

# IKC UPDATE

A Quarterly Publication of The Indiana Karst Conservancy  
December 2019  
Number 135



# INDIANA KARST CONSERVANCY, INC

PO Box 2401, Indianapolis, IN 46206-2401

[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.

EXECUTIVE BOARD	COMMITTEES / CHAIRPERSON	GROTTOES & LIAISONS
<p><b>President</b> Jerry Lewis (2020) 812-786-1744 <a href="mailto:LewisBioConsult@aol.com">LewisBioConsult@aol.com</a></p>	<p>Education/Outreach Salisa Lewis 812-967-7592 <a href="mailto:FirstFeed@aol.com">FirstFeed@aol.com</a></p>	<p>Bloomington Indiana Grotto* Dave Everton 812-272-2300</p>
<p><b>Secretary</b> Marc Milne (2020) 757-338-1080 <a href="mailto:MilneM@Uindy.edu">MilneM@Uindy.edu</a></p>	<p>Web Technologies Bruce Bowman (see E-Board list)</p>	<p>Central Indiana Grotto* Keith Dunlap 317-882-5420</p>
<p><b>Treasurer</b> Keith Dunlap (2020) 317-882-5420 <a href="mailto:Keith.Dunlap@juno.com">Keith.Dunlap@juno.com</a></p>	<p>IKC Update Editor/Publisher Keith Dunlap (see E-Board list)</p>	<p>Dayton Underground Grotto Mike Hood 937-252-2978</p>
<p><b>Directors</b> Bruce Bowman (2020) 317-539-2753 <a href="mailto:Bruce.Bowman@tds.net">Bruce.Bowman@tds.net</a></p>	<p>Hoosier National Forest Liaison Jerry Lewis (see E-board list)</p>	<p>Eastern Indiana Grotto Jonathan Annonson 317-395-4325</p>
<p>Jeff Cody (2022) 317-888-9898 <a href="mailto:Codyjpme@att.net">Codyjpme@att.net</a></p>	<p>Buddha Karst Property Manager Keith Dunlap (see E-board list)</p>	<p>Evansville Metro Grotto* Steve Weinzapfel 812-4630-7995</p>
<p>Laura Demarest (2021) 812-320-5973 <a href="mailto:LadyLauraDemarest@gmail.com">LadyLauraDemarest@gmail.com</a></p>	<p>Lowry Karst Preserve Ray Sheldon <a href="mailto:RSheldon.indiana.caves@gmail.com">RSheldon.indiana.caves@gmail.com</a></p>	<p>Louisville Grotto* Susan Wilkinson 317-910-8023</p>
<p>Danyeale Green (2019) 317-370-7891 <a href="mailto:DCottrel@iu.edu">DCottrel@iu.edu</a></p>	<p>Orangeville Rise Property Manager Carla Striegel-Winner (see E-board list)</p>	<p>Near Normal Grotto* Ralph Sawyer 309-822-0109</p>
<p>Dave Haun (2021) 317-517-0795 <a href="mailto:DaveHaun@ExploringEarth.com">DaveHaun@ExploringEarth.com</a></p>	<p>Robinson Ladder Property Manager John Benton 812-389-2248 <a href="mailto:JMBenton1952@gmail.com">JMBenton1952@gmail.com</a></p>	<p>Northern Indiana Grotto* Jennifer Pelter 260-456-3374</p>
<p>Goni Iskali <a href="mailto:BattyCaver85@gmail.com">BattyCaver85@gmail.com</a></p>	<p>Shawnee Karst Property Manager Jerry Lewis (see E-board list)</p>	<p>St Joseph Valley Grotto* Joy Baiz 574-286-9404</p>
<p>Matt Selig (2020) 317-258-9983 <a href="mailto:MSelig@hotmail.com">MSelig@hotmail.com</a></p>	<p>Sullivan Cave Property Manager Keith Dunlap (see E-Board list)</p>	<p>Sub-Urban Chicago Grotto Gary Gibula 630-791-8020</p>
<p>Bob Sergesketter (2020) 812-482-5517 <a href="mailto:CableBob@insightbb.com">CableBob@insightbb.com</a></p>	<p>Wayne Cave Property Manager Danyeale Green (see E-Board list)</p>	<p>Windy City Grotto Phil Goldman 847-917-1290</p>
<p>Tom Sollman (2021) 812-753-4953 <a href="mailto:TPSollman@gmail.com">TPSollman@gmail.com</a></p>	<p>Indian Creek CE Monitor Jamie Winner (see E-board list)</p>	<p>*grottos with liaison agreements</p>
<p>Carla Striegel-Winner (2019) 812-367-1602 <a href="mailto:CarlaStriegel@gmail.com">CarlaStriegel@gmail.com</a></p>	<p><b>MANAGED CAVES / PATRONS</b></p>	<p>Suicide Cave Kevin Smith 317-412-3667 <a href="mailto:FreeWheeler2Go@yahoo.com">FreeWheeler2Go@yahoo.com</a></p>
<p>Richard Vernier (2020) 812-385-5058 <a href="mailto:rsavcaver2@gmail.com">rsavcaver2@gmail.com</a></p>	<p>Buddha Cave Jeff Cody 317-888-9898 <a href="mailto:codyjpme@att.net">codyjpme@att.net</a></p>	<p>Sullivan Cave Paul Uglum 317-417-5596 <a href="mailto:Paul.A.Uglum@gmail.com">Paul.A.Uglum@gmail.com</a></p>
<p>Sue Vernier (2021) 812 385-5058 <a href="mailto:rsavcaver2@gmail.com">rsavcaver2@gmail.com</a></p>	<p>Lowry Cave Ray Sheldon <a href="mailto:RSheldon.indiana.caves@gmail.com">RSheldon.indiana.caves@gmail.com</a></p>	<p>Upper Twin Cave Dave Everton 812-272-2300 <a href="mailto:DEverton@indiana.edu">DEverton@indiana.edu</a></p>
	<p>Robinson Ladder Cave John Benton 830-305-1026 <a href="mailto:JMBenton1952@gmail.com">JMBenton1952@gmail.com</a></p>	<p>Wayne Cave Dave Everton 812-272-2300 <a href="mailto:DEverton@indiana.edu">DEverton@indiana.edu</a></p>
	<p>Shiloh Cave James Adams 317-945-8604 <a href="mailto:JKAdams@aol.com">JKAdams@aol.com</a></p>	

Cover: A healthy Cave salamander (*Eurycea lucifuga*) from an unidentified cave.  
Photo by Scott Frosch, November 2019



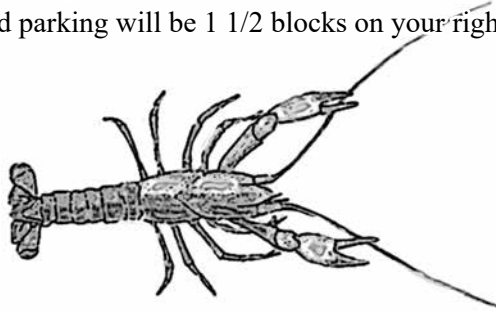
**IKC QUARTERLY MEETING REMINDER**  
**SATURDAY, DECEMBER 7th, 10:30 PM EST**  
**ELLETTSVILLE, INDIANA**  
**MONROE COUNTY PUBLIC LIBRARY (ELLETTSVILLE BRANCH), ROOM A**

The quarterly meetings are for the Executive Board to conduct business, and for our members and other interested persons to have an open forum to talk about 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:** Recap of recent work projects and the promotion of upcoming projects at our various preserves; Financial reports; Lowry Karst Preserve stewardship and fund-raising update; Wayne Cave EQIP funding contract update; NCRC Orientation to Cave Rescue training wrap-up; Cave/land acquisition activities; and more....

Meeting address: 600 W Temperance Street, Ellettsville, IN 47429 (812) 876-1272.

Directions: 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 will be 1 1/2 blocks on your right.



## ACTIVITIES CALENDAR

**Dec 7 – IKC Quarterly E-Board meeting (see above)**

**March ?? – IKC Annual Business Meeting (date & location to be determined)**

**April ?? – IKC/ICS Cave Symposium (date & location to be determined)**

For more information on the Indiana Karst Conservancy, visit our website at [ikc.caves.org](http://ikc.caves.org) 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 can also be made by credit card using our on-line services on our website (see the Join Us! tab in the menu).

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.

IKC Update (ISSN 1076-3120) copyright © 2019 by the Indiana Karst Conservancy, Inc. Excluding reprinted material and individually copyrighted articles and artwork, permission is granted to National Speleological Society affiliated organizations to reprint material from this publication, with proper credit given to the author/artist and the IKC Update. Articles do not necessarily represent the opinions of the Indiana Karst Conservancy, the National Speleological Society, or their respective members.

## RAMBLINGS FROM THE PRESIDENT...

“Knowledge is power” is an expression that was used frequently by Thomas Jefferson, although he spelled it “knolege”. For Jefferson, knolege was a recipe for safety and happiness. I’ve always admired our scientist/president, for whom the Pleistocene Jefferson’s ground sloth was named (*Megalonyx jeffersonii*). Jefferson commissioned what might well be considered the greatest advance of science in the history of the United States: the Lewis and Clark expedition (Lewis... hmmm, that’s a story for another time). Personally, I named the Jefferson’s groundwater isopod in his honor (*Caecidotea jeffersoni*). In a time of seemingly never-ending dumbing down of segments of our society, and a combination of disdain and denial of science at the highest levels in our government, it would be nice to have another Jefferson come along.

The point of this homage to knowledge, convoluted in my fashion, is that the last month has been replete with knowledge flowing for the IKC, in both learning and disseminating. I had a ring-side seat and I’m going to share it with you...

From October 7-11, the National Cave and Karst Symposium (NCKMS) had its biennial meeting in Bristol, Virginia. The IKC was front and center during the Tuesday cave conservation sessions with the IKC’s Education & Outreach Coordinator Salisa Lewis’s presentation “Cavers conserving karst: The Indiana Karst Conservancy”. Salisa talked about the many functions of the IKC, everything from land acquisition and management to... education and outreach, of course! The presentation was well received with a great deal of discussion at the end which stretched into a prolonged conversation with some other cave conservancy folks after the talk.

Salisa’s presentation was nested in the good company of presentations by, among others, the Southeastern Cave Conservancy, Northeastern Cave Conservancy, West Virginia Cave Conservancy, Mid-Atlantic Karst Conservancy, and

Kentucky Karst Conservancy (there were others speaking as well, but you get the idea). It was interesting to hear the different variations on the theme of protecting caves and karst. The Cave Conservancy of the Virginias not only does property acquisition, but has a grant and fellowship program that puts serious money into cave and karst research. I was interested in the different perspectives on liability waivers. Most conservancies seem to require them and the trend appears to be moving toward on-line applications. I think the

IKC needs to pursue this avenue in the future.

As always, the NCKMS was full of interesting presentations... this year’s might have been the best ever. It was meticulously organized by Wil Orndorff and his colleagues at the Virginia Department of Conservation and Recreation. The week was kicked off by the Monday endangered species “workshop”, actually a field trip, that was led by myself and Wil. We spent the day looking at caves and springs in the karst valleys

between the Appalachian mountains of southwestern Virginia. This is the area that I’ve been concentrating my molecular phylogenetics research for the last few years, which has resulted in the discovery of the greatest karst species biodiversity anywhere in the United States. The focal point of the field trip was the federal endangered Lee County Cave Isopod (*Lirceus usdagahun*), including a trip through the length of Thompson Cedar Cave to see the isopods now that they have recovered after an extirpation event that led to their listing.

The Wednesday NCKMS field trip was another highlight of the week. We toured Gap (AKA Cudjos) Cave, an interesting cave that sits right above the Cumberland Gap (and it’s modern day highway tunnel) in Cumberland Gap National Historical Park. After lunch at Wilderness Road State Park, the group travelled to the incredible Natural Tunnel State Park, where a railroad traverses an enormous natural cave (albeit worse for wear) long ago pushed into service as a tun-



nel. The trains still run through the cave each day. Perhaps the high point of the day was a tour of the Gray Fossil Site in adjacent northeastern Tennessee. This treasure trove of Pleistocene fossils was found in an ancient sinkhole, that is in the process of being carefully and methodically excavated for its rich paleontological holdings. We had lots of time after a tour of the sink excavation site to look at the new museum and research lab constructed next to the sink. The evening was capped off by a buffet dinner and presentation by the Director of the facility, Dr. Blaine Schubert.

The 2019 NCKMS was a big success – the NCKMS 2021 in Texas will have a tough act to follow.

On the heels of NCKMS followed the IKC-sponsored Orientation to Cave Rescue (OCR) that was presented by the National Cave Rescue Commission (NCRC) of the NSS, here in Indiana on November 2-3. For details, see the article on page 8. This was an outgrowth of my attendance at the rescue of seven cavers from Binkley Cave in 2016. As I waited for the rescue to unfold, I was struck by the circus that was happening on the surface around the cave entrance, as ambulances, trailers, police vehicles, and family and friends gathered. On top of the concern for my friends in the cave, I wondered about what the procedure was for staging

a rescue. Who to call? Who needs to be here? Who needs *not* to be here. What vehicles really need to be back here crowding around this field around the entrance, and which ones could be parked somewhere else. How many of them should have stayed where they came from?

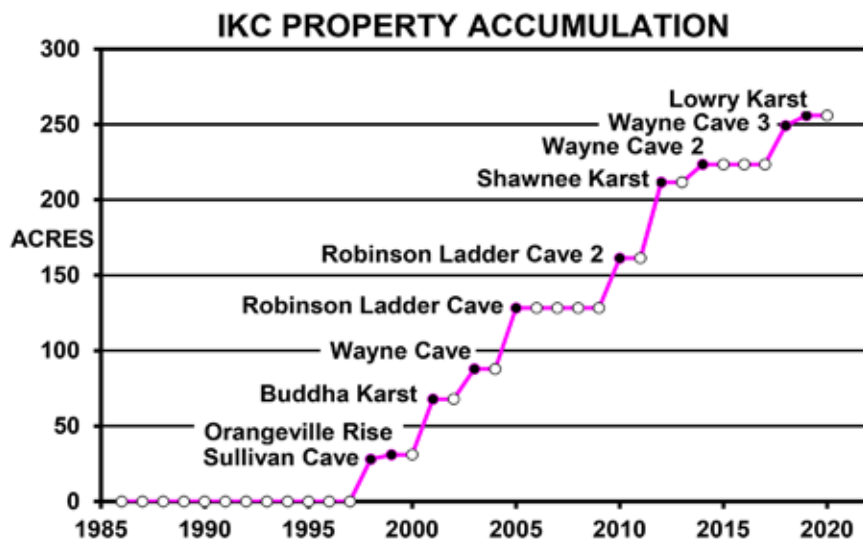
I had nothing but questions, and at the next IKC board meeting, I put finding the answers on the agenda. This came to fruition with the Orientation to Cave Rescue. At the end of the two-day seminar, I felt like it was tremendously valuable information for anyone going in or otherwise managing caves, so much so that it should be on any caver’s to-do list. Due to the generosity of two donors, the IKC was able to provide significant financial sponsorship to our members wanting to attend, and the two days was time well-spent. My congratulations to Anmar, Jess, and the rest of the NCRC folks who made it possible.

NCKMS and NCRC OCR were a great way to cap off the year. At the December IKC Board meeting, we’ll be discussing how to push the organization forward in 2020... another OCR, the prospect of on-line waivers, lots of possibilities. And remember that everyone is always invited to the IKC Board meetings!

*Jerry Lewis*

### NEWS BRIEFS...

- ☐ With the addition of the Lowry Karst Preserve, the IKC now owns just under 256 acres at seven preserves acquired through ten transactions (three were expansions of existing preserves). Below is the timeline.



- ☐ The IKC has gained eight new members in the last quarter. Welcome John Lawrence, Quentin Shaw, Christine Shallenburg, Jonathon Annonson, Stephanie Suen, Marissa Schorr, Mitch Caudill, and Carroll Ritter. The IKC membership currently stands at 216.

## LOWRY KARST PRESERVE STEWARDSHIP UPDATE

*by Ray Sheldon*

As with any new property that the IKC acquires, there are lots of tasks needing attention to bring the preserve “up to standards” and to facilitate visitation. Some of these tasks are pretty easy (like picking up trash) and other require coordination, equipment, and funding approval (like grading and hardening the access roads). The following timeline summarizes activities thus far. Volunteers to date include Bambi Dunlap, Keith Dunlap, Beth and Ray Sheldon, Richard Snyder, Bruce Trotter, and Jerry Walker.

- August 2 – the IKC closes on the 6.66-acre property with the entrance to Lowry Cave.
- August 18 – Keith, Bruce, Jerry, and Ray installed T-posts with five foot white PVC covers on the property corners to better mark the survey pins.
- August 28 – IKC President Jerry Lewis and The Nature Conservancy Allen Pursell visited the cave and walked the property related to TNC’s funding grant.
- September 20 – At the fall IKC meeting, the IKC Board members voted to adopt the preserve’s Management Plan and appoint Ray as the Cave Patron and Property Manager.
- October 3 – Keith and Ray hiked the property to assess the extent of invasive plants and decide how to move forward with property improvements.
- October 6 – Bambi filled five large trash bags, mostly along the western boundary of the property. Bruce used a chain saw to cut up downed trees and also helped Bambi, Keith, and Ray remove branch debris and saplings from the unimproved county road (access road) and interior lane. Bruce, Keith, and Ray worked on improving the lane gate operation and installing 60 feet of wire fence along the county road to redirect foot traffic to the lane gate. Keith used a generator and electric pole saw to remove branches overhanging the county road and interior lane to allow for the spreading of stone.
- October 10 – Beth and Ray took Richard, the stone contractor, to show him the property location to determine what size stone is needed for the county road and lane base.



**Left:** Ray Sheldon grading and preparing the old county road for stone. **Right:** The interior lane into the Lowry Karst Preserve.

*photos by Keith Dunlap, 2019*



- October 13 – Beth blew leaves off driveway while Ray sprayed herbicide on the roads to kill the vegetation.
- October 17 – Keith and Ray removed a Honey Locust tree adjacent to the lane (to prevent future tire punctures) and placed the sign post and emergency information sign at the trailhead to the cave. Keith used a sawzall to remove several 5/8” diameter rebars (trip hazards) from a deteriorated retaining wall at the trailhead.
- October 19 – Matt Selig lead two co-worker cavers on an hour trip to the rear of the cave. In the cave they saw a frog, a surface crawfish, many spiders and crickets, raccoon scat and raccoon footprints. They saw water coming from the ceiling at a higher point and many fossils in the first half of the cave. Photos were taken for Bar Keepers Friend (one of our donor).
- October 21 – The IKC Board approved \$1200 funding for the stone purchase, delivery, and spreading.
- November 2 – Ray used his tractor and grader box to fill in existing ruts, improve drainage, and shape/level the county road and interior lane in preparation for the stone spreading. Bruce and Keith set seven steel T-Posts from the lane gate to the trailhead where a rope will be strung to deter visitors from short-cutting down the hillside to the cave (to correct current erosion issues). They also cleared the remainder of the old interior lane to the back of the property, cutting up downed trees and removing branch debris 300 feet past the previous effort. They also cut and stump treated with Tordon the larger invasives (autumn olive and bush honeysuckle) and grape vines, getting over more than half (and the worst half) of the property.
- November 9 – Richard spread 15 tons of #3 stone along 250 feet of the county road section leading to the interior lane.
- November 10 – Keith mowed down the small saplings along the interior lane extension.
- November 16 – Ray installed ropes onto the previously installed T-posts to direct visitors to the cave trailhead (rather than short-cutting down the slope).

In the next several weeks a couple more truck-loads of stone will be spread and another workday will be needed to do the final grading of the stone.

Currently we are granting access/visitation to the cave for small groups (preferably just one vehicle due to limited parking). Once we get the road/lane hardened such that visitors can park beyond the lane gate, we will be ready for larger groups. For more about the property, the cave, and visitation, go to [ikc.caves.org/lowry-karst-preserve](http://ikc.caves.org/lowry-karst-preserve)

*Treasurer’s note: To the right is the fund-raising status and donor’s list as of mid-November. We currently stand at approximately 84% of our \$36,000 goal with just over \$5,600 remaining to fund. We are still waiting to hear back about a \$2000 grant request submitted to the NSS, and hopefully our members and others will consider some year-end donations to wrap up this project.*

LOWRY KARST PRESERVE DONATION LIST
<b>\$5,000 or more</b>
Keith Dunlap The Nature Conservancy*
<b>\$2,500 to \$4,999</b>
Matt Selig Bar Keepers Friend
<b>\$1,000 to \$2,499</b>
Bruce Bowman Virgil Brack Barbara Hanka Central Indiana Grotto National Speleological Foundation
<b>\$500 to \$999</b>
Ellen Jarquart and Hank Huffman Salisa & Jerry Lewis Bill Tozer
<b>\$250 to \$499</b>
Sue & Richard Vernier
<b>\$100 to \$249</b>
Miriam Ash Paul & Monica Cannaley Jeff Cody Matthew Laherty Tom & Kim Metzgar Tom Rea Ralph Sawyer Richard VanRheenen Carla Striegel-Winner & Jamie Winner Honor of Dr Jeanine Ash & Dr Laurence Yeung Bluespring Caverns Evansville Metro Grotto Northern Indiana Grotto
<b>\$50 to \$99</b>
Dale Chase Timothy Heppner Kyle Hoyt Carroll Ritter Indiana Caverns
<b>\$5 to \$49</b>
Ron Adams George Cesnik Jaime Coffman Dave Everton Scott Frosch Rick Gikas Allen Goodcase Dave Haun Marlin Heinlein David Hughes Todd & Laura McCartney Jon Miller Raymond Moul Stan Nieder Gene & Jennifer Pelter Kelle Reynolds Cindy Sandeno Mark Van Buskirk Chris Wadsworth
<b>Project goal: \$36,000 Raised/Pledged to date: \$30,395 Percent of goal: 84.4% November 15, 2019</b>

## THE IKC-SPONSORED ORIENTATION TO CAVE RESCUE

*by Jerry Lewis*

On November 2-3, the IKC sponsored a training seminar called “Orientation to Cave Rescue” (OCR), an intensive two days of instruction conducted by personnel of the National Cave Rescue Commission (NCRC) of the National Speleological Society. The inspiration for the IKC’s sponsorship of this OCR was born on a blustery December day in 2016, as I stood in the pasture outside the main entrance to Binkley Cave watching a full-scale rescue unfold. My caver friends deep inside Binkley were in dire straights after an unexpected rain, and it was apparent that the rescue I was observing unfold on the surface was something the IKC might have to deal with someday. I made a mental note to find out more about the information and skills involved in conducting a successful rescue, which eventually led to this OCR.

The first day of the OCR was primarily classroom instruction, which was conducted in a meeting room at the Mitchell Public Library. There were 22 students in attendance. The instructors for the numerous short courses were Jess Deli (NCRC Central Region Coordinator), Anmar Mirza (NCRC National Coordinator), Leanne Hughes, and Stephen Bishop. Each have completed NCRC training levels 1 thru 3, passed the Instructor Qualification Class, and been approved by the Board of Regional Coordinators... so to put it lightly, these folks know what they are doing. Several specialists (basically those en route to becoming instructors) also participated in the instruction of the courses, including IKC Directors Laura Demarest and Danyelee Green. Other specialists for the day were Chris Bauer, Adam Mathis, and Angela Pullano.

The classroom portion of the OCR was a smorgasbord, where we were able to get tastes of a lot of different topics that are aspects of rescues, including communication, injuries, hypothermia, establishing priorities, etc. Each subject we tasted was a topic that was typically greatly expanded in the more advanced NCRC courses.

Finishing the first day, we drove over to a public park where we practiced “wrapping” an injured person in a litter for transport, got hands-on experience with a couple of kinds of litters

intended for different situations, and then “rescued” a couple of volunteer patients. The “rescue” consisted of wrapping the patients and then passing them through a maze of playground equipment. We probably looked like participants in a mass escape from some asylum, but cramming the litters up, down, over, and through all those play-places was excellent practice.

The next morning at 8:00 AM, everyone met at the Richard Blenz Nature Preserve outside of Bloomington to conduct a full-scale mock rescue. The scenario was that three people had entered the preserve’s Buckner Cave. Laura Demarest and Jess Deli played the roles of hapless spelunkers who were in the cave searching for a connection to another cave, and had succeeded only in having breakdown collapse on the diggers. Anmar Mirza played the role of a third clueless explorer who had been with the group, but went for help only to find himself unable to get past the locked gate.

All sorts of rescue roles were played... a coordinator on the surface ran the rescue, and assigned me the role of taking a shift as gatekeeper. Someone has to keep a list of everyone coming and going into the cave, so that everyone can be accounted for, and no one is left behind at the end of the day. I was also in charge of the field phone that was placed at the beginning of the crawlway leading to most of the cave. The phone was connected via wire laid by the first crew into the cave through the long crawlway extending to the T-intersection. This allowed the in-cave coordina-





tor to send messages to the surface without going back-and-forth through the 700-foot crawl. Messages were relayed from the T-intersection to the entrance by phone, and then to the surface by runners. It was more realistic, and stressful, than I could have imagined for an exercise.

Most of the literal heavy lifting was done by crews of volunteer rescuers. First the injured cave explorers had to be located. Although it was believed they were near the “volcano” this remained to be seen, and as it turned out one of the cavers had gotten themselves lost. After finding them, teams started the long trip back to the surface with the patients. Eventually both were laboriously transported through the crawlway and successfully made it to the surface (see photos below). Keep in mind that this involved lifting the dead weight of a person strapped down on a litter through spaces that in places were scarcely large enough for it to pass.

At the conclusion of the mock rescue we met back at the shelter house on the surface and An-

mar did an overview of everything that had happened from start to finish. Some things were done well, other things not-so-much, but over-all I think he thought the exercise was well-executed. As a mock rescue, at times it was scary how realistic it was. If this had been a real rescue, in my estimation it would have been a success and the injured patients would have survived to cave another day.

I learned a lot from the weekend experience and would recommend it to anyone who goes in caves, if for no other reason as an object lesson in not getting oneself into situations where a rescue is needed. It appeared like everyone left with a lot more knowledge than when we arrived on Saturday morning, and there are now more people with at least some inkling of how a rescue works if the time comes. Hope for the best... and plan for the worst.

A special thanks to the two donors (Barbara Hanka and SerVaas Laboratories) who funded the \$25 discounts to encourage IKC members to attend this training.



## A BIOLOGICAL RECONNAISSANCE OF RAY'S CAVE

by Jerry Lewis

Ray's Cave, in Greene County, has long been known to be an important hibernaculum for the Indiana bat (*Myotis sodalis*), where its winter population is in the tens of thousands. The cave is one of Indiana's "classic caves", with a prominent entrance that is marked on topographic maps. The map of the cave indicates 9000 feet of passage, mostly a walking height stream passage with a couple of side passages not far from the spring entrance (there are two other smaller entrances). Located on the western side of Indiana's southcentral karst, the cave is formed in the Beech Creek limestone.

I'm aware of a few bits and pieces of information on the fauna of this cave other than the bats. Since back in the 1960s, Ray's Cave has been known to have been inhabited by a very rare cave beetle (*Pseudanophthalmus*), known only from two other Greene County caves. These little red ground beetles, about 4 mm in length, are completely eyeless and unpigmented. Also, Zhang and Holsinger (2003) reported that B. Nicoll visited Ray's Cave in October and December, 1964, and made the first collection of a relatively large (up to 20 mm) amphipod that Zhang named *Crangonyx indianensis* in the description of the species. John Holsinger also visited the cave in June 1965, where he also collected *Crangonyx indianensis* in the company of the tiny cave amphipod *Crangonyx packardi*. John Holsinger also collected the cave isopod *Caecidotea stygia* (see above) at the same time that he was collecting the amphipods (Fleming, 1972).

Busacca (1975) conducted research on the occurrence of heleomyzid flies in the cave. These little reddish-brown flies are common in Indiana caves, usually found on the walls and ceilings. Busacca found that the flies occurred throughout the part of the cave examined, but were most common within a thousand feet or so of the entrance. At least a few were present during all three of Busacca's visits to the cave (in October, November, and January), but the population spiked in October, when they apparently move underground to

spend the cold months of the year in the relative shelter of the cave. Four species were reported: *Amoebaleria defessa*, *Aecothea specus*, *Heleomyza brachypterna*, and *H. serrata*.

Hobbs et al. (1977) reported the cave crayfish (*Orconectes inermis testii*) from Ray's Cave, based on an unsubstantiated sight record by a caver who reported the "blind white" crayfish "*Orconectes pellucidus*" (sic) (Moore, 1967).

Although the cave is "closed" by the owner, I was able to arrange a trip to evaluate the invertebrate fauna of the cave (in particular an investigation of the cave beetles), through the auspices of Tim Shier (IDNR), who also coordinates entry for

monitoring the endangered bats that inhabit the cave. Keith Dunlap had been to the cave many times with the bat survey teams and offered to be my guide.

Keith and I visited the cave on the hot summer afternoon of August 14, 2019. As promised, the entrance to Ray's Cave is large and scenic, with the stream flowing out and cascading down a series of short drops. Entering the

cave, we made note of some typical entrance fauna, including the nest of an Eastern phoebe (*Sayornis phoebe*), Cave salamander (*Eurycea lucifuga*), and Cave orb-weaver (*Meta ovalis*). It became immediately apparent that Raccoons (*Procyon lotor*) really liked the cave, as evidenced by all the piles of scat along the ledges in the entrance passage. About 250 feet into the cave, where the stream passage makes a 90-degree left, we started placing pitfall traps. These were four-ounce jars that we buried in mud to their rims, filled with isopropyl alcohol as a preservative and baited with limburger cheese. We placed a total of ten of these traps in mudbanks between the spring and Beech Tree entrances.

Progressing along the spacious stream passage we noted Bollman's cave millipede (*Conotyla bollmani*), Cave dung flies (*Spelobia tenebrarum*), and numerous egg sacs of what we presumed to be the common Cave sheet-web spider (*Phanetta subterranea*). In the stream we saw numerous large Cavespring crayfish (*Cambarus tenebrosus*), but no cave



crayfish. This was of particular interest due to the thin report of a cave crayfish from the cave by Moore (1967), which appears to be spurious based on our observations (and the lack of anyone ever collecting a specimen of a cave crayfish from the cave).

Isopods (*Caecidotea stygia*) were large and obvious, and I collected a few and took them home alive in vials of water for photographs. We also found the Indiana cave amphipod (*Crangonyx indianensis*) and Packard's groundwater amphipod (*Crangonyx packardi*) were still alive and well in the cave.

Arriving at the breakdown room below the Beech Tree entrance, we found a couple dozen Indiana bats (*Myotis sodalis*), probably a so-called bachelor colony of males. We placed the last three pitfalls in bat guano and departed before further disturbing the bats.

Keith (along with Danyele Green and Laura Demarest) returned to the cave on September 2 and pulled the pitfalls for me, delivering them to the September IKC Board meeting, which coincidentally was at our home. Examination of the pitfall trap contents revealed at least 19 taxa (see table below), including at least four (probably more) species of springtails, five kinds of flies, four species of rove beetles, and a trogliphilic ground beetle (but the troglobitic *Pseudanophthalmus* did not make an appearance). The springtails remain unidentified,

but it appears like the troglobites *Sinella alata* and a *Pygmarrhopalites* are present.

In total, we found eight species of obligate subterranean invertebrates, including two amphipods, an isopod, a spider, two springtails, and a fly, plus the cave beetle that is known from the cave. There are very likely more to be found, but this represents a good start.

References:

Busacca, J. 1975. Distribution and biology of *Amoebaleria defessa* (Osten Sacken) and *Heleomyza brachypterna* (Loew) (Diptera: Heleomyzidae) in an Indiana cave. N.S.S. Bulletin, 37 (1): 5-8.

Fleming, Laurence E. 1972. The evolution of the North American isopods of the genus *Asellus* (Crustacea: Asellidae). International Journal of Speleology, 4: 221-256.

Hobbs, H.H., Jr., H.H. Hobbs, III, and M.A. Daniel. 1977. A review of the troglobitic decapod crustaceans of the Americas. Smithsonian Contributions to Zoology, 224: 1-183.

Moore, Michael C. 1967. Ray's Cave, Greene County, Indiana. Bloomington Indiana Grotto, 7 (2): 18-27.

Zhang, Jun and John R. Holsinger. 2003. Systematics of the freshwater amphipod genus *Crangonyx* (Crangonyctidae) in North America. Virginia Museum of Natural History Bulletin 6, 274 pages.

Ray's Cave Pitfall Data (14 August - 2 September 2019)																				
Pitfall location:	<i>Conotyla bollmani</i> (millipede)	acarina spp. (mites)	<i>Phanetta subterranea</i> (cave sheet-web spider)	<i>Pygmarrhopalites</i> (springtail)	<i>Sinella</i> (springtail)	<i>Tomocerus bidentatus</i> (springtail)	entomobryid sp (springtail)	<i>Ceuthophilus brevipes</i> (cave cricket)	<i>Spelobia tenebrarum</i> (cave dung fly)	<i>Megaselia cavernicola</i> (cave hump-backed fly)	<i>Aecothea specus</i> (heleomyzid fly)	psychodid sp. (moth fly)	mycetophilid sp. (fungus gnat)	<i>Atheta trogliphila</i> (rove beetle)	<i>Aleochara lucifuga</i> (rove beetle)	<i>Quedius erythrogaster</i> (rove beetle)	<i>Quedius spelaeus</i> (rove beetle)	<i>Platynus tenuicollis</i> (ground beetle)	braconid sp. (wasp)	
1 Riparian mudbanks in dark zone		X		X			X		X	X		X	X	X						
2 Riparian mudbanks in dark zone				X	X		X		X	X		X	X	X						
3 Riparian mudbanks in dark zone				X	X		X		X	X		X	X	X						
4 Riparian mudbanks in dark zone		X		X			X		X	X		X	X							
5 Riparian mudbanks in dark zone	X	X		X			X		X	X		X	X	X	X					
6 Riparian mudbanks in dark zone	X	X		X			X		X	X		X	X	X	X					X
7 Riparian mudbanks in dark zone	X	X						X	X	X		X	X	X	X	X			X	
8 Mudbanks below sink entrance	X	X		X				X	X	X		X	X	X	X		X	X		
9 Mudbanks below sink entrance		X		X		X	X	X	X	X		X	X		X				X	
10 Mudbanks below sink entrance		X	X	X	X		X	X	X	X	X	X	X		X		X	X		

## A LOOK BACK AT INDIANA KARST

by John M Benton

Normally, when one thinks of pyramid ruins, it is usually in the middle of a desert. But between Bedford and Needmore, there lays the remains of the ill-fated Limestone Tourist Park, with its own limestone pyramid ruins right in the middle of Indiana's cave country. The limestone of Indiana has contributed to a major part to several large buildings across America: the Empire State Building, the Pentagon, the Washington Cathedral, the Waldorf Historia Hotel, numerous state capital buildings, and countless other buildings of significance. It is this portion of our heritage that the Limestone Tourist Park was proposed to inform, entertain, and memorialize.

In the late 1970s, a set of limestone pyramids, as well as a replica of the Great Wall of China, was proposed and started, as well as a viewing platform, helipad, recreation pavilion, museum, stone machinery exhibit, souvenir area, and picnic/food areas (see page 19). One of the pyramids was planned on being 100 feet in height (see above).

The federal government gave Bedford grant money to start the project at one of Bedford-area

large limestone quarries, but soon after construction began, the project came under attack and was dubbed one of Wisconsin senator's (Alan Cranston) Golden Fleece Awards in 1981, which Cranston claimed was pork-barrel spending of federal tax dollars. Government funding was revoked after just one layer of limestone had been laid

for the pyramid and the park was left to be reclaimed by the weeds and elements as it stands today.

To reach the site, about nine miles north of Bedford on State Road 37 at the crossroads to Judah, turn east onto Old 37 at the stoplight. After about three miles on Old 37, one will pass the Salt Creek Brewery.

A mile or so past

this point, slow down! This is an old highway that dead-ends with an old large gate after you round a small turn. Pull off the road and park. To get to the pyramid, you must cross private property (not posted the last time I was there, but things may have changed). Cross the old yellow fence and you will be at the site. An interesting remnant left in Indiana's cave country!

More photos can be seen at [Atlas Obscura](#).



Artist's rendering of the pyramid, administration building, and museum.



Left: Aerial image of the base of the unfinished pyramid and the raised observation platform . Right: First level of the pyramid.

photo by John Benton, 2018

**INDIANA KARST CONSERVANCY TREASURY REPORT**

**Income/Expense Statement  
From July 1, 2019 to September 30, 2019**

## INCOME:

Dues Apportionment and Residuals	786.25	
Donations - General	168.50	
Donations - Land Acquisition Fund	13,111.04	
SpeLoggers	470.00	
Investment Earnings	993.69	
	<u>          </u>	\$15,529.48

## EXPENSES:

IKC Update (printing, production, mailing)	267.75	
Education / Outreach	0.00	
Stewardship/Conservation	280.77	
Property tax (Lowry adjustment)	13.89	
Business (PayPal/NFG fees, meeting)	107.10	
SpeLoggers	2,632.04	
Lowry Cave acquisition (excludes earnest payment)	31,920.50	
Transfers to/from restricted funds/other adjustments	-18,459.75	
	<u>          </u>	(\$16,762.30)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD:                       (\$1,232.82)

**Balance Sheet  
September 30, 2019**

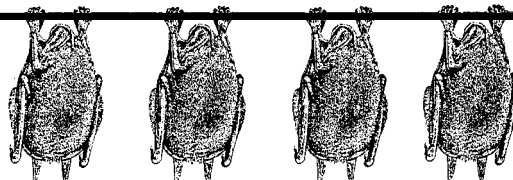
## ASSETS:

Cash in Checking / Saving / CDs / Brokerage acc'ts	200,833.88	
Robinson Ladder Cave Preserve (73.48 acres)	162,000.00	
Wayne Cave Preserve (57.59 acres)	188,000.00	
Shawnee Karst Preserve (50.31 acres)	105,000.00	
Buddha Karst Nature Preserve (36.84 acres)	29,000.00	
Sullivan Cave Preserve (28.00 acres)	72,000.00	
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>	<u>\$796,847.04</u>

## FUNDS &amp; OPERATING EXCESS:

Land Acquisition Restricted Fund	70,372.62	
Deferred Dues Restricted Fund (211 members)	4,192.50	
Stewardship Endowment Restricted Fund	69,944.14	
Previous General Fund (total)	57,570.60	
Net Excess (Deficit) This Period	<u>-1,232.82</u>	
Current General Fund (unrestricted)	56,337.78	
Current General Fund (committed)	2,600.00	
Real estate liquidity (basis value excluding CE)	<u>596,000.00</u>	

Total Liabilities & Operating Excess                       \$796,847.04



## IKC EXECUTIVE BOARD MEETING MINUTES

September 28, 2019 4:00 PM EDT, Burns Hollow, 17903 State Road 60, Borden, Indiana

### Board Members Present:

Jerry Lewis, President  
 Marc Milne, Secretary  
 Keith Dunlap, Treasurer  
 Bruce Bowman (proxied by Phyllis Sergesketter)  
 Jeff Cody  
 Laura Demarest (proxied by Bambi Dunlap)  
 Danyele Green  
 Dave Haun  
 Goni Iskali  
 Matt Selig  
 Bob Sergesketter  
 Tom Sollman (proxied by Salisa Lewis)  
 Carla Striegel-Winner (proxied by Ray Sheldon)  
 Richard Vernier  
 Sue Vernier

### Board Members Absent:

None

### Call to Order

The meeting was called to order by President Jerry Lewis at 4:00 PM EDT at Burns Hollow, Borden, Indiana. Jerry asked everyone to introduce themselves.

### Acceptance of Proxies

- Salisa Lewis for Tom Sollman
- Ray Sheldon for Carla Striegel
- Bambi Dunlap for Laura Demarest
- Phyllis Sergesketter for Bruce Bowman

### Email Votes

None.

### Approval of Previous Minutes

The minutes from the June Board meeting were approved as published in the September 2019 *IKC Update*.

### Treasurer's Report

Current finances: Keith outlined the financial status of the organization: Cash assets totaling \$200,833.88 and land assets totaling \$596,000.00, for total assets: \$796,847.04. Funds include Stewardship Endowment: \$69,944.14; Land Acquisition: \$70,372.62; Deferred Dues: \$4,192.50; and General Operating Fund (unrestricted): \$56,337.78.

Membership: Currently stands at 209 members. Fourteen previous members were dropped for non-payment.

### Shawnee Karst Preserve

Work on the kiosk for Shawnee Karst Preserve will begin next month or November 2019.

The Classified Forest inspection is scheduled for November 2019.

Keith invited members to walk the potential adjacent expansion property. Keith plans to build a driveway gate to control access into the property.

### Sullivan Cave

Keith noted that he mowed once. There is stilt grass present in some parts of the property. Keith wants to put down more grass seed, but because of dry weather it would be a waste since the seed would likely not germinate. Keith plans on putting down fescue if it ever rains. He said that his treatment of the annual stilt grass last year also killed off some of the perennial grasses.

### Wayne Cave Preserve

Danyele updated members about the work status of the invasive species management at Wayne Cave Preserve. She stated that some work days had high participation and some work days had low participation. On most work days, Danyele and Keith were present. On September 5th, Amy Spalding from DNR inspected the property and the Preserve passed this first inspection with flying colors. Amy was shown the invasive species management that was conducted on the property and Amy claimed that we did a great job and that our work was very thorough. Payment for the treatment has not yet been received. The amount of check should be around \$6,500. Less than \$200 worth of chemicals and lunch for volunteers was purchased on the work days.

The "back" 20 acres (southern most part) of the property is currently being assessed for invasive species work status. In early 2020 the organization will find out if that tract is approved. If approved, the contract will be for 2021 (but we can start treatment in 2020). This will, simultaneously, be year two of invasive species management of the front section of the property, but there will be less work for the front section. This is because after the first year, most of the work will consist of walking the property and re-treating problem areas. The back 20 acres that IKC is applying to treat in 2020 will be a great deal of work.

The next projects for the property include trash pick-up and trail maintenance.

Jeff asked if there will be work days in colder parts of the year. Danyele responded that there will be October and November workdays.

There was a round of applause for Danyele for her work.

### Buddha Karst Preserve

Keith reported that the Classified Forest inspection is scheduled for October 15th. Janet Eger (Lawrence



County District Forester) will come out and look at the Shawnee expansion property to enroll it, and on the same date will walk Buddha Karst Preserve for its re-inspection. The invasives on the Buddha property are minimal and it has changed for the better because of treatment, so IKC expects the review to be positive.

#### **Robinson Ladder Cave Preserve**

Keith stated that the chestnut tree plantation status is unknown since last mowing in May. In October, one last mowing of the property is planned. Jamie Winner has mowed the access lane and parking area, but it is unknown if he will mow the upper field. The mowing work is better to do during cooler weather.

#### **Orangeville Rise**

Carla (Ray reported) updated members of stewardship activities at Orangeville Rise. The property was walked, monitored, and cleaned of trash.

In a water monitoring update from Lee Florea, it was reported that the side structure was updated to control for flow conditions. The sampling of the property is continuing and Sara Burgess will be presenting this work at the Geological Society of America meeting in Phoenix.

#### **Lowry Karst Preserve**

Jerry asked attendees for name recommendations for the Lowry Preserve property. He suggested that “cave” should be left out of the name so that it doesn’t attract unwanted attention. It was suggested that “Lowry Karst Preserve” should be the official name of the property.

Jerry spoke about The Nature Conservancy’s role in funding the purchase of the property and said that The Nature Conservancy (TNC) may help fund the purchase of the property with a \$5,000 donation. However, in order for TNC to approve the donation, they had to do a property walkthrough first. Alan Pursell and Jerry walked the property for this purpose. Alan was pleasantly surprised with the high quality of the property. Some invasives were noted to be present, mostly on the fringes of the property.

Dave, Jeff, Matt, the Verniers, and the Lewis’s made donations toward the purchase of this property.

Keith spoke about funding the acquisition and management of the property. The listing price was \$33,000 and the IKC offered \$30,000 on a per-acre basis. After the official survey, it turned out that the property was a little larger than expected. The IKC ended up paying \$32,000 for the property. The closing costs were split with the seller as was the cost of the boundary survey. With these additional costs, and the 10% Stewardship Endowment contribution, the total cost of the project totaled slightly over \$36,000.

The IKC has received approximately \$14,000 so far for the project through donations, and an additional

\$8,500 in pledges (this includes TNC and others) and \$3,200 from the IKC for the Stewardship Fund. So currently, about \$25,000 of the \$36,000 cost is identified. There are several possible grant sources of funds to pay for the remaining \$11,000. Keith submitted a grant for \$2,000 through NSS for funding, but its status is unknown. Keith also submitted a \$2,000 grant to the National Speleological Foundation and a \$1,000 grant to the Central Indiana Grotto. If all of those grants are accepted, that totals \$5,000 in grant money that could be put towards the \$11,000 remaining to pay for the property.

Matt stated that his company makes cleaning products and used his personal kitchen to film a promotion. To “compensate” Matt, his company donated \$2,500 to the IKC for Lowry Cave. Matt has matched donation from them. His company requested some pictures for their social media. Jerry asked if anyone had any reservations about Matt’s company putting their donations on social media. The consensus from members was “No problem, as long as the exact location of the conserved cave is not published.”

Bambi suggested that Dogwood City Grotto (DCG) may be a good organization to approach for funding. Keith stated that the last couple times that DCG was asked for funds, the grant proposal was turned down and the submission guidelines/deadlines were becoming “vague”. However, Keith suggested that he could try again.

Keith stated that the IKC has had fewer donations come in from members and the public than with prior acquisition projects. But if all else fails, we could pay for the remaining costs from the Acquisition Fund.

Jerry raised the issue of the Property Manager and Cave Patron for this property. He stated that because it is a small property and visitation is not likely to be too great, the IKC would likely only need one person for both positions. Jerry suggested Ray Sheldon as Property Manager/Cave Patron. Keith stated that upon the announcement of the purchase of the property, Ray reached out and contacted Keith and was proactive about volunteering. Bambi stated that she could say nothing but good things about Ray. Ray stated that he lives 25 minutes from the cave in Elizabethtown. Keith recommended him as Manager. Ray said that he could help screen cave visitors and prevent squatters since he lives nearby. He is willing to ready a campsite on the property and help with maintenance. His friend (Richard) has a backhoe/trailer and is interested in donating equipment time and labor depending on what is needed by IKC. His truck can carry 15 tons of stone. Bob S. made a motion to appoint Ray Property Manager/Cave Patron. Danyeale seconded the motion. Vote: Unanimous approval (15/15).

Jerry stated that an important directive for this (and



other) caves is not to let anyone knowingly go into the cave without a liability release.

Keith stated that Dick Vernier found a few misspellings in the last version of the circulated Management Plan, which were subsequently corrected. It was agreed that initially visitation permission would be granted by the Cave Patron only, not the Grotto Liaisons, and that camping would be established in the future. Jeff asked if the access road is shared by any other landowners. Keith responded that the owners of the property east of the cave (that borders State Road 3) would have access to the road. Jeff stated that was his concern. He stated that if we allow camping or grotto access, other landowners may have an impact on their land. Keith stated that parking on county roads is problematic, but if the parking area is hardened and made interior to our property, that problem will be eliminated. Ray will have to scout that problem and get back to us about a budget, etc. The gate needs to be re-hung properly and that will eliminate the visibility of cars parked there, too. Jerry stated that the IKC should not encourage visitation until these improvements are made. Keith stated that the ruts in the road during spring get worse the further you go, ending at a 10-foot sinkhole. Jerry stated that the IKC should not encourage parking at the adjacent church property. Ray stated that he is unsure if stoning to the property on the county road is allowed in this particular county. Perhaps the county can supply the stone. He will check. Jerry stated that Ray is now the "boss" of the property and that if he has any issues he can't resolve, he can direct them to Jerry. Ray should use the Management Plan to determine what is "legal" and what isn't. Jeff asked if we know where previous trespassers were parking. Jerry stated that they probably parked at the church. Danyeale stated that the county road looked as if it was used to access the property. Keith stated that the neighbor has been mowing the road up to our property line. There will probably be some unauthorized visitation no matter what we do. The IKC should put up signs and trail cameras to see what type of visitation occurs. Ray asked if a Spelogger has been installed. Keith answered that the IKC could put one in. Jerry stated that since the IKC is developing a generic kiosk for Shawnee Preserve, that the same kiosk format could be used for this property too, but not one that would attract attention.

To get the discussion back on track, Jerry asked for any further discussion on the Management Plan for this property. Goni asked how the IKC will be dealing with rappelling and liability on the property. Keith stated that it will depend on the Management Plan. Jerry stated that TNC thinks that the cliff face near the creek may be a place where rare plants exist. Before rappelling is allowed, the IKC should recruit a botanist to examine the area. Goni asked if the IKC should therefore put something in the Management Plan to prevent rappelling. She also asked if the IKC

is liable for any injuries that occur from visitors rappelling on this property. Jeff stated that there is no waiver for rappelling, so therefore they can do that without filling one out. The IKC may want to change that. Sue asked if the IKC could combine the "rappelling" liability clause with the cave liability form. Keith responded that it is probably better to have two separate and specific permits. Jerry tabled the rappelling discussion until a botanist is recruited to examine the property. Ray asked if the IKC is liable if visitors are camping on the property and the visitor falls off of the cliff. Keith stated that for typical hiking & camping, the IKC is covered by Indiana's Sportsman Law. Caving is unique and while the Sportsman law does cover that, a waiver is still needed. Rappelling may also need to have a separate waiver. He expressed desire to develop a new, separate release that could also cover other properties. Jerry stated that rappelling should be banned for the next year until a botanist can analyze the cliff plant community. Alan Pursell had speculated that there were rare plants on cliff face and native mussels in the creek. For conservation purposes, the IKC should temporarily ban rappelling. Danyeale stated that Item 13 in Appendix C in the property "rules" should be removed. Keith and Jerry agreed. Goni suggested that the rappelling statement should be worded like the camping section in that it may be allowed later, but for now it's prohibited. Keith stated that the current wording in the Plan related to rappelling pretty much states that so we are okay. Bambi asked if knowledge of this rule assumes that everyone has read the Plan. Jerry stated that the IKC should put signage up to temporarily prohibit rappelling. However, there is nothing stopping anyone from doing what they want. Matt asked if the property will be overrun by invasive species in the near future. Jerry stated that Allen (TNC) didn't think it was that bad, though the property does possess Stiltgrass, bush honeysuckle, and autumn olive. Keith stated that he wants to work with Ray to address the invasives.

Jerry asked for any further questions or comments. Sue made a motion to approve the Management Plan after the addendum to rappelling section. Keith seconded the motion. Vote: Unanimous approval (15/15)

Jerry asked the members if everyone was content with the current visitation policies. Danyeale asked if Ray preferred phone call or email requests to enter cave. Ray answered that e-mail is his preferred method of contact. Jerry requested Ray to not get wholesale visitation going until signage is up. Ray asked how visitation is advertised. Jerry answered that it isn't advertised and that news will travel via word-of-mouth. However, the IKC needs to tell local grottos that the cave is now owned by IKC and that visitors can't just go in whenever they want (this was in response to a recent posting on Facebook by a grotto of a trip to Lowry Cave).





### Land Acquisition Activities

Keith stated that in June, he was able to buy 17.5 acres north of Shawnee Karst Preserve and is also paying for the demolition of numerous structures on that property. It came with 2.5 houses, a horse barn, a stone outhouse, several other buildings, and an in-ground pool. As of last week, all of those buildings are gone except for a 24' x 36' garage. On the north side of the road, there was a house directly on top of Upper Twin Cave that has been abandoned because the septic system had failed. The main passage of Upper Twin is under both properties (acquiring this property would approximately double the protected passage). Keith would like to make this expansion property available to the IKC for purchase in the near future (one or two years). He will enroll it in the Classified Forest program this fall to reduce property taxes. Someone else within the IKC will have to lead the acquisition effort other than Keith because of his conflict of interest in owning the property. The property will likely appraise for between \$50,000 and \$70,000. On a side note, last spring, Gary Whittaker passed away and left the IKC \$44,000 in a Fidelity account. Gary Whittaker was a 10-year member of IKC and liked the mission of IKC, especially cave acquisitions. His bequest could go towards paying for the purchase of the expansion property.

Jeff Cody asked how long it takes to pay off properties. Keith responded that it typically takes about a year. Jerry stated that Tom, Keith, and himself went to the property and looked around a cave sinkhole and found a cave entrance that was not in the ICS database. It was a 30-40 foot cave that is on top of known passage in Upper Twin. It may connect, with some effort. Keith stated that it likely feeds into the cave. The sinkhole takes a lot of water, so it must be going into Upper Twin. Jeff asked if the Land Acquisition Fund numbers in the financial report includes the \$44,000 from Gary Whittaker. Keith responded in the affirmative. Jerry stated that the main house on the property had a sandstone facade. Jerry suggested removing the sandstone from the house and re-purposing it on the ground around the kiosk at Shawnee Karst Preserve. The sandstone recovery was done by Tom and Keith.

Jerry asked Keith when the property should be purchased from him by the IKC. Keith stated that the IKC should first finish purchasing the Lowry Karst Preserve. Since he will be taking a capital loss on the property, it won't matter tax-wise if he keeps it more or less than a year.

On another project, Keith stated that five years ago, he tried to buy another property adjacent to the Sullivan Preserve, but the deal fell through after the owner's bank reneged on their original agreement. As of October 1, he will own this 11-acre tract, and will therefore now own on three sides of the Sullivan property. The property comes with a modular house, two garages, and a "cabin" with a "squatter" that all need to be removed.

The squatter is the granddaughter of the previous owner. Keith has agreed to allow her to stay for one year.

### Education and Outreach Report

Salisa Lewis will be speaking about the IKC at NCKMS in Bristol, VA in mid-October. Salisa is talking about the IKC to attempt to foster participation in NCKMS from other conservancy organizations. Will Orndorff is attempting to ramp up participation in NCKMS. Jerry and Salisa's consulting company donated sponsorship of the meeting and received free advertising for the sponsorship. Their company donated the ad space to the IKC and provided artwork and verbiage for the advertisement.

Laura Demarest was doing a presentation at McCormick's Creek State Park and recruited Jerry to talk about the IKC for the Indiana State Garden Club of Indiana. The Garden Club agreed to reimburse for travel expenses, but Jerry was not seen the money (which he was going to donate to the IKC).

Danyeale stated that the Orientation to Cave Rescue workshop is planned for November 2nd and 3rd. There is scholarship money available for first responders and IKC members. In order to apply, one must go to the NSS website and fill out the NCRC online registration form. Alternatively, one may go to Facebook Central Region NCRC page and sign up there. The workshop will be held at the Mitchell, IN library. A minimum of 15 people are needed and that has already been met. Danyeale will be teaching one section. Keith stated that he suspects that some of the recent new members that have joined the IKC, joined to get the discount for being an IKC member (this was by design). He hopes that they will continue to renew.

Keith stated that Tom Sollman volunteered for Spring Mill cave weekend at end of August. Tom did a presentation and let two trips to Endless Cave. Rich Lunseth did a program also, but neither had very good attendance.

### SpeLogger Project

Dick stated that he built 24 SpeLoggers for the IKC and that Keith sold 21 of them. Keith stated that the residual money will go to the IKC. Bambi asked to whom they sold. Keith stated that USFWS/DNR programs in Kentucky, West Virginia, and Arkansas purchased them. Jerry asked if one could be donated to Lowry Karst Preserve to monitor visitation. Keith stated that one of our older SpeLogger could be used for that.

### Spider Collection Permit for Graduate Student

Jerry stated that Marc put him in contact with a graduate student from East Tennessee State University. The student is interested in *Meta ovalis* research. Jerry will take her out to Buddha and Keith will take her out to Sullivan in October. The student wants many spiders from different caves. Jerry indicated she will need to write a report for newsletter.



Ray stated that a cave in the Crosley FWA is called “Spider Cave” because there were hundreds of spiders in the entrance. Jerry stated that he doesn’t have a permit for that cave and it’s on DNR property. The student can’t publish it or put it in her thesis if she doesn’t have permits for the property. Keith stated that the IKC Upper Twin Cave entrance room will also have *M. ovalis*. Marc stated that the student wants to release the spiders back into their caves. Jerry stated that the student doesn’t need to release them back into cave because the species is common. Asked if there was a motion to approve the collection of *M. ovalis* from the IKC caves. Dick made a motion to approve collection of *M. ovalis* from our caves. Bambi seconded Dick’s motion. Vote: Unanimous approval (15/15).

### Legal Status

There was extensive discussion on the IKC initially being listed as a co-defendant in a lawsuit from an incident in Sullivan Cave in 2017. The IKC was subsequently dismissed from the lawsuit after we filed a counter-suit for legal expenses, as stipulated by our liability waiver that the plaintiff signed. We are now beyond the two-year statute of limitations and can discuss this situation more openly, should there be a benefit to do so. Sue asked why we should disclose anything about this lawsuit. Jerry stated that transparency with the IKC membership is important. However, he feels that the less specifically said about this particular incident, the better. Matt stated that this issue was well-covered in the media and we did not need to get more specific. Asked if there is value in asking about lessons learned from this, Jeff stated that a waiver was what saved us from extended legal action and that this could be a lesson on having a waiver for all cavers. Jerry agreed that the signed waiver saved us. Jeff stated that since it’s a matter of public record, perhaps the IKC Cave Patrons and Grotto Liaisons could use this situation as an emphasis point for having cavers sign the waivers. Danyeale agreed. Keith stated that the IKC should be cautious about what we say. He stated that the IKC could describe what happened, but should not place blame on any party or try to analyze what went wrong. We should however put something in the newsletter about the importance of waivers related to this situation. Jerry stated that he has previously alluded to this situation in his Ramblings column in the *IKC Update*. Goni stated that many cavers are still under the impression that cavers just sign one waiver a year (as was our old policy) and that putting information out that this is no longer the policy could be helpful. Bambi stated that the situation should be a lesson for all cave trip leaders.

### IKC No-entry List

Jerry stated that the IKC does not want to create a new issue, but asked if the IKC should have a means to prohibit problematic cavers from visiting our caves/

properties. Multiple members answered in the negative. Jerry wondered if the IKC should distribute an “IKC no-entry list” to Cave Patrons. Keith stated that if the IKC proceeds with this list, that the IKC would need to notify any one listed about their no trespassing status if they enter one of our properties. Sue read a letter/rule that she developed with Keith about denying access to certain cavers. Bambi asked if the IKC should include the specifics of the letter on the liability release. Keith stated that the liability release is getting too long and that it would be desirable if it was kept to one page. If the IKC were to implement this and circulate it to the Cave Patrons and Grotto Liaisons, he suggests two tiers: a) no trespassing on our properties, or b) cannot be a trip leader, but may otherwise go cave trips. Carla (via Ray) stated that she is against having a no-entry list. Salisa stated that, legally, it might help our standing if we have a list and the members have already been informed that they would be trespassing on our property. Jerry asked if the IKC should investigate the legal standing of having such a list. Informal poll: 14 (yes); 1 (no: Carla).

### Port-a-potty Empire

Keith stated that Bambi’s son-in-law owns A1 Port-a-Potty and has acquired another company which has port-a-potties that do not fit his brand. He is donating one to Keith, and Keith will replace the old one at Sullivan. Do we want one at another property? Danyeale responded in the negative. She states that properties without a port-a-potty have no problems. Jerry asked the cost that the IKC would have to pay to service it. Keith stated that the cost would be \$75 once or twice a year for servicing. Keith suggested that he could put an extra one in storage if needed. Multiple members asked Keith to keep one in storage.

### Items from the Floor

Jeff stated that as a longtime member of IKC and SCCi, he is interested in the differences in how the two organizations are run. He suggested that it would be useful to have an exchange of ideas between different conservancies. Salisa stated that that’s what Wil Orndorff wants to do at NCKMS. Keith stated that the NSS has done this for the past 15 years with a “Conservancy Roundtable” at the annual convention, but is not well participated. Danyeale stated that if attendance is an issue, they could use technology (video conferencing) to increase attendance. Asked the dates of NCKMS. Salisa responded that NCKMS would be held between Oct. 6th – 9th.

Carla (via Ray) stated that we should contribute our membership/support of Indiana’s new Indiana Land Protection Alliance (ILPA). This is a new organization that is struggling and we as the IKC should support them. Jerry stated that he and Keith had walked the Buddha preserve with the first new Executive Director

of ILPA before she abruptly resigned. Currently there is nothing we need to talk discuss, but might revisit at the December meeting instead when annual dues will be due again. Keith clarified that the ILPA is an alliance of Indiana land trusts and has been around for a while, what is new is that they have decided to hire a paid Executive Director.

**December Meeting**

The next meeting will be on December 7th at 10:30 am EST at the Ellettsville branch of the Monroe County library.

**Adjourn**

The meeting was adjourned at 6:24pm

Respectfully submitted by Secretary Marc Milne.

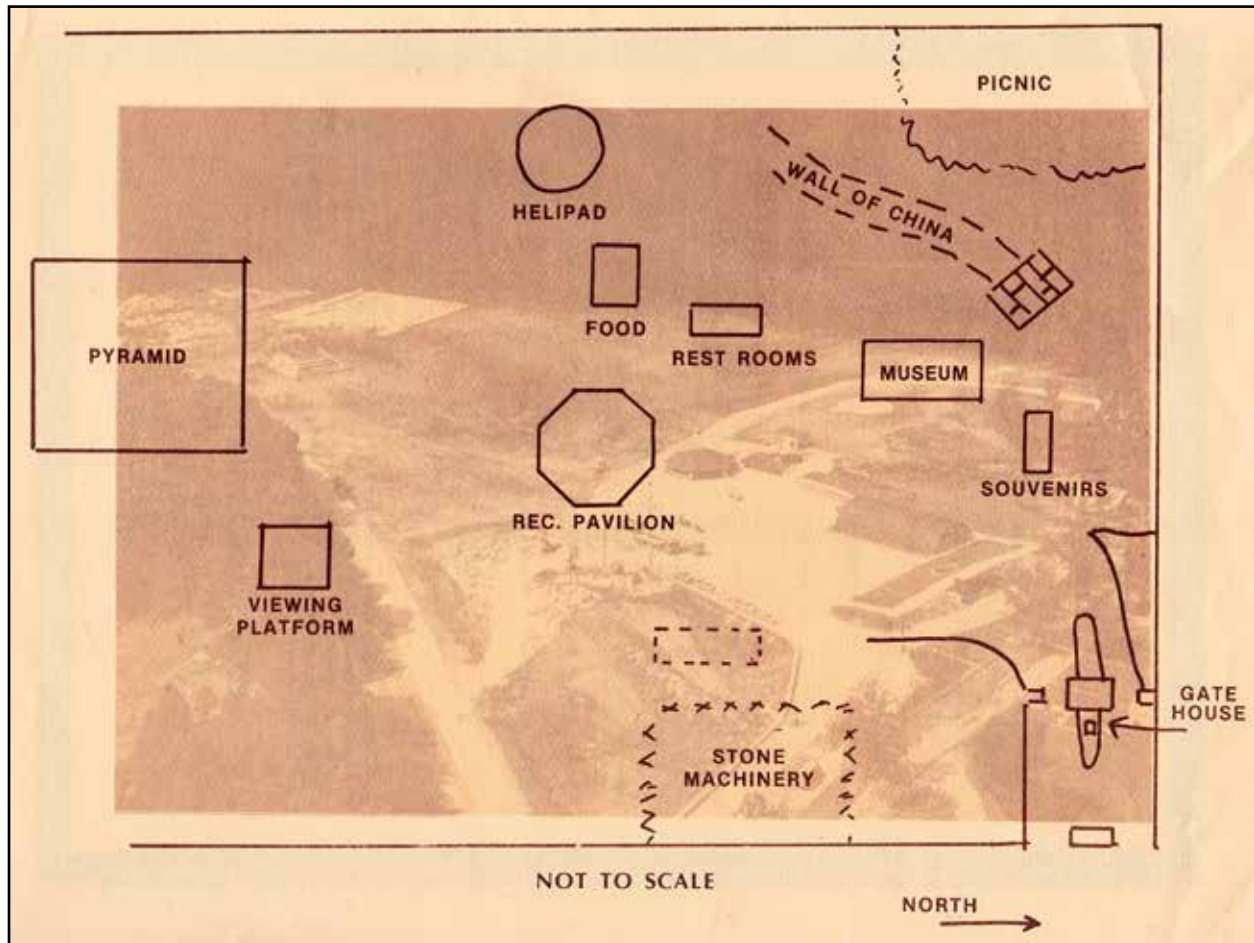


image from John Benton collection

The proposed site map of the ill-fated Limestone Tourist Park, Needmore, Indiana (see article on page 12)

**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.

