



IKC UPDATE

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INDIANA KARST CONSERVANCY, INC

PO Box 2401, Indianapolis, IN 46206-2401

ikc.caves.org

Affiliated with the National Speleological Society



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

EXECUTIVE BOARD

President

Matt Selig (2023)
317-258-9983
MSelig@hotmail.com

Secretary

Laura Demarest (2023)
812-320-5973
LadyLauraDemarest@gmail.com

Treasurer

Keith Dunlap (2023)
317-882-5420
Keith.Dunlap@juno.com

Directors

James Adams (2023)
317-499-5451
JKAdams@aol.com

Jeff Cody (2025)
317-888-9898
CodyJpme@att.net

Scott Froesch (2023)
317-250-9535
Froesch.Apple@gmail.com

Danyeale Green (2025)
317-370-7891
mudandogs@gmail.com

Dave Haun (2024)
317-517-0795
DaveHaun@ExploringEarth.com

Rand Heazlitt (2024)
502-445-9532
Pyrometric@aol.com

Goni Iskali (2025)
BattyCaver85@gmail.com

Joe Kinder (2024)
812-322-3328
KinderJoe@yahoo.com

Tom Sollman (2023)
812-753-4953
TPSollman@gmail.com

Carla Striegel-Winner (2025)
812-639-9628
CarlaStriegel@gmail.com

Paul Uglum (2024)
317-417-5596
Paul.A.Uglum@gmail.com

Richard Vernier (2023)
812-385-5058
rsavcaver2@gmail.com

COMMITTEES / CHAIRPERSON

Education/Outreach
Carla Striegel-Winner
(see E-board list)

Web Technologies
Bruce Bowman
765-720-1483
Bowman46118@gmail.com

IKC Update Editor/Publisher
Keith Dunlap
(see E-Board list)

Buddha Karst Property Manager
Keith Dunlap
(see E-board list)

Lowry Karst Property Manager
Vacant

Orangeville Rise Property Manager
Carla Striegel-Winner
(see E-board list)

Robinson Ladder Property Manager
John Benton
830-305-1026
JMBenton1952@gmail.com

Shawnee Karst Property Manager
Keith Dunlap
(see E-board list)

Sullivan Cave Property Manager
Joe Kinder
(see E-Board list)

Wayne Cave Property Manager
Danyeale Green
(see E-Board list)

Indian Creek CE Monitor
Rand Heazlitt
(see E-Board list)

GROTTOES & LIAISONS

Bloomington Indiana Grotto*
Dave Everton
812-272-2300

Central Indiana Grotto*
Keith Dunlap
317-882-5420

Dayton Underground Grotto
Mike Hood
937-252-2978

Eastern Indiana Grotto
Jonathan Annonson
317-395-4325

Evansville Metro Grotto*
Steve Weinzapfel
812-630-7995

Louisville Grotto*
Susan Wilkinson
317-910-8023

Near Normal Grotto*
Ralph Sawyer
309-822-0109

Northern Indiana Grotto*
Cheryl Doan
260-385-0631

St Joseph Valley Grotto*
Joy Baiz
574-286-9404

Sub-Urban Chicago Grotto
Gary Gibula
GaryGibula@aol.com

Windy City Grotto
Susan Clark
708-415-1635

*grottos with liaison agreements

MANAGED CAVES / PATRONS

Buddha Cave
Jeff Cody
317-888-9898
CodyJpme@att.net

Lowry Cave
Carla Striegel-Winner (temporary contact)
812-639-9628
CarlaStriegel@gmail.com

Robinson Ladder Cave
John Benton
830-305-1026
JMBenton1952@gmail.com

Shiloh Cave
James Adams
317-499-5451
JKAdams@aol.com

Suicide Cave
Kevin Smith
317-412-3667
FreeWheeler2Go@yahoo.com

Sullivan Cave
Paul Uglum
317-417-5596
Paul.A.Uglum@gmail.com

Upper Twin Cave
Dave Everton
812-272-2300
DEverton@indiana.edu

Wayne Cave
Dave Everton
812-272-2300
DEverton@indiana.edu

IKC ANNUAL BUSINESS MEETING REMINDER

Saturday, March 25th, 12:30 PM 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 other interested persons to have an open forum to talk about 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: Election Results; Financial reports; Cave Patron and Property Manager 2022 annual reports; Recap of recent (2023) preserve work projects; Promotion of upcoming preserve projects; Education/Outreach/Field Days status; Lowry Cave Preserve management personnel; 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. To reach it from Bloomington, travel west on Highway 46 until you reach the stoplight at Sale Street. Turn left. The library and parking lot will be 1 1/2 blocks on your right. Enter the front doors and proceed straight into the main library and past the service desk, continuing to Meeting Room A on your left. The meeting is an inside venue. Please mask-up and socially distance as appropriate for your level of comfort.

ACTIVITIES CALENDAR

Mar 25 – IKC Annual Business Meeting (see above)

April 22 – Indiana Cave Symposium (see page 9)

April 29 – Lowry Cave Preserve Hike & Tour (see page 7)

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

Jul 29-30 – Wilderness First Aid Course (see page 11)

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

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

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RAMBLINGS FROM THE PRESIDENT...

As I write, the Indiana Karst Conservancy's annual elections are under way. We are required to have annual elections as part of our governance as stated in the by laws. It is one of the ways our membership influences the organization. Our Election Nomination Committee put out the call for volunteer candidates for open positions and discussed responsibilities and qualifications with interested persons. These candidates then submit brief biographies and statements of why they are interested in serving the organization and its members, and the possibilities they see going forward.

The Executive Board approves the slate of candidates, and it is then up to our membership to vote for the candidates. This year there is one candidate each for the three Officer positions (including myself) and five candidates for the four open Director positions (there are a total of 12 Directors with one-third coming open each year).

It is a serious task because the Executive Board, along with input from our volunteer Property Managers and Cave Patrons, determines the IKC's priorities. The Board proposes various initiatives and decides what the IKC will do to serve our membership and accomplish our exempt purpose.

I am happy to report all the candidates on our election slate are committed to the IKC and though one Director candidate won't be elected, I believe in all our candidates' dedication to the IKC's cause.

So please, as you vote, consider the candidates and their qualifications and their sense of vision for the IKC. The Officers and Directors of the

IKC are ultimately here to serve you and far from being a "check the box" exercise, our elections are an opportunity for our members to provide feedback on how best to guide the IKC.

Almost everything else the IKC does is a matter of choosing between priorities and allocating our resources. To foster this discussion, for the last two years, the IKC's Treasurer, Secretary, and I have sat down to document our goals for the coming year.

There is a saying, "If you don't know where

you're going, any road will get you there." Given that our time and resources are constrained, we believe it's important to focus the IKC's resources and efforts on what we believe are the IKC's most important opportunities.

I want to highlight several of the goals that came from these discussions and our thoughts about them.

In April 2021, we needed to decide how to handle the Beach Bequest, made by Ray and Gale Beach. There were many things we could have done with this generous gift, but what became obvious in our goal meeting, and in subsequent discussions with the full Executive Board, was that we wanted to ensure the IKC's future. We visualize the IKC as an organization that will last in perpetuity; that will

serve even our grandchildren's grandchildren, and beyond. Rather than spend the Beach Bequest immediately, our Board ultimately decided to use it as a down payment towards the IKC's future. First by investing it, and once it reached a sustainable balance, it could be used to supplement future acquisitions.



photo: Spike Selig

Property acquisition is a perennial goal of the IKC. We currently own seven preserves with significant karst features. We've had the opportunity to acquire several significant properties in the last two years, but for various reasons, the deals fell through or the math just didn't make sense. That doesn't mean we're giving up.

The IKC regularly discusses possible property acquisition opportunities. We're never certain of when a significant karst property will become available, but when they do, we must be ready to act quickly. Our promise to you is that we won't commit our resources to frivolous or vanity projects. We want to add new preserves to the IKC's portfolio of "crown jewels" of protected Indiana karst resources, and sometimes expand our existing preserves when opportunities arise.

The Board also set goals to increase our use of digital media to improve our communications with the IKC's membership and the interested public. In the last two years, we have grown the IKC's Facebook community to 1,550 followers and have gained many new members as a result of being more visible to a larger audience.

Along with our website (ikc.caves.org) and direct emailing, we use our various media resources to communicate information about our activities, late breaking cave conservation news, and solid educational information about karst conservation and cave sciences. If you haven't already, please follow the IKC on Facebook!

We've also discussed how we can serve cavers through education. The *IKC Update* is an excellent educational tool that covers a broad range of conservation and cave science topics. The IKC regularly sponsors cave rescue training, events like the Indiana Cave Symposium, and we have subject matter experts who lead events at our various preserves to help cavers and other interested persons learn just exactly what we mean when we say "karst conservation".

We also support cavers who want to (safely) cave in our caves. Far from being an exclusive private club, *we want responsible cavers to use our caves for caving*. Just please be sure to ar-

range permission and sign a waiver before caving in an IKC cave, of course.

A final set of goals I'd like to discuss is our work to help the IKC become a more active member of Indiana's land conservation community. To this end, we've participated with the Indiana Land Protection Alliance (ILPA). Our Directors have attended ILPA-organized conservation training events, numerous ILPA meetings from locations such as Indiana state parks to the State Capitol, and we have shared the IKC's story with other conservation partners from across Indiana. And recently, one of our Board members, Carla Striegel-Winner, was invited and then elected to serve on ILPA's Board of Directors.

Our participation in ILPA allows us to learn from the challenges and opportunities faced by other land trusts. ILPA has also inspired us to work harder at advocacy and to that end we have provided evidence-based arguments against certain Mid-States Corridor routes, taken candidates for Congress caving,

and promoted direct mail conservation efforts through our social media channels.

There are many other goals I don't have room to discuss at length here. There are goals that are perhaps more aspirations that may never be accomplished, but serve as guiding lights for our work. For example, improving our outreach with landowners, government agencies, and other land conservancies will continue to be important considerations in our work.

Thinking hard about our goals helps direct our efforts as we conduct the IKC's business on a day-to-day level. After we tally the election results at our March Annual meeting, and the next year's Officers and Directors are seated, we will sit down to consider our short-term and long-term goals again.

I encourage you to think about your own caving initiatives and goals for the coming year. If you have any you think the IKC should consider, I'd be happy to hear from you and I hope we get an opportunity to see each other at the various IKC events in the coming year. Perhaps we'll be able to get underground together, as well!

Matt Selig

"...we want responsible cavers to use our caves for caving."

NEWS BRIEFS...

- ❑ After a dozen years of the Indiana DNR-managed caves being closed due to White-nose Syndrome, and after several years of the Division of Forestry (DoF) making a commitment to re-open the caves on State Forest properties once a web-based permit system could be developed, the DoF launched their web-based permit system on January 11, 2023. The DoF elected to do a soft-launch without issuing a press release, but word spread quickly within the caving community which responded enthusiastically with as many as 40 cave trips registered/scheduled within the first 24 hours. We commend the DoF for taking the lead in re-opening the caves on State-owned properties for recreational use and hope the other DNR divisions with caves will follow suit. The easy-to-use four-step permit system (schedule, check-in, check-out, report) also provides the means of making observations (impact, vandalism, fauna) to provide feedback to the DoF staff that can assist in better management of the caves resources they oversee. For more information on caving on IDNR State Forests, go to www.in.gov/dnr/forestry/properties/recreational-caving-in-state-forests.



photo courtesy Jasper Beavers

- ❑ The IKC continues with quarterly field tours this year, with the spring tour at our Lowry Karst Preserve (see page 7). In the works for summer, fall, and winter tours are an in-depth look at the Shawnee/Upper Twin Cave System, a visit to our Sullivan Cave Preserve, and we will revisit the Wayne Cave Preserve with a look at the Garrison Chapel Karst Area with IKC President and karst-geology lover, Matt Selig. Summer, fall, and winter dates are not finalized yet, but you may always go to www.eventbrite.com/o/indiana-karst-conservancy-42238885883 to check it out, and if you hit “follow” you will get notices when new events are posted. We will also announce them on our Facebook page and through member emails.
- ❑ Wow, what a wonderful response we got from our member email solicitation and Facebook post for purchasing the components (about \$700 worth) to assemble our Property Manager’s work bins, including First Aid kits! Thank you! Our entire Amazon Charity Wishlist was fulfilled in less than three three weeks! The workday bins will be handed out to our Property Managers at the March Annual meeting. In addition to the very important first aid kits, the kits include handy items like clipboards, pencil pouches full of supplies, etc to make the Managers’ tasks a little easier during workdays and events. We were new to this type of fund-raising and did not realize we would not be provided the names of donors who ordered items unless they “opted-in”, so we would like to thank the ones we do know: Windy City Grotto, Dick and Sue Vernier, and Andrea Huntington. Thanks to the rest of you as well! And thank you to Danyele Green and Carla Striegel-Winner for organizing and managing this fund-raising project.
- ❑ The IKC is pleased to announce that IKC Director, Carla Striegel-Winner, will also serve on the board of the Indiana Land Protection Alliance (ILPA) through 2025. ILPA, of which the IKC is a member, serves all of the land trusts in the state and organizes training and education opportunities for member trusts, as well as advocating for land acquisition funding that the land trusts can then utilize to further their protection. Congratulations to Carla and thanks for volunteering, providing guidance to ILPA, and facilitating cave and karst conservation efforts at the state level!
- ❑ The IKC would like to thank Organic Robot Designs (www.organicrobotdesigns.com) in Greenfield, for donating the custom shirts we are using as an appreciation gift for our Cave Patrons and Property Manager volunteers. We will be handing those shirts out at the Indiana Cave Symposium on April 22! This was an unexpected gift from Charlie and Deb Vettters! Organic Robot also han-

dled our recent IKC-logoed shirt and gear sales too, and we were quite pleased!

- ❑ The IKC sends a heartfelt ‘thank you’ to Vibe Yoga (www.vibeyogastudio.com) in Bloomington for raising \$178 in donations during the month of January! Special thanks also to IKC Board member Goni Iskali for facilitating this partnership and matching the donation! Yoga and caving make a great match!
- ❑ The IKC did a mini fund-raiser last December. Cindy Rothrock, an IKC member (and sister to Keith Dunlap), offered to donate processed persimmon pulp for the IKC to re-sell. She also offered to wholesale raw honey from some of her hives for the IKC to retail for a profit. Because the items could not be easily shipped, the offer was sent out to a limited list of IKC members and supporters in the Indianapolis and Bloomington areas so the goods could be hand delivered. In total the IKC netted \$326.
- ❑ As has been noted in the past, the IKC annual dues (\$15/year) revenue do not completely cover all of the IKC’s baseline 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 beyond their standard dues to supplement and support the IKC (the IKC has not raised its dues since our founding in 1986). During 2022, fifty-six individuals/couples

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LOWRY KARST PRESERVE AND VICINITY: NATURAL AND CULTURAL HISTORY HIKE AND TOUR

SATURDAY, APRIL 29

Natural And Cultural History Hike: 10 AM to 12 noon EDT

Join us for our first field trip of the year, to our beautiful Lowry Karst Preserve in Jennings County in the southeastern part of Indiana. At just under 7 acres, we will be able to hike the whole property, and we plan to take advantage of the gorgeous surroundings, including the bluff and magnificent cave entrance! We will likely include an additional site or two in the vicinity that is of natural and/or historical interest. John Benton, cave and cultural historian (and IKC member), will tell tales of Morgan’s Raiders who came right through the area in 1863 and were purported to have visited some of the local caves. IKC Outreach Coordinator Carla Striegel-Winner will show us the beautiful variety of native plants the preserve hosts, and help us identify them. IKC board member Keith Dunlap will be on hand to fill us in on the recent history of the IKC’s involvement with Lowry Karst Preserve and answer questions we might have. Our new Property Manager for the preserve will be there as well. The event is by registration only and limited to 20 participants. It will go rain or shine and registrants will receive details on the event, including exact meeting location. Registration will open March 24, but you may go to ikcFieldTourApril2023.eventbrite.com at any time for more information and to have a reminder sent to you.

Optional Stewardship Opportunity with lunch included: 12 noon to 1:30 PM EDT

We are including an option to stick around after the tour and lend a hand pulling and bagging invasive garlic mustard from the preserve. No experience is required and participants who choose to stay get a complimentary light lunch before expending calories on this beneficial task! Lunch at noon, Garlic mustard pull from 12:30 to 1:30 PM.

Questions may be directed to Carla Striegel-Winner (CarlaStriegel@gmail.com or 812-639-9628).

OPEN CAVE ACCESS IS MEANINGFUL FOR KARST CONSERVATION, EDUCATION, AND OUTREACH

by Carla Striegel-Winner

Having many of the Harrison-Crawford State Forest caves re-open in January after a dozen year closure (see page 6) has been wonderful. We have an entire generation of cavers who have never been able to see the beauty of these special places. When we experience the wilds of nature, it is not only beneficial for our mental and physical health, but can change our attitudes towards the environment for

our lifetimes. I am really proud of the IKC, CIG and cavers in our community who worked with the Indiana DNR Division of Forestry to reopen these caves for responsible recreational access. The Division of Forestry really did this right, with careful thought and input from cavers. So, please, IKC members, use that new permit system and get out there and enjoy those caves that are now open to you!

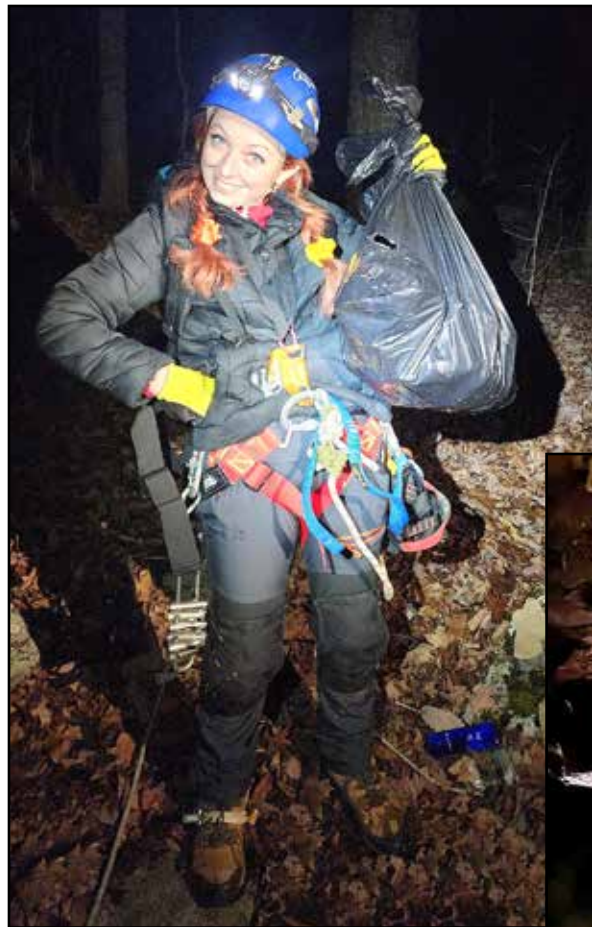


photo courtesy Charlie Blanton

Left: Cavers doing what cavers do! Anna Blanton holds a bag of assorted trash she and fellow Harrison County cavers collected and cleaned up out of a very nice pit cave on the Harrison-Crawford State Forest shortly after the cave re-opened. Issac's Pit is within striking distance of a popular multi-use trail at the recreation area and unfortunately gets its fair share of pop and beer cans and bottles tossed down it. Cavers who used to drop the pit for fun would clean up after others, but have not had a chance to do so for a long, long time.



Right: Maucks Cave has been closed longer than Clary Schotter has been alive. Her interest in caving was ignited at the Windy City Grottos' Family Caving Weekend at IKC's Sullivan Cave last July. Clary is home-schooled and grandma Carol Roberson Groves plans and organizes amazing science field trips – this one to finally go caving close to home in one of the newly reopened caves on the Harrison-Crawford State Forest.

photo courtesy Carol Roberson Groves

2023 INDIANA CAVE SYMPOSIUM PREVIEW – APRIL 22

by Keith Dunlap

The 29th Indiana Cave Symposium, co-sponsored by the Indiana Karst Conservancy and Indiana Cave Survey, will be held in-person at the same place as last year on Saturday, April 22, at the Orange County Community Center (1075 N Sandy Hook Road adjacent to the H-4 fairgrounds) in Paoli, Indiana.

As in the past, the symposium will offer the customary 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 the presentations beginning at 6:30. The *tentative* presentation titles and presenters (the final order has not been set) include:

- IKC Cave Patron/Property Manager Appreciation/Recognition – Matt Selig
- Molecular Phylogenetics of Indiana Cave Iso-pods – Jerry Lewis
- Dog Hill Cave/Donnehue Cave Update – Dave Everton
- Visual Presentation of Lesser Known Indiana Caves – Carroll Ritter
- Studebaker Pit Update– Mike Drake
- Recent Bat Counts and Other Batty Things – Darwin Brack
- Binkley Cave System Update – Rand Heazlitt



photo courtesy Dave Black (2022)

For more information about the Symposium, contact Bruce Trotter (BruceATrotter@gmail.com) or visit the Indiana Cave Survey (ics.caves.org). Also, in order that we may better plan for food, this year attendees should RSVP using the following link: form.jotform.com/230618453149154

We will again be doing a pre-Symposium karst surface tour. The tour requires pre-registration and is limited to 20 participants. Registration will open March 20, but you may go to SymposiumTour2023.eventbrite.com at any time and have a reminder sent to you. The tour will start at 12:30 PM and return by 4:30 PM EDT and led by Matt Selig. It will compare and contrast the geology of the caves of the Mitchell Plain and the Crawford Uplands. The karst hydrology of the Lost River drainage basin will also be discussed, with a bonus overview of archeological research at Wesley Chapel Gulf. Stops will be at Wesley Chapel Gulf and a private location. Hiking will be required at both locations.

...News Briefs continued from page 7

and eight organizations made general donations beyond their dues totaling \$7,168. Donors include Jim Adams, Ron Adams, James Adler, John Benton, Ted Bice, Larry Bundy, Danielle Burden, Martin Church, Jeff Cody, Patti Cummings, Verl Dasher, John Dimit, Mike Drake, Andrew DuBois, Kim Dulaney, Dave Everton, Jeff Farr, Barbara Hanka, Rand Heazlitt, Tem Hornaday, Kevin Johnson, Karen Kimbrel, Jo Kimmel, Glenn Kotnik, Marcella Larch, David Lasser, John Lawrence, Matthew Lewis, George Mattson, Dave McGowen, Charles Miller, Jane & Lynn Miller, Bill Morrow, Ralph Moshage, Carl & Louise Nelson, Ken Nisly-Nagele, Nathan Pate, Ernie & Jacqueline Payne, Gene & Jennifer Pelter, Russell Pusilo, Kelle Reynolds, Cindy Rothrock, Ralph Sawyer, Gordon Smith, Zack Snyder, Jeffery Stocker, Carla Striegel-Winner & Jamie Winner, Bruce Trotter, Daniel Ufford, Rowana Umbarger, Aaron Valandra, Bob Vandeventer, Richard & Sue Vernier, Paul Webb, Scott Worpell, Tom Zeller, Bluespring Caverns, Cleveland Grotto, Greater Cincinnati Grotto, Near Normal Grotto, Windy City Grotto, Organic Robot, New Hampshire Charitable Trust, and Vibe Yoga.

- ❑ The IKC also maintains a Cave/Land Acquisition restricted fund which is used exclusively to accumulate resources for our acquisition activities. In 2022 we did not solicit donations for any particular project, yet we had thirty-nine individuals/couples and six organizations contribute \$17,873. Donors include George Bruchen, Keith Calkins, Thomas Carney, Jaime Coffman, Constance Curry, Mark Curry,

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TOM REA (1934 - 2022)

compiled by Jaime Coffman

It is with much sorrow that we announce that Tom Rea, NSS 5683L FE, of Bloomington, Indiana peacefully passed away on November 19, 2022.

Tom was born June 22, 1934 in New Castle, Indiana to George and Margaret Rea. He graduated from Purdue University in 1956 with an electrical engineering degree, and Indiana University in 1957 with an MBA. He worked his entire professional career at Indiana Bell/AT&T, retiring relatively young in 1990. Tom loved to tell about his famous Phi Delta Theta brother, "Neil", as in astronaut Neil Armstrong. He often regretted not taking Neil up on an offer of flying lessons while at Purdue.

Tom's first cave experience was when he was 6 or 7, when his parents took him on a trip to Mammoth Cave. He was hooked! He would pretend to explore "caves" he built out of cardboard boxes or whatever he could find. He spent most of his adult life involved in the caving community. He was instrumental in the formation of the Michigan Karst Conservancy in 1983 and the Indiana Karst Conservancy in 1986. He was a long-time member of the Central Indiana Grotto and served many positions and eventually

was the editor of CIG Newsletter for years. Tom was also active at the national level and was the only person to serve in every National Speleological Society Board of Governors (BOG) position (President, EVP, OVP, AVP, Secretary-Treasurer, and Director). He was an NSS member for 60+ years. He published many books for the NSS including Caving Basics. He also edited many NSS Convention guidebooks, Cave Capers guidebooks, and published numerous caving books with Larry Matthews. For many years, Tom taught an Introduction to Speleology course at what is now the University of Indianapolis. He brought many

cavers into the caving world and the NSS via this course, introducing them to the principles of safe caving, cave science, and cave mapping.

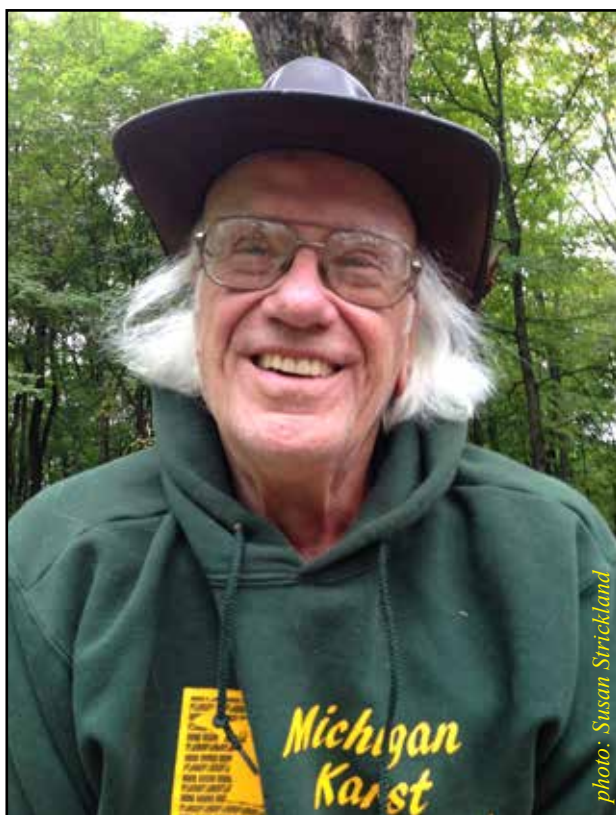
Tom's other love of his life was his wife Ladonna whom he lost to Covid in December of 2020. They had been married for nearly fifty years. Ladonna was a formidable woman who in her younger years was a stunt pilot and flight instructor. Tom also held a pilot's license for many years and would occasionally fly to various caving events. Together with Ladonna, they formed a greyhound rescue non-profit and saved over 700 dogs. This was also his inspiration for the name of his publishing company, Greyhound Press.

In later years, they developed an affection for the borzoi breed, another sight hound, and owned several. After moving to Bloomington, Tom volunteered at the Bloomington Animal Care and Control as a dog walker, and later an adoption counselor.

Tom was active in the caving community long after he was no longer able to actively cave. He showed up at all the local grotto meetings, E-board meetings, and BOG meetings. He often showed up for volunteer work days helping where and when he could, worked at Cave Capers registration, and attended most NSS con-

ventions up until just recently. He loved the Upper Peninsula of Michigan and the MKC's Fiborn Karst Preserve. As the preserve's Property Manager, he religiously attended the work weekends and meetings there, driving the 1,200 miles round trip from his home in Indiana once a month from April to October – as well as the annual snow shoe trip in February. Though he did not describe himself as a "people person", he was an intelligent conversationalist. He never had the radio on during his many road trips, yet he had plenty to chat about.

Tom was an avid photographer and had a functioning dark room at many of his residences.



He was a member of the Boy Scouts of America and helped with leading troops for many years. He often led scout trips and never turned down novice cavers. He held a Red Cross certification in swim instruction, and as a younger person served as a life guard and swim teacher. Tom was always willing to take an extra passenger on his adventures, or mentor a younger person. He had many skills and helped many a friend with minor home improvements as well, and he was generous with items he no longer wanted. He would say, "You want this, come and get it."

Tom enjoyed travel – to caving events and to international caving locations. He visited Ukraine and Russia, multiple countries in Europe, Australia, as well as pretty much every state. He loved talking about his travels, and the places he still wanted to see, such as Eilean Donan Castle in Scotland.

Tom and Ladonna did not believe in having funeral services, so none were held. Their ashes will be scattered at the Fiborn Karst Preserve in the UP of Michigan over the weekend of July 7-9, 2023.

Tom is survived by his sister Carol Rea Marks, his nephew Brad (Vicki) Marks, and his granddaughters Katie James, Kristina Vesledahl, and Kaylee Burnsgaard. Tom was cared for in his final years by many caver friends whom he would call family.

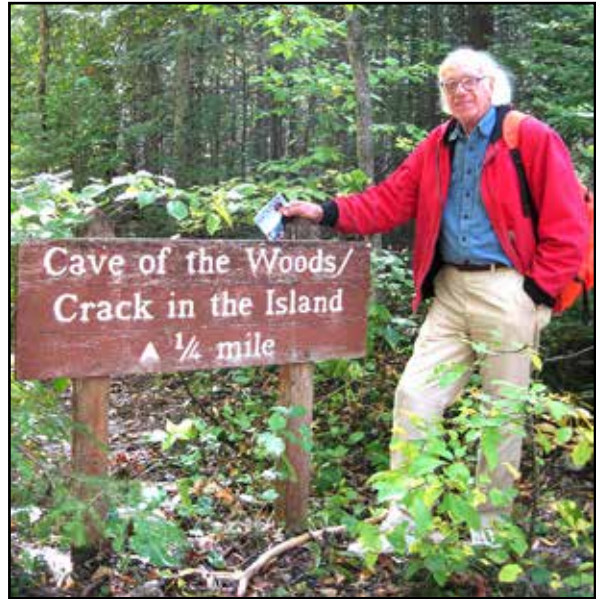


photo courtesy Jaime Coffman

IKC TO HOST WILDERNESS FIRST AID COURSE JULY 29-30

As a conservation organization, our mission is to ensure we have land protected now and for future generations to enjoy. This means getting people out and onto (and into) our preserves. The IKC Executive Board saw a unique opportunity to provide those that traverse our lands with opportunities to learn skills that would benefit them while doing so. We have previously partnered with the National Cave Rescue Commission (NCRC) to host several Orientation to Cave Rescue (OCR) courses at a discounted rate for IKC members. We are adding to this by hosting Wilderness First Aid (WFA) classes from SOLO.

Save The Date: July 29 – 30, 2023

Location: Lawrence County Independent School (LCIS)
223 Old Farm Road, Bedford, IN



The course will be two full days (16 hours) of classroom instructions with hands on learning scenarios that range from crisis response, patient assessment, physical trauma, environmental issues, bleeding control, and how to handle medical emergencies. There will be an optional CPR course available for those that take the course or you are welcome to take it separately.

Registration will open in April, first to our members only for a discounted rate of \$100 (non-members will be \$150). Class fees normally range from \$275-\$325. Registration will be shared publicly, if spots remain. Class size is limited, so save the date now and be on the lookout for a special member email in early April with a link to register for WFA and/or CPR (CPR add-on for members is \$25, non-members \$35).

Primitive camping will be available for registered participants at our nearby Sullivan Cave Preserve.

GET TO KNOW YOUR INVASIVES: CALLERY PEAR

by Danyele Green



photos courtesy www.mc-iris.org

Left: Flowering Clusters. Right: typical spring view along roadsides showing how prolific they are.

This is the eighth installment of our invasive species education series.

Look into the woods right now, or along streets, and particularly along edges of forests – the early flowering trees you see right now are likely this awful Bradford Pear (late March thru April). But **wait**, the title says Callery Pear rather than Bradford Pear. What's the difference?

Some history: The Bradford Pear (most common in Indiana) is the most common cultivar of Callery Pear and we very often hear the names used interchangeably. It was originally thought the Bradford cultivar could not reproduce (aka pollinate and produce fruit). **But**, guess what. More cultivars of Callery were created and they decided they all loved each other, **a lot!** Enough to cross pollinate and now the Midwest is filling up with this invasive species.

Fast Facts:

- Latin name *Pyrus calleryana*
- How to ID: One of the first trees to turn green

and start to flower in the spring. The white clustering flowers **stinks!** Callery pear has thorns, Bradfords do not. but there are other cultivars of Callery pear out there that may or may not have thorns.

- They form dense thickets and out-compete native species. Because it leafs out earlier than our natives, it can shade out our spring ephemerals.
- Best methods of control: basal bark treatment, girdling, and foliar spray dense areas of small trees. Please research the best method for the size of trees you need to remove.

Native alternatives to Callery Pear:

- Serviceberry
- Pagoda Dogwood
- Green Hawthorn
- Washington Hawthorn

For more information on identifying and managing invasives in Indiana, go to www.sicim.info

WHY DOES A KARST CONSERVANCY CARE ABOUT REMOVING INVASIVES?

Native plants support greater diversity and larger number of wildlife compared to invasive ones. Left unchecked, invasive plants can take over the native understory species that thrive in our preserves. Some invasives can also release chemicals that inhibit the growth of native species and may even hinder beneficial soil fungi. So, invasives can interrupt the circle of life. Additionally, if we allow these undesirable plants to thrive on our preserves, we are being bad neighbors and responsible for allowing their spread to other sensitive areas. In order to be good stewards of our karst and karst-dependent life, we need to be good stewards of our land in general.

CONSERVATION PARTNERS MEETING

by Carla Striegel-Winner

How can we work together across our great state to conserve special places?

The Indiana Karst Conservancy took part in the inaugural Indiana Conservation Partners meeting January 12 at the Indianapolis Zoo. This amazing event pulled together representatives from land trusts, government agencies, and academia from across the state to learn, collaborate, and plan for the future of conservation in Indiana, ending in an activity to get us thinking about working together on a statewide conservation strategy.

Marc Milne, current president of the Indiana Academy of Science (IAS) (also IKC member and past Board Secretary), and fellow academic colleague Sergio Henriques of the Global Center for Species Survival actually conceived the event and they hope to continue with meetings, possibly regionally. The event included several short presentations about conservation efforts and our current state of affairs in Indiana. These included an overview of Indiana land trusts by Andrea Huntington (below left) of the Indiana Land Protection Alliance (ILPA) which featured several photos from IKC preserves, and other presentations by land trusts and agencies. One that really hit home was “Indiana’s Past and Future Climate: Natural Resources Planning & Preparedness” by Melissa Widhalm of the Midwestern Regional Climate Center. She detailed changes in rainfall that could certainly effect caves and cavers – the trend is for less rain overall, but with more seasonal large events which tend to produce more inches of rain per event than historically. The Climate Center has some amazing tools and data

by county on their website that one could rabbit-hole on for quite a while: mrcc.purdue.edu.

Another presentation was Marc Milne introducing a new partnership between IAS and ILPA in the form of a grant program to encourage land trusts to contract with taxonomists to do bio-inventories on our properties. The program is well thought out and in the first round, both ILPA and IAS are each contributing \$5,000, for a total of \$10,000 in grant funds. This is an exciting program, as bio-inventories are not used as much as they could be, and Marc even described taxonomists as an “endangered species” as their skills are not being used to their potential. The grant proposals opened on February 6th with a deadline of February 24th and the IKC has submitted a proposal. Hopefully we will be able to detail that, as well as the results of the bioinventory in a future *IKC Update*, if we are granted the funding! In addition to the grants, a webpage (www.protectindianaland.org/ias-partnership) on the ILPA site lists IAS taxonomists that cover Indiana. It’s an interesting list, with my favorite being the person who specializes in snail-killing flies.

Toward the end of the conference, each table group was assigned one-sixth of the state of Indiana (below right) with the task of – how do we work to connect the dots of conservation in our Hoosier state? Looking at these conservation corridors was a great start and the organizers (Indiana Academy of Science, Indiana Land Protection Alliance, and the Global Center for Species Survival), hope to continue strategizing across our state for the benefit of conservation.

photo courtesy Carla Striegel-Winner



photo courtesy Andrea Huntington

A LOOK BACK AT INDIANA KARST

by John Benton

On February 10, 1990, in a *Bloomington Herald-Times* article by columnist Rose McIlveen, she discussed an article that appeared in the January 13, 1928 edition of the *Bloomington Evening World*. A couple of IU students, exploring in nearby IU Cave (also known as Truitt Cave), Monroe County, reported to the *Evening World* reporter, that they had heard female blood-curdling screams inside the cave. The police were called. A search party headed up by the two students returned to the cave (strangely the newspaper fails to mention why police were not part of the search). "Flashlights, fire department lanterns, revolvers, and cigarettes comprised the search equipment" (all standard search equipment, right?) until around 3 AM the next day. Footprints were reportedly found, those of a man's feet and a woman wearing high heel shoes!

The police did search the cave later, but found no corpses. They speculated the scream may have been a practical joke. A subsequent headline read, "Students Plan Hoax of Woman Lost in IU Cave". It seems the students' intention was to wildly excite Bloomington and Indiana University. The newspaper reported the boys told the story in a very convincing manner. The article does not mention if any disciplinary action was taken.

IU Cave was operated as a show cave starting about 1920 through the late 1920's. When this incident happened in 1928, the cave may or may not have still been open to the public.

Sources:

A Little Truitts (IU) Cave History, Danyeale Green, *BIG Newsletter*, Vol 21#2&3, July-Dec. 2020.

Looking Back, Student's Hoax Provokes Search of Cave in 1928, Rose McIlveen, *Bloomington Herald-Times*, page B9, Feb. 10, 1990.

Students' hoax provokes search of cave in 1928

"The mystery of darkness blacker than night; the dripping of slow water on mud; the slimy nearness of cavern walls; and above all the mission which compelled them to become a part of this eery setting awoke chilly fears and startling recollections of ghost tales..."

Bloomington Evening World
Jan. 13, 1928.

The old cliché, "It was a dark and stormy night..." was nothing compared to the front-page come-on in the *Evening World* Jan. 13, 1928.

It seems that on Saturday, Jan. 7, a couple of Indiana University students had been exploring what was then called the "IU Cave" west of town. Returning to town, the two, George Bodine and David Cooper, reported to the *Bloomington Star* that they had heard blood-curdling female screams in the cave.

Reported the *Evening World*: "So expressive was the scream, the youths said, that it could have been made

The two students enlisted some classmates to go back to have a closer look. They were accompanied, naturally, by a *Star* reporter.

Related the *Evening World*: "Flashlights, fire department lanterns, revolvers and cigarettes comprised the equipment of the impromptu vigilante squad, which labored up and down the tricky, muddy passages of the caverns until shortly after three o'clock Sunday morning."

The newspaper article claimed "footsteps, which during the afternoon were not seen further than 100 yards inside, were plainly visible to the deepest recesses Saturday night. They were the imprints of a man's feet and those of a woman wearing high heeled shoes. These and occasional fresh paper from cigarette packages and tinfoil from chocolate candy were the only things that shed light on the mysterious 'shrieking woman.'"

The *Evening World* said the boys had made a thorough search "in the hopes of finding a corpse."

The police also made a search of the cave. They speculated that the scream might have been a practical joke or from someone who had fallen and been injured.

Actually, the whole incident was a joke. Under the headline "Students Plan Hoax of Woman Lost in IU Cave," the *Bloomington Telephone* smugly related that it was not really taken in by the students whose intention was to "wildly" excite Bloomington and Indiana University.

The newspaper reported "the boys told the story to the cops in a convincing manner and also phoned the story to the Telephone office."

Concluded the *Telephone*, "But the hoax failed to 'click'; in fact, the boys did not get their joke even well started, so the laugh is really on them."



Looking back

By Rose
McIlveen

by none except an insane person or one who was in dire distress." Someone at the *Star* had the good sense to call the police.

Though the police had not received any missing person reports, someone came up with the ominous information that a taxi had deposited two passengers — one male, one female — at the cave shortly after noon Saturday. (The *Evening World* did not disclose the source.)



1927 photos of the entrance stairs descending into IU Cave that were part of the short-lived commercial operation. Images courtesy of the Frank M. Hohenberger Photograph Collection, The Lilly Library, Indiana University.

ICEE (IN-CAVE EMERGENCY EXERCISES) TRAINING HELD IN SULLIVAN CAVE

by Laura Demarest

On the weekend of January 14-15, 2023, volunteer instructors and specialists from the National Cave Rescue Commission taught an ICEE (In-Cave Emergency Exercises) class with special permission from the IKC to stay overnight in Sullivan Cave. This training consisted of a mix of lectures and hands-on applications geared towards experienced cavers who conduct remote exploration or those who may find themselves unable to exit a cave for an extended time due to entrapment or injury.

A total of 19 attended the class including 4 instructors, 2 specialists, and 13 students with diverse caving backgrounds and experience levels. After a short pre-cave session on a chilly Saturday morning (see right image) to share pack loadouts and key pieces of necessary equipment, the group ventured underground for the next 30 hours!

Topics covered during the class included:



photo courtesy Central Region

deciding when to self-rescue and when to call-out for assistance, medical and psychological considerations and care for injured cavers (and the rest of the team), splinting and bandaging in the cave environment, group dynamics under stress, unexpected bivouac and extended



survival underground, assisting an injured caver through difficult terrain, hypothermia prevention and care, improvised shelters and heat tents, physiology of food and water for active caving and ongoing survival, low impact camping underground, and making the best use of limited equipment during self-rescue.

The National Cave Rescue Commission (NCRC) is a volunteer organization under the National Speleological Society that offers cave rescue instruction. Information on upcoming NCRC training opportunities can be found on

their website www.ncrc.info or by checking Central Region's Facebook page periodically for local training events www.facebook.com/CentralRegionNCRC.

The IKC encourages safe caving and is pleased to support local training events that will help prevent future incidents, while equipping cavers with the best skills for handling the unexpected and unpredictable. Look for more exciting opportunities in the future such as the Wilderness First Aid Course being offered on July 29-30 (see page 11).

photo courtesy Central Region



photo courtesy Laura Demarest



photo courtesy Laura Demarest



photo courtesy Central Region



Upper left: Anmar Mirza guides the class on counterbalance haul options.

Upper right: The class sets up a minimal gear lowering system to assist a patient down a steep slope.

Middle left: Hauling and passing gear into the cave.

Middle right: Class in the Mountain Room listening to a lecture.

Lower right: Improvised heat tent.



photo courtesy Jasper Beavers

GLENN LEMASTERS (1952-2022)

Glenn Edwin Lemasters, 70, of Bargersville, Indiana, passed away on December 13, 2022 in Franklin. He was born September 28, 1952, in Shelbyville to Maurice Edwin Lemasters and Virginia “Ginnie” (Cuskaden) Lemasters.

He was a 1970 graduate of Waldron High School in Shelby County where he was a proud member of the basketball team. Later in his life, Glenn attended Purdue University’s School of Engineering and Technology, where he obtained his B.S. degree in Mechanical Engineering Technology. He put his intelligence, insatiable curiosity, and analytical mind to work at many places over the years, like the Diamond Chain Company, but his two true loves were caving and his daughter, Allison Lemasters Black.

Friends of Glenn remember him for his great enthusiasm and passion for caving. His eyes sparkled when he told stories of his exciting (and sometimes dangerous) adventures. He was a Life member of the National Speleological Society (NSS #16754). He was integral to the founding of the Indiana Karst Conservancy. He was one of the first members with IKC membership #3, joining at the organizational meeting in February 1986. Glenn also served as a Director on the IKC Executive Board through 1992, volunteered at countless IKC workdays, and maintained his membership until the end of his life.

Glenn was driven to find and explore new caves, and he worked on many survey projects through the years, drafting over 20 cave maps. These included several multi-mile caves such as Charles Cave, Honeymoon Cave, and Breathing Hole. He especially loved Wyandotte Cave, and one of his greatest accomplishments was his involvement in the exploration of Easter Pit and its subsequent connection to Wyandotte Cave. He re-drafted Richard Powell’s Wyandotte map

and nearly doubled the length with all of the extensions to bring Wyandotte to over 9.4 miles long. Cave conservation was very important to him, as were all aspects of caving.

The only thing Glenn loved more than caving was his daughter, Allison. He even retired from engineering early in his life to be a stay-at-home dad to her when she was in the fourth grade. He is well remembered for participating in many of her extracurricular activities over the years, especially as a “pit dad” for her high school marching band. Glenn used his engineering skills to build all kinds of cool props and contraptions for her shows (like a giant clarinet the size of a truck, or large air cannons to shoot balls and confetti out for a grand finale). He was the kind of dad you could always count on, who attended every concert and event, and who would make jokes to his daughter like, “I love you so much that if you ever went to jail, I would come visit you every day...well, every other day,” with a smile and a laugh.

Glenn would do anything for a friend and drop everything to be there for his daughter. Nature was his true home, as he found his peace and happiness through hiking, camping, caving, collecting rocks for his rock garden, and being in those places that “urban sprawl” hadn’t touched yet. Dementia took him too soon, and he will be missed deeply by many people.

Survivors include his daughter, Allison Lemasters Black, and her husband, Paul, currently stationed in Tacoma, WA, for Paul’s military service, a brother, Gregg Lemasters, and his wife, Nina, of Shelbyville, and his devoted friend and caregiver, Renee Furrow, of Indianapolis.

The family asks that memorial contributions in his name be made to the Indiana Karst Conservancy.



BLUESPRING CAVERNS MYST'RY RIVER KAYAK TRIP

article and photos by Jeff Cody

As many of you know, Bluespring Caverns is a commercial cave operation near Bedford, Indiana (Lawrence County) featuring a seasonal boat tour upstream from a dock, not far from the main (Colglazier) entrance. Bluespring Caverns (aka Blue Spring Cave) is one of Indiana's longest caves at over 20 miles in length. This is also one of the most significant river caves in the United States. In the last few years, the cave's operators have offered kayak trips downstream from the commercial boat dock. They require advance reservations, minimum group size, and advance payment to book the kayak trips. This trip typically lasts somewhere around two hours of kayak float time.

In December of 2021, Bluespring Caverns in-cave facilities were used as the venue for the Indiana Karst Conservancy quarterly meeting. With that in mind, fellow IKC Board members arranged one of these kayak adventure trips for the morning before our meeting. Unfortunately Mother Nature interrupted those plans and high water from a recent storm postponed the trip. So we rescheduled for February 2022. That too

was postponed for high water. It was difficult to get a date that would work for the participants and also align with the cave's schedule, as they do not offer this trip year round, only certain months. Time ran out before the seasonal boat tour began, so we knew we would have to wait a while. We eventually settled on December 10, 2022 as our next attempt... third time was a charm. I was a bit concerned that the dry weather we had had in the weeks leading up to this date might actually be an issue with too low of water level, but they said water level conditions were close to ideal. I could not believe it was actually going to happen.

Board member participants other than myself were: Matt Selig, Laura Demarest, Scott Frosch, Danyele Green, Goni Iskali, and Carla Striegel-Winner. Also on the trip was IKC member Nate Vignes, who was a last minute substitution for Director Joe Kinder's slot, as Joe was not feeling well the night before. Our professional guides were AJ Horen and Nic Kaufmann.

I left my home on the south side of Indianapolis early, and stopped in Bloomington to eat a full breakfast at the Cloverleaf. I arrived at the cave a bit before the others and chatted with AJ for a short

bit. Our meeting time was 10:30 AM. After a few minutes others began to arrive. The commercial operation was closed for the season, so it was just us on the property. We changed inside the warm confines of the visitor center and its restrooms. I was dressed in what I typically wear on most cave trips. The only exception was I was wearing old gym shoes instead of cave boots... I figured that would be more comfortable sitting in a kayak for a few hours. We left our stuff right in the visitor center and AJ and Nic locked it up as we left. We walked



down the incline from the visitor center, through the cave door and into the cave, continuing down to the boat dock. All the kayaks (sit on top-type) were staged in the water on the upstream side, same as the tour boats. The operator and co-owner of the cave is long-time Indiana caver Jim Richards, and AJ and Nic are also cavers. Because of that, they gave us a bit more than what was on the normal kayak trips by taking us upstream first to the tour boat turn around point area (Sidebar: I had been to this area before twice in a canoe with Joe Kinder years ago. We went through the low point laying on the floor of the canoe and pushing off the ceiling. Then on



upstream to the second and third discovery area). Our kayak trip then returned to the boat dock, then it was time to head downstream to what is typically the usual kayak trip.



From the boat dock, the kayaks needed to be carried a bit in the comfortable-sized walking passage to get to floatable water. I had never been in this downstream section before, and I believe they had never offered this as part of a commercial tour until they added the kayak option. This trip is called the “Myst’ry River Voyage”. Soon we were all in our kayaks floating downstream. The passage characteristic changed a bit in this section from what I had seen previously in the upstream section. Very interesting and well worth it, to me at least. We stopped at one point and AJ explained to us how we were getting into a downstream section that floods very rapidly. During the first part of the downstream journey you pass under a rather large formation. As you progress further, the general trend is more confined. We eventually made it to the point where AJ explained the typical trips turn around. We soon reached a spot where you had to lean far back to pass beneath a lowspot. AJ explained before attempting the low spot that it was easy to flip the kayak and anyone who did not wish to try could just wait, as the final turn around point was not far ahead. Others filed in and I followed toward the end of the group. I was not real



comfortable with how far back I had to lean and the kayak began to wobble side to side. I could feel how easy it would be to tip and with me being more top heavy, I was asking for trouble. I decided against proceeding and backed out with Nic staying with me. We could hear the rest of the group the entire time as they did not go much further (they proceeded to the Waterfall Room where the ceiling height dropped just beyond). We waited a short time and the group was soon coming back out the low spot. I was waiting with a camera and had my flashlight out for extra flood light. Scott apparently decided he liked the water so much he wanted to take a dip and tipped his kayak, finding himself swimming. At that point, I was glad I passed on the low spot. From here we all made it back upstream to the dock area. We had to once again carry the kayaks through the area of shallow water and left them on the ramp leading up to the cave’s entrance.

This was a fantastic “team building” experience and nice to cave with IKC Board members. Also near the downstream end of our trip, AJ ex-



plained to us about the construction of Williams Dam downstream of the cave on the White River and the impact it had on the cave stream. If not for the dam, installed in the early 1900s, we would have been able to float all the way out to the White River and exit the original cave, but now the spring entrance is submerged. After our trip, we returned to the visitor center and changed back into our street clothes. We then got to choose a magnet or sticker with the kayak trip logo. I purchased a commemorative T-shirt as well. I would highly recommend this trip, but it does require advance planning/reservations and a minimum group size. Also note the cave stream is highly influenced by rain and may require rescheduling. Thanks to all my fellow IKC Board members for making this a memorable trip. Also special thanks to our guides AJ and Nic. They went out of the way to make this a safe and great adventure.

POPULATION TRENDS OF WINTERING BATS IN INDIANA

by Keith Dunlap

This article covers the more interesting aspects of the bat hibernacula census conducted in Indiana caves in January/February of 2022. The census was last conducted in 2019 (as reported in IKC Update #136). 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-two years (1980-2022), 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. Since 1980, there have been nearly 500 winter census visits to caves hosting Indiana bats. And while there are over 3,000 caves in Indiana, there are less than a dozen caves that contain any notable populations.

Similar to prior recent censuses, the 2022 census methodology of conducting the in-cave work relied primarily on high resolution photography for collecting cluster data (rather than directly counting individual bats). Photographic censusing minimizes disturbance times and improves accuracy. And per USFWS White-nose syndrome (WNS) protocol, extraordinary care was 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 the well-documented winter observations of population declines in the seven major hibernacula known at the time in Indiana, Kentucky, and Missouri. From 1965 to 2001, the range-wide population declined by over 40% (883,300 to 526,000; see the lighter bars in Figure 1). Then from 2001 to 2011, the total population actually rebounded and increased by 15% and there was optimism that some of the mitigation practices being implemented were actually working. Unfortunately WNS swept across their range and the total population again declined through 2019.

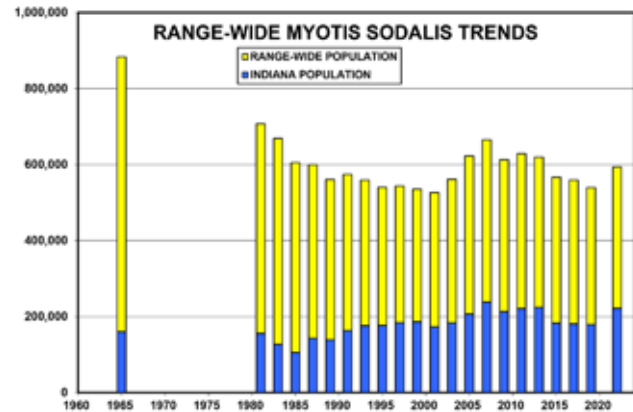


Figure 1

The good news is that the 2022 count showed improvements in the total numbers. For Indiana specifically (dark bars in Figure 1), the population “bottomed out” in 1985 and gradually and consistently increased until WNS reached Indiana in 2011. The 2015, 2017, and 2019 counts were down, but the 2022 Indiana bat population in Indiana also rebounded.

The “executive summary” of the Indiana results is that the southern hibernacula in the Harrison-Crawford area are showing significant increases while the hibernacula in the “northern” area (Monroe and Greene counties) are showing significant decreases. The traditional expectation was that as climate change progressed, the northern caves would gain Indiana bats as their 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 to lessen the effects of WNS (e.g., higher stored fat usage) and thus increase their rate of survival. Thus the bats in the 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 is mostly anecdotal and it will take more observations to see if this thesis proves out.

First the bad news of the major hibernacula in the north: Jim Rays Cave (Figure 2), Coon Cave (Figure 3), and Grotto Cave (Figure 4). Jim Rays Cave in 2007 was the largest hibernacula in Indiana (with over 77,000 bats) and perhaps the second largest anywhere. Since then (and even before WNS) it has steadily declined by 80%, now with just over 15,000 bats. Likewise Coon Cave has dropped 75% from a high in 2013 with over 30,000 bats to about 7,500 bats. Finally Grotto Cave was all but abandoned

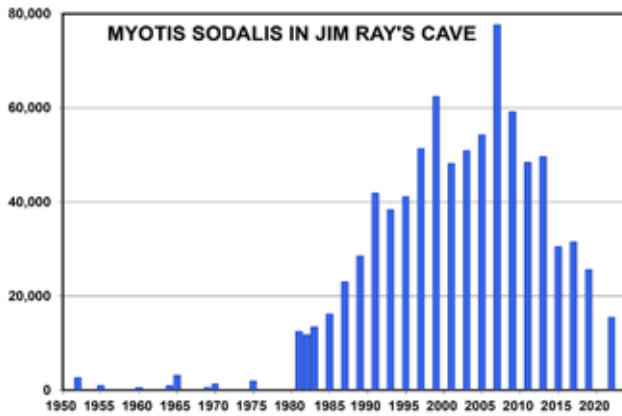


Figure 2

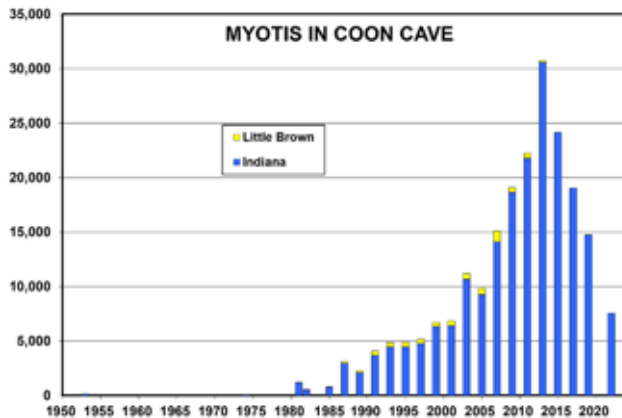


Figure 3

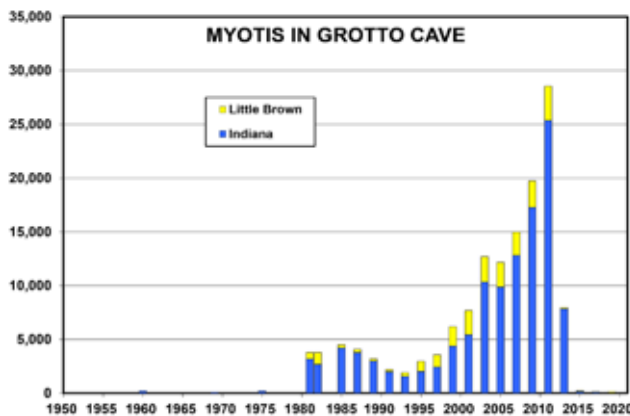


Figure 4

going from over 25,000 Indiana bats in 2011 to less than 200 in 2015 and now just 29 in 2022. Looking at the northern hibernacula in aggregate, in 2009, over 45% of the Indiana bats in Indiana used these northern caves compared to now just over 10%. On a range-wide basis, in 2009 nearly 16% of the bats were in these caves, compared to less than 4% today.

Moving to the Harrison-Crawford area, the Indiana population has shifted from around 53% in 2009 to nearly 84% in 2022. This is primarily due to substantial increases in Wyandotte Cave and Jug Hole.

Wyandotte Cave (Figure 5) is by far the most interesting and important hibernacula in Indiana. Its size provides an extremely wide varia-

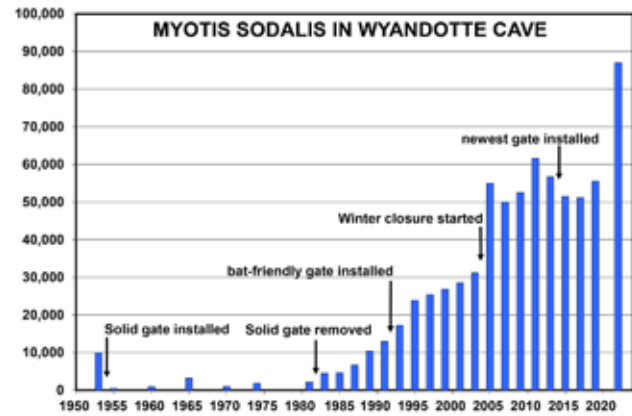


Figure 5

tion 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 2022, there were just under 87,000 Indiana bats using Wyandotte, a remarkable 41% increase from the previous highest count in 2011. What is also interesting is that over 60,000 (69%) of the Indiana bats in the cave were hibernating in the much-cooler entrance room in 2022, far greater than any previous count. One other significant change at Wyandotte is that the number of the federally-endangered gray bats (*Myotis grisescens*) that were first observed in 2011, increased significantly from 1,400 in 2019 to over 7,000 in the 2022 count (over 400% increase!). Whether this geometrically 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. Finally, gray bats have also been recently documented using Wyandotte during the summer.

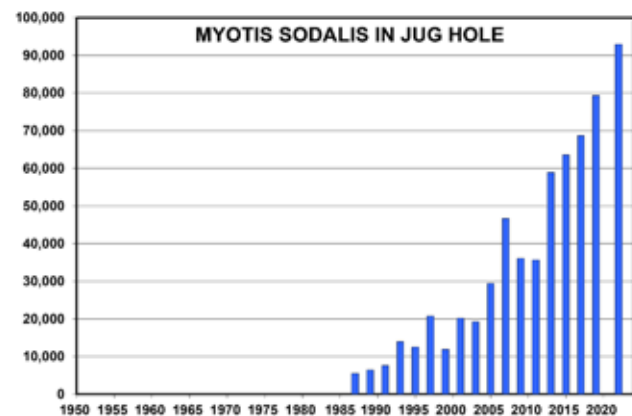


Figure 6

Jug Hole (Figure 6) has shown remarkable and steady growth despite WNS and other external stimuli. In 2022, the number of Indiana bats counted were almost 93,000. This makes this cave the largest hibernacula in Indiana and second largest range-wide (the Sodalis abandoned mine in Hannabel MO is the largest with over 215,000 bats). The odd thing is that Jug Hole would seem to 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 dis-allow winter visitation by cavers. Regardless, the bats seem to like it.

There are other caves in the Harrison-Crawford area that have shown increases in recent years (Wallier Cave, Swinney Cave), others that have decreased but stabilized (Saltpeter Cave), and some that have become irrelevant as bats have left (Twin Domes and Batwing Cave).

Geographically in between the “northern” caves that are quickly losing populations and the southern Indiana caves that, in aggregate are gaining bats are a few caves in the middle such as Endless Cave (Figure 7) and Neyman (Panther) Cave (Figure 8) in Washington County. While neither of these caves have particularly large populations (relative to Wyandotte and Jug Hole), both have

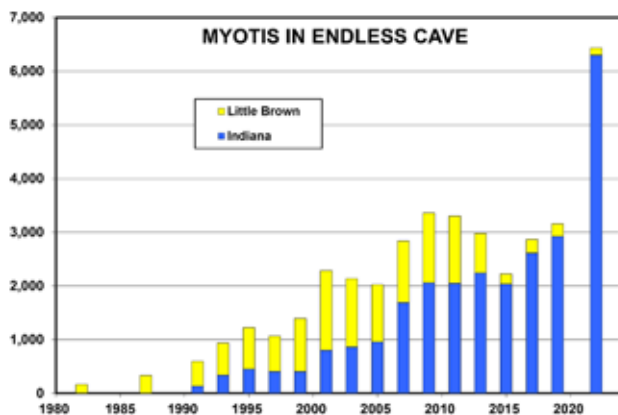


Figure 7

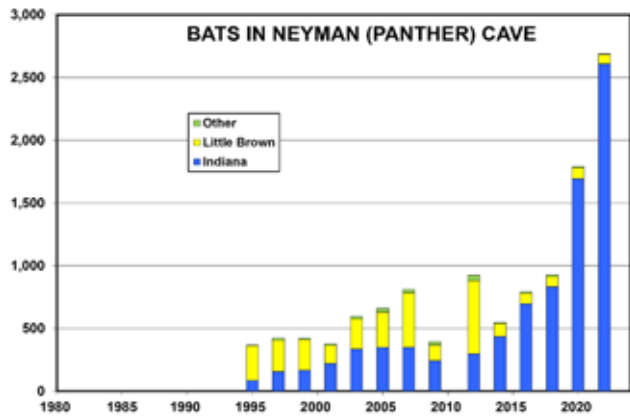


Figure 8

demonstrated a continuous positive trend over the past twenty-five years and significant gains in 2022. And both have the capacity to become very important caves in the future.

I'll end with one final observation from the 2022 bat census. While it was very clear that White-nose Syndrome had a terrible impact on little brown (*Myotis lucifugus*) bats with an 80-90% state-wide drop in the 2011/2013 time frame (see Figure 9), both aggregately and in almost every individual cave in 2022, there were slight population increases. So while little browns were very susceptible to WNS, we might be seeing some positive recovery for the species, at least in Indiana.

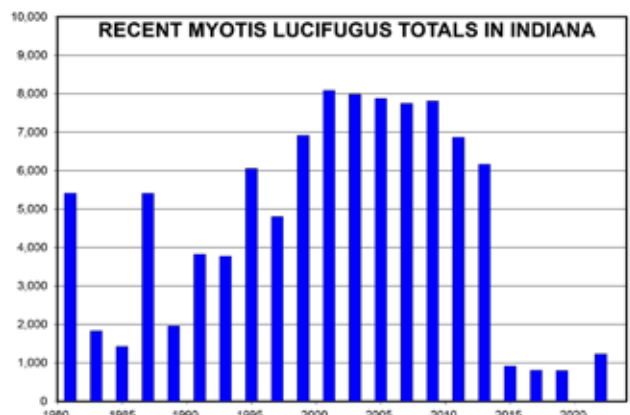


Figure 9

...News Briefs continued from page 9

John Dimit, Keith Dunlap, Dave Everton, Rachel Frost, Al Goodcase, Barbara Hanka, Danny Hollander, Kevin Johnson, Bert Kaufman, Mary Ketchem, Roy Knoy, Ed LaRock, Matthew Lewis, Johnny McCarter, Jon Miller, Ken Nisly-Nagele, Sherrill Owens, Ernie & Jacqueline Payne, Darryl Pell, Kelle Reynolds, Gary Roberson, Wes Roeder, Roger Schaefer, Connie Schulte, Matt Selig, Gordon Smith, Andrew Stauffer, Jeffery Stocker, Carla Striegel-Winner & Jamie Winner, Bruce Trotter, Bob Vandeventer, Richard Whisler, Scott Worpell, Environmental Services & Innovations, Cleveland Grotto, Evansville Metro Grotto, Northern Indiana Grotto, St Joseph Valley Grotto, and BRS III LLC.

- ❑ The IKC has gained seven new members in the last quarter. Welcome Brice Alt, Hank Daunhauer, Ian Good, Tim Miller, Curtis Owen, Chris Schotter, and Justin Thompson. IKC membership currently stands at 268.

INDIANA KARST CONSERVANCY TREASURY REPORT

Income/Expense Statement From October 1, 2022 to December 31, 2022

INCOME:

Dues Apportionment and Residuals	970.00	
Donations - General	1,088.61	
Donations - Land Acquisition Fund	13,750.00	
EQIP stewardship grant	1,379.70	
Special fund-raisers	563.00	
General Investment Earnings	306.93	
		\$18,058.24

EXPENSES:

IKC Update (printing, production, mailing)	946.58	
Education / Outreach	109.89	
Stewardship / Conservation	333.81	
Business (PayPal fees, postage, etc)	237.51	
Insurance Premium (liability, D & O, volunteer)	1,792.00	
Transfers to/from restricted funds/other adjustments	13,750.00	
		(\$17,169.79)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD: \$888.45

Balance Sheet December 31, 2022

ASSETS:

Cash in Checking/Saving/Brokerage accounts	574,548.04	
Robinson Ladder Cave Preserve (73.48 acres)	162,000.00	
Shawnee Karst Preserve (67.78 acres)	175,000.00	
Wayne Cave Preserve (57.59 acres)	188,000.00	
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>\$1,256,561.20</u>

FUNDS & OPERATING EXCESS:

Land Acquisition Restricted Fund	79,335.42	
Deferred Dues Restricted Fund (264 members)	5,325.00	
Stewardship Endowment Fund (+6.16%)	80,461.07	
Gale & Ray Beach Endowment Fund (+3.45%)	321,408.70	
Previous General Fund (total)	87,142.56	
Net Excess (Deficit) This Period	<u>888.45</u>	
Current General Fund (unrestricted)	88,031.01	
Current General Fund (committed)	1,972.87	
Real Estate Basis (excluding value of CE)	<u>682,000.00</u>	

Total Liabilities & Operating Excess \$1,256,561.20

IKC QUARTERLY MEETING MINUTES

Sunday, December 11th, 2022 – 1:00 PM EDT

600 West Temperance Square (MCPL Library), Ellettsville, IN 47429

Board Members Present:

Matt Selig, President
 Laura Demarest, Secretary
 Keith Dunlap, Treasurer
 Jim Adams
 Jeff Cody
 Scott Frosch
 Danyele Green
 Dave Haun
 Rand Heazlitt
 Goniela Iskali
 Joe Kinder (via Zoom)
 Tom Sollman
 Carla Striegel-Winner
 Paul Uglum
 Richard Vernier

Board Members Absent:

none

Others Present: Bruce Bowman, Mike Drake, Christina Seuell, Charley Shipley and family members, Sue Vernier.

Call to Order

Meeting was called to order by Matt Selig at 1:03 pm EDT.

Acceptance of Proxies

All Board members were in attendance – no proxies needed.

Approval of Previous Minutes

The minutes from the September meeting were approved as published in the December 2022 *IKC Update*. *Paul Uglum made the motion to approve the minutes and Danyele Green seconded. Unanimously passed*

E-mail Motions Since Last Meeting

On 10/3/2022 – *Laura Demarest moved that the IKC Board grant permission for the Studebaker Project cavers to have permission to traverse Wayne Cave for the purpose of enlarging/surveying the connection between Studebaker Cave and Wayne Cave. Scott Frosch seconded.* Discussion followed and it was requested that the project submit a Research permit, which they did and it received approval. *Final vote on the motion was 14-0 in favor with 1 abstention. Motion passed.*

Treasurer Report

Keith Dunlap outlined the current financial status of the IKC:

Assets:

Cash assets totaling	\$572,184.91
Land assets totaling	\$682,000.00
Total Assets	\$1,254,184.91

Dedicated Funds:

Land Acquisition Fund	\$65,585.42
Stewardship Endowment	\$82,251.27
Gale & Ray Beach Endowment	\$330,178.39
Deferred Dues	\$6,037.50
General Fund	\$88,132.33
Total Dedicated Funds	\$572,184.91

Membership currently stands at 264 paid members, which is the highest number to date.

Financial updates were also provided on Endowment funds and investments

Election Nomination Committee

Paul Uglum, Jeff Cody, and Goni Iskali volunteered to serve on the Nomination Committee and were subsequently appointed by President Matt Selig to begin carrying out the associated duties.

Education/Outreach

2022 & 2023 Outreach – Carla provided a summary of the four field days held in 2022 and conveyed thanks to those who assisted. Eventbrite has worked well for registration and there has been an average attendance of about 15 people (about 50/50 members and non-members) for each field day. The ‘Big’ Day (bird watching event) in partnership with the Indiana Land Protection Alliance (ILPA) and Indiana Audubon Society had 16 in attendance. Matt Selig recently provided a Zoom presentation update for the Greater Cincinnati Grotto and offered to do the same in the future for other groups who may be interested. Upcoming 2023 events will take place at the following IKC Preserves: Lowry, Sullivan, Shawnee, and another to be announced IKC Preserve. Planning is underway and more details will be forthcoming.

IKC Merchandise Update – The merchandise pop-up store generated \$287 for the IKC. Thanks to Organic Robot Designs (Charlie and Deb Vettters) who donated a percentage of the profits back to the organization.

ILPA Preserve Maps – Nicely printed maps provided by the Indiana Land Protection Alliance (ILPA) became available in early October and were distributed at the ‘Big’ Day. Of our seven IKC Preserves, we selected Buddha and Orangeville Rise to be included since they are both state Nature Preserves and open to the public without gate codes/access logistics being



necessary. A corresponding ILPA webpage is coming soon to highlight preserves in Indiana.

2022 Outreach/Education Expenditures – a \$250 budget for Carla to use for Outreach/Education supplies was approved for 2022 and Carla used \$249.34 this year. Expenditures included promotional handouts, small gifts for volunteers/speakers, signs/lamination, and tote bags for future presenters. *Scott Frosch moved to renew the \$250 budget for Education/Outreach supplies for 2023. Rand Heazlitt seconded the motion. 15-0-0 in favor with no abstentions. Motion passed.*

Safety: Property Manager Kits

Danyeale and Carla discussed the need to provide first-aid/workday supply kits for each of the IKC's seven Property Managers. These kits would include items such as waivers, writing utensils, clipboards, as well as basic first aid supplies, bug spray, gloves, and a laminated emergency contact sheet. The estimated cost for each safety/workday kit would be approximately \$100/each, with an expectation that perishable supplies would need to be occasionally replenished for an ongoing cost of about \$15/year. Danyeale and Carla also asked about setting up an Amazon charity/wish list to solicit member donations for purchasing these supplies. *Rand Heazlitt moved to authorize Danyeale and Carla to promote the Amazon charity/wish list for a finite time and any items that are not donated can be purchased by the IKC for the workday supply bins not to exceed \$700 before the March 2023 meeting. Richard Vernier seconded. 15-0-0 in favor with no abstentions. Motion passed.*

Additional discussion ensued about IKC policies on safety and the status of the *ad hoc* Safety Committee. It was suggested that the objectives of Safety Committee should be revisited and updated soon. Matt mentioned that liability is a three-legged stool that involves an organization's waivers, insurance, and policies. Paul mentioned that the IKC should develop a "Policies & Procedures" document that would help guide the IKC's actions without having to update Bylaws, etc. Danyeale offered to organize a Zoom meeting to discuss further development and formalization of this special interest group.

2023 Wilderness First Aid Training

Danyeale discussed the potential for the IKC to sponsor a Wilderness First Aid (WFA) course in the future, which she could help organize and teach as a certified Instructor. This would be a 16-hour course offered over a weekend with a 2-year certification. WFA class typically costs approximately \$200 per student. The IKC could coordinate the training and structure registration so that it can be used as a fund-raiser or the IKC could opt to offer discounts to members and 'break even'. Danyeale passed around a cost-breakdown and discussion ensued. Consensus involved offering this training to IKC members for \$100 and \$150 for non-members. *Laura moved that Danyeale organize a WFA class to be sponsored by*

the IKC with a \$100 option for members and \$150 for non-members in 2023. Goni seconded the motion. 14-0-1 in favor with one abstention. Motion passed.

Cave/Land Acquisition Activities

Big Bat Cave/Kentucky Karst Conservancy – Matt spoke again with Adam Hjermerud to get some clarification about the matter previously discussed at the last quarterly meeting. No action is needed.

Kinser Property - Keith Dunlap spoke again about the 23-acre Kinser property between the IKC's Wayne and the NSS's Buckner properties and provided some updates. One of the owners finally agreed to let Keith order an appraisal to get a third-party valuation. Keith will follow up after the new year.

Lowry Preserve Manager & Cave Patron

The Lowry Cave Preserve Property Manager and Cave Patron position has been vacant since the unexpected passing of Ray Sheldon last summer. Bruce Trotter has conveyed interest in being the new Property Manager/Cave Patron. Jasper Beavers had also indicated he could help, but already has an abundance of other volunteer duties. *Carla moved to approve Bruce Trotter as the Lowry Cave Property Manager and Cave Patron. Keith seconded. 15-0-0 in favor with no abstentions. Motion passed.*

Proposed Resurvey of Sullivan Cave

Paul Uglum provided an overview about this project and its purpose, stating that the team (led by Dean Wiseman) plans to focus on resurveying certain portions of Sullivan Cave using the original Frushour survey notes and existing survey points. There have been some changes in the actual cave structure over time that should be documented. Dean would like to resurvey from the entrance to the Mountain Room in order to provide a more detailed map of that area. He is also experimenting with LiDAR and other 3-D technologies that would be utilized. Paul is working with Dean to get the Research Permit filled out and to set expectations for providing updates and requesting access for future trips. Some discussion occurred about our research permits and how the IKC reviews and archives them. *Keith moved that the IKC Board approve the Research Permit with Paul Uglum overseeing the research project, to expire in one year. Rand seconded. 14-0-1 in favor with one abstention. Motion passed.*

Recap of Preserves Work Projects and Upcoming Preserves Projects

Buddha Karst Nature Preserve – Keith mowed a few months ago. Trails are in good shape for winter hiking. A big tree is down that Brad Barcom has volunteered to cut once it drops to the ground and blocks the trail.

Lowry Karst Preserve – No updates from acting Property Manager, Keith Dunlap

Orangeville Rise Nature Preserve – Carla reported that the property is in maintenance mode though some winter invasives need to be sprayed. The scientific Research permit for water collection is still active. Dry season water sampling was completed, though there has been a recent staff change so follow up will be needed. The duration of the project will be for ten years with Carla overseeing this activity. The webpage content has also been updated on the IKC website.

Robinson Ladder Cave Preserve – On behalf of John Benton, Carla gave an overview of the stewardship activities that followed a recent field day event hike. The access lane was cleared of low branches, which was the main work objective. Attendance was good and positive feedback was received.

Shawnee Karst Preserve – Keith mowed the trails in October ahead of the birding field day. Spring projects are slated to begin in March and will include mowing the Indian grass in the warm season grass areas. Trees have been ordered to be planted in the spring as well, probably sometime in April. It was also recently noted that a new entrance to Upper Twin cave has opened.

Sullivan Cave Preserve – Joe gave a summary of recent tasks completed, including the installation of the new driveway and parking area in September. Keith resurrected the old address sign by the new driveway, but a better post is needed. Joe also did some fall mowing and cleared a dangerous dead tree that was next to the parking area. Other general maintenance occurred including firewood stacking and trash pick-up. Joe also reached out to the porta-potty service (Izzy's) to schedule another service before the end of the year and to set up a quarterly service schedule. In early December, Joe also constructed a fire pit and generously donated a picnic table for the site. He plans to split/stack more firewood in the next month and has been working down his task list for the property. A workday will be planned in 1st or 2nd quarter of 2023.

Wayne Cave Preserve – Danyeale reported that the camping area is currently in good shape and Cris Seuell has volunteered to bring more bricks over for fire pit improvements soon. There was a 'Green Certification Audit' in November, conducted by Ralph Unversaw (Classified Forest program – DNR) and the property passed with flying colors. After some insights from the bat hike field day, the 3rd tract 'open area' will be managed accordingly for good habitat. Ralph Unversaw and Ellen Jacquart are consulting on options to keep it 'bat friendly'.

Danyeale said that some cave visitors have complained about the Wayne Cave gate being extremely heavy and hard to open from the inside. Discussion ensued about replacing the gate with a lighter version ASAP and notifying groups and grotto liaisons of this issue. Keith volunteered to take care of the gate replacement before the next IKC meeting. The lock will also need to be re-

placed as part of necessary maintenance. Danyeale also reported that some campers recently left an unattended fire during the fall drought and a neighbor reported it to her. Danyeale issued a warning to the campers, and they were asked to return and put out the fire fully.

Indian Creek Conservation Easement – Keith and Matt walked the property on Monday 12/5/22 and noticed a couple of deer stands that will need to be removed. They also noted that a couple of PVC pipes were missing from the fence boundary marker. Rand reported that his gmail address has not been functioning, but he planned to go on 12/27/22 for a follow up visit if it was deemed necessary.

General updates – Carla reported that the hydrogen isotope water sampling for Dr. Huth's project is still ongoing under an IKC permit. She is finishing up some samples and plans to mail them by the end of the year.

ILPA News

Matt attended the ILPA Annual Meeting in early December and gained some insight regarding public relations and has some new ideas for the future, such as sending out a press release for significant IKC acquisitions. He also attended a presentation on how to speak with elected officials about your organization's goals and mission. Updates about the NLCT (Next Level Conservation Trust) grant were also provided and more funding may be allocated soon. Carla was elected to the Board of Directors for ILPA. Matt also brought IKC materials for display and distribution at the event.

Items from the Floor

- **Appreciation Items for Property Managers/Cave Patrons** – Carla reported that Organic Robot Designs donated shirts as a 'thank you' for our Cave Patrons and Property Managers. She will pass them out soon!
- **Paul had some questions about electronic waiver signatures.** He reports that 2/3 of the signatures on Sullivan Cave waivers are electronic now and that it may be advantageous to pursue electronic waivers for the IKC. Matt has been reviewing the legalities and is looking into services that can provide electronic waivers with an annual fee. Paul wanted to make the Board aware that electronic signatures are becoming increasingly more prevalent, and that Sullivan collects 400-600 waivers per year. It was mentioned that the SCCi (Southeastern Cave Conservancy, Inc.) has a good set up and could be used as a model. Rand and Joe had some suggestions for who could be contacted from SCCi for more information.
- **Paul also mentioned that there are a lot of Grotto Liaisons who do not use the key for Sullivan Cave anymore and replacement keys can probably be discontinued in these instances.** Keith typically communicates with the liaisons to make them aware of changes. Paul reported that sometimes the Liaisons



don't communicate with him about booking trips and there are occasional surprises. This issue will be revisited at a future meeting.

- Keith reported \$276 in funds raised during a recent IKC honey/pulp sale.
- Jim Adams submitted a Certificate of Appreciation for the Elliot Stone Company (Shiloh Cave owners) to the NSS for award consideration.
- Joe Kinder mentioned that the Wagoner Cave property sold, and Joe has the info to reach out in the future.
- Mike Drake wanted to thank the IKC for supporting and approving the permit to make the Studebaker-Wayne cave connection.
- Laura mentioned that there is planning for a 2026 NSS National Convention, likely to be held in southern Indiana.
- Cris Seuell asked about updates regarding Reeves

Cave and if the new owners have been contacted by any IKC representatives.

- Goni asked if the IKC wanted to do a partnership with Vibe Yoga again this year for their donation-based yoga classes in January. She will connect with them soon to get everything set up.

Next Meeting Date and Place Selection

The next IKC Quarterly meeting will be the Annual Business Meeting, scheduled for March 25th 1:00 EDT at the Ellettsville Public Library with a Zoom option to be provided. **Note: the start time was later revised to 12:30 EDT.*

Adjourn

Jim Adams moved to adjourn at 4:11 pm EDT. Paul Uglum seconded. Unanimous consent.

Respectfully compiled and submitted by Laura Demarest, IKC Secretary

Mike Woolard exiting Blue River Run Cave on the Harrison-Crawford State Forest. The Division of Forestry launched their new permit system on January 11, 2023, opening most of their caves to visitation, to the delight of many cavers.



photo courtesy Carla Striegel-Winner

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.

