

INDIANA KARST CONSERVANCY, INC.

PO Box 2401, Indianapolis, IN 46206-2401

ikc.caves.org

Affiliated with the National Speleological Society



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

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*grottos with liaison agreements

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Cover: Sean Lewis in the Column Room of Coon Cave, Monroe County, Indiana. Photo by Elliot Stahl, July 2008.



IKC QUARTERLY MEETING REMINDER

SATURDAY, JUNE 29th, 10:30 AM EDT BLOOMINGTON, INDIANA WAYNE CAVE PRESERVE

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 promotion of upcoming projects at our various other preserves; Financial reports; Wayne Cave Management Plan revisions; Cave/land acquisition activities (two active projects); EQIP funding contract; Cave Rescue Training; and more....

Stewardship Activities: There will be several work activities at the property (weather permitting) after the meeting including mowing the camping areas, invasive eradication, trash pickup along Gardner Road, etc. If you are so inclined, stick around post-meeting or show up around noon and have some fun.

Directions to the Wayne Cave Preserve: From the intersection of SR 37 and SR 45 in Bloomington, take SR 45 west 1.4 miles to Airport Road. Turn west (right) on Airport Road and continue past the airport to Garrison Chapel Road (approximately 2.7 miles from SR 45). Turn south (left) on Garrison Chapel Road for about 1/4 mile to Gardner Road. Turn west (right) on Gardner Road for approximately 4/10 mile and look for a driveway on the left (street address 8307). GPS 39.1326/86.6496

Rain Contingency: If the weather is problematic, the meeting will be moved to the home of Danyele Green, 6888 E Bender Rd, east of Bloomington. Check with Danyele (317-370-7891) on that decision if not obvious.

ACTIVITIES CALENDAR

Jun 29 – IKC Quarterly Board Meeting (see above)

Aug 2-4 - Cave Capers, Crawford County Fairgrounds (Marengo, IN)

Sept ?? – IKC Quarterly Board Meeting (date & location to be determined)

Nov 2-3 – Orientation to Cave Rescue (sponsored by the IKC)

For more information on the Indiana Karst Conservancy, visit our website at *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.

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RAMBLINGS FROM THE PRESIDENT...

This episode of Rambling is dedicated glances into some aspects of the IKC that folks may not be familiar with: 1) being the President of the organization, and 2) being a Cave Patron,

First, as President, I get all sorts of stuff to do. Some of it is fun, like riding on the parade float with the homecoming queen, or kissing babies at supermarket openings. Other IKC tasks are less fun, like having my name on the top line when the IKC receives legal notifications, or the issue that this ramble focuses on below. I discussed briefly in a past Ramblings that the IKC had lost its liability insurance due to an incident resulting from

a cave club trip into one of our caves. If you've heard me talk about anything recently (other than, of course, fascinating cave critters...) it's probably been about waivers for cave trips. The IKC now has to absolutely insistent that everyone entering one of our caves fill out a waiver and get it submitted to the Cave Patron before their trip. As cave owners, this is the IKC's first and most important line of defense against liability issues. If you're still clinging onto the notion

that cavers don't sue cavers, I'd suggest you come into the reality of the 21st Century. *There can no longer be any exceptions, and this includes everyone.* I went in Buddha Cave last month and I submitted a waiver before I went in the cave. Even the President is not above the law.

Recently I received an email from Kevin Smith, the Cave Patron for Suicide Cave, about an issue he had. I've deleted the name of the offender to protect the guilty, but otherwise here it is:

"Just wanted to report that _____, a member of the CIG, visited Suicide Cave the weekend of Feb 23rd. After repeated attempts, by myself and Danyele Green, I have been unable to get him to respond to my requests, much less provide waivers and to return the key to the cave. Scottt Frosh visited the cave the first week of May, and after talking with me, he mentioned that

there may have been similar issues with Mr.
_____on a previous visit to Sullivan Cave.
In the future, I will not allow Mr. _____to
lead a trip to Suicide Cave. This behavior
is irresponsible and disrespectful. I have
replaced the lock/key to this cave."

I then inquired with our Sullivan Cave Patron, Paul Uglum, and learned that indeed, the same thing had happened with Mr. _____ regarding a trip to Sullivan last year. Finally, I brought this to the attention of the CIG and it was noted that the person in question had formerly been a member, but had not paid their dues and was not at

present affiliated with the grotto, despite indications to the contrary.

Let's do a little math on this. Since the errant caver refused to return the key to the Suicide Cave gate that was entrusted to him, that meant the lock had to be changed. Just for simplicity's sake, let's say a new heavy-duty pad lock and several duplicate keys cost \$25. Now the lock has to be put on, and by my calculations it was about a 215-mile round trip for the Cave Patron to drive from his home to

to drive from his home to Suicide Cave, swap out the lock, and drive home. The 2019 IRS rate for mileage is 58 cents per mile. That adds up to \$124.70 of gas and wear and tear on Kevin's car, added to \$25 for the lock and keys, giving us a total of roughly \$150 for this episode (and equals the annual dues of *ten* IKC members). We'll also pretend Kevin had nothing better to do with his time than to spend most of a day dealing with this... and while we're at it, we can pretend like I have nothing better to do than deal with the backlash from this guy's poor attitude, and how to prevent it from happening again in the future. All because a caver feels so entitled that he blows off all the rules.

I must add before going further that the vast majority of people going in our caves play by the rules. They're simple... Read and complete the waiver and return before the trip, obtain the key if needed, and go caving in a safe, responsible way. Is that too



much to ask? When the IKC provides you with a key to one of our caves, the price of that admission is that we are trusting you to provide the liability waivers and return the key promptly. And as far as we're concerned, you are staking your reputation on keeping up your end of the deal.

Now back to Mr. ____. I'd be interested in hearing what you think we should do about this sort of situation. From my perspective, I'm pretty sure that the NSS in general and the grottos in particular still educate new (and old) cavers about caving etiquette, and especially how to treat cave owners with the upmost respect and attention. If I had a cave on my property and a caver pulled this stunt on me, for starters I'd never let him step onto my property again. And I'd be thinking really hard on whether or not I wanted to let anyone go in my cave again. What's in it for me to let you go in my cave? Remember, visiting a privately-owned cave is a privilege, not a right. And while the IKC is not your typical private landowner, visiting our cave still should not be taken for granted.

One of the missions of the IKC is doing education and outreach. That said, I think we've assumed that cavers are already on-board with at least the caving basics, including etiquette. This is generally viewed as being information that is conveyed to neophytes by grottos or other organizations, although in the case of Scout groups or other people going on cave trips of that ilk, someone like Paul Uglum will lead the trip and be sure everyone is up to snuff on what's what. This leads me to wonder what went off the rails in the education and training process where some-____ (who was reportedly affilione like Mr. ated with a grotto) can behave in such an asinine manner toward our Cave Patrons?

As the President of the organization it is important to remember that I'm only the President and as such, I'm frequently the point man for the organization, but in all things concerning the rules and regulations of the IKC, that is a matter for contemplation by the Executive Board. As a matter of process when there is a problem, I'm more often than not the person who gets to hear about it first. When it's a problem concerning one of caves, as far as I'm concerned the Cave Patron is the ruler of the roost. So when Kevin isn't leading any more trips into Suicide Cave, I back that decision 100%. When I hear from Paul that the same guy created the same problem at Sullivan Cave, then as far as I'm concerned, the IKC is done with Mr. ____... he need not ask to lead a trip into one of our caves ever again, and as far as I'm concerned, I don't even want him as a participant on any trip into any of our caves. The world is full of caves, so he can go be someone else's problem.

Sadly, this is going to have to be a conversation for an upcoming Board meeting. As a parent, the model for how to deal with errant behavior of your kid is simple. You provide a rule and when the rule is broken, there are consequences. If there are no consequences then there are, effectively, no rules, and then the kid learns that, they can do what they want without concern of repercussions. But that's dealing with kids, and theoretically this is a discussion about adults. I'd like to hear your thoughts on how to deal with individuals who won't follow the IKC rules concerning checking out cave gate keys and returning liability waivers.

Jerry Lewis

NEWS BRIEFS...

- □ At the IKC Annual Business meeting on March 23rd, Jerry Lewis, Marc Milne, and Keith Dunlap were re-elected as President, Secretary, and Treasurer, respectively. Danyele Green and Carla Striegel-Winner were re-elected Directors, while Jeff Cody and Goni Iskali became new Directors. The full list of the Executive Board can be found on page 2. Our immense thanks to retiring Directors Everett Pulliam (9 years on the Board) and Jamie Winner (16 years on the Board).
- □ Also at the March IKC meeting, Danyele Green was selected as the new Wayne Cave Property Manager, replacing Robert Sollman who asked to be replaced after serving in that position for fifteen years. Danyele will continue the existing stewardship responsibilities at the recently-expanded property and take on the new task of executing the EQIP funding contract we initiated with the Natural Resource Conservation

2019 INDIANA CAVE SYMPOSIUM RECAP

by Keith Dunlap

The new Orange County Community Center in Paoli was the venue for the 27th annual Indiana Cave Symposium, which was held this year on April 27th. The Symposium was once again co-hosted by the Indiana Karst Conservancy and Indiana Cave Survey, with each organization splitting the facilities rental and food expenses, which included burgers, brats, and pork rib entrées, along with buns, condiments, and soft drinks. Approximately sixty attendees helped out by bringing side dishes, desserts, chips, and the like to complete the cookout for the first part of the event. The program part of the Symposium began promptly at 6:30 PM. The following summarizes the presentations:

- Cave fauna of the Garrison Chapel Karst Jerry Lewis. Jerry covered some of his recent cave biology work in Coon, Grotto, and Salamander caves, as well as some area springs. He was proud to announce that he had re-discovered a rare cave species that was thought to have gone extinct.
- Aquatic Fauna of Upper Twin Cave Tom Sollman. Tom presented a summary of his extensive census work in Upper Twin Cave (Spring Mill State Park and the IKC's Shawnee Karst Preserve). In addition to the numerical observations (mostly on cavefish and crawfish), he also looked at various statistical/functional regressions which will improve the repeatability of future census in this cave (as well as other caves).
- Preliminary Look at Hunting Snakes in Wyandotte Cave John Benton. John's presentation was on the multiple native American snake pictographs recently discovered in Wyandotte Cave. Much more work is needed to understand this impressive artwork and John is currently waiting for a research permit from the DNR to continue with the documentation and carbon dating.
- The Mitchell Plateau Karst Observatory Lee Florea. Lee explained this Indiana Geological & Water Survey project including long-term goals and some current activities including various monitoring stations at Bluespring Caverns and the Orangeville Rise. He also demonstrated a GIS-based website being developed for documenting sub-surface dye-tracing within Indiana.
- Oral Histories of Indiana Caving Matt Pelsor. Matt is the host for *The Caving Podcast* and shared with the audience a number of interesting audio recordings from various Indiana cavers he has interviewed over the past few years.
- Cave Maps: the Art of Cave Survey and Cartography Marion Akers. Marion shared her knowledge and technical skills in sketching/data collection while conducting in-cave surveying, and also in preparing accurate, meaningful, and *artful* cave maps.
- Binkley Update a Year Too Deep! Rand Heazlitt. Rand provided a very detail and in-depth summary of the numerous activities in the Binkley Cave System over the past year. Much of the work was on connecting ancillary caves into the main system.
- A Packed Year at the RBNP-Anmar Mirza. Anmar detailed the numerous projects happening on the Richard Blenz Nature Preserve and in particular the significant work being done to transform Blenz's residence into a caving community resource.
- The Cave RoverTM Project Christopher Dick. Chris shared his enthusiasm in developing his various caving "rovers" robots for multiple functional possibilities. He did several live demonstrations.



hoto courtesy Jerry Lewis (2019)

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

A LOOK BACK AT INDIANA KARST

by John M Benton

This issue's Look Back is an interview with long-time caver Gary Roberson conducted on April 15, 2019. I've know and caved with Gary for over 50 years and it was a pleasure to capture this bit of history.

How did your caving career begin? Do you recall your first cave trip; any details, who with, where, first impressions? When did you join the NSS?

My first cave exploring adventure was as an eleven year old, Tenderfoot Boy Scout. It was

my first camping trip as a Scout and just happened to be to Cave River Valley, north of Campbellsburg, Indiana. It was a wonderful place at that time run by State Senator, Victor Green of Pekin. There were trout pools, cabins, etc. A wonderful older couple lived in the log cabin headquarters. I remember them inviting us Scouts up for popcorn over the fireplace. The Jiffy Pop pie pans with aluminum foil over the popcorn had recently become available and we popped

corn over an open fire while the lady played church hymns on an old pump organ that she worked with her feet. Great memories!

While on the camping trip, we explored at least four of the caves. My first adventure was in Lamplighter's Cave, which just had been found a year or so before. I remember the senior patrol leader, Richard Heavrin, burning his lip on the top of a Coleman lantern as he tried to squeeze into the low crawl at the bottom of the entrance chimney. It made a huge impression on an eleven year old boy and I was hooked. When I turned sixteen, I took kids from my neighborhood to Cave River Valley the day I got my license. That turned out to be another interesting adventure, but for another time.

I went to my first Louisville Grotto meeting in 1965 and joined the NSS in 1966. However I was an active caver from the day I received my driver's license in 1963.

Please talk about your background, where you were raised, schools and colleges attended, your working career?

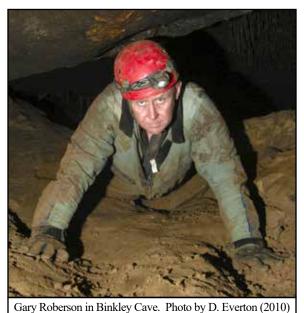
I was from birth in New Albany, Indiana and attended New Albany High School where I met Terry "The Dog" Crayden, who a few years later formed and led the Indiana Speleological Survey (ISS). George Jaeggers and Ken "Bear" Hoover were also in my graduating class. I attended Vanderbilt University in Nashville, Tennessee from 1965-69. I majored in Business Adminis-

> tration and had only one college geology course. I still have the book. It has one small paragraph about continental drift and no mention of plate tectonics. I guess you could say we were still in the "dark ages".

While I was at Vandy, I was a member of the Nashville Grotto, which met at the Vanderbilt campus. Lots of now-wellknown cavers were in that grotto then. Roy Davis published our newsletter and Larry Matthews, who writes all the books about

Tennessee Caves, was in my graduating class. I did a number of sightseeing cave trips in Tennessee, but my heart was in Binkley after my first trip there in 1967, so many weekends I rode the L&N train home (my dad was VP of the L&N) and Terry Crayden picked me up to go caving in Binkley. I got my first real full time job at Capital Holding in Louisville by sleeping in after a long weekend cave trip in Binkley and skipping class. I was laying in bed and got a call from one of my professor's that a recruiter didn't have enough people sign up for interviews. I got the job and came back home to start my career and continue working in Binkley Cave.

I left Capital Holding in 1974 to go run Marengo Cave, which I bought in 1973 along with cavers, Terry Crayden, Gordon Smith, and J Patrick Stephens. Prior to Marengo, I helped develop Squire Boone Caverns with Terry Crayden and Ken Hoover on weekends from 1971-1973.



Eventually, J Pat and Terry sold their interests in Marengo to Gordon and I. I continued running Marengo until 2001 when my wife, Laura and I, sold our interest to Gordon. I then worked for a few years as CFO of Noah's Ark Children's Village, which provided Christian homes for foster children. I then was in real estate with Laura from 2009 until we started developing Indiana Caverns in 2012. I have been CEO of Indiana Caverns since it opened in 2013.

Who were your caving mentors?

Terry Crayden and Roger Sperka. Of course, I spent a lot of time with Lewis Lamon and we also stopped in his hardware store ever time we were in Corydon. However Lewie was past his prime caving days by the time we knew him.

Do you have a favorite cave? Details please?

Binkley is certainly my favorite cave. I have been involved with it either caving or through Indiana Caverns continuously since 1967. After we sold our interest in Marengo in 2001, I went back to Binkley project, got it going again, met Dave Everton in 2008 and wound up doubling the length of the cave between 2009 and 2014. The years from 2009-2011 just before developing Indiana Caverns were a great climax to my active caving career. I was able to participate on some really great, long survey trips in my early 60s. It makes great memories now; but I almost undertook more than I could handle on a trip through the Grand Ripper at the top of Grand Falls in 2013. If Tim McLain hadn't loaned me a trash bag, I might not have made it out.

I also really liked Dog Hill-Donnehue back when you didn't have the culvert entrance. Of course, I still have great affinity for Marengo Cave and especially the New Discovery, which was found in 1992 when I got Dave Black to recruit some cavers with time and skills to push the Blowing Bat Crawl. It took them only a few hours to make the break-through.

Outside of Indiana, I would guess Blue Spring Cave in Tennessee is my favorite along with Nichol's Blow Hole, which I almost developed as Tennessee Caverns in 2004.

What grottos and caving clubs have you been involved with over the years? You were one of the founders of the ISS, please talk about that?

I have already mentioned the Louisville Grotto and Nashville Grotto. I was active in the Louis-

ville Grotto from 1969 (after graduation from college) until the time of the development of the Lone Star Preserve. That is one of my least favorite memories of caving. Let's just say some people in the Louisville Grotto didn't follow Robert's Rules of Order in the way Lone Star was handled. I and several other cavers left the Louisville Grotto after that episode. The interesting thing is although the purchase of Lone Star was not handled correctly, it has turned out to be a good thing anyway.

I was also a member of the now defunct Harrison-Crawford Grotto for a number of years.

I was one of the charter members of the ISS along with several cavers from New Albany and Purdue. Terry, Ken, and George along with me hailed from New Albany. Richard Newton, Jim Geeding, John Turner (who wound up marrying Lewie Lamon's daughter Mary Ann), and about six to eight other Purdue Outing Club members were the initial members. While the ISS has generally been a pretty loose-nit organization, we did have actual meetings at IUS for a short while, and were an accredited non-profit until we quit filing reports. The ISS still exists as a loose-nit organization of project cavers after 53 years.

Please discuss your involvement with show caves you've been involved?

As mentioned previously, I helped develop Squire Boone and was a stockholder for a while. The project started when Fred Conway approached Harvey Binkley about buying [the historic entrance to] Binkley Cave in 1971. Harvey told him he would sell it to us "boys" first. I called Fred. He came to my mom's house and I showed him pictures of Squire Boone and Fred bought the property without ever seeing it. Then he asked if us cavers would develop it for him. Terry, Ken, and I agreed to do the work for stock in the business.

The summer Squire Boone opened, Gordon Smith approached Terry, Ken, and I along with J Pat Stephens about going in with him to buy Marengo. Ken decided not to participate, but the rest of us did. Terry was the first manager for a year, then I took over.

After selling our interest in Marengo, I reactivated the Binkley survey project. By 2003, I was seriously thinking about developing the cave with Terry's help. We couldn't get the landowners needed to work together. So I decided to try to develop Nichol's Blow Hole in Tennessee. We went so far as getting an option on the land. However I found out through a

cave radio survey that a key piece of the entrance passage was on a hostile landowners property. That killed the deal. In 2010, the part of [Binkley] cave that was to become Indiana Cavern's was found. Rand Heazlitt, who had seen it, told me that he thought it might make a good show cave. I got to see it in 2012 on the trip in, which we connected Binkley and Blowing Hole, and three months later development was underway.

You play a little different role, not only as a long-time caver, but as a cave owner, Squire Boone and Marengo Cave in the past, and now Indiana Caverns (part of Binkley Cave), and

as a cave manager and cave-steward, has that had any issues, problems, or rewards?

Like any other business, there are both joys and tribulations. Anytime you work with people there are issues. I will say that I believe God has blessed me with the opportunity to spend almost all my life working with caves in one capacity or another. I believe it was my destiny. Few other cavers have had the opportunity to both enjoy a lifetime of

survey and exploration, and also work daily at a cave they own. When you are at a cave every day, you get to see things (especially concerning cave life and their habits) that no one else gets to see.

You have authored several cave related books, starting with the early ISS History on Binkley Cave, now Indiana's longest at over 44 miles. Please elaborate on those books? Do you have plans for more?

I wrote Fifty Years Under the Sinkhole Plain in 2007-09 to document all the old ISS work in Binkley Cave. We couldn't seem to interest any younger cavers in working in a cave that is cold, wet, muddy, and very demanding. Little did I know that writing the book would lead me to Dave Everton, and a total revitalization of the project. I will add that White Nose Syndrome closing all the cave's on state property made more project cavers in Indiana interested in working on the project than probably would have happened otherwise.

After the discovery of the McLain River master stream in 2014, I wrote the Geology of Binkley Cave. We really didn't have a good idea of the overall geology until that discovery. As a caver, I wanted Indiana Caverns to have a book about the geology, so I wrote it. It sells pretty well.

The Longest Year documents our 380 days development of Indiana Caverns in 2012-13. I will only say it amazing and only God's grace that we finished it and didn't kill anyone. Looking back

> on it, starting development of Indiana Caverns with only a five person crew of whom two (Terry and I) were 65 years old, a third Rand was 50, and two young cavers was life on the edge and probably asking for trouble. I truly believe, if we had waited six more months, I don't think we physically would have made it. Rand was battling a life-threatening problem and didn't know it. I think everyone involved would agree that it was probably the hardest

Gary Roberson with daughter Amanda. Photo by D. Black (2013) thing they ever did. I am

grateful that Rand and Dog didn't give up when we all wanted to. I think any caver would enjoy reading the story. It was quite an adventure.

I do have plans to write a book about the renewed ISS and Binkley project from 2009 to present when I retire from Indiana Caverns.

I also think I may write my biography. I think I would enjoy that process of thinking back over my life and preserving some of our family history.

Most memorable cave trips, good and bad, why?

My most memorable trips:

- 1) First trip in Binkley (1967) After we went through Big Break and blew into big cave and ran in big passages for several hours. I was literally hooked for life.
- 2) Lamplighter's Cave, first cave trip (1958) started me on a lifetime of cave adventures.

- 3) Doghill-Donnehue through trip (1963) cold water in Donnehue, warm water in Doghill, and terrible cramps on the way home.
- 4) Grand Ripper Trip (2012) Trip where I was someplace I probably shouldn't have been and made it out alive.
- 5) Upper Blowing Hole Trip (2012) Longest trip at advanced age.
- 6) First Blue Spring Cave, Tennessee trip (circa 1980s) Just spectacular beautiful cave. Walk for miles without bending over in dry passages with gypsum needles etc. Unheard of for Indiana cavers.

Has your long time wife, Laura or family been involved in caving?

Laura and I married in 1981. She had been my partner in business and life ever since. I could not have held up under the stresses of undercapitalized show cave businesses without her at my side. She is not a caver, but supports me. She did go into the New Discovery at Marengo with us through the Blowing Bat Crawl a week after it was discovered. She promised God in the middle of the crawlway that if He got her out of there, she wouldn't do it again.

Both of my kids, Troy and Amanda, have done some caving, but don't have a passion for it. Troy did go on one very memorable Louisville Grotto trip to Tennessee with Charlie Fort, and we still talk about that trip today. I think my kids admire what Laura and I have accomplished, but think we are nuts for working so hard all these years.

You were voted an NSS Fellow and have received the Central Indiana Grotto's Lewis Denbo Lamon (Indiana Caver of the Year) award, please talk about what those mean to you.

As I get older, it is always good to feel appreciated. Many people have done much more for organized caving than I have. I am a project person – not a consensus builder – so my accomplishments are work on specific projects whether cave survey and exploration, show cave development, or writing. Since I am a project person, I am generally looking forward rather than backward. However getting the Lewis Lamon award from Indiana cavers, and a Vista award from the State Tourism department for a lifetime of achievement in tourism development are very meaningful to me.

Today as my show cave career winds down and most of my active caving is behind me, I am looking forward to having more time to travel and to document more history from Binkley and my other adventure.

Anything you'd like to add or talk about, free rein?

God has given me an opportunity to live a life of adventure in a modern age when most of what we normally call "frontiers" have been explored. I don't think all that has transpired is a coincidence. I think it was His plan for my life. It hasn't been an easy journey so far; but it has been rewarding for me none-the-less. I still look forward to the next adventure around the corner.

ANNUAL CAVE PATRON / PROPERTY MANAGER REPORTS

Each year at the Annual Business meeting, the IKC Cave Patrons and Property Managers are asked to present a verbal summary and submit a written report describing the prior calendar year's activities and incidents, and to make any future recommendations needing implementing. The following is a compilation of the reports for 2018:

Buddha Cave Patron Report (Jeff Cody)

This year we had a total of 10 groups visit the cave with permits. A total of 59 cavers filled out waivers for these trips. Nine of these trips were arranged through myself and one via the BIG Liaison (Dave Everton). Typically Dave arranges more trips than I do. I had at least two groups that made ar-

rangements with me, but did not go. Some are still not aware of the need for a ladder to access the upper level. This is a slight increase over recent years. The 2018 Indiana Cave Capers was held nearby, so I suspect Buddha was the closest significant cave to the site. We had two trips from Capers for a total of 15 on those trips. Thanks to Keith Dunlap for mowing prior to this event. I made two trips to the cave this past year, one on April 22 with Tony and Marion Akers; and I made a quick visit to the property on August 18 on my way down to Capers for a quick check on the property. The cave appeared to be in good condition. I did notice quite a bit of flood debris in the lower level. Another notable trip was on December 9th led by Dave Schaefer. This trip was

done without any vertical gear at the canyon as Dave knows the correct climb down into the lower level before getting to the obvious drop off spot. I knew others had done this in the past and it involves a low wet area that may be seasonal.

As mentioned earlier, the cave appears to be in good shape, so far we have had no issues since the necessity of the ladder to enter the main passage from the entrance room. I am a bit concerned with the possibility of an issue due to incorrect ladder placement. I would suggest maybe placing a bolt somewhere on the ledge as an anchor point to secure the top of the ladder or to use as an anchor to get back down with SRT, if the ladder tips over when people are in the cave. I do not remember seeing a suitable natural anchor anywhere close. I do know the Board may not be crazy about placing bolts, but I am one to take safety over conservation if given the choice. My concern is due to unlevel ground in the ladder placement area. It can be done, but one has to use common sense. This is just my opinion and I suspect others have different opinions.

Buddha Property Report (Keith Dunlap)

Last fall we culled approximately 50% of the oak trees that were planted in 2006. That planting had a very high survival rate and the spacing matrix was dense, so removing some of the trees should help the growth rates of the remaining released trees. The removal also reduced the "plantation-like" appearance of that area.

This is the second year since we started planting trees in 2001 that we did not do any weed control related to trees. While more weed/fescue control would be helpful, it is not a high priority.

The large tree that was down on the trail towards the back of the property was cut to allow trail mowing. I could not determine who cut the tree.

Two emergency information signs were installed on posts on the property (one by the kiosk, and one near the entrance to Buddha Cave).

There were no major management problems or concerns encountered during 2018.

2019 activities I hope to accomplish:

- Continue mowing the trails.
- Continue working on the grapevines at the back of the property.
- Plan for the removal of the dying Ash tree by the parking lot gate.

Sullivan Cave Patron Report (Paul Uglum)

Sullivan Cave remains a frequently visited cave and as a result requires scheduling to prevent parking issues on high use weekends. Groups experience levels range from very experienced cavers traveling upstream to the Rise, to various youth groups with limited or no wild cave experience making trips to the Mountain Room and back with an experienced caver as a guide.

For 2018, there were 80 trips with a total of 530 participants. Most trips were arranged through the IKC Cave Patron and BIG liaison. Although the number of trips remained the same as last year, there were more trips with only 3 or 4 participants. Group sizes range widely, from 2 to 18 participants, with the average of 6.6 participants per trip. More experienced groups tended to be smaller and led youth groups larger.

Five of the trips included camping on the site, a slight decrease from last year. There were an additional four trips that were scheduled through the IKC, but did not take place due to weather, too many participants backing out, or because Sullivan's was the back up plan and was not needed. One trip was rejected for a request for same day visitation for which a key pick up could not be arranged.

Several out of state grottos have had trips including Near Normal, Dayton Underground, Windy City Grotto, and Cleveland Grotto. The West Virginia University Caving Club had one trip and Purdue Outing Club had four trips.

There were 20 additional inquires, up from 7 last year, that did not result in a trip. These were generally non-cavers who did not respond to replies after I explained that Sullivan was a wild cave and what the IKC rules were.

In December, Sullivan Cave received some unwanted and incorrect publicity in My Indiana Home Magazine and in their on-line version. The article "Five Natural Attractions You Must Visit in Indiana" did have the e-mail for Sullivan Cave correct, but listed the location as Springfield in La Porte County (rather than Springville in Lawrence County). The on-line version of the article has been corrected and encourages anyone who wants to visit a wild cave to work through existing caving clubs or take the wild cave trips of commercial caves. So far there have only been two enquiries based on the article. [editor's note: There is a bit of irony about this article promoting visitation to Sullivan Cave in that just months before it's publication date, our liability insurance carrier, Farm Bureau Insurance, dropped us due to an incident at the cave. Oh, did I mention that the magazine is published on behalf of Farm Bureau Insurance to emphasize how great of an insurance company they are?

I lead four trips to Sullivan including a CIG beginner's trip again this year. In general, the

cave is in good condition considering the level of visitation. Some additional damage appears to be occurring despite efforts to educate users about leave no trace caving. It would be good to set up some efforts to remove non-historic graffiti in the Backbreaker and remove any trash that has accumulated in the Mountain Room.

There was one incident when a caver fell while climbing down to the Sullivan River upstream of the South-Y after negotiating the Popcorn Crawl. He landed poorly resulting in a partially collapsed lung and difficulty breathing. He was largely able to make his way out of the cave by the time outside assistance was able to reach him. On the side of caution, the injured caver was transported by ambulance to a hospital and has fully recovered. There was a second group in the cave and they locked the gate as they left the cave, delaying assistance efforts. In the future, an emergency key will be available.

Skill at completing waivers correctly seems to be lacking, in a couple of cases the wrong lines were signed. Various earlier versions of the waiver have been provided from some participants. Instructions on IKC expectations on filling out a waiver and instruction to use only the latest version (available on the IKC website) have been added to communications with potential trip leaders.

Most trips were requested via e-mail and keys mailed to the trip leader and returned by mail. The postal service has not impressed me... a new record of nearly two months for delivery has been set. A second key was provided so the trip was not delayed (the first key was sent Nov 5 and received Jan 4). I encourage anyone wanting to visit Sullivan Cave to plan ahead.

Locks have been replaced as needed, but the SF series remained the same throughout the year.

Opportunity #1: As with last year, an in-cave cleanup/restoration project would be a good idea. There are parts of the Backbreaker that have far too much graffiti in some locations – this tends to encourage more damage in my estimation. It would also be good to have a general clean up.

Opportunity #2: There are more beginners who would be interested in visiting the cave if they could find someone to lead them. I generally direct them to the local grottos and the CIG introduction to caving class at REI. I do not have a good solution, but the interest is there if anyone has a workable solution. It would be useful to create a list of those who are willing to lead an occasional trip with a youth group.

Sullivan Property Report (Keith Dunlap)

This was the IKC's 20th full year of ownership

and we continue our long-term stewardship projects, but otherwise we are in "maintenance mode".

The "camping" area and the area out by the highway were mowed three times last year. Twice during the growing season, and once after all the leaves were down to mulch the leaf cover.

The lane/parking areas are for the most part in good shape and no major maintenance is anticipated for 2019. There was some rutting from heavy rain in the driveway near the gate.

Several members and a few youth groups which took advantage of the camping area and firewood over the past year. We are still discouraging campers from bringing their own firewood to reduce Emerald Ash Borer transportation, although EAB is now widespread in Lawrence County.

Locks are being serviced by Paul Uglum, the Cave Patron.

In August, I treated the Stiltgrass in the upper half of the camping area with 0.25% Clethodim and MSO. In 2017 I treated the lower (more infected) area. It does appear that the treatments reduce the amount of the annual invasive grass, but it also appears to have impacted the "good" perennial grasses too. We probably need to overseed the camping area in the fall with a more hearty grass like tall fescue if we plan to continue the Clethodim treatments.

The port-a-john was supposedly serviced once last year (late fall). However, we did not receive an invoice for this service.

An emergency information sign was installed on a post at the east end of the parking area adjacent to the trail down to the cave.

There were no major management problems or concerns encountered during 2018.

2019 activities I hope to accomplish:

- Systematically walk the woods to remove grapevines, per the suggestion of the DNR District Forester.
- Perhaps spray the camping area again in August to control the Stiltgrass infestation (up the dosage).
- Over-seed the camping area with tall fescue that will be more hardy.
- Put a new roof on the "wood shed".

On the adjacent property to the east, some additional cleanup around the home site is needed and some earth grading is planned to restore the area. Overflow parking is available there and I have been keeping an area mowed for alternative parking and camping.

Wayne Cave Patron Report (Dave Everton)

OK, so how many people are reading and thinking, "Oh, no – another regurgitated Everton report?" To those folks, I salute you, and offer a surprise: I've switched up the usual pain and suffering, and will deliver a different flavor with a Q&A session!

Question: How many trips did you approve this year? **Answer:** Wayne Cave had 17 trips.

Question: How many cavers visited the cave? **Answer:** Wayne Cave had at least 91 visitors.

Question: What do you mean, at least? Do you not maintain records? Are you not doing your job?

Answer: Cavers can be naughty once in a while, and perhaps a bit self-entitled, which is understood. During 2018, someone used one of two keys generously allotted for use during Cave Capers, but I wasn't given the details on how many cavers went. However, thanks to a responsible CIG caver, the key was eventually returned to me.

Question: Did anyone visit more than once? **Answer:** As a matter of fact, yes. We have some masochists out there, but they've sworn me to secrecy.

Question: Did grottos with IKC Liaison agreements visit the cave?

Answer: The CIG made three trips and the Near Normal Grotto made one.

Closing Comments: Because of the IKC, cavers have many opportunities to visit caves that would otherwise probably be off limits. That also includes the IKC partnership with the IDNR in the Interim Cave Access Program. Here's a special thanks also for pursuing new insurance last year, in order to allow continued visitation to the caves. Thank you IKC, for continued cave and property protection and access!!

Wayne Property Report (Robert Sollman)

For 2018, several cave trips to Wayne Cave included overnight camping in the clearing on the hill-top with no problems.

Property Maintenance:

- The combination lock is still functioning and has been oiled several times.
- Trash was removed from the clearing and along driveway.
- Routine weed-eating and mowing of parking lot and adjacent camping sites.
- The trail to the cave was cleared of debris and mowed.

• There were no major problems or concerns encountered during 2018.

Future Projects include:

- Continued construction of informational boards for kiosk.
- Routine maintenance of property.
- Expand our invasion control effort.

Robinson Ladder Property (John Benton)

January 27, 2018: Biennial bat census at Robinson Ladder Cave (RLC). Attending: Tom Sollman, Keith Dunlap (both IKC), and the Indiana DNR people. Weather was sucky with a constant rain. Total count was four Big Brown bats... almost as many bats as counters.

March 13, 2018: A request was made from Megan Crecelius, IDNR, Inventory Forester, to remeasure a CFI plot (Continuous Forest Inventory) within the RLC classified forest property. The data collected helps gain a better understanding of Indiana's forest species composition, forest quality, overall health, growth and mortality rates, presence of diseases, and pests or invasive species. The plot measured is a circle with a 24 feet radius. Permission was given for the request, but I heard no feedback if the visit was indeed done, or the findings.

April 28, 2018: A mini-work day was held at the RLC property, in just over four hours a lot was accomplished. Volunteers were Keith Dunlap, Jamie Winner, Tom Sollman, Everett Pulliam, Glenn Kotnik, Danyele Green, and Tymme Laun. It was perfect weather, but a little breezy for spraying. Items accomplished:

- 28 dead or struggling trees were flagged with purple flags (~40% were butternut and the remainder were chestnut).
- Replacement holes were dug for the 28 trees.
- 24 butternut trees were planted with green flags.
- Color-coded weathered flags were replaced where necessary for species identification.
- All trees were top-flagged with red flagging tape for easier visualization for future mowing/weed treatment.
- Most trees were treated with 2.5 oz. of 12-12-12 fertilizer.
- All trees were treated around them using glyphosate (post-emergent) and Pendulum (pre-emergent) herbicide.
- Volunteer tulip poplar trees were culled from

inside the fenced-perimeter as they were "outcompeting" the preferred trees.

- Emergency info sign post was installed and the sign mounted at the start of the trail near the lower parking lot. This sign has contact info in the event of an emergency, similar to other IKC property signs posted.
- Hand trimming of branches along the entrance lane was done.
- A lane was cleared into the woods to the wildlife pond on the Campbell tract, to create a path for Jamie Winner's tractor to fortify the earthen dam in two places, later this season and install an overflow pipe.
- Minor invasive species treatment was done near the pond.
- Jamie took some aerial photos with his drone.

May 15, 2018: John Benton cut, removed, and treated poison ivy around the drive gate. Some flagging was done on the trail to the cave.

June 1, 2018: Jamie Winner mowed at RLC, using his father's Kubota. He dropped off the overflow pipe for the wildlife pond.

June 24, 2018: Keith and Bambi Dunlap mowed (with Keith's walk-behind mower) around the chestnut and other trees inside the fenced-perimeter on top of the hill. Lots of rain to date with moist soils; most of the trees look very good. Lots of rain also means lots of vegetation growing too. Keith sprayed round-up around the perimeter of the fence to make future mowing easier there. Final task of the day was to mow down and back, about 4-foot wide total, on the north side of the access lane off Hwy 66; this to knock down re-sprouting trees in the lane.

July 14, 2018: Jamie Winner with tractor and blade, rebuilt the dam at the small wildlife pond on the Campbell tract (north section of RLC) so it will better hold water. An overflow pipe was installed to hopefully prevent the dam from over-flowing and erosion.

September 8, 2018: Jamie Winner with his tractor, mows the drive lanes, camping areas, and most of the lower field before the rains came in. He noted the wildlife pond was nearly dry prior to the rain. The lower field was rough, and he broke two mower driveshaft shear bolts, and pulled parts of trees and sumac jammed under the tractor, mowing for about six hours in 103 degree heat index. Carla was nowhere nearby with some cold lemonade?

October 28, 2018: Keith and Bambi Dunlap mowed inside the chestnut plantation fencedperimeter with his walk-behind mower. This marks the end of the third growing season (planted spring 2016). Keith estimates 90% of the trees are alive, some have been re-planted, but estimates 50% are viable, that is growing to the point they will out compete the weeds if spraying/mowing was stopped.

A couple of the chestnut trees are over 10' tall; black walnuts seem to be doing the best overall and the red oaks just holding their own. In the spring of 2019, Dunlap plans on weed treatment around each tree, but will probably back off the twice a year mowing, letting the survival of the fittest rule.

Future: Continue mowing upper/lower fields every other year (did lower field in 2018), ease off tree care, but not eliminate, watch wildlife pond dam to see if water retention continues, mowing of lanes, drive and camping areas, couple times year, trim branches over lanes as needed. Treat autumn-olive as needed and other invasives. Other projects??

Thanks to volunteers Jamie Winner, Keith Dunlap and all for using their own equipment in work done at RLC. It is appreciated!

RL Cave Patron Report (John Benton)

For 2018, there was only one recreational cave trip that I was aware of: June 2, 2018, CIG caver Carl Tuttle led a group of 10 cavers into Robinson Ladder Cave, cavers were mostly from IN, and some from OH. RLC continues to be one of the least visited cave preserves of the IKC.

Upper Twin Cave Patron Report (Dave Everton)

Okay, so continuing my Q&A session from before:

Question: How many trips did you approve this year to Upper Twin Cave?

Answer: There were 5 trips that went through me. In addition, Tom Sollman made numerous trips to Upper Twin, but had blanket approval and doesn't have to report them to me (although he often included me on trip reports).

Question: Why doesn't Tom Sollman have to report his trips to you?

Answer: He has been granted special power and authority by IKC Board! Plus, he's a grown man, and not afraid of the dark.

Question: How many cavers visited the cave?

Answer: Upper Twin had 28 visitors.

Question: Did anyone visit more than once? Answer: Except for Tom Sollman, not to my knowl-

Question: Did grottos with IKC Liaison agreements visit the caves?

Answer: Upper Twin does not qualify for visitation under that program.

Question: Why do you keep sabotaging the IKC entrance to Upper Twin? Reportedly there is video footage showing you above the sinkhole entrance, causing large quantities of clay and debris to slide down off the sinkhole wall into the entrance area.

Answer: I refuse to answer on the grounds of self-incrimination. Feel free to produce the reported video footage, convene a sub-committee, and then contact my attorney Darryl "The Hammer" Isaacs.

Closing Comments: Because of the IKC, cavers have many opportunities to visit caves that would otherwise probably be off limits. That also includes the IKC partnership with the IDNR in the Interim Cave Access Program. Thank you IKC, for continued cave and property protection and access!!

Shawnee Karst Preserve Report (Jerry Lewis)

In 2018, we had a productive year in the maintenance of the Shawnee Karst Preserve. The highlight of the year was the completion of the rerocking of the preserve road. A day of work by Tom Sollman, Keith Dunlap, and I in 2017 cutting away trees encroaching on the lane was followed by another similar work day in September, 2018 by the same personnel. In October, Jamie Winner brought his tractor and blade and while Keith and I coordinated the delivery of six tri-axle truckloads of crushed limestone (130 tons) from a quarry in Mitchell, Jamie worked on using the tractor blade to smooth the gravel and create a slight crown in the road to facilitate drainage. In addition to renovating the entire lane as needed, the circle was also re-rocked and the parking areas expanded.

The IKC entrance to Upper Twin Cave continued to be challenging to open. After previously re-excavating the entrance from the first major episode of the upper hillside slumping and covering it, another major slumping episode occurred and the entrance was again sealed. Later in October, 2018 Jamie Winner used the backhoe on his tractor to excavate a narrow slot down through most of the fill, and Tom Sollman and Keith Dunlap were then able to hand dig to minimally re-open the entrance. The mud walls of the excavation were deemed too unstable to attempt entry into the cave, but it appeared like it would be relatively simple to expand and stabilize the excavation. That proved to be wrong when another rainfall occurred a week later and the entrance again slumped shut. As of the end of 2018 the entrance remained sealed.

Also in October Tom Sollman, Keith Dunlap, and I again returned to the preserve and spent a

few hours removing cedars and other trees that had encroached into the native grassland opening. Keith used a hand-held brush-cutter with a circular blade that was very effective in cutting tree trunks up to a couple inches in diameter. Tom used loppers to remove many other small saplings, while I chain-sawed larger cedars and poplars.

Other routine maintenance was done by Keith Dunlap and Bambi Dunlap consisting of mowing the over a mile of trails twice, and doing invasive plant control.

Finally, the IKC board approved funds for construction of an information kiosk to be placed in the circle parking area. Construction of the kiosk is anticipated to take place during the summer of 2019.

Shiloh Patron Report (James Adams)

The Indiana Karst Conservancy has continued, with the permission of the landowner, to permit up to six recreational trips into Shiloh Cave for the general caving community per calendar year. Each trip is limited to 10 participants with three vehicles on the property. During 2018, I misplaced the waivers for one of the trips and allowed, by mistake, seven trips to be taken into the cave. There were no requests for visitation denied because the agreed upon quota had been reached. Later, the missing waivers were located.

Suicide Cave Patron Report (Kevin Smith)

2018 had four trips totaling 34 cavers: one group representing the Bloomington Indiana Grotto (BIG), two trips by the Central Indiana Grotto (CIG), and one trip by the Cleveland Grotto led by Dave Everton. There were no concerns or problems reported from the groups with regards to the cave and the cave gate, as well as the lock, are in good working order.

The IKC wishes to thank Charlie and Will Biel, stewards of the Arrow Hill Ranch Forestry and Wildlife Sanctuary, for another great year!

Orangeville Rise Report (Carla Striegel-Winner)

6/30/18 Voted in as new Property Manager.

6/30/18 Property visit: Took photos, noted invasives (garlic mustard in seed!), picked up trash along roads and parking areas, checked signs.

12/5/18 Property visit: Picked up trash, petted visiting cat and dog.

Total volunteer time for 2018: 1.5 hour. Total trash: 3 pounds.

Plans for 2019 include walking property boundary, checking for erosion on SW corner, full walk around to identify other possible invasive species, and check general ecological health

Continued on page 20...

INDIANA KARST CONSERVANCY TREASURY REPORT

Income/Expense Statement From January 1, 2019 to March 31, 2019

INCOME:

Dues Apportionment and Residuals	845.00
Donations - General	3,264.18
Donations - Land Acquisition Fund	15,465.00
Investment Earnings	865.75

\$20,439.93

EXPENSES:

IKC Update (printing, production, mailing)	335.81
Education / Outreach	80.83
Stewardship/Conservation	551.22
Business (credit card fees, renewals, meeting)	319.90
ILPA membership	500.00
Transfers to/from restricted funds/other adjustments	15.786.22

(\$17,573.98)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD: \$2,865.95

Balance Sheet March 31, 2019

ASSETS:

Cash in Checking / Saving / CDs / Brokerage acc'ts		220,596.00
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
Orangeville Rise Nature Preserve	(3.01 acres)	7,000.00
Indian Creek Conservation Easemer	13.16	

\$783,609.16

FUNDS & OPERATING EXCESS:

Land Acquisition Restricted Fund	90,028.08
Deferred Dues Restricted Fund (211 members)	4,740.00
Stewardship Endowment Restricted Fund	69,246.47

Previous General Fund (total)	53,728.66
Net Excess (Deficit) This Period	2,865.95

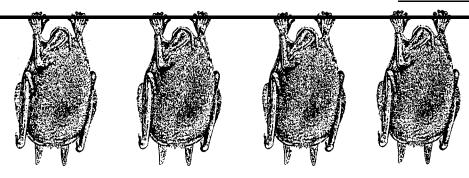
Current General Fund (unrestricted) 56,594.61

Current General Fund (committed) 1,100.00

Real estate liquidity (basis value) 563,000.00

Total Liabilities & Operating Excess

\$783,609.16



IKC ANNUAL BUSINESS MEETING MINUTES

Saturday, March 23, 2019, 10:30 AM EDT, Ellettsville, Indiana

Board Members Present:

Jerry Lewis, President

Marc Milne, Secretary (proxied by Salisa Lewis)

Keith Dunlap, Treasurer

Bruce Bowman
Laura Demarest
Danyele Green
Dave Haun
Everett Pulliam
Matt Selig

Bob Sergesketter (proxied by Jeff Cody)

Tom Sollman

Carla Striegel-Winner

Richard Vernier

Sue Vernier

Jamie Winner

Board Members Absent:

None

Call to Order

The meeting was called to order by President Jerry Lewis at 10:30 AM EST at the Ellettsville Branch, Monroe County Public Library, Ellettsville, Indiana. Jerry asked everyone to introduce themselves.

Email Motions Since Last Meeting

On February 5, 2019 President Lewis presented the slate of candidates for the 2019 Executive Board elections, as recommended by the Nominating Committee (Danyele Green, Matt Selig). The slate was:

President: Jerry Lewis
Secretary: Marc Milne
Treasurer: Keith Dunlap
Directors: Jeff Cody
Danyele Gree

Danyele Green Goniela Iskali

Carla Striegel-Winner

Lewis called for discussion. Several Board members responded to voice approval. On February 6, 2019 Lewis called for a motion to approve the slate if there was no more discussion. Keith Dunlap moved that we approve the slate of candidates offered by the Nominating Committee for the 2019 Executive Board elections. The motion was seconded by Marc Milne. Lewis called for the vote on February 6, 2019. On February 7 all Board members were accounted for and the motion passed unanimously.

December Meeting Minutes

The minutes from the December Board meeting were approved as published in the March, 2017 IKC Update.

Treasurer's Report

Current finances: Keith outlined the financial status of the organization: Cash assets totaling \$220,065.38 and land assets totaling \$563,000.00, for total assets of \$783,065.38. Funds include Stewardship Endowment: \$68,900.25; Land Acquisition: \$88,138.08; Deferred Dues: \$4,395.00; and General Operating Fund (unrestricted): \$58,632.05.

Membership: Currently stands at 210 members (the largest number ever). Fifty-six members have yet to renew for 2019. A second renewal reminder will be sent in mid-April.

On-line payment: Thanks to Webmaster Bruce Bowman, our on-line service to pay dues and make donations is now functional. Since January, 21 members have used the service including multiple new members joining via the website. Approximately \$700 in revenue with \$21 in service fees.

IRS reporting: After Board review, our 2018 990 tax return has been submitted, as well as our Indiana NP-20.

Investment Committee: The newly appointed Investment Committee (Tom Sollman, Matt Selig, Keith Dunlap) had some brief discussions on the scope of the committee and investment philosophies. It was decided they would initially only manage the Stewardship Endowment Fund for long-term growth. No investments have been made to date.

Short-term investments: The Treasurer has been moving our cash assets between our Fidelity Money Market fund, multiple CDs, and a new promotional savings account at Fifth-Third Bank which will be paying 2.05% until March 1, 2020.

Election

President Lewis appointed Dick Vernier as the Election Teller to tally the ballots.

Property Manager & Cave Patron Reports

Keith Dunlap compiled and e-mailed copies of all Property Manager and Cave Patron reports to the Board for their viewing pleasure prior to the Annual Board meeting. Copies of reports were also made available during the meeting.

Orangeville Rise

The newly appointed (June 2018) Property Manager (Carla Striegel-Winner) reported that invasive species (garlic mustard) control is needed, she needs to relocate the corner pins, and bank erosion was observed near the plaque. She will send out an email if workday planned.

There was a request for research access to Orangeville Rise by Lee Florea and Sarah Burgess (grad student running the project). They would like permission to put monitoring instruments/equipment in, with access for two years. Carla made a motion to grant permission. Everett Pulliam Seconded the Motion. It passed unanimously.

There was some further discussion on the project Florea/Burgess was conducting. Tom Sollman inquired if Spring Mill/Twin Caves could be included. There were issues with multiple agencies that can be challenging.

Lee provided more background on the project in that he is starting a Karst Research Program at IU. Last summer he received a grant from the Center for Rural Engagement. The project will be a critical zone observatory of surface and subsurface. Similar equipment has been installed at Bluespring Caverns to monitor water levels and chemistry. Sara will sample Flood Creek, Wesley Chapel, and Orangeville Rise. She will visit monthly to download data for two years of monitoring levels and chemistries, T, pH, dissolved oxygens, sulphur, and calcium concentrations; things linked to how the cave formed. The goal is to understand the evolution of the Mitchell Plateau. At the Orangeville Rise, the instrumentation may possibly reuse the USGS abandoned? strong box post. Jerry inquired if an annual article could be written for the IKC Update newsletter and Lee indicated that was possible.

There was some further discussion about the removal of the instrumentation at the end of the project. Lee said the equipment was expensive, so yes, it would be recovered. There was some further discussion on the USGS strong box as why it was not removed, as promised, if their project was completed. Lee indicated he would be seeing Jeffery Woods (Louisville, KY Science Center - Indy Branch) in a few weeks and will check in to see if the instrument is still in use, or if it could be removed, or reused for Lee's project. Carla and Laura expressed that the box may serve as a deterrent to vandalism. Carla also indicated that the chain holding the box on the tree is beginning to constrict the tree growth and will need to be addressed. Keith asked about E. coli monitoring. Lee said that was not currently part of his project, but Laura said fecal monitoring is happening twice a year with Hoosier Riverwatch. The Orangeville Rise is a DNR Nature Preserve, so approval from them is also necessary. Jerry will contact Nature Preserves, but noted his long-term contact, Director John Bacone, just retired. Lee and Sarah thanked the Board for approval.

Buddha Cave Preserve

Cave Patron (Jeff Cody) reported that he and Laura Demarest are planning an inspection trip to the cave and will report back to Board in June. Property Manager (Keith Dunlap) had nothing to add to his written report.

Robinson Ladder Cave Preserve

Property Manager/Cave Patron (John Benton) was not

in attendance and thus had nothing to add to his very detailed written report. However, Dunlap indicated he had been notified that a company was planning to use a chainsaw device suspended from a helicopter to cut trees away from power lines.

Shawnee Karst Preserve

Cave Patron (Dave Everton) was not in attendance and thus had nothing to add to his written report. Property Manager (Jerry Lewis) reported we had a great year. He is finalizing plans for the kiosk construction planned for April. Danyele volunteered Tim's power auger (Hand held) for use to dig the post holes.

Sullivan Cave Preserve

Cave Patron (Paul Uglum) was not in attendance and thus had nothing to add to his very detailed written report. Property Manager (Keith Dunlap) had nothing to add to his written report. Danyele reported that she would be "freshening" the porta potty on March 31st. It was supposedly pumped late last year.

Wayne Cave Preserve

Cave Patron (Dave Everton) was not in attendance and thus had nothing to add to his written report. Property Manager (Robert Sollman) was not in attendance and thus had nothing to add to his written report. He did indicate at the December meeting that he would cede his title to another capable person. Dunlap indicated a short workday is planned for today after the meeting.

Selection of the new Property Manager – After Danyele expressed some interest, Keith nominated Danyele Green. This was seconded by Dave Haun. During the discussion, Danyele asked, "What's involved in being a Property Manager?" Keith defined the role as monitoring the property, keeping trails clear, and cleaning up trash as needed. Approving/coordinating requests to camp on property can go through either Cave Patron or Property Manager. For large maintenance issues, such as downed trees, the Property Manager can arrange for other people to remove trees, mow trails, etc. The property manager may take a larger role in other activities such as in managing invasive species. Motion carries. Danyele is now the new Property Manager.

Kiosk panels status – A viewing of the new panels in the kiosk is happening after the Board meeting. Laura saw them last Saturday. She reports they are beautiful; the pictures look great. "It's very cool – a great bonus to that property." From a financial standpoint, Keith reports the budget was \$1000, but only spent around \$500. Plans are anticipated for Shawnee and Sullivan. Images were created by ColorMax Digital on a corrugated plastic which should be durable. The kiosk has a dry erase marker and white board. There is some concern that the marker will be used to draw on the map. Laura noted a lot of trash in cave last weekend. Her group carried out the trash they found. She suggests

that some cleanup may be warranted, especially in the Canyon area. The cave shows signs of recent flooding.

Management plan update – Bruce and Danyele will work on this together. Plan needs to be updated to reflect new acreage.

EQIP cost-share grant (invasive and grapevine control) – Application is completed. The January government shutdown may have impacted the expected timeline. Keith signed up for 15 acres with a five year obligation. Next year we would add another 20 acres. In 2021 we would add the final 22 acres. Payments, anticipated to be \$15,000 at the end of the grant.

Preserve trail construction – The new loop trail has been flagged. We may need more permanent flagging/markers due to the number of trails intersecting.

Jeff Cody asked about the gap between Wayne Cave property and the nearly adjacent NSS Buckner property. There are two tracts of land that could potentially connect the preserves. One owner is not interested in selling. The other owner keeps cattle on his 20 acres and has not responded to Keith's inquiries about a possible sale.

Indian Creek Conservation Easement

The inspection was completed last July by Jaime Winner. There was nothing to add to his written report.

Keith moved to rescind the \$500 allocated in June of 2010 for legal fees since it was decided re-recording the legal description was not needed. Everett Pulliam seconded. Motion passed unanimously.

Shiloh Cave

Cave Patron (James Adams) was not in attendance and thus had nothing to add to his written report.

Suicide Cave

Cave Patron (Kevin Smith) reported Dave Everton visited recently and the lock is in good condition.

Education and Outreach

Laura Demerest reported that the displays are being used. In November there was a Wonderlab presentation with a lot of IKC materials. We now have a third groundwater model (donated by Fred Steinhoff). Carla reported that the Orange County Soil & Water will be using it. Laura asked if our brochure could include the online membership options. Also perhaps the QR code for donations (like we added to the Wayne kiosk display). Laura can work to add this to the brochure if she is sent the original. Jerry did two presentations for The Nature Conservancy of Indiana in February.

Election results

The Board thanked Dick Vernier for serving as Election Teller and compiling ballots. The results:

President: Jerry Lewis Secretary: Marc Milne Treasurer: Keith Dunlap

Directors:

Danyele Green Jeff Cody Goni Iskali

Carla Striegel-Winner

Jerry recognized Everett Pulliam and Jaime Winner for their many years of past service.

Emergency Protocols Update

Both Wayne and Sullivan key lock boxes are installed. The post at Suicide property is about 20 feet from the sinkhole. Keith plans to go by and install the signage signs and lock box tomorrow. There may be a need for a different and/or smaller box somewhere more hidden to prevent vandalism. All signs have been reprinted and updated with Laura and Kevin Romanak's contact numbers and will be installed in the near future.

Indiana Land Protection Alliance (ILPA) membership

Last year we approved \$500 funding for a one year of membership. This has not yet been allocated. The new Executive Director is now in place and has contacted all of the Indiana land trusts. Jerry requested potential benefits to the IKC from her. In summary, there is no tangible benefit to the IKC at this time. Jerry forwarded the email to the Board for review and would like discussion around whether to continue with this membership. Laura suggested potentially waiting until other larger or more effective land trusts join. Sue reiterated Laura's opinion, noting that the Sycamore Land Trust is not part of this group. Keith reports that with a new leader in the Sycamore Land Trust, they may be more likely to become part of this group. Larger groups like TNC and ACRES are putting in \$10,000 annually. This organization is the umbrella over the other land trusts in Indiana. Carla reminded the Board we had already had a long discussion regarding this and we approved it. We should table this discussion and move forward. Keith and Jerry plan to meet the new IPLA director, Ellen Holland, at some point. It is also possible she could come to an IKC meeting. The membership money goes toward paying the Executive Director salary and other expenses. Keith will send a check for membership.

Indiana Cave Symposium

A motion was made by Everett Pulliam seconded by Sue Vernier, to provide funding (\$150 for half of expenses) for this year's Indiana Cave Symposium. The motion was passed unanimously.

Land Acquisition Activities

The Wayne Cave preserve expansion payment (\$12,780) from TNC has been received. There are limitations (aka "strings attached") to the property

allowing TNC to recoup their share of the contribution should we ever sell the property. This Agreement has been recorded.

Shawnee Karst Preserve expansion. This appears to not be a priority for the landowners. Keith had concerns about the original appraisal of looking at the four lots separately when they are not easily dividable and the owner only wants to sell them as together. Keith provided the landowners a summary of ten comparable properties in the area suggesting a more realistic valuation. Last year property taxes have not been paid and this year's taxes will be issued soon. If those are skipped too, the property could be put up for a tax sale.

Jeff Cody shared that the Rockcastle Cave Conservancy has recently purchased the Garbage Pit entrance (soon to be renamed the Crockett entrance, as the entrance had been owned by Tom Crockett, who recently passed away) of Sloan Valley Cave. This entrance provides access to a large portion of the cave with large passages. A greenhouse and a lot of debris have been removed from this entrance. The conservancy also owns two entrances to Pine Hill Cave. They are looking for funding.

Items from the Floor

Jerry was approached by IKC member Dave Everton last week about Boone Cave in Owen County. It's in the TNC Green Bluff dedicated Nature Preserve (near Spencer, IN). Jerry would like the Board's input on whether the IKC should approach TNC about doing a management arrangement for access for this cave. Matt mapped this cave in the 1990s and discussed the difficulty of managing access to all the entrances that are so remote. Keith gave Buddha Cave as an example of a remote cave which has a legal process for gaining legal entry to the cave. Dave suggested this might be a good property for an educational kiosk at a later time. Carla asked whether the access management arrangement would cover only Boone Cave or potentially more TNC-owned caves in Indiana? Is Dave wanting to be the volunteer to manage access to this cave? Danyele knows someone who knows the owner of another one of the entrances who is not caver-friendly. Does

the Board want Jerry to approach TNC about this single cave, or a proposal for all TNC-owned IN caves? Matt asks if the IKC manages this does it increase the IKC's liability? Matt advocated for controlling access to preserve the signature rooms in Boone and the pristine condition of the Cannonball side. Jeff Cody volunteered to accept the role of Cave Patron for this venture, if needed.

Laura Demerest brought up the Orientation to Cave Rescue (OCR) planned in the fall. Danyele reports we have asked the NCRC for approval. We can move forward with planning a location once we have NCRC approval. Hopefully we will have approval, a date, and information on cost in time for the June meeting and June newsletter. The current proposed date is Nov 2-3, with classroom time on Saturday at IU or the Elletts-ville branch of the Monroe Co library and the mock rescue planned on Sunday at a nearby property, either Sullivan or Buddha.

Laura also brought up the weeklong NCRC in May in Mitchell. Anmar and Jess requested some sort of blanket permission for the group to go in IKC caves during that week. Jerry requested more specific details rather than a blanket approval. Keith recommends signing waivers for each cave at the beginning of the week. They will submit a list of anticipated sites to Keith and Jerry. The Cave Patrons would then be involved in a discussion.

Indiana Cave Sympoisum annual event April 27th Orange County Community Center, Paoli, IN

Survey Workshop, May 4-5, McCormick's Creek State Park. More details on the IGWS website.

The next meeting will be on June 29th at 10:30 EST at the Wayne Cave Nature Preserve (weather backup: Danyele's house)

Adjourn

The meeting was adjourned at 12:46pm

Respectfully submitted by Salisa Lewis, acting secretary.

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of property; more complete trash pick-up; make contacts with DNR NP staff and local watershed group; garlic mustard pull in May; and review the Management Plan.

Indian Creek CE Report (Jamie Winner)

Properties covered by the conservation easement were inspected by Jamie Winner and Keith Dunlap on June 8th, 2018. Inspection reports were mailed to ap-

plicable landowners in late June.

A PVC T-post cover was missing along the easement boundary of lot #10 and lot #11. Both were replaced. During the previous year the invasive species Johnson grass, multiflora rose, and poison hemlock were noted growing within the easement area of lot #10. This year the previously identified invasive species were treated with backpack sprayers while on site for the inspection.

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Service to address the invasive species on the property. This contract is for a five year commitment on the most heavily infested area and consists of the northern-most 15 acres. Assuming things goes as planned, we hope to contract for another 20 acres next year and the remaining 22 acres in 2021. Also as part of the EQIP contract, in the third year, some timber stand improvements (TSI) will be conducted to remove grapevines.

- As part of the IKC's educational mission, we will be hosting a National Cave Rescue Commission two-day Orientation to Cave Rescue (OCR) training class. The training is scheduled for November 2/3 with class room instructions on Saturday at the Mitchell Public Library and a mock rescue on Sunday. The OCR registration fee will be \$40 for NSS members and \$60 for non-NSS members, including training materials (but no meals). Limited free primitive camping will be available at the Shawnee Karst Preserve. Alternative camping is available at Spring Mill State Park for a fee. As a further encouragement, participating IKC members will receive a \$25 reimbursement (for the first 25 members who register). Thanks to Barbara Hanka and Servaas Laboratories (Bar Keepers Friend) for their donations to help underwrite this training. Further details and registration information will be in the September *IKC Update*.
- □ Last year, the IKC entrance to Upper Twin Cave slumped shut with mud. We used a backhoe to re-open it briefly last fall, but it again closed up. Over the winter, rain and mother nature flushed the entrance partially open, and some manual digging by Cave Patron Dave Everton widened it enough for a trip in May. The entrance is still prone to some slumping, but we are hoping occasional heavy rains will improve the situation naturally such that we will not have to stabilize artificially.
- ☐ On June 25th, IKC Board member Laura Demarest will be conducting a one-evening learning session called "Limestone, Cave, and Karst" as part of the Bedford Parks Department Outdoor Series. The course will cover "...what is unique about our limestone and karst, and why these systems are so fragile for stormwater and water contamination. She'll also explain what makes this part of Indiana globally unique." The class starts at 6 pm and is *free*. However, you must RSVP (812-275-5692) for the class by June 21st.
- ☐ The IKC has gained *eleven* new members in the last quarter. Welcome Brain Banks, Tim List, Mark Clark, Susan Clark, Larry Fisher, Andrea Carpenter, Todd McCartney, Kyle Hoyt, David Hane, Cheryl Doan, and Matt Pelsor. The IKC membership currently stands at 194.

	INDIANA KARST CONSERVANCY, PO BOX	2401, INDIANAPOLIS, IN 46206-2401		
I would like t	to help the IKC protect Indiana's unique caves and other kar	st 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	Make	checks payable to the Indiana Karst Conservancy, Inc. and mail to the		
ADDRESSCITY/STATE/ZIP		 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. 		
				PHONE#