review Of Archaeological Studies At Wyandotte Cave, Indiana – John Benton
- Karst Protection- Sycamore Land Trust Properties and Priorities – Tom Swinford
- WFYI Across Indiana: Exploring Indiana’s Caves with the Central Indiana Grotto – Scott Frosch
- Survey and Mapping Updates in Hells Hole – Jamie Winner
- The B.I.G. Survey Group: Truitt Cave Project – Matt Lewis and Nathan Schonegg



photo courtesy Keith Dunlap (2024)

For questions about the Symposium, contact Dave Everton ([DEverton@iu.edu](mailto:DEverton@iu.edu)). Also, in order that we may plan for the event, please RSVP using the following link: [form.jotform.com/250507540507148](https://form.jotform.com/250507540507148)

The IKC and ICS will again be offering a karst surface tour prior to the Indiana Cave Symposium: What do caves, outlaws, and domes have in common? Come along on the this field tour and find out! Join long-time IKC and ICS members Carroll Ritter, John Benton, and Carla Striegel-Winner (with a combined total of over 100 years of caving experience!) for a visit to a couple of rarely accessed and lesser known cave/karst and historical sites in and around the Springs Valley area of Orange County (and maybe a well-known one too!). Participants will depart from and return to the Orange County Community Center (site of the Symposium) 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: [SymposiumTour2025.eventbrite.com](https://SymposiumTour2025.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. 🦇

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...continued from page 7

all on local, regional, and national scales. This meeting is highly valuable to bat biologists looking to collaborate on research and management of bats, as well as to other professionals who promote conservation by enhancing public understanding of bats and their habitats. Because this year’s annual meeting is in Indiana, the IKC has elected to be a sponsor which includes a registration for one IKC representative and a booth space for the IKC to set up our display and promotional materials. To learn more about MWBWG and this meeting, go to [mwbwg.org](https://mwbwg.org).

- ☐ If you receive the printed version of the *IKC Update*, you may have noticed this issue looks a little different with a “magazine” style binding and full color throughout. Over the past several years,

Continued on the bottom of page 11...



## TAKING ADVANTAGE OF OUR ILPA ALLIANCE

by Danyele Green

On Tuesday, February 4th, five IKC Board members and several other IKC members joined over 130 other land trust board members, staffs, volunteers, and partner agencies and organizations from throughout the state at the second Annual Winter Gathering conference hosted by Indiana Land Protection Alliance (ILPA). The IKC has been active with ILPA for over a decade and became a dues-paying member in 2021 when ILPA formalized their governance to accept organizational members. When the IKC first joined, we were not quite sure if the benefits justified the dues, but as I sit here now writing this article, I'm still amazed at the collaboration and effort put in by ILPA's staff and board which has been such an amazing partner for all. ILPA's Mission and Values align with our own, and their goals of Education, Advocacy, Collaboration, and Communication have been successful in helping the IKC grow and become much more well known throughout the region with our land conservation peers. This has resulted in grants to the IKC for several projects, awareness of funds available at the state level, educational courses offered to our Board members and volunteers, and great publicity opportunities for our grassroots organization.

At this year's winter conference, I attended three breakout sessions which included Creating Events that Engage and Welcome, GIS 101, and Land Trusts Standards & Practices. The takeaways from the first session, led by Pam Blevins Hinkle and Linnea Holt, I hope will culminate in some special events with perhaps a collaboration or two with other local land trusts that were in the same session. Stay tuned as we work on those opportunities this year. The second session, presented by Bob Neary, brought some awareness to most of the room about the amazing GIS work being done through the oversight of The Nature Conservancy. Check out The Conservation Dashboard ([maps.tnc.org/conservationdashboard](https://maps.tnc.org/conservationdashboard)) and Resilient Land Mapping Tool ([maps.tnc.org/](https://maps.tnc.org/))

([resilientland/#/explore](https://resilientland.tnc.org/#/explore)) which was created out of extensive GIS mapping and data entry tools. The last breakout session I attended was led by the Land Trust Alliance's (LTA) Midwest Senior Program Manager, Mary Kay O'Donnell, whose territory covers Indiana. The LTA is also powered by member land trusts across the U.S. and for purposes of this breakout session, she shared years of compiled best practices which resulted in a Standards and Practices Manual which is a fantastic guideline for land trusts to follow to be as successful as possible.

Alternative breakout sessions available and attended by other IKC Board members included The Role of Agricultural Land Protection in Indiana's Conservation Efforts, Conservation Finance 101, and Forestry for the Birds (presented by Allen Pursell).

In addition to the breakout classes, there was an hour session on policies and legislative updates by those with areas of expertise that will affect land and water protection in the State of Indiana. Every bit of information shared was relevant to us, to what we do, and what we should look forward to in the future.

The evening culminated with a reception co-hosted by the Indiana DNR for not only the conference attendees, but additional guest legislators. It began with ILPA's Executive Director, Andrea Huntington, leading a Fireside Chat with newly-elected Governor Mike Braun. This was followed by an introduction and conversation with Alan Morrison, the new Director of the Department of Natural Resources. Finally there was a special presentation by Dan Bortner (Director of State Parks) honoring late photographer Carson Hughes (visit [carson-hughes.smugmug.com/About-Carson](https://carson-hughes.smugmug.com/About-Carson)). 🐦



IKC Board members attending the ILPA's Winter Gathering (left to right): Danyele Green, Keith Dunlap, Cris Seuell, Scott Frosch, and Carla Striegel-Winner

**BILL TOZER, NSS #4955 (1941-2024)***compiled by Keith Dunlap*

William (Bill) Franklin Tozer passed peacefully after a brief illness on December 7, 2024 at his home in Parker, Colorado.

Bill was a founding member of the Indiana Karst Conservancy, joining in 1986 at its first/organizational meeting. Bill was elected to the Executive board as Secretary in 1991, and then served as a Director from 1992 until 2006, when he moved to Colorado. Bill was a regular on IKC workdays and was instrumental with the acquisition of the Sullivan Cave Preserve in 1998, leading the *ad hoc* committee to formulate our first preserve's management plan and spearheaded the fund-raising efforts. He was always a positive influence on IKC initiatives including later acquisition projects.

Bill's first wild cave adventure was in 1959 to Grotto Cave in Monroe County. For the most part he was a recreational caver, but he was significantly involved with the exploration and mapping of the caves of Henderson Park (1965-67), as well as numerous smaller projects within Indiana (e.g., Wildcat and Riverside caves in Orange County). He took great pride in working with the many cave landowners he met over the years. He also enjoyed leading youth groups on their first caving adventures.

Bill was a pioneer in vertical caving and frequently caved with Bill Cuddington (the "father" of Single Rope Technique), Richard Schreiber, Ed Yarbrough, John Cole (inventor of the rappel rack), Sara Corrie, Dick Mitchell (developer of the Mitchell climbing system), and Jay Arnold. He helped explore numerous deep pits in TAG (before the area was even known as "TAG"). Bill was the eighth caver to drop Surprise Pit in Fern Cave and the tenth to drop Fantastic Pit in Ellison's Cave. In 1967, he was one of the very first cavers to bounce Sotano De Las Golondrinas in Mexico (on Goldline rope, no less).

Bill was also an active member of the Central Indiana Grotto, joining in June of 1963. Bill served every CIG Executive Board position, including serving as Chairman twice (1966 and 1977). He was a prolific early contributor to the *CIG Newsletter*, and eventually volunteered to be the publication's Editor from 1976-1988, putting out over 150 issues. He was also the Editor of numerous Cave Capers guidebooks over the years.

Bill was also active at the national level, joining the National Speleological Society in 1960, becoming a NSS Fellow in 1980. He served on the NSS Board of Governors for two terms (6 years) and was the Chair of the Directorate for five of those years. He then was elected the President of the NSS from 2005 to 2008, providing leadership for the controversial-at-the-time selection and purchase of the new NSS headquarters in

Huntsville. Bill also served as the Chairman of the NSS Awards Committee for eight years.

Born in Indianapolis on October 25, 1941 to William and Catherine Tozer, Bill spent his early childhood in Indianapolis before moving to Brazil, Indiana before high school. After earning his undergraduate degree in Physics and Chemistry with a minor in Mathematics education at Indiana State University, he earned a Master's degree in Physics at Purdue University. After graduation, he taught physics and science at Arsenal Tech High School (Indianapolis), then moved to Albany, New York to work at the Dudley Observatory studying noctilucent clouds and micrometeorites. He later returned to Indiana where he was a Science and Physics teacher at Madison Heights/Anderson High School, completing his career with 39 years of teaching. After retirement in 2006, he moved to Parker, Colorado.

In 1968, Bill married Patrice Mast and they raised four children: Mark, Kathleen, Deborah, and Michelle (two engineers and two medical doc-



tors, all cavers). Bill was a devoted husband, father, and grandfather (to 11 grandchildren). He loved getting underground, and took his children and grandchildren caving from a young age. Bill also spent much time outdoors gardening, growing food for the family, and tending to his trees in his “wild area” on his property in Anderson. He never knew a stranger and was always interested in conversations about all things related to science or caving. He will be missed.



Bill Tozer (left) and Keith Dunlap at Maroon Bells in Colorado (2011)

If you would like to hear more about Bill in his own words, listen to his 2018 interview with Matt Pelsor on *The Caving Podcast*: [podomatic.com/podcasts/cavingpodcast/episodes/2024-12-17T11\\_23\\_04-08\\_00](https://podomatic.com/podcasts/cavingpodcast/episodes/2024-12-17T11_23_04-08_00).

*Footnote on the cover photo – In 2019 while I was indexing references for the Indiana Cave Survey database, I ran across an article in the November 1968 CIG Newsletter (12#11) of the October 10, 1968 discovery of Spider Cave by Bill Tozer and Jay Arnold. The sketch map included with the article had a PLSS quarters location, but as far as I could tell, no one else had ever been to this cave located on the Harrison-Crawford State Forest, not too far from Daly Pit (which wasn't discovered until 1975). I emailed both Bill and Jay about the cave and they both sent me their topo “dots” and Jay also sent me several images (scanned from slides) he took that day. One was the cover photo of Bill preparing his survey book just outside the entrance to Spider Cave, and another was of Bill sliding into the very small and obscure entrance at the bottom of a sinkhole. While preparing this article on Bill, I re-visited Jay's photos and got curious about this cave again and emailed HCSF caver Chris Bell to see if he could go out and relocate it. He responded a few days later that he indeed re-found the cave and confirmed it did exist. Could it be that no one else had been to this cave in over 50 years? 🐦*

...continued from page 8

our newsletter page count has gone up and the number of copies printed has increased such that photocopying the newsletter has become an expensive option, so we have been exploring lower cost commercial printing. The main negative with commercial printing is a longer lead time, but that just means a slightly earlier deadline for the contributors. While this first issue has pretty much the same design layout, in the future we may gradually introduce more color and visual styling. We are interested in your comments on this change. Email [IndianaKarstConservancy@gmail.com](mailto:IndianaKarstConservancy@gmail.com).

- ❑ ***We really appreciate your additional donations!*** As has been noted in the past, the IKC annual dues revenue only covers ***about half*** of the IKC's operating expenses and obligations. These baseline expenses include printing and mailing our quarterly newsletter, our general liability and business insurance premiums, our property taxes, routine stewardship activities, and other miscellaneous/necessary business expenses. Thus, we greatly appreciate the additional donations many of our members make each year beyond their standard dues to supplement and support the IKC. During 2024, sixty-three individuals/couples and ten organizations made general donations totaling \$4,533. Donors include Joy Baiz, John Benton, Ted Bice, Seth Brown, Larry Bundy, Danielle Burden, Paul Cannaley, Dan Chase, Jeff Cody, Verl Dasher, Gene Davidson, Laura Demarest, John Dimit, Chris Donohue, Dave Everton, Jeff Farr, Daniel Garrett, Daniel Gray, Andrew Hahn, Michael Halla, Barbara Hanka, Tem Hornaday, Glenn Kotnik, Marcella Larch, Ed LaRock, David Lasser, George Mattson, Greg & Val McNamara, Tippi McTyeire, Jane & Lynn Miller, Marc Milne, Anthony Moore, Steve Morris, Bill Morrow, Ralph Moshage, Ashley Motia, Carl Nelson, Ken Nisly-Nagele, Chris Parks, Ernie & Jacqueline Payne, Gene & Jennifer Pelter, Everett Pulliam, Russell Pusilo, Riley Radcliffe, Kelle Reynolds, James Reyome, Carroll Ritter, Wesley Roeder, Stacy Roesch, Cindy Rothrock, Wes Terrell, Ralph Sawyer, Noel Sloan, Jeff Stocker, Bruce Trotter,

*Continued on the bottom of page 21...*

## AN INTERVIEW WITH CHRIS SCHOTTER

by John M Benton

*Editor's note: In place of John's usual "Looking Back" column, John conducted a written interview with Indiana caver Chris Schotter, whose family is steeped in Indiana caving history...*

**How did your caving career begin? Who were your caving mentors? I'm sure your caving grandfather, Leo Schotter has a lot to do with your caving career?** – Being a third-generation caver and growing up in Milltown next door to my grandpa Leo, caving was just something we did. But by the time I was old enough to go, grandpa was retired from caving, so I never actually did any cave trips with him, but he was a talker and loved to tell cave stories. My first wild cave trip was to Langdon's Cave with my dad, Gary, my brother Gary Jr, and our neighbors Neil and Doug Proctor. I was in the third grade.

Through the years, many cavers would stop in to talk to my grandpa about caves. One of those cavers was Nadine Wilson. They had an instant friendship, so when Nadine was taking a break from college, grandpa let her live in the basement of the shop for a couple years in the early 1980s. Nadine was a huge influence on my caving and introduced me to many of my caving friends. In 1989, she told me I should go help a guy named Danny Dible work on a dig. I drove down and helped him work on what we would eventually dig open and call Bauer's Big Windy. Danny and I have been friends ever since, and still spend most of our trips together digging on holes, with the occasional one turning out to be something really nice. Somewhere in that same time frame I went to a Harrison-Crawford Grotto meeting, which is where I met Dave Black. Dave became one of my best

friends and we've spent thousands of hours underground together since then.

**Please tell us about your background?** – I grew up in Milltown. My dad followed his dad (grandpa Leo) to do plumbing, heating, and electric work. I went to Milltown Elementary School where I met one of my best friends, Aaron Green. All of my early caving trips were with Aaron. My senior year at Crawford County High, I got a job as a guide at Marengo Cave, and worked there while I studied at Indiana University Southeast for a few years. Then I moved to Indianapolis and lived there for six years while I finished school to

get a technology degree, and then worked for an engineering firm doing industrial programming. I guess I burnt out after six years there. I quit my job so I could do an epic seven-week road trip to Alaska with my friend, Eric Morris, whom I had met at Marengo. What an adventure that was! Back home, I decided to do a life change. I went back to IUS to get my teaching degree.

With a fresh degree in secondary education, my first job was in Arizona as an engineering instructor with a summer camp for really smart kids through Johns Hopkins. I packed up my truck and did a solo road trip for the summer. I headed out a couple

weeks early so I could hike the Grand Canyon and other sites along the way. When the summer program was over there, I rushed back home for a job teaching general science at Jeffersonville High School. JHS was as close to hell as I ever want to be. I toughed it out for a year and it taught me that I really wasn't cut out to be a teacher. But I did get a free trip to Australia out of the job as a chaperone for a group of high school kids, so maybe it was worth it. I spent the next ten years back where I started, working for my dad doing residential



Chris Schotter in Shuck's Cave in 2006.

photo courtesy Dave Black

plumbing, heating, and electric jobs. These are all skills that came in handy when I married my wife Monica in 2010. We now live in her grandparents' 125-year-old farm house west of Corydon that we are slowly remodeling a room at a time. When my dad passed in 2013, I got my current job at the Amazon warehouse in Jeffersonville. I started on the floor in the warehouse and have worked my way up to an office job handling internal communications for the site.

**Do you have some favorite caves or projects you could tell us about?** – I'll go caving anywhere, but I always come back to the Harrison-Crawford area. My roots run deep here and it is my home. It also happens to have some great caves and I've been exploring them here nearly all my life. I've been fortunate enough to work on dig projects that turned out to be great discoveries, but it hasn't been easy. My grandpa rarely dug, but didn't need to... there were unexplored caves all around that were wide open. He just needed a light and a rope. Now, it usually takes work and a lot of rock moving to find something new.

Rolling Rock Cave was one of my project caves. It sits on a ridge across the valley from the Wyandotte Cave system and is an impressive blowhole in the winter which makes one dream of the possibilities of more big dry cave. It was first explored back in the 1980s through a miserable canyon/crawlway to a nice 47 foot pit, but not nearly enough cave to account for the airflow that it has. I did several trips there with Danny trying to try to find the way on with no luck. Two of those trips were especially memorable.

One trip to Rolling Rock was in 2006 with Danny Dible and Brian "Grubby" Grubb. The weather report called for rain, but this cave was high on the ridge and we foolishly weren't worried about it. We could hear thunder in the distance at the parking area. We didn't want to walk in the rain, so we hurried to get to the cave. It started to

rain just as we got to the entrance, so we rushed down into the "dry" cave. There are a couple small climbdowns to a low grim crawl that twists and turns before opening to a dome and some canyon passage to the pit. I was the biggest in the group and was the last in, struggling through the passage with my heavy pack as usual. Near the end of the crawlway, there was suddenly a stream of water flowing in behind me. Danny heard it and asked how I was making that noise. I told him it wasn't me; it was the stream rising behind me. Still thinking we were going to dig, we thought if we hurried and got down the pit, we could work on our dig while this little storm flushed through. The pit is pretty big and our dig was off to the side, away from the main drop. We

got to the pit and rigged it, but before anyone could go down, the flow of water increased dramatically to an insane flood of water shooting out into the pit. We were in a shale area above the pit, so we dug a couple bench seats and sat down to wait, thinking it would be over soon. The water flow just kept increasing with no sign of letting up. We could hear it moving bowling ball sized rocks through the little canyon at our feet and throwing them out into the pit. It was Grubby's birthday and I surprised him with a Little Debbie brownie with a candle. Kind of a surreal birthday party, but we sang Happy

Birthday and had a good laugh. Grubby brought it back to reality though when he didn't eat the brownie, but decided to save it, saying we might be in here for a while. We put little rock piles at the water level so we could tell if it was going down. Nope, the rocks were soon under the rising water. After a couple hours on our little bench seats, we decided to backtrack to a slightly larger area. It was a little misty from the now waterfall at the climb-up to the crawlway, but we could at least stand and pace around a little to stay warm



*Gary Schotter (Chris's dad), age 17 in Gary's Pit in 1961.*

while we waited. We had planned on a 12+ hour trip anyway, so we had plenty of food and water. Garbage bags came out as ponchos to help keep us warm and I had a little foam seat pad that we'd take turns with for short naps. This went on for another ten hours or so, before I couldn't take it anymore. We had a full arsenal of digging tools in our cave packs, so our new plan was to remove the two or three tightest spots in the crawlway, and maybe this would remove the places that were sumped. There was only room for one person to work at a time in the crawl and it was hard going. Twice I was up in the crawl working and forced to retreat by sudden rises in the water level from flood pulses. We improved three areas in the crawl over the next eight hours, and both Grubby and I were sure we were looking at a low air space to the exit of the crawl. Danny tried to tell us there was one more small spot after that, but we convinced him we should go for it. We packed up everything and made a push for the entrance. Of course, Danny was right and there was one section left that was only about a foot tall with several inches of fast-moving water in it. Grubby went first, followed by Danny, and I brought up the rear. Right in the smallest part, Grubby's light went out. Danny was right behind him and shined his light ahead encouraging him to go for it. He made it, and Danny followed as soon as he was clear. I scooted ahead and found their packs stashed to the side. Danny came back in and I shoved the heavy packs ahead to him one at a time. Then it was my turn. I could barely fit through this spot when it is dry. Now it had three inches of water flowing through it, which did not help. I'll never forget Danny's advice... "Keep your head up!" Thanks! With my helmet off so I could actually keep my head up and breathe, I shoved through with the water trying to push me back while rolling small rocks under and me as I went. With great relief, I popped through to the other side and we all had a big hug. We had to move a few rocks out of the way that had washed in a couple other spots, but otherwise no other trouble to get out. Roughly 24 hours after we'd entered the cave we resurfaced to a gorgeous sunny day. The sunlight glistening off the rain-soaked forest was one of the most beautiful things I've ever seen. I felt reborn. On the hike back to our trucks, the normally dry creek bed at the bottom of the valley still had a foot of water flowing and you could see the flood debris from the high water mark several feet out of the banks.

Turns out we were underground for a freak storm that dumped nearly ten inches of rain in a 24-hour period. I've been back in this cave several times, but the side canyon thing we were working on was a dud. The bottom of the pit is a huge breakdown pile, and after seeing that the water didn't back up at all at the bottom, I believe that is where the cave goes. But it would be a monumental amount of work to follow it downward. Some caves just don't give up their secrets.

My other memorable trip to Rolling Rock Cave was during the 2007 NSS Convention. Marion O. Smith had mailed me a list of all the caves and pits he had done in Indiana, so I wouldn't take him to any repeats. Elliot Stahl, Marion, and I decided on Rolling Rock. I was leading the way and when I got up to the entrance, I was shocked to see a couple of young turkey vultures in the entrance. One ran out under an overhang, and the other ran the opposite direction into the cave. There is an infamous story of Glenn Lemasters doing hand-to-hand combat with a vulture in the crawl of this cave years before, but I hadn't seen any evidence of them being there on all my trips, so I guess it is periodically used by the birds. I told Elliot they looked to be about the size of a chicken before he went down to see how bad it was. He came back out saying it was bigger than any chicken he'd ever seen. We had a discussion on what to do. I was of the notion to forget it. But Marion was determined and said he wouldn't let a damn chicken stop him from doing a pit. So in he went with much cussing at the smell. Elliot and I debated it some more and decided we'd never hear the end of it if we didn't go, so we reluctantly followed him in. If you've never smelled a vulture den, I can tell you they stink really bad.

Just inside the entrance is a six foot climbdown that is only a couple feet in diameter. The young bird had fallen down the hole and was just past it in the cave. We all skirted past it and headed on in to bounce the pit. On our way back out, the bird had moved back up to the bottom of the climb. We didn't know what to do. Even a chicken-sized bird is intimidating in a two foot confined space. Marion had done one other cave with vultures in it, so we voted him to go first since he had the most vulture experience. We split up his gear into our other packs and he used his empty pack as a shield as he entered the little climb. The vulture instantly puked, as they are known to do, which made the whole thing even worse. Somehow, he used his pack to move the bird off to the side and then



left his pack laying over it which calmed it down enough for Elliot and I to climb out past it. Once above it, I reached down and got Marion's pack. We all felt gross and went straight to the showers at camp. That is the only time I can remember ever seeing Marion actually clean his gear.. it was that bad! I feel bad for the bird as it was doomed down there. But where it was, we just didn't have any way of getting it out. We decided it was a classic case of natural selection. The smarter of the two birds ran out, while the dumber one ran in and down a hole. *[Editor's note: I'm sure the cave fauna lower on the food chain appreciated the vulture's contribution to their success.]*

Eric's River Cave was another of my early favorite projects. In 1996, my friend Eric Morris found a hole while he was looking for flint and artifacts in the nearby Dry Run. The hole was small and only a few feet above a spring blowing a nice cool breeze. He showed it to me, and then we got Aaron Green and Fritch Shultz to help dig it open. There were a couple big rocks that took some work to get out of the way, but it really wasn't that bad of a dig and we broke through in one trip with a couple more trips to stabilize the dig. A hundred feet or so in the small cave opened up to over a mile of nice walking stream passage. Dave Black led the survey and we had many survey trips over the next few years to finish it.

In 1992, I was a tour guide at Marengo Cave. There was a side passage in the cave called the Blowing Bat Crawl. It had enough air blowing out of it that you could feel it from the tourist trail. Cavers had worked on it off-and-on over many years and made progress, but no breakthrough. We had to do an evening dig trip so as not to interfere with the tours, and everyone expected this trip to just be another long attempt. But as it turned out, we were able to break through in one trip. It was a long night of moving rock, but we found big cave; as good as it gets in Indiana and it just kept going. We took turns leading the way as we strolled down one of Indiana's biggest boreholes for close to a mile. One of the best days caving in my life. Afterwards, it was my 15-minutes of fame. Being a tourist cave, it was big news and the owners wanted to maximize the publicity. I was interviewed for several newspaper articles, even

led groups of reporters through the cave for first person adventure articles. This was right before the 1992 NSS convention in Salem, so during convention, I led trips there with cave geologists and biologists from all over the U.S.

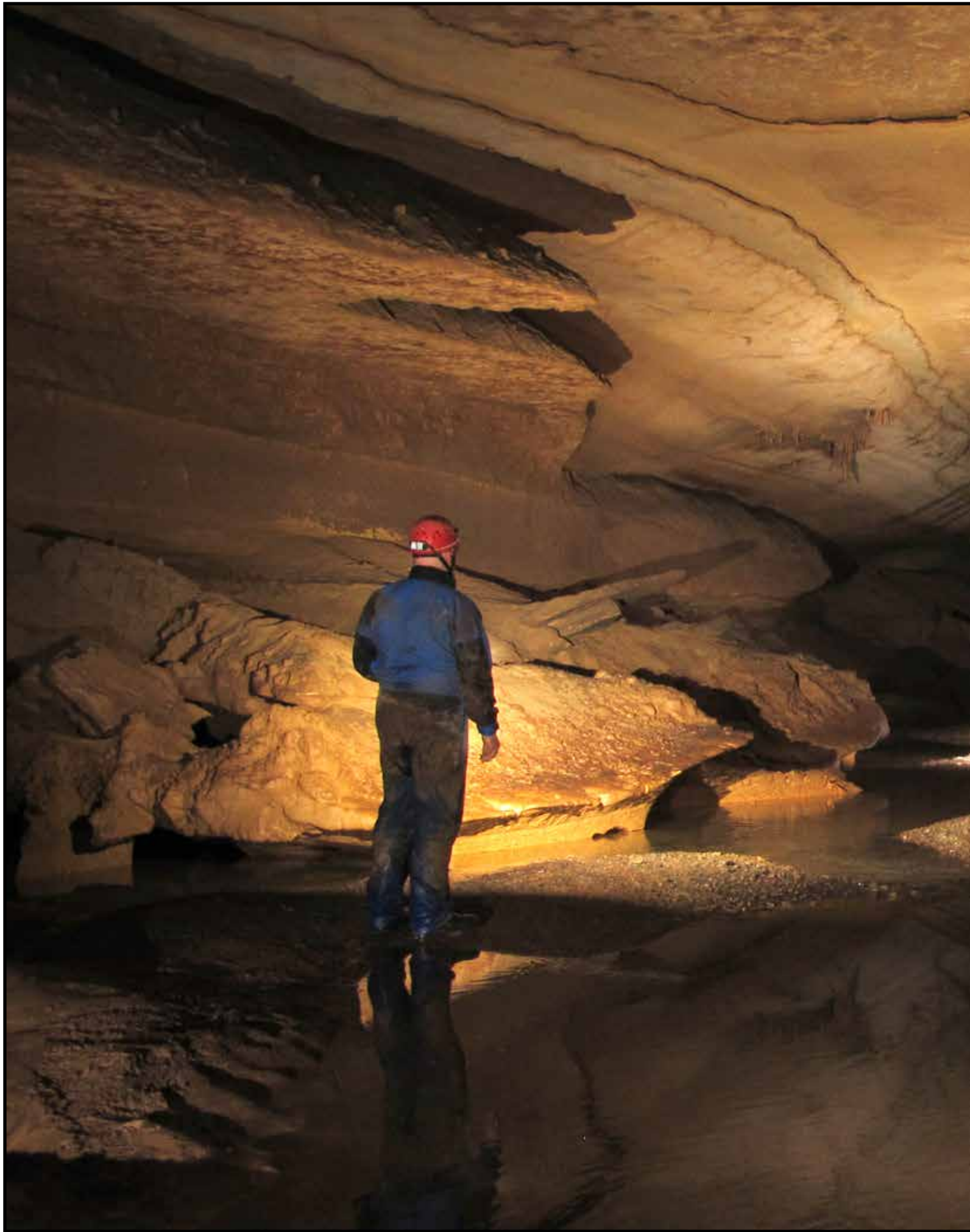
Big Rock Swallow Hole is another project that I am proud of. I found it on a ridge-walk with Dave Black, I think in 1999. I only found it because the big rock above it is very scenic and I walked down to get a better look at it. It was a pleasant surprise to see the small swallow hole in the streambed under it. The entrance needed some work, but beyond that it is just a really fun multi-drop cave with a nice big pit at the end. We had a lot of great trips in there exploring and surveying. The cave ended up being 182 feet deep with the longest drop being 78 feet.

Some of our most recent work has been south of Milltown. Chuck Perkins was out talking to landowners in the area when he met Mike Lucas. Mike had recently bought the old Spencer Farm and was excited about having someone look at holes on his property. He was also good friends with Conrad Bishop, the owner of an adjacent piece of land that contained Duke's Cave. Duke's was a known cave that had a good lead in it. With the new landowner connection, we had a new project. The initial dig got us several hundred feet of cave ending at a nice room, but then it dropped down to another dig. The second dig opened to another big room and a few thousand feet of cave, mostly nice walking canyon. We did many trips here over a couple years and in the end had a complex cave over 4,000 feet long with multiple levels, and a little bit of everything from nice almost Wyandotte-like upper passages to nasty lower-level ear dippers.

Back to Lucas's land, we had worked several different digs, cleaned up a trash pit, and added several small caves to the Indiana Cave Survey. The longest one we named Lucas Cave. Mike did some really impressive back-hoe work to open up this cave. Later, fearing a collapse, we installed a metal dome and stairway to keep it open. In-cave, we had several areas that we had to dig through to eventually find a long canyon passage that opened up right over a short section of borehole before ending in breakdown and a sump with a length of

*Continued on page 18..*

*Center spread: Chris Schotter (foreground) and Tom Sollman in the New Discovery section of Marengo Cave. Chris took this 2024 photo with the camera on a tri-pod and timer delay. ➡*







3,800+ feet. Mike has a really nice property with potential for more caves to be opened.

**Expand upon your time as a guide at Marengo Cave.** – I started working at Marengo my senior year of high school in 1991. After I put in my application, Aaron Green and I were on our way to explore the lower parts of Ted's Dig. As we drove past the parking area for Langdon's Cave, we saw some cavers there by their cars. We stopped to chat and one of them turned out to be Gary Roberson, one of the owners of Marengo. Not sure if it helped me get the job or not, but stopping to introduce ourselves couldn't have hurt. I worked there until the fall of 1996 when I moved to Indianapolis for school. I started as a guide and then moved up to a maintenance supervisor under Bob Wyman. I honestly couldn't have asked for a better job at the time. I mean, I got to work in a cave every day! I really enjoyed the winter months. The tours really slowed down and we did improvement projects in the cave like pouring concrete trails, lighting improvements, and damming up new reflection pools. I made a lot of great friends there that I still keep in touch with today. The current owner, Steve Calhoun, started as a guide about the same time I did. The current Guide Supervisor is Larry Wyman, son of my boss when I was there. Larry and I occasionally go caving together now. I'm amazed every time I go back for a visit to see the changes they have made. The little gift shop has been totally enveloped in a much larger complex of buildings and activities.

My Marengo years were some of my best years of caving. I got to help with the dig and exploration of the New Discovery section in 1992. And then in 1993/1994 we connected the New Discovery to nearby Old Town Spring Cave. The connection passage was some of the smallest, most awkward, and miserable caving I've ever done. But the air flow was incredible and kept enticing us to push. There were several long hard trips to make it happen and I'm glad we did it, but I would never do it again. To my knowledge, only three people have ever made the connection. The last area we dug through to connect the two caves was a really low wet muddy crawl that was not easy to dig open. I suspect it has filled back in over the last 30 or so years, so anyone wanting to do that connection trip would need to re-dig everything.

**What are some of your most memorable cave trips, good or bad?** – In 2005 I saw an ad in the *NSS News* classifieds looking for cavers interesting in joining a trip to New Zealand. It was a group of mostly California cavers, but they had room for a few more on the trip. I knew it would take me a long while to pay off the credit card, but what use

is a credit card if you can't rack up a trip to New Zealand on it! Marion Smith also joined the group. I knew him before this, but it was this trip that really solidified our friendship. It was a fantastic two weeks of caving, backpacking, and sightseeing with the highlight for me being a through-trip to Harwood's Hole, that just happened to be on my birthday! The entrance is a massive open-air 600 foot pit. The cave below is a really fun multi-drop cave following a stream down several pitches to eventually exit the well-decorated Starlight Cave over 1100 feet below. Easily one of the best cave trips of my life.

I've done two trips to Ellison's Cave to see Fantastic Pit. On my first trip, none of our little group had ever been there and we didn't know the cave was near flood stage. It looked really wet, but we just figured it was always like that. We got soaked just getting in the entrance with only our armpits remaining dry. The waterfall in the big pit was beautiful at first. Rappelling beside it for the first few hundred feet, you could hear the roar of the water crashing at the bottom, but the water falling through the air beside you was really quiet and reminded me of the northern lights in its movement. It quickly changed to miserable as we went down and the water spread out enough that the last 200 feet was a total drowning. I had to keep my head down to use my helmet as an umbrella to breathe. By the time all three of us got down we were near hypothermic and were ready to climb out. My second trip was bone dry and spectacular, but the rope we'd borrowed was in a big rope bag. Everyone else wanted to tie it off and throw it down the 600 foot pit. Lucky, I didn't listen. As I was pulling the rope out, I found a big mouse nest of rope fibers. The little rodent had chewed nearly through the middle of the rope which would have surely snapped and dropped me hundreds of feet to my death had I rappelled down without checking it. We knotted the bad spot and went ahead with a memorable trip.

**I know you participated in several trips to Mexico, and had an experience with a vampire bat. Care to elaborate?** – In the mid-1990s I did nine trips to Mexico; most of them were Gerald Moni trips looking for new caves. We'd usually go the week of Thanksgiving for ten-day trips, driving straight through for two days to get to the karst regions. Then up at dawn every day to find and explore caves for five or six days before a marathon drive back home. The jungle there is dense and it's just not practical to do a typical ridge-walk like we do here. We'd go to an area that Gerald had picked out on a topo map and someone on the trip who



could speak Spanish would ask the locals if they knew of any caves. With luck, someone would be willing to lead us to see caves in the area. These were small mountain villages and we were some of the first foreigners they had ever seen. Most villagers were friendly and curious, and often very helpful in showing us cave entrances, even if they were suspicious that we were secretly looking for treasure. We found a lot of new pits, mostly in the 60-100 foot range, with a few between 200-300 feet and a couple multi-drop caves going hundreds of feet deep. In Indiana, these pits would all be classic caves, but by Mexico standards, they were mostly dud holes that I seriously doubt anyone has ever returned to see.

On the 1996 trip, I was bitten by the vampire bat. We had a nice spot under a bridge along the Rio Corona River where everyone driving down would meet up the first night. It was a clear night and we were tired so Nadine and I decided we didn't need tents. Gerald slept in the back of his truck while we just put a couple tarps down for our sleeping bags. Gerald failed to mention that a few years before someone else made the same mistake and was bitten by a bat at this very same location... Anyway, I slept right through the night and didn't know anything was amiss until the next morning when people started asking why I had blood all over my face.

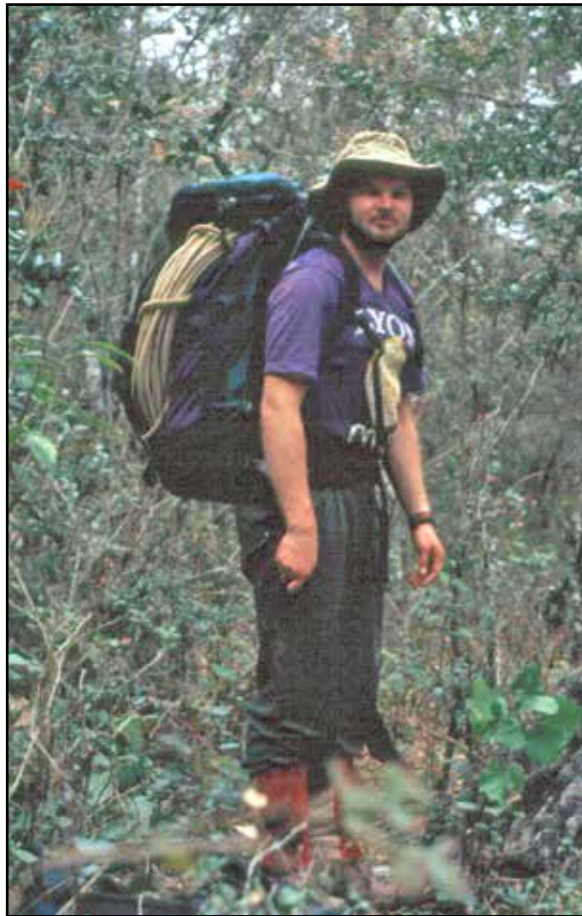
The little sucker (literally) had crawled up and nipped the back of my ear while I was sleeping. Vampire bats survive by being stealthy and it's common for their victims to not notice a quick bite by their little sharp teeth. Not sure how much blood it actually licked up, but it was a sloppy eater and I had blood all over my face, my pillow, and sleeping bag. We talked about rabies, but the general consensus of the group was the gestation period was a couple weeks and I'd be fine to finish the trip. So, on we went and had a great trip exploring caves for a week, including a beautifully decorated pit around 300 feet deep.

Back home in Indianapolis after the trip, I called the health clinic at IUPUI and asked about getting rabies shots. I was informed the two-week period we all thought I had was wrong and that I should have immediately come home to start the treatment. The vaccine itself was an interesting bright pink color and I also had to get some immune globulin shots on my first visit. The nurse wasn't joking when she said, "Huh, I didn't know we had syringes this big! You're going to want to take some Advil when you get home." They split the dose up with half in each hip and it was still a lot. I went home and laid down for a nap and could barely move my hips to get off

the sofa when I woke up. Chances are I was never exposed to rabies, so the shots were preventative, but not something to risk. I think it was a ten-shot series spread out over a month. Thankfully after the first dose, the rest were normal-sized shots. Since then, I've done several caves in Mexico that had vampire bat roosts in them. My blood brothers are fascinating little animals, but they are messy and the caves they call home are not pleasant with a smell much worse than other bat caves.

**Who were other Schotter family members who were/are cavers?** – Grandpa Leo was the ring leader of his caving group and I'm sure he took most of his family members underground at some point. I think one of the

signatures in Batwing Cave is one of his brothers that he took in there. And grandpa took his wife, Nellie, into Jewel Box once. The only family members who were hooked though were my dad, Gary, and my uncle Allen. Most weekends through the early 1960s they were underground. From my generation, my brother was part of our caving crew while we were in high school, till he moved out for college and met girls at which point he more or less quit caving. My sister Robin was a guide at both Marengo and Wyandotte caves, and did some caving with us.



*Chris Schotter on a 1999 Mexican cave expedition.*

**Your grandfather Leo, was a plumber/electrician by trade and was hired by the State of Indiana in 1967 to electrically light the Monument Mountain tour route in Wyandotte Cave. Do you recall any stories from your grandfather Leo about this?** – Grandpa Leo had many jobs over the years: guard at a mental institution, school bus driver, part time mortician, water superintendent for Milltown, and the plumbing, heating, and electric business he started. He was also a diehard, true blue Democrat. His business was working on the lighting in Wyandotte when the Republicans won the 1968 state election. He refused to work for the guy that took over and quit without finishing the job. My dad was upset over the whole thing and would have preferred to keep working on it. The Wyandotte wiring job was a fun job for them and being winter time, it was nice and warm in there.

One of their favorite stories involved our neighbor, Neil Proctor, who was a guide there at the time. Neil was in the cave helping to unroll a 100 foot roll of black plastic drain tubing. I think maybe they used it as conduit. The process was to get an end loose, and stack some rocks on it to hold it down while they unrolled it down the passage. Apparently, he'd nearly unrolled the whole thing when his stack of rocks came loose, releasing the tubing which started rolling itself back up. They were working by lantern and couldn't see what was going on back there. They heard the unusual noise of it rolling up, but didn't know what it was until it appeared in the lantern light and literally ran over Neil.

**Who were some of the caving friends or cohorts of Leo? What are some of the caves they found or explored in the Harrison-Crawford area?** – Grandpa's shop in Milltown was a hub for cavers through the 1960s as a base camp of sorts. Clarence Lindsay from Muncie was one of his best friends and made the drive down more weekends that not. In

good weather they'd go caving. If the weather didn't cooperate, they'd stay in and play cards. Everyone just called him Lindsay and he introduced grandpa to vertical caving. Virgil Poe was another of grandpa's lifelong friends. He owned a gas station in Milltown. Bob Kepley lived a few miles away and was another of the regulars. And of course, grandpa's little Pekinese dog, Tiny. She loved it and would tag along on most of their cave trips. They would even put her in a sack to lower her down pits. Cavers from Evansville area and up around Indianapolis would come in from time to time for trips as well. I wish he'd had a log book at the shop for people to sign in and record everything they did.

Most everything around Milltown that has a naturally open entrance, their group explored, though some of the names have changed as they were later documented by other groups. Gary's Pit near Rothrock's Mill was named for my dad. Virgil's Haunted Pit is now called Keck's Pit. Tiny's Cave is now Beechtree Cave. Thunder Hole was later renamed Blue River Double Sinks, and on and on. They were the first to explore Easter Pit, though at the time it was just a little dud pit and wasn't connected to Wyandotte until many years later. It is widely assumed that King Leo is named after my grandpa, and I believe it is, but I personally don't remember him telling any stories about that cave. I just wish

someone had written them all down!

**Any final thoughts?** – I would encourage any new cavers reading this article to start a cave log and document all your trips. I didn't start documenting mine until 2006 so a lot of my early trip records are from poorly kept notes in journals. Reflecting on this interview really made me wish I'd done a better job in my early caving years and that my grandpa would have done the same. Many trips have just been totally forgotten and much history is lost to time. 🦋



*Leo Schotter in Devil's Graveyard Cave in 1964.*

## NEW MONROE COUNTY KARST PROTECTION ORDINANCES

by Keith Dunlap

Last spring, Kevin Stunk and I were invited to meet with Kelsey Thetonia, the Monroe County Municipal Separate Storm Sewer Systems (MS4) Coordinator and Tammy Behrman, the Assistant Director of the Monroe County Planning Department. Both were interested in soliciting our feedback on separate draft ordinances the two agencies were working on related to karst protection in Monroe County (note the Monroe County Planning ordinances exclude the incorporated areas of the city of Bloomington and Ellettsville). The MS4 regulations would be new and the Monroe County Development Ordinances would be the second iteration of the ones County Planning had in place for almost two decades. The goal was to enhance karst protection without being overly burdensome to developers. The two agencies also wanted their individual ordinances to be consistent with each others. Kevin and I reviewed the draft ordinances and submitted a number of language suggestions and additions with almost all of them being incorporated. The the MS4 ordinances were adopted June 5, 2024, while the Monroe County Planning ordinances were adopted on December 19, 2024. Because the ordinances are similar, for the rest of this article I'll just refer to the Monroe County Planning Department's Development Ordinances.

Let me first say that Monroe County is one of the few jurisdictions that actually has any karst protection regulations, so it is refreshing to see that they were interested in revising them to ad-

dress some deficiencies with the original ordinances. In the original rules, they had a protected/non-buildable area called a Sinkhole Conservation Area (SCA) that was defined as an enclosed depression at least two feet deep where anything within the depression rim could not be disturbed. In the new ordinance, the protected area is now called a Karst Conservancy Area (KCA) and is expanded to include a fifty-foot buffer that extends beyond the sinkhole rim. But more importantly the new ordinance now includes the protection of other karst features (swallow holes, cave entrances, sinking streams, springs) not located within a sinkhole with a similar fifty-foot buffer. There are still some exceptions, but for the most part, the new inclusive language is much more comprehensive in providing sensitive karst protection.

To learn more about the stormwater regulations, go to [www.co.monroe.in.us/departments/division.php?structureid=131](http://www.co.monroe.in.us/departments/division.php?structureid=131). To learn more about Monroe County Planning rules go to [www.co.monroe.in.us/departments/?structureid=13](http://www.co.monroe.in.us/departments/?structureid=13). To download the newly adopted Monroe County Development Ordinances, go to [monroecounty99.sharepoint.com/:b:/s/mcplangroup/EUMCPwkAhOBBIqhfh8vZF40BjKe9-m9p4PYro6L34U2Ag?e=1n5wLT](https://monroecounty99.sharepoint.com/:b:/s/mcplangroup/EUMCPwkAhOBBIqhfh8vZF40BjKe9-m9p4PYro6L34U2Ag?e=1n5wLT) and then go to the Karst and Sinkhole Development Section (826) starting on page 276. The language in these ordinances could make an acceptable template for other communities wishing to add karst protection to their development plans. 🐦

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...continued from page 11

Aaron Valandra, Richard & Sue Vernier, Paul Webb, Rich Whisler, Dean Wiseman, Bristol Yoder, Vibe Yoga, Tom Zeller, Bluespring Caverns, Cleveland Grotto, Greater Cincinnati Grotto, Northern Indiana Grotto, Windy City Grotto, Anne S. Frantz Charitable Fund, Indiana Native Plant Society, The Clay Grander Lions Club, Kroger Community Rewards, and Mr Beast.

- ❑ The IKC also maintains a Cave/Land Acquisition restricted fund which is used exclusively to accumulate resources for our acquisition activities. In 2024 we had forty-five individuals/couples and four organizations contribute \$37,061. Donors include Josh Abdulla, Ron Adams, Bill Baus, Jasper Beavers, Danielle Burden, Keith Calkins, Paul Canney, Thomas Carney, Dan Chase, Mark Collins, Myrick David, Laura Demarest, John Dimit, Steve Dodds & Family, Keith Dunlap, Daniel Garrett, Allen Goodcase, Barbara Hanka, Rand Heazlitt, Matthew Laherty, Matthews Lewis, George Mattson, Greg & Val McNamara, Jeff Meadows, Kim Metzgar, Ashley Motia, Ernie & Jacqueline Payne, Kelle Reynolds, Carroll Ritter, Gary Roberson, Wesley Roeder, Matt Selig, Mary & Spike Selig, Noel Sloan, Gordon Smith, James Stahl, Carla Striegel-Winner, Dave Tibbetts, Aaron Valandra, Paul Webb, Steve Weinzapfel, Norbert Welch, Rich Whisler, Dean Wiseman, Tom

Continued on page 31...

## SAWW CHAINSAW TRAINING ADDS TO IKC SKILL SET

by Joe Kinder

The Indiana Land Protection Alliance (ILPA) received an Environmental Action grant from NIPSCO to host an immersive three-day chainsaw safety course for several land stewards across the state. Carla Striegel-Winner, fellow IKC Board member, forwarded me an email she had received on the training and requested that I review and consider applying for this upcoming training. This Safety and Woods Worker (SAWW) chainsaw training was to take place at the Indiana DNR Division of Forestry Training Center at Morgan-Monroe State Forest on November 18-20, 2024, and was limited to only twelve participants. Considering I had expressed interest previously in taking a chainsaw safety course, and being the

ing, I was mostly looking forward to increasing my knowledge of the proper personal protective equipment (PPE) needed to safely operate a saw, how to best maintain my saws to run effectively and efficiently, and how to properly fell a tree.

**Day 1:** On Monday, November 18th, the training began with an in-class lecture all morning that extended into the afternoon. Our trainers Joe Glenn and Aaron Hovis introduced themselves and discussed their careers as sawyers/loggers and ultimately how they became chainsaw safety trainers. After the introductions, we discussed the proper PPE that should be used during operation which includes a hard hat (preferably with attached eye & ear protection), ear and eye protection (if not attached to the hard hat), rated boots, and hand and leg protection (gloves, chaps, etc). This led to the actual saw itself and the many safety features already built into the unit to protect the operator. These include the chain brake (needs to be disengaged in order to make the chain cut), the throttle lock-out (prevents acceleration of the chain when the hand is removed from lock-out), the chain catcher (a piece of aluminum under the bar that keeps chain from hitting your elbow if the chain breaks), and a spark arrester (screen in exhaust that prevents a fire). These are just a few examples; ultimately the overall saw condition should be inspected prior to each use. Bar and chain reactive

forces were discussed and what can produce a kickback. Examples were provided via slides showing scenarios that an operator might find themselves in. We discussed each example and how best to avoid ensuring safety is being met.

After lunch, we started discussing the different types of cutting scenarios, whether the tree is alive or dead, wet or dry, and the proper techniques to safely fall a tree. In the past, I typically would perform what is called a chase cut, I would make a notch on one side and then make a back cut from behind on the other side of the notch to drop the tree. This is still a method that can be used, however there is less control on where the tree will fall. Joe and Aaron then discussed the "Open Face Bore Cutting Technique" that utilizes



photo courtesy Andrea Huntington



The trainees pausing for a photo op out in the woods.

Property Manager at the Sullivan Cave Preserve, I felt this would be a great opportunity to receive this training and add needed skills for the IKC. I completed and submitted my application to ILPA in July, then roughly a month later I received notification that I had been selected to participate.

Leading up to this training, I would say I felt confident in being able to safely operate my chainsaws, but I had received minimal instruction in the past and primarily learned how to operate a saw from one of my neighbors 15 to 20 years previously. Learning to operate a chainsaw has been a great skill to have as I own three different sizes of Stihl chain saws, each are powerful and there are obviously lots of safety hazards associated with running a saw. With this upcoming train-

a notch, a hinge, a back cut, and a trigger for safer control. The “notch” is created by making two cuts to remove a wedge of wood that should create at least a 70-degree or more opening. The “hinge” is an established strip of uncut wood behind the notch, this serves as a guide for the tree to fall to the intended target area. A “back cut” is made after the notch is created, this is where the operator plunges the bar through the tree from one side thru the other side, leaving enough uncut wood for the hinge, then the operator can saw toward the back of the tree to leave just enough wood to establish what is called a “trigger”. Once all cuts are made, the last cut should be the trigger which will bring the tree down. For this cutting technique to work, the operator must understand the basics of the open face bore cut and determine the diameter at breast height (DBH) of the tree to determine the minimum and maximum hinge thickness for that tree. If the hinge is too thin or thick, this will impact the control an operator might have and ultimately where the tree will fall.

Each of us participating in the training really looked forward to practicing this technique in the field, but we still needed to understand the six-step tree falling pre-plan using the H.E.L.P.S.O.S acronym. **H** = Hazards, where the operator visually identifies all hazards, assesses the risks, mitigates or accepts any hazards, then decides to either move forward with the cut or not. **E** = Escape, once the hazards have been identified, the operator needs to determine his or her escape route to generally get out of the way of the tree when it falls. **L** = Lean, where the operator identifies which side of and the direction the tree is leaning towards. **P** = Plan, where the operator identifies the cutting technique to be used, and the plan put in place to succeed. **S** = Size, determining the DBH and identifying the type and size of the hinge that is needed to control the tree’s fall. The two general rules for creating the hinge are: 1) a maximum hinge thickness is 10% of the DBH; and 2) the minimum hinge length is 80% of the DBH. Finally the **O S** = Oh Sh\*t!!! The operator identifies where the tree might go if the cutting plan fails, along with any new potential hazards.

Mid-afternoon the class drove to an area nearby that was designated by the IDNR for the field use portion of our training. Joe and Aaron

demonstrated techniques we learned earlier in the day and explained that each of us would have the opportunity to practice these techniques in the field on the next day.

**Day 2:** On Tuesday, November 19th, the training continued in class with a lecture about additional safety concerns, notably how to cut “spring poles” to avoid getting hurt as well as utilizing a plastic wedge on the bad side of the tree when performing an open face bore cut. Mid-morning we found ourselves back in the field where each of us would practice completing open face bore cuts in a stump as well as practice cutting spring poles. After lunch, we each picked out our own tree to cut... I selected an 80-foot tall Virginia pine. I was the second person of the twelve to complete an open-faced bore cut, where I went through the individual steps (H.E.L.P.S.O.S),



*Aaron Hovis (left) discussing proper maintenance of a chainsaw.*

*photo courtesy Joe Kinder*

created a notch and then bore cut through the tree to create my hinge leaving a small trigger to be released when ready. After completing each of my cuts, Aaron the trainer observed and mentioned I did a great job, and I should be ready to cut the trigger. With the go ahead, I cut the trigger, moved into my escape route and watched my tree fall to my planned target area. It was so cool to put those new skills into practice. Each of us took our turn and supported each other, ultimately everyone did a great job, and we continued through the afternoon cutting additional trees.

Before the end of Day 2, Joe Glenn mentioned that he and Aaron have given each of us just enough knowledge to be dangerous. Our knowledge now far exceeds our skill set and it



will take a lot of practice utilizing these new techniques to catch up. I could not agree more, but I feel just gaining this knowledge has already made me a much safer sawyer, retention of knowledge however, comes with practice.

**Day 3:** Wednesday, November 20th, was the last day of our training. Since we had nearly a full day of field training the day before, and since there was rain in the forecast, we opted to utilize the training center for the day, putting emphasis on the proper maintenance of our chainsaws. Joe and Aaron explained the different types of chains and bars needed for the type of cutting each of us would likely be doing. We continued to discuss the reactive forces and what causes a kickback. The “kick corner” of the bar is the only part that causes a kickback usually from pushing too hard, a dull blade, a blade not filed correctly, or filed too aggressively. We practiced filing our chains with different types of filing guides, which I did not have a good understanding of prior to this training. Learning how to sharpen a chain and identifying how much life is still left on a chain will now save me a lot of costs moving forward,

where I would normally have taken my chains somewhere to get sharpened, or I would purchase a new chain altogether. All in all, this training was so good for me, it helped me better understand the function and proper maintenance of my chain saws, and the proper techniques to safely fall a tree. I can apply these skills to the Sullivan Cave Preserve and assist other IKC Property Managers with their properties as needed.

I would highly recommend this training to any other land steward or anyone in general that might benefit from learning the proper and safe techniques to operate a chain saw. I want to thank Carla Striegel-Winner for suggesting I take this course along with several other IKC Board members for their support. Thanks to ILPA for sponsoring me and the other participants in the training, for providing meals, snacks, and drinks throughout each day. A big thanks to the Indiana DNR Division of Forestry staff for allowing us to utilize their training center. Lastly, I would like to send a special thank you to Joe Glenn and Aaron Hovis for giving us their time and expertise. They were outstanding instructors who are very passionate. 🐦



**REGISTRATION TO OPEN SOON!**

**WILDERNESS FIRST AID**

July 12 – 13

Lawrence County Independent Schools

223 Old Farm Road, Bedford, IN



- The IKC is sponsoring this class, which allows us to give deep discounts to attendees.
- The course is two full days (16 hours) of classroom instruction with hands-on learning scenarios that range from crisis response, patient assessment, physical trauma, environmental issues, bleeding control, and how to handle medical emergencies.
- The WFA class fee is \$125 with IKC members receiving a \$25 discount. Typically the fee for this course put on by other organizations is \$250-\$300.
- There is an optional/add-on CPR course offered on Saturday evening, and you are welcome to take this class separately, if there are any openings available. The fee for this optional training is \$25.
- Primitive camping is available at our nearby Sullivan Cave Preserve.
- If you are not already and would like to become an IKC member to take advantage of the IKC discount (thanks to funding from the IKC) please go to [ikc.caves.org/join-the-ikc](http://ikc.caves.org/join-the-ikc)
- For details and how to register (when open) watch the IKC’s website home page ([ikc.caves.org](http://ikc.caves.org)) or the IKC’s Facebook page ([www.facebook.com/indianakarstconservancy](http://www.facebook.com/indianakarstconservancy))

**CLASS SIZE WILL BE LIMITED!**



## POPULATION TRENDS OF WINTERING BATS IN INDIANA

by Keith Dunlap

*This article covers the more interesting aspects of the biennial bat hibernacula census conducted in selected Indiana caves in January/February of 2024. The census was last conducted in early 2022 (as reported in IKC Update #148). While the primary focus of the surveys have been on the Indiana bat, data on all species are collected and is becoming more important as more species are imperiled. The numbers reported here are preliminary as the final report has not been released. I have been involved as a volunteer in this research since 1987.*

As part of the USFWS Recovery Plan for the federally endangered Indiana bat (*Myotis sodalis*), biennial population counts are conducted to assess the status of the species. In this article, as I have done in the past, I will present a subset of the cumulative data systematically collected over the past forty-four years (1980-2024), along with some historic numbers dating as far back as 1950. The vast majority of the contemporary data has been collected for the Indiana Department of Natural Resources under the direction of Dr Virgil Brack, and now his son, Darwin Brack, both of Environmental Services & Innovations (ESI). Since 1980, there have been over 500 winter census visits to caves hosting Indiana bats. And while there are over 3,000 caves in Indiana, there are less than ten caves that contain any notable *sodalis* populations.

Similar to prior recent censuses, the 2024 census methodology of conducting the in-cave work relied primarily on high resolution photography for collecting cluster data (see photos on back page), rather than directly counting individual bats. Photographic censusing minimizes disturbance times and improves accuracy. And per USFWS White-nose syndrome (WNS) protocol, extraordinary care is taken to assure all gear and clothing were properly decontaminated between each hibernaculum visit.

Historically, the Indiana bat was one of the first species to be protected under the Endangered Species Act (it was added to the list in 1967). The reason for the bat's listing was its propensity to concentrate during the winter in large numbers in only a few caves, and the well-documented observations of the population declines in those known mega-hibernacula at the time (basically seven caves in Indiana, Kentucky, and Missouri). From 1965 to 2001, the range-wide population

declined by over 40%, then actually showed some improvements from 2001 to 2007, but then started decreasing again, likely due to White-nose Syndrome (WNS). However, in the last two range-wide surveys (2022 and 2024), there have again been some positive population increases. I hope to write a more detailed article on the range-wide Indiana bat population in a future *IKC Update*.

For Indiana hibernacula specifically, the total population “bottomed out” in 1985, but then gradually and consistently increased until 2007 (see Figure 1). As with the range-wide trends, the total numbers then dropped again for the 2012-2019 surveys; likely the impact of WNS. Fortunately, the total Indiana populations have

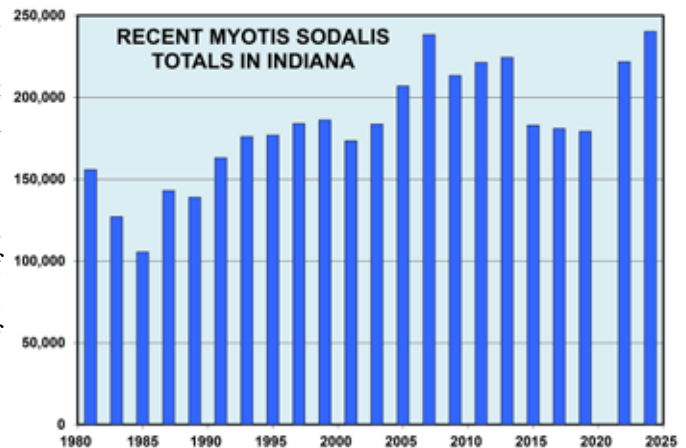


Figure 1

rebounded significantly in 2022 and 2024, with the 2024 population exceeding 240,000 bats, ***the highest documented totals in Indiana since records have been kept.***

With that all said, the population distribution of Indiana bats in Indiana has drastically shifted geographically since 2007, and particularly since WNS arrived in 2011. The number of bats in the more northerly hibernacula that include Jim Ray's and Clyfty caves (Greene County) and Coon and Grotto caves (Monroe County) have significantly decreased, down 84% (Figure 2). The traditional expectation was that as climate change progressed, the northern caves would gain Indiana bats as the species' range shifted north. However, the new hypothesis is that due to WNS, the bats are moving to caves where they can shorten their hibernating period (later in and earlier out) to lessen the effects of WNS, and thus increase their chances of survival. Consequently the bats in the more southern Indiana hibernacula



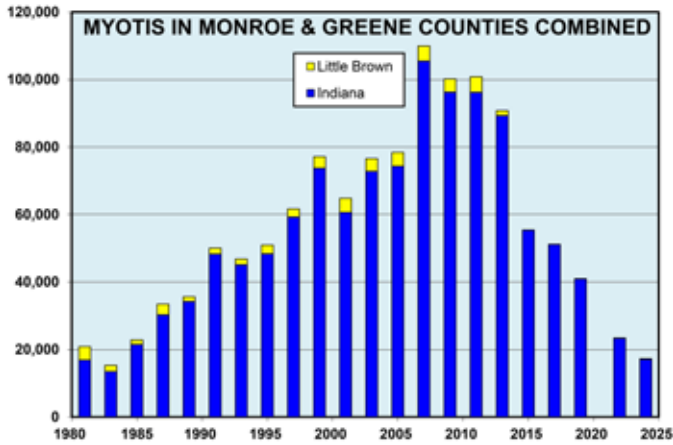


Figure 2

(i.e., Harrison-Crawford area) can gain body fat a little longer in the fall, and come out of hibernation a little earlier in the spring to feed due to being located at a lower latitude. At this point, the evidence of this explanation is mostly anecdotal, and it will take more observations and research to see if this thesis proves out.

Looking at the populations in the Harrison-Crawford area, the two block busters are Wyandotte Cave and Jug Hole. Wyandotte Cave (Figure 3) is by far the most interesting and important hibernacula in Indiana. Its size provides an extremely wide variation in microclimate conditions that allow the bats to shift within the cave to locations that best suit their needs. The cave has also had a long history of anthropomorphic changes with multiple gates impacting airflow and flight interruption, and commercial tours causing various levels of winter disturbance. With each proactive management decision (bat-friendly gates, Rugged Mountain closed for winter tours, all winter tours discontinued, etc), the bats have responded positively. In 2024, there were just over 103,400 Indiana bats using Wyandotte, a remarkable 68% increase from the previous highest peak in 2011. What is also interesting is

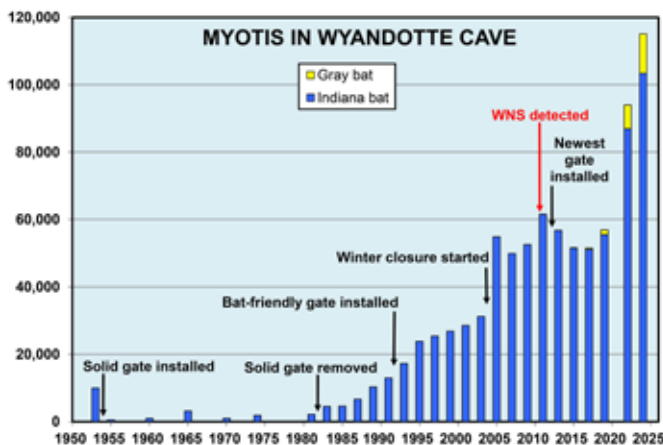


Figure 3

that over 73,000 (71%) of the Indiana bats in the cave were hibernating in the entrance room in 2024 (see photos on back page), greater than any previous count. This shift in inter-cave preference may be due to the entrance room being cooler than the rest of the cave, or might also be the result of moving the bat-friendly gate closer to the entrance in 2013 and thus reducing winter disturbance in the entrance room. One other recent and significant change at Wyandotte is that the number of the federally-endangered gray bats (*Myotis grisescens*), first observed here in 2011, increased significantly from 1,400 in 2019 to 7,000 in the 2022, to nearly 11,700 bats in the 2024 count (an 850% increase in just 5 years!). Whether this exponentially increasing population of gray bats in Wyandotte will continue, and if there will be any negative impact on the wintering Indiana bats, is yet to be known.

Jug Hole (Figure 4) has also shown remarkable and steady growth despite WNS and other

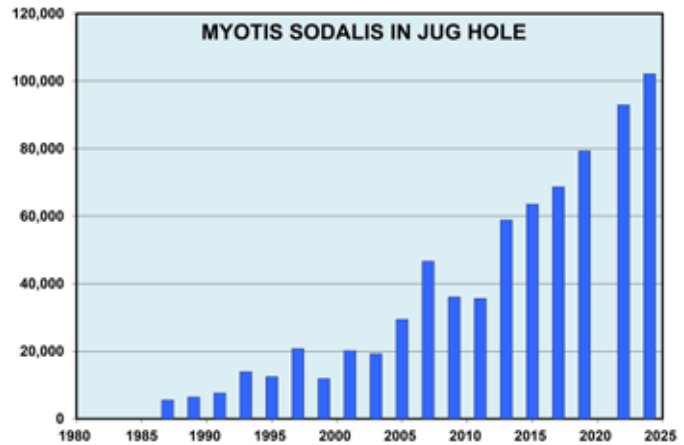


Figure 4

external stimuli. In 2024, the number of Indiana bats counted there were slightly over 102,000, just a few less than in Wyandotte. This makes Wyandotte and Jug Hole the second and third largest hibernacula, respectively, range-wide. The abandoned mine in the Sodalid Nature Preserve in Hannabel MO is the largest hibernaculum with over 222,000 bats in 2024. The odd thing about Jug Hole is that it does not have any of the classic characteristic of being a good bat hibernacula other than being a cold air trap, and the only real management prescription has been to discourage winter visitation, which cavers have supported. Regardless, the bats seem to like this pit cave.

There are a few other caves in the Harrison-Crawford area that have shown increases in recent years including Wallier Cave (Figure 5) and Swinney Cave, to a much smaller extent. With that said, there are additional previously important and



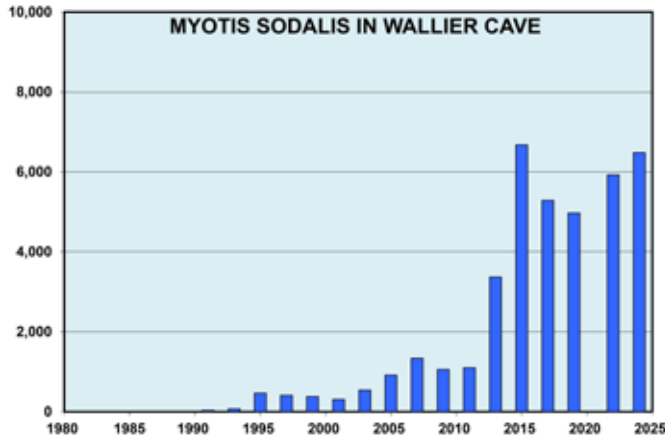


Figure 5

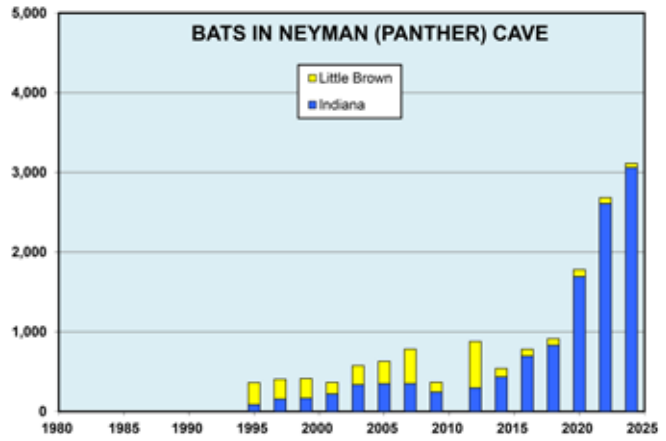


Figure 7

significant caves in the area that have all but become irrelevant including Twin Domes, Batwing, Saltpeter, Robinson Ladder, and Wildcat caves.

Geographically in between the northern and southern caves are a few “middle” caves, specifically Endless Cave (Figure 6) and Neyman (Panther) Cave (Figure 7), both in Washington County. While neither of these caves have particularly large populations (relative to Wyandotte and Jug Hole), both have demonstrated a continuous positive trend over the past twenty-five years. Both

have the capacity and characteristics to become very important caves in the future.

I’ll end this article with one final observation from the 2024 bat census related to a different *myotis* species. WNS had a terrible impact on the little brown bat (*Myotis lucifugus*) with an approximate 90% state-wide drop from 2009 to 2013 time frame (Figure 8). But we have seen modest increases in both 2022 and 2024, so hopefully we are at the beginning of the gradual recovery for this species, at least in Indiana. 🦇

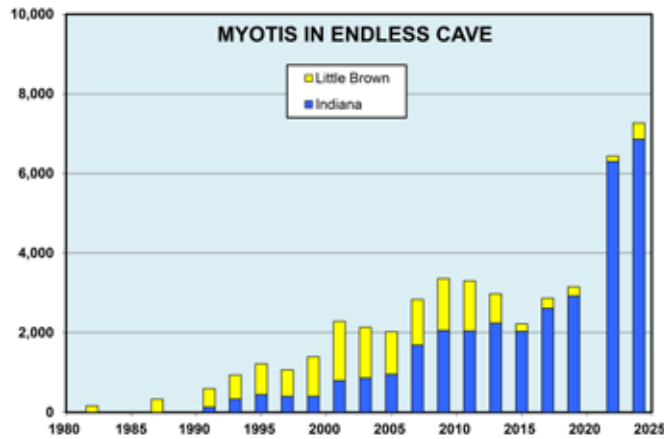


Figure 6

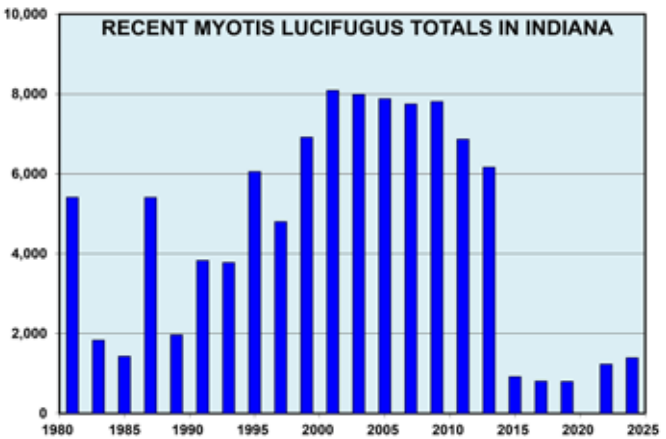


Figure 8

**JOIN US FOR AN IKC PRE-MEETING SOCIAL**  
**SUNDAY, MARCH 23rd – 12:15 to 1 PM EDT**  
**Monroe County Public Library (Ellettsville Branch, Room A)**  
**600 W Temperance St, Ellettsville, IN 47429**

Come for refreshments and give a pre-meeting hello to the IKC Board and fellow members and supporters. We will have info available on our upcoming activities – including the field events and the Indiana Cave Symposium. Feel free to stay for the meeting – for a few minutes, or if you are brave and caffeinated, for the whole meeting!

Questions? Contact Carla Striegel-Winner ([IndianaKarstConservancy.info@gmail.com](mailto:IndianaKarstConservancy.info@gmail.com)).

**INDIANA KARST CONSERVANCY TREASURY REPORT**

**Income/Expense Statement  
From October 1, 2024 to December 31, 2024**

<b>INCOME:</b>		
Dues Apportionment and Residuals	1,186.25	
Donations - General	1,080.19	
Donations - Land Acquisition Fund	10,095.01	
General Investment Earnings	1,889.43	
		\$14,250.88
<b>EXPENSES:</b>		
IKC Update (printing, production, mailing)	922.20	
Education / Outreach	350.00	
Stewardship / Conservation	502.80	
Business (PayPal fees, postage etc)	241.37	
Liability Insurance	1,811.00	
Transfers to/from restricted funds/other adjustments	10,095.01	
		(\$13,922.38)
<b>NET OPERATING EXCESS (DEFICIT) THIS PERIOD:</b>		<u><u>\$328.50</u></u>

**Balance Sheet  
December 31, 2024**

<b>ASSETS:</b>		
Cash in Checking/CD/Brokerage accounts	821,136.50	
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>\$1,708,149.66</u></u>
<b>FUNDS &amp; OPERATING EXCESS:</b>		
Land Acquisition Restricted Fund	92,162.39	
Deferred Dues Restricted Fund (313 members)	6,963.75	
Stewardship Endowment Fund (+1.44% for Q4)	142,882.38	
Gale & Ray Beach Endowment Fund (+2.62% for Q4)	487,842.43	
Previous General Fund (total)	90,970.21	
Net Excess (Deficit) This Period	<u>328.50</u>	
Current General Fund (unrestricted)	91,298.71	
Current General Fund (committed)	3,890.92	
Real Estate Basis (excluding value of CE)	<u>887,000.00</u>	
<b>Total Liabilities &amp; Operating Excess</b>		<u><u>\$1,708,149.66</u></u>

**DON'T FORGET TO RENEW YOUR MEMBERSHIP!**

# IKC QUARTERLY EXECUTIVE BOARD MEETING MINUTES

Sunday, December 15th, 2024 – 1:00 PM EST

Ellettsville Public Library – 600 West Temperance Square, Ellettsville, IN 47429

**Board Members Present:**

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

**Board Members Absent:**

None

**Others Present:** John Benton, Bambi Dunlap, Richard “Fig” Newton, Sam Richey, Wes Roeder, Gordon Smith, Kevin Strunk, and Sue Venier.

**Call to Order – IKC Exempt Purpose & Introductions**

The meeting was called to order by Matt Selig at 1:00 PM EST.

**Acceptance of Proxies**

All Board members in attendance, so no proxies.

**Approval of Previous Minutes**

*Danyeale Green made a motion to approve the minutes from the September meeting as published in the December 2024 IKC Update. Bill Baus seconded. Unanimously approved.*

**Election Nomination Committee Appointment**

Laura will serve on the Election Nomination Committee along with Scott and Cris. Director terms are up for Danyeale, Goni, Carla, and Jeff as well as the three Officer positions.

**E-mail Motions Since Last Meeting**

None.

**Treasurer Report**

Keith outlined the current financial status of the organization:

Assets:

Cash assets totaling	\$826,361.83
Land assets totaling	\$887,000.00
<b>Total Assets</b>	<b>\$1,713,361.83</b>

**Dedicated Funds:**

Land Acquisition Fund	\$83,077.38
Stewardship Endowment	\$146,417.25
Gale & Ray Beach Endowment	\$499,237.98
Deferred Dues	\$7,822.50
General (unrestricted) Fund	\$89,806.72
<b>Total Dedicated Funds</b>	<b>\$826,361.83</b>

Membership currently stands at 312 paid members.

Stewardship Endowment Fund has grown by 10.9% APR and the Gale and Ray Beach Endowment Fund has shown favorable progress with a 7.6% APR increase since it was invested in mutual funds.

**Proposal for Printing the IKC Update**

Keith shared some demonstration copies of glossy, full-color magazine-style newsletters that could be adopted for *IKC Update* printing in the future. Currently the IKC prints about 250 copies which cost approximately \$700 to print at Office Depot (color cover, grayscale inside). Implementing the new format newsletter would save money, if printed in current volumes. The potential printing vendor we priced is in Minnesota, but Carla reached out to other ILPA member trusts, all of which use Indiana-based printers for this service. Eliminating the envelope would save some money (\$0.07/envelope) too, though postage would be the same. From the Editor’s standpoint, the newsletter must have pages in multiples of four, which can make layout more difficult, though a photo centerfold could be included and with full-color, we could emphasize more photography. A graphic artist would help a lot with layout, and it was proposed that a volunteer could be found within IKC membership. Consensus was in favor of making this change to the *IKC Update* in the future.

**Education/Outreach Committee**

Carla shared the 2023 *IKC Update* covers that had received awards at the 2024 NSS Convention; they will be recognized at the IKC/ICS Symposium in the spring.

When it comes to 2025 field days and outreach events, Carla is still planning a few options, but asked for any input or volunteers who may have unique ideas. The Noblesville cave-related school event that was scheduled for February 5th will be cancelled this year with plans to reschedule in 2026.

Carla has also collected information on promotional items (hats, etc.) with the option to have them for sale in early 2025. Some discussion ensued about item specifications and pricing. *Keith Dunlap moved to authorize Carla to order 20 hats and 20 beanies from Organic Robot Designs or another applicable vendor.*



*Cris Seuell seconded. Unanimously approved.*

Carla also indicated that she has been using extra copies of the *IKC Update* to give out to conservation partners and would be able to use any extra copies that others may want to give back when they finish reading.

There was also some information from the Midwest Bat Working Group sent to the IKC regarding an upcoming annual meeting in Fort Wayne in April 2025 in which sponsorship was solicited. Goni attends these meetings regularly and can represent the IKC in person with a display table on-site. *Cris Seuell moved that the IKC pay for a \$350 sponsorship for the Midwest Bat Working Group conference in April 2025. Bruce Bowman seconded. Unanimously approved.*

### **ILPA Update**

Joe gave a summary of a recent three-day chainsaw safety class he took that was sponsored through ILPA which was very beneficial.

The ILPA Winter Gathering Conference and evening Reception will be on Tuesday, February 4th, 2025, and IKC Directors are encouraged to attend as it is a great opportunity to network with representatives of other conservation organizations in Indiana.

ILPA also completed its strategic plan (2025-2029); copies were passed around for reference.

The IKC's annual ILPA membership dues are due in January. *Cris Seuell moved that IKC pay \$500 to continue membership in ILPA. Danyele Green seconded. Unanimously approved.*

### **Quarry Life Award Proposal**

Carla, Keith, and Tom gave an overview and some background information regarding this research contest sponsored by Heidelberg Materials, which provides funding to groups that involve habitat and species-related projects at their facilities. A proposal was submitted by Tom Sollman in November to conduct population studies on blindfish in Hamer Cave in 2025 as a representative of IKC. No word on the proposal status has been provided. Some discussion ensued about environmental concerns related to quarries and concrete manufacturing.

### **“Land Acquisition Committee” Discussion**

Matt provided some background on this topic and iterated that this was discussed last year with the consensus being that the IKC Executive Board represent a land acquisition committee unto itself with the Officers being the primary coordinators, with the help of subject-matter experts. Matt proposed leading an *ad hoc* committee to collect information on how other similar organizations pursue land acquisitions so that the IKC can be better prepared to act when opportunities arise. More information will be sent out.

### **Purdue Research Grant Opportunity**

Matt has been working with research scientist, Caue Borlina, who has created a grant proposal for a project to develop a virtual cave. Matt has been consulting with him to make sure good conservation ideals are being conveyed properly and in return, if the grant is awarded, Matt will redirect any consulting fees to the IKC.

### **2025 Indiana Cave Symposium**

Kevin Strunk provided some updates on the April 26th, 2025 event that will be held at the Orange County Community Center. There will be a daytime surface tour led by Carroll Ritter and John Benton as well as a vertical cave trip led by Bill Baus. Speakers are being scheduled currently, and other planning efforts are underway. Volunteers will be needed to help set-up and tear-down. *Keith Dunlap moved that the IKC donate up to \$250 towards Indiana Cave Symposium sponsorship. Scott Frosch seconded. Unanimously approved.*

### **SCCI Online Waiver Update**

Matt has been working with IKC member Tim Harris to move this project forward so that online waivers may be available in 2025.

### **2025 Wilderness First Aid Training**

Danyele proposed that an IKC-sponsored WFA training be offered in the summer at Lawrence County Independent Schools, as has been coordinated in previous years. The baseline cost would be \$100/student but in the past the IKC has offset some costs for registration and facility usage. *Laura Demarest moved that the IKC host a WFA course in 2025 with a \$25/member discount and up to \$300 for facility donation and class supplies. Joe Kinder seconded. 14-Yes, 0-No, 1-Abstain. Motion passed.*

### **Review IKC Membership Dues, ILPA Mtg Info Share**

Danyele provided a summary of a recent ILPA meeting where discussion was held regarding what other conservancies and land trusts charge for membership and various incentives they offer to donors. After some discussion it was suggested that Danyele and others who have insight gather more information and create a proposal to share at the next IKC quarterly meeting. Danyele, Bruce, Keith, and Carla will work together on this.

### **Recap of Preserves Work Projects & Upcoming Preserves Projects**

**Shawnee Karst Preserve** – Keith shared info on the recent Winter Tree ID field day that included a post-hike significant trash clean-up stewardship project. In March he will conduct some prairie mowing. Keith also met with Camille Verendia (USFWS) to discuss pollinator plantings and invasive removal and whether funding may be available for these efforts in the future.

**Buddha Karst Nature Preserve** – Keith reports all is in good shape



**Sullivan Cave Preserve** – Joe Kinder has been working with volunteers to cut up and split firewood. He also ordered porta-potty service and blew some leaves. New locks have been installed on the cave and lane gates and plans for constructing a kiosk are in the works for 2025.

**Wayne Cave Preserve** – Danyeale will submit the final EQIP grant report, with a walk-through tentatively scheduled for March 2025. Some trail clearing and maintenance has been conducted. The kiosk needs some attention due to carpenter bee damage. The map and website also need to be updated as well to reflect the 20-acre expansion. Workdays will be announced in the future for trail building and more invasive removal. Cris Seuell will be taking over as Wayne Cave Property Manager in 2025.

**Orangeville Rise Nature Preserve** – Carla noted that a rope has appeared on-site and should be removed at earliest convenience. Some stewardship info was circulated regarding the Ready-Set-Fire grant for White Oak Woodlands to other Property Managers.

**Indian Creek Conservation Easement** – Bambi Dunlap reports that the site is in good condition.

**Lowry Karst Preserve** – No report from Jasper Beavers.

**Robinson Ladder Cave Preserve** – No report from John Benton.

**Items from the Floor**

- Danyeale proposed a switch to a single-page volunteer workday waivers for events, which also includes

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Zeller, Indiana Caverns, National Speleological Foundation, Environmental Solutions & Innovations, and BRS III (Bar Keepers Friend).

- ☐ The IKC has gained two new members in the last quarter. Welcome Suzanne Gagnon and Michael Woolard. Also welcome back Nick Noe and the Central Ohio Grotto who were members in the past and recently re-joined. The IKC membership currently stands at 314. 🐦

a photo release. There were no objections so she will update the waiver as necessary.

- Kevin Strunk and Keith Dunlap have been conversing with Monroe County Planning and stormwater representatives to consult on karst protection standards and also data sharing with the Indiana Cave survey.
- Save the Date: NSS Convention July 6-10, 2026 in Corydon, IN
- Carla shared that Brad Westrich from Indiana Fish & Wildlife wants to initiate a contract with the IKC for funding up to \$10,000 to conduct stewardship activities on IKC properties to benefit bats (e.g. invasive removal, habitat improvements, etc.). This would be a reimbursement grant opportunity and could involve contracting with a third-party company to assist with removal activities and/or purchase removal equipment and supplies. *Carla moved that the IKC negotiate a contract with the DNR to implement Habitat Management funding. Cris Seuell seconded. Some discussion ensued. Unanimously passed.*

**Next Meeting Date and Place Selection**

The next IKC Quarterly meeting is scheduled for Sunday, March 23rd at 1:00 EDT at the Ellettsville Public Library.

**Adjourn**

The meeting was adjourned at 4:17 PM EST.

*Respectfully compiled and submitted by Laura Demarrest, IKC Secretary*

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

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

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

\$ \_\_\_\_\_ donation to the general IKC fund.

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

\_\_\_\_\_ I know of an area worthy of protection. Please contact me.

\_\_\_\_\_ I would like to volunteer to help. Please contact me.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY/STATE/ZIP \_\_\_\_\_

PHONE # \_\_\_\_\_

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



Indiana bats being photographed in the entrance room of Wyandotte Cave on the February 6, 2024 bat census. It takes a whole team to photograph, record photo numbers, take temperatures of each cluster, and two or three spotters (with laser pointers) to keep track of the process. See the related article starting on page 25.

*Photos courtesy of Carla Striegel-Winner.*