

IKC UPDATE

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INDIANA KARST CONSERVANCY, INC

PO Box 2401, Indianapolis, IN 46206-2401

ikc.caves.org

Affiliated with the National Speleological Society



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

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ANNUAL BUSINESS MEETING REMINDER
SATURDAY, MARCH 23rd, 10:30 AM EDT
ELLETTSVILLE, INDIANA
MONROE COUNTY PUBLIC LIBRARY (ELLETTSVILLE BRANCH)

The Annual Business meeting is for the purpose of Executive Board elections. Annual reports from the IKC Cave Patrons and Property Managers are also presented. And as always, the meeting is for members and other interested persons to have an open forum for talking about caves, 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 meeting is informal, and everyone is encouraged to attend and participate. The IKC Board wants your input.

Preliminary Agenda: Elections; Cave Patrons/Property Managers annual reports; Upcoming projects at various other preserves; Indiana Cave Symposium; OCR training update; Financial reports; 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

Mar 23 – IKC Annual Business meeting (see above)

Apr 27 – Indiana Cave Symposium (see page 9)

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

June 17-21 – NSS Convention (Cookeville, TN)

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

Fall ?? – 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...

Usually my rambles extoll the virtues of the IKC, but this one might have to veer from that course to talk about how I think we might be messing something up. First, some background about the fauna of cave entrances...

Most cavers who have been in any Indiana caves know that there are some animals that are usually found around the entrance. Cave crickets are a good example. Everyone knows these little insects usually occur around entrances – I remember on my first trip into a wild cave (in Missouri in 1971) the trip leader pointed out cave crickets. In Indiana caves there are at least three native species of cave cricket (as well as one species introduced from Eurasia). Cave crickets generally leave the cave to forage on the surface in an area around the entrance. Our cave crickets belong to the group called *Ceuthophilus* and most cavers probably don't know that there are as many species of this group that *don't* live in caves than do live underground. Most of them live in forests or grasslands, not associated with caves and are usually called Camel crickets.

Another familiar inhabitant of cave entrance zones is the Cave salamander (*Eurycea lucifuga*). These beautiful orange salamanders seem to contradict their name, as they don't really look like any other animal living in an Indiana cave. That notwithstanding, these creatures are uniquely tied to caves, where in the summer they live in the entrances and forage on the surface, while in the winter withdrawing deeper into the cave where temperature and humidity is less volatile. Recent research by Gavin Bradley at the University of Louisville demonstrated that for every Cave salamander seen casually in a cave, there might be 100 or more that you didn't see. Over the course of a year in about a 300 foot stretch of a small spring cave he found over 1,000 unique cave salamanders in an area

where a casual observer would see a few.

Those of you attending the Indiana Cave Symposium a while back might recall that I was doing research on the inhabitants of sinkholes for the Hoosier National Forest. That project has now been completed and some of the results were surprising. There were some species living in sinkhole floors that I had previously found only in caves, which

I had suspected might be the case. An example of one of these animals was the Gray-handed pseudoscorpion (*Kleptochthonius griseomanus*), a tiny creature resembling a tail-less scorpion. I had first found one of these critters in Indian Cave at Mesmore,

and then one more in the pit floor at Twin Domes Cave, both in the twilight zone of the caves. I hit the mother lode when one sample from a sinkhole on the Kimball Tract near Orangeville contained more than 30 of the pseudoscorpions. Clearly the preferred habitat was sinkhole floors. In additional sampling they were clustered on the floor of the sinkhole, and did not occur up on the rim.

So the surprise to me was the growing body of evidence that there are some animals that seem to be as ecologically restricted to cave

entrances and sinkhole floors as troglobites are restricted to the dark zones of caves. The group of animals inhabiting cave entrances have long been known as troglonexes, i.e., "cave visitors" but it appears to me that some of these animals are no more visitors to the sinkhole floor/cave entrance habitat than troglobites are to caves inter-

riors. I don't yet understand *why* some of these animals are restricted to the sink/entrance habitat, but it appears to me that they are much more habitat-limited than I had suspected.

So...why the ecology lecture? For the past two years the IKC has been struggling with the management of the IKC entrance to Upper Twin Cave. We purchased the property now called the Shawnee Karst



Cave salamander (*Eurycea lucifuga*)



Gray-handed pseudoscorpion (*Kleptochthonius griseomanus*)

Preserve in early 2012 because of the presence of this entrance. For the first few years after the purchase, the entrance was stable and access to the cave was not an issue. That changed in 2015 after the hillside above the cave entrance slumped and tons of soil, rock, and trees slid over the short cliff above the entrance and created a small mountain of debris on the entrance in the sink floor. Our sinkhole entrance became a sinkhole pond. Eventually it dried out enough that we were able to bring in a bobcat track-loader and remove enough of the mountain that the entrance itself could then be dug out. Part of the issue during that episode was a large boulder that required chemical persuasion to fracture and remove from the entrance, but thanks to Dave Everton we got the boulder removed and the entrance was again open.

Subsequently in April 2018, more soil slumped into the entrance and we were back where we started. An attempt was made to dig the entrance out by hand, but it was like trying to dig out liquid peanut butter... every time a hand full was removed, the same amount oozed back in its place. Digging was further stymied by the presence of synthetic matting/netting we'd put on



Plugged IKC entrance to Upper Twin Cave, September 2018

the slope above the cave to attempt to stabilize it. Now it was like fiber re-enforcement in the mud. Luck was with us however and eventually in October we had a dry spell and the clay dried out. Jamie Winner brought his tractor backhoe and was able to dig a narrow hole through the muck and with a bit of additional hand-digging, Tom Sollman completed the job of reopening the entrance. That lasted about a week until the next heavy rain, at which time the mud slumped back into the hole, turning it once again into a sinkhole floor rather than a cave entrance.

Under normal circumstances cave entrances might open and close spontaneously as part of the natural cycle of what happens in karst landscapes. When a new cave entrance opens up, it becomes a new portal for animals to exploit as habitat. And if the entrance closes such that the cave is com-

pletely sealed, then there is presumably a mini-extinction event of all the creatures that are trapped inside and need to get out, and also the animals that were outside in the sink floor but need to get back into the cave to survive.

My concern is that the man-made cycle of opening, then slumping shut, then re-opening, then slumping shut, is wreaking havoc with the animals that live in the entrance zone. It also has potentially profound effects on the rest of the cave since with our current management the passage switches between allowing an air current to flow through the entrance when it is open (which alters the temperature/humidity profile of the entrance zone and beyond), then changes it again when it closes.

So, I have two concerns with our management of the entrance. First, the more obvious concern, the IKC purchased the property on the merits of the cave entrance to facilitate research and recreational opportunities. And second, we're messing with the cave ecosystem, perhaps more profoundly than we'd appreciated. In retrospect, I think the measures we've taken

to open the entrance have turned out to be half measures. This was largely due to manpower and financial constraints. I think if we want to have a cave entrance then we're going to have to either open the entrance again enough to shove a culvert into it, or take Tom Sollman's suggestion and get a larger piece of excavation equipment to come in and dig the entrance out to the extent that it would be nearly impossible for it to slump shut again. The manpower and financial constraints still apply to both, and there are esthetic concerns as well.

I think we need to make a decision and either leave the entrance closed or open it in a more permanent fashion. I've heard some input from our members on this and I welcome more...

Jerry Lewis

NEWS BRIEFS...

- ❑ The IKC is sad to announce that we received word that IKC member Gary Frederick Whittaker, 71, passed away on June 28, 2018. Gary lived many years in Danville, Illinois, but spent his last few years in Madisonville, Kentucky with his sister. He was an NSS member (45912) and an IKC member since 2009. His sister indicated he loved to come to Indiana to go caving and was always talking about the IKC. He contacted the IKC several years ago to inform us he was naming the IKC as one of his beneficiaries and in October, we learned that our share of his investment brokerage account was just over \$44,000. The IKC Board has subsequently designated his bequest to our Cave Acquisition Fund. Gary's obituary can be found here: obituaries.commercial-news.com/obituary/gary-whittaker-1947-2018-1065220748.



- ❑ Most of the IKC's basic operating expenses and obligations (newsletter, liability and business insurance, property taxes, routine stewardship activities, miscellaneous business) are covered by the IKC membership dues. However, we are greatly appreciative of additional donations to supplement and support the many other projects that the IKC initiate. During 2018, thirty-five individuals and four organizations made general donations beyond their dues totaling \$2,427. Donors include John Ahlberg, John Benton, Ted Bice, Jeremy Brisch, Thomas Chenier, Jaime Coffman, Laura Demarest, John Dimit, Barbara Hanka, Dave Haun, Tem Hornaday, Kevin Johnson, Padraic Kennedy, Paul Kortepeter, Frank Massa, George Mattson, Jon Miller, William Morrow, Raymond Moul, Stanley Nieder, Ernie & Jacqueline Payne, Tom Rea, Gary Roberson, Ralph Sawyer, Sid Semroc, John Sies, Jon Snellenberger, Tom Sollman, Wesley Terrell, Bruce Trotter, Aaron Valandra, Bob Vandeventer, Richard & Sue Vernier, Gary Whittaker, Scott Worpell, The Cleveland Grotto, Greater Cincinnati Grotto, Saint Joseph Valley Grotto, and Servaas Laboratories (Bar Keepers Friend). The overall number of donors were down significantly in 2018 due to our emphasis on our land acquisition fund-raising, but interesting enough, the total donated dollars was only down slightly compared to 2017.
- ❑ The IKC also maintains a Cave/Land Acquisition restricted fund which is used to accumulate resources for our acquisition activities. In 2018 we solicited for the funds to acquire the Wayne Cave Preserve expansion with eighty-three individuals, ten organizations, and several anonymous donors contributing \$50,291. Donors include James Adams, Ron Adams, John Ahlberg, Ken Alwin, Miriam Ash, John Benton, Richard Blenz, Don Bohling, Virgil Brack, Carl Brown, George Brutchen, Larry Bundy, Pat Burns, Andrea & William Carpenter, Joshua Carpenter, George Cesnik, Dan Chase, Martin Church, Jeff Cody, Jamie Coffman, Laura Demarest, John Dimit, Keith Dunlap, Dave Everton, Jeff Farr, Scott Fee, Al Goodcase, Jeff Gosnell, Daniel Gray, Danyeale Green, Barbara Hanka, Rand Heazlett, Marlin Heinlein, Ron Hellmich, Tim Heppner, Shawn Hogbin, Hank Huffman, David Hughes, Goni Iskali & Brad Barcomm, Glenn Kotnik, Darrell Lahm, Dave Lasser, Jerry & Salisa Lewis, Kriste Lindberg, Dan McDowell, Kim Metzgar, Jon Miller, Lynn & Jane Miller, Marc Milne, Raymond Moul, Carl & Louise Nelson, Ken Nisly-Nagele, Nate Pate, Ernie & Jacqueline Payne, Gene & Jennifer Pelter, Joseph Powers, Everett Pulliam, Kevin Rasmus, Tom Rea, Kelle Reynolds, Wesley Roeder, Nick Saulcy, Ralph Sawyer, Bob & Phyllis Sergesketter, Ray Shendon, Brenda & John Shultheis, Gordon Smith, Robert Sollman, Tom Sollman, Ty Spatta, Kevin Strunk, Bill Tozer, Paul Uglum, Aaron Valandra, Bob Vandeventer, Richard Vanrheenen, Richard & Sue Vernier, Chris Wadsworth, Stan Weinzapfel, Richard Whisler, Gary Whittaker, Carla & Jamie Winner, Bob Zatarski, Bluespring Caverns, Indiana Caverns, National Speleological Foundation, National Speleological Society, Central Indiana Grotto, Evansville Metro Grotto, Near Normal Grotto, Northern Indiana Grotto, Saint Joseph Valley Grotto, and Sub-Urban Grotto.

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RECENT ACTIVITIES AT THE WAYNE CAVE PRESERVE

by Keith Dunlap

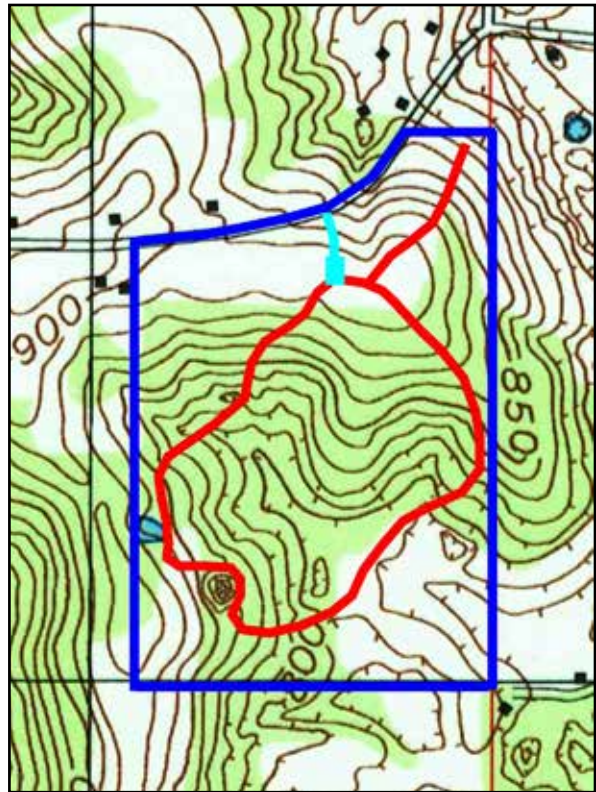
Over the past three months, we have accomplished numerous tasks at the Wayne Cave Preserve, especially related to our new expansion tract we acquired last summer.

First on the list of accomplishments was to scope-out and flag a new 4000 foot-long loop trail that starts and ends at the parking area and makes an enjoyable hike through the woods that allows easy viewing of the many interesting karst features on the property. The trail has not been completely cleared at this point, but we anticipate one or two more workdays will get it in shape. This loop is in addition to the existing 900 foot spur trail that leads to Wayne Cave's entrance at the north end of the property.

Another activity worked on was the removal of interior fencing on the new tract. The previ-



ous owner over the past ten years expended a lot of sweat and dollars into installing the fences for livestock containment and a garden enclosure, but these fences are counter to our needs so we decided to remove them. On one workday, Tom Sollman and Keith Dunlap removed approximately 900 feet of double-strand barbwire and pulled over 50 T-



posts. On another workday, Tom, Keith, and Sue & Dick Vernier cleared and removed approximately 300 feet of mesh "field" fence and pulled some of the cedar wooden posts, although we have a lot more wooden posts to pull or cut off. We plan to save the mesh fencing to re-use as tree protectors in the future. Likewise, we will save and reuse the T-posts. All of the barbwire will be recycled.

A third task accomplished in the past few months was the artwork creation of the two large display panels to go into the existing kiosk near the parking lot. This task had been delayed from about a year ago so we could include all the information about the expansion including the trail map (above) and the revised donors list. The panels have now been ordered and should be installed in the next month.

Finally, over the past few months, we have completed and submitted an application for EQIP cost-share funding for invasive plants control. If granted (we will know in April), we will start this summer on a staggered plan of initially treating the northern 15 acres of the preserve, followed by the southern 20 acres in 2020, and then the middle 22 acres in 2021. Each of these areas will require five years of commitment in removing the invasives. We chose the staggered approach so as to not over-commit our volunteers in doing the entire 57 acres at one time.

THE GREAT TNC ROAD TRIP

by Jerry Lewis

On the morning of January 30th, my friend Allen Pursell picked me up at my home in Burns Hollow to begin an all day road trip, during which I would give talks at two The Nature Conservancy (TNC) locations while flying the IKC flag. The trip up to Indianapolis for the first talk went by quickly since we always have lots to talk about, and we pulled into the TNC's Efroymsen Conservation Center with an hour to spare before our scheduled talks.

The program was for donors who had made or pledged major contributions to TNC, and started with a greeting by Mary McConnell, the State Director of The Nature Conservancy, who then introduced Allen (Indiana Director of Forest Conservation for TNC). Allen spoke first about the mystique of caves, dating back to Mayan times, and then looked at some of the caves preserved by TNC in Indiana, with special attention to their rare inhabitants. After a 20-minute talk, the floor was turned over to me. I started my talk by showing caves I'd visited "from sea to shining sea", literally caves lapped by the Atlantic (in Maine) and Pacific (in Washington) oceans. I touched briefly on the beauty of caves and some of the many kinds of cave formations, and then talked for a moment about the cultural and historical significance of caves, from Lascaux to Wyandotte. Next I showed a photo of Allen and his very young son Asher in 1996, back when they and my twin sons and I all went caving periodically during my three years of working on TNC Blue River Project. We sampled almost 200 caves in those years, which was the largest cave biology project in the history of Indiana.

The title of my talk was "Five Things About Subterranean Biology You Never Knew..." and I spent the rest of my time talking about those five things. These were: 1) many cave animals are known from only one or a few caves; 2) some cave animals are rare... finding one is a lot; 3) some cave ani-

mals are extremely picky about their habitats, and a drop of 1% humidity can be deadly; 4) sinkholes are biodiversity hotspots, with cold-loving animals from Canada and warm-loving creatures from the deep south both existing in our sinks, along with regional endemics and species from the caves below; and 5) even in the parts of Indiana where there are no caves, obligate subterranean critters inhabit groundwater flowing through the soil.

The program ended about one o'clock and we chatted with the twenty-five or so guests and answered questions, then headed out of Indianapolis down I-65, finally stopping for lunch a little before three o'clock. After bolting down a Mexican meal we headed to the Brown County Hills field office of TNC, which is a rustic old house in the forest outside of Nashville. I had been asked to

speak with a group of local residents about caves in the Brown County Hills. After an informal pitch-in dinner, I was introduced to the group by Dan Shaver, Director of the Brown County Hills project for TNC. Then Allen Pursell added additional introductory remarks with a story from the time that I'd worked with him at the Blue River Project. It's embarrassing,

but funny: Allen related that we both had young sons at the time and that we'd be out working on the cave bioinventory with the three kids. After leaving the cave (it was Route 66 Cave, Crawford County) we were walking back to the car and one of the twins took note of a hole in the bottom of a sink. I told him to check it out and the next thing we knew he was upside down and waist deep in this hole, but said that was as far as he could go. He crawled back out of the hole with a box turtle in hand. I decided this was a great moment for a "nature moment" with the kids, especially Allen's son Asher, who thought I was the be-all and end-all of nature facts. So we gather into a little circle and I solemnly held out the creature for everyone to look at, and proclaimed "Asher....this....is a squirrel." The poor kid looked at me, and then



Dan Shaver at TNC's Brown County Hill Project presentation

looked at his dad, and looked back at me. And Allen finally looked at me and said “Uh, Jerry, I think that’s actually a turtle.”

I have no clue what kind of mental moment I was having, but it was both embarrassing and incredibly funny. We all had a good laugh and headed to the next cave.

That story was my introduction to the group, and I then started out my talk saying that it was going to be a very short talk, as there were not really any caves in the shale and siltstone formations of the Brown County Hills. But...as a technicality TNC’s project area for the Brown County Hills included the Deam Wilderness of the Hoosier National Forest. As Spock once said, “Vulcans embrace technicalities”, and so do I, and luckily I’d been to ten caves at the tiny karst area on the edge of the Mt. Carmel Fault that runs through the Deam Wilderness.

I had a few photos of the best-known cave there, Patton Cave, and noted that there were some management challenges because of the close proximity of the cave entrance to Lake Monroe. I told them that when we were conduct-

ing the biological evaluation of the cave one day my wife and I were crawling along in the cave stream looking for critters, and looked up to see a woman wearing flip-flops, a white bikini, and holding a fluffy dog. Not your typical caver.

The other possibility for subterranean creatures in the Brown County Hills were animals that live in the shallow groundwater emerging as seeps from the base of hills. Although no subterranean animals are known from groundwater habitats in Brown County, I showed them photos of the seeps on our property in Clark County, which is the same geologic formation as in Brown County. There is a rich groundwater community in our seeps and there’s every reason to believe the same will be true in Brown County when someone looks for it.

I finished up my talk after about forty-five minutes and fielded questions for another half an hour. It was a great group with lots of questions and discussion. After that, Allen and I headed back for I-65 and I finally got back home a little before midnight, after a successful speaking on behalf of the IKC.

2019 INDIANA CAVE SYMPOSIUM PREVIEW

by Keith Dunlap

The 27th annual Indiana Cave Symposium, co-sponsored by the Indiana Karst Conservancy and Indiana Cave Survey, will be held on Saturday, **April 27**, at the Orange County Community Center (1075 N Sandy Hook Road adjacent to the H-4 fairgrounds) in Paoli, Indiana. The customary free cookout (burgers, brats, and other assorted meats and non-meat offerings) and pitch-in side dishes (please bring a covered dish or dessert to share) will start at 5 PM EDT. Presentations will begin at 6:30. The *tentative* presentation titles and presenters (in no particular order) include:

- Cave fauna of the Garrison Chapel Karst – Jerry Lewis
- The Cave Rover™ Project – Christopher Dick
- Oral Histories of Indiana Caving – Matt Pelsor
- Cave Maps: the Art of Cave Survey and Cartography – Marion Akers
- Binkley update a year to deep! – Rand Heazlitt
- A Packed Year at the RBNP – Anmar Mirza, Jessica Deli, Laura Demarest
- Aquatic Fauna of Upper Twin Cave – Tom Sollman
- Indiana Cave Mapping Workshop – Lee Florea



photo courtesy Dave Black (2018)

For more information about the Symposium, contact Chris Dick visit the Indiana Cave Survey (www.caves.org/survey/ics).

DOG HILL CAVE CLEANUP PROJECT

by Scott Frosch

In the summer of 2017, a group of local cavers went into Dog Hill Cave (the northern section of the Dog Hill-Donnehue Cave System in Lawrence County) and discovered black water, gray sludge, and a strong sewage odor. That situation was reported to the Indiana Department of Environmental Management (IDEM). By coincidence, I also work for IDEM and had the good fortune of being assigned to this project. My boss said something like, “We need to collect water samples from Dog Hill and Donnehue caves and we are looking for volunteers.” Twist my arm! I’ve never jumped so fast for an assignment. Getting paid while caving is one of my career goals, for sure. During this investigation, IDEM and the City of Bedford Utilities Department worked together, eventually identifying an adjacent apartment complex with two sanitary lift-stations in complete failure. Sewage from one of those lift-stations was overflowing onto the surface where it entered a nearby swallow-hole. Sewage from the other lift-station was flowing into an intermittent stream that runs into the entrance of Dog Hill Cave. IDEM went through enforcement action against the owner/operator of the apartments. The lift stations were back on-line within a few weeks.

During the investigation, I became acquainted with the owner of the cave entrance. He was appreciative of the efforts to preserve and protect surface water quality, especially the water in the little creek that flows across his property and into Dog Hill. Cave owners are good friends to have.

One persistent rumor about Dog Hill Cave is that Bedford’s “water treatment plant” flushes waste into the cave. I learned this was true in the past, but there is more to the story. Municipalities have two types of water treatment plants: drinking water and waste water. Bedford has a drinking water plant on the north side of 29th Street. This drinking water plant back-flushes its sand filters a couple times each day. Historically, the flush water was released to the surface and it went into Dog Hill Cave. This flush water was full of sedi-

ment, algae, etc. Basically whatever was in the water they were filtering. The city *never* flushed sanitary waste through the cave. Today, the back-flush water is piped directly from the drinking water plant to the waste-water treatment plant on Pumphouse Road. Since the daily rinsing of the cave with the back-flush water stopped, other contamination (e.g., sanitary waste from the apartment complex) became more obvious. There is some irony that the back-flushing which received such negative attention in the past may actually have been helping move other, more objectionable, contaminants through the cave.

Bedford, Indiana is located in the heart of karst country. The surface soil is shallow and the epikarst is severely fractured. Spills and releases

to the surface go straight into the caves without filtration. Even when cave water looks clean, always remember it is untreated surface water. Don’t drink it. Proper management of septic fields and sanitary waste collection systems is important to public health in all areas, but in karst regions, it is essential. Many cavers dismiss Dog Hill-Donne-

hue as a “city cave”, with no hopes of salvation. I reject that argument... I am unwilling to write this fantastic and significant system off. I know it can be better than it is.

Because of the sewage issue, I stayed away from Dog Hill for almost twelve months. I wanted to give the cave some time to flush itself out. Other cavers (e.g., Naomi Fothergill of the Windy City Grotto) were more eager to return. Afterwards, she reported the sewage was gone, but there was still lots of trash inside Dog Hill. I mentioned this to the owner. Together, we decided the cave could use some attention and tender loving care. Since the sewage appeared to be gone, we wanted the litter and garbage out, too.

In the summer of 2018, the landowner granted access to a small group of volunteers who started picking up trash from the surface. On our first day, we walked upstream in the dry creek-bed from the cave entrance until we ran out of time. A



box turtle joined our group for a few minutes. We started the cleanup on the surface, in the immediate watershed, because we knew that trash would eventually end up on the cave if nothing was done. We covered about a quarter-mile that day and collected two large bags of refuse. Most of the waste was styrofoam cups and plastic, but there was a handful of used syringes (?!), and some broken lawn furniture in the pile. After working the surface, we entered the cave and started collecting trash into piles to be recovered on a future trip.

A few weeks later, a second group of volunteers returned and we resumed cleaning inside the cave. We again entered the Dog Hill entrance and worked our way to the area with the rimstone dams and the big climb-down. Over this distance of maybe 2,500 feet, we collected five large bags of trash. Again, most of the waste was styrofoam cups and plastic bottles. We also found another used syringe, two truck tires, some lumber, and a gutter downspout. All of this debris washed in from the surface. Many thanks to the sturdy cleanup workers who hauled these large, heavy items and full trash bags out of the cave. The front of the cave is now almost free of trash/garbage (note, a metal trash can remains half-buried in the cave stream).

On the way out, we found and rescued a small garter snake. We left the property excited about our progress and wanting to go deeper into the cave.

My Facebook posts about the cleanup project got some attention. Nobaro Sokabe, a Windy City Grotto caver, commented there was more garbage beyond our stopping point. He encouraged us to return and recover the rest. For those unfamiliar with Dog Hill Cave, to get to the very back of the cave, you must climb down some deep rimstone pools and go through two bathtubs. The first bathtub is only six to ten feet long, and provides at least twelve inches of airspace. You don't even get your ears wet in this one. The second bathtub is twenty to thirty feet long and has less than six inches of airspace. That one is definitely an ear-dipper. Some prefer to remove their helmets through this low section. The back half of the cave is considerably wetter and tougher (and prettier) than the front.



I rounded up a third group of volunteers and we suited up for a long, wet trip. Starting at our previous stopping point, we continued picking up trash from the rimstone dam area back through the bathtubs, heading towards the back of the cave. About halfway through the final wet crawl, I realized with some surprise that our group of seven cavers had dwindled to three. Our group had separated not once, but twice, while the leaders forged ahead. This is not a desirable situation. We quickly decided to stop moving forward. Our new goal – get the group back together. At the turn-back point, we were less than 250 feet from the end of the main trunk. On this outing we collected one large bag of trash. Again, there were lots of styrofoam cups and plastic washed in from the surface. We unfortunately found some caver trash, too (used batteries and two flashlights). The back part of the cave is now much better than it was. There is one small crevice just beyond the big climb-down that still needs some attention.

On this third trip, we also took some time to explore and enjoy our surroundings. After checking out a little brown bat and a blind cave crawfish, we discovered a small lead that starts as a sloppy, muddy, belly-slide under a rock ledge. That opens up into 250-300 foot of upper-level walking passage that is insanely decorated. Ceilings, walls, and floor of this area were covered with show-cave quality decorations. Best of all, this side passage is not on the map! For those of us who had been in the cave many times, the feeling of a new discovery was incredible. Fueled by a powerful sense of accomplishment, we excitedly exited the cave.

I sincerely wish I could end this article on a high note. But disappointingly, the black water and gray sludge are back. The smell of sewage is powerful and offensive. There is so much sewage it is unlikely that it comes from a residential source. We are pointing our fingers, once again, at the neighboring apartment complex. Hopefully, the IDEM wastewater inspectors will get to the bottom of things and get this ongoing sewage release stopped.

I can't stop thinking about our new discovery. We climbed up out of the main stream passage



(which runs east to west) to a highly-decorated upper-level passage that went to the south. I want to check the other side of the cave stream carefully to see if that incredible upper-level passage continues off to the north. But I am unwilling to go through the sewer again. Bathtubs and wet crawls are less alluring when they are filled with black water. First, the source of the sewage must be identified and corrected. Then, the cave will need some time to naturally recover. I guess I'll reset my alarm clock for another year or two.

Anybody up for a kick-ass Dog Hill Cave

trip, say, in 2020? Make sure your tetanus shots are up to date!

Dog Hill Cleanup Project by the numbers: three cleanup trips (74 volunteer-hours), eight large bags of trash (over 200 pounds), and eleven volunteers (representing three Indiana Grottos: CIG, EIG, and BIG). The volunteers: Jonathon Annonson (EIG), Daniel Clawson (no affiliation), Jeff Cody (CIG), Eric Edelman (EIG), Scott Frosch (CIG), Shannon Garner (CIG), Paige Murello, Rosario "Roy" Murello (CIG), Stephanie Redick (CIG), David Schaefer (BIG), and Mike Wilson (CIG).

HOW I NEARLY CAUSED JOHN HOLSINGER'S PREMATURE DEMISE

by Jerry Lewis

In November, 2018 one of my oldest and dearest friends passed away: Dr. John R. Holsinger. John was one of those cavers for whom an obituary can be written with page after page of accomplishments over a career of decades – see the *NSS News**. In brief, John was a cave biologist specializing in the evolution and systematics of subterranean amphipods, although he was fluent with essentially anything that lived in a cave, as well as the caves themselves. He spent much of his career dedicated to the conservation of caves and karst.

An indication of how long I knew John is the fact that I not only have a file folder of correspondence (sent through the mail) from him, it's more than an inch thick. The oldest letter is dated October 11, 1972, and was written on the letterhead of the National Museum of Natural History – Smithsonian Institution, where I believe

John was completing a post-doctoral fellowship. John was writing to provide me with identifications of amphipods that I had collected in Mystery Cave, Perry County, Missouri. In another letter two weeks later, he identified cave isopods that I had included in a shipment of flatworms to Dr. Roman Kenk at the Smithsonian, which Roman then handed off to John. Our friendship grew over the years when I was an undergraduate student in Illinois, and upon my graduation, I accepted an in-

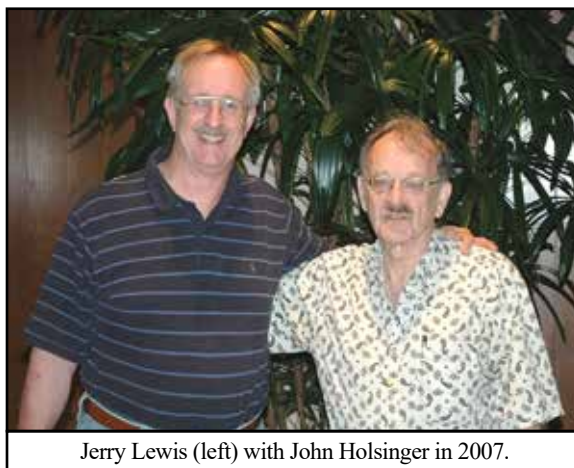
invitation to go to Old Dominion University in Norfolk, Virginia to study as John's graduate student.

I started working on a Master's degree with John Holsinger in the fall of 1976 (for perspective, John had just published one of his major works, the book *Descriptions of Virginia Caves*. That semester was noteworthy as the first time John offered his cave biology class, which I of course took. The highlight of the class was a field trip to see caves and cave animals in the Appa-

lachians of West Virginia and Virginia. The vehicle that the university provided for the trip was a former airport limousine painted robin egg blue. It's difficult to describe how comical we must have looked tearing down gravel roads out in the boondocks in that idiotic limousine, which we called the "Blue Goose".

We spent the first night somewhere in Lewisburg,

West Virginia. That evening we were walking down the sidewalk of what passed for the main drag of town, for whatever reason, all of us were walking in a row along the concrete curb. One of the female class members was pursuing a rather ribald conversation about the depth of water required to immerse those parts of the anatomy associated with human reproduction. For reasons beyond my recollection, I felt compelled to mimic a West Virginia accent (why would anyone from



Jerry Lewis (left) with John Holsinger in 2007.

Indiana need a worse accent?) and throw out for the group's consideration, "Mah mamma told me that as long as ah kept that thing in my pants ah'd do okay." I think John had up to that moment considered me to be polite – he was so taken aback that he turned around to say "What?!?" and was laughing so hard he fell off the sidewalk curb... into on-coming traffic. Luckily someone grabbed him and yanked him back to the curb, or I would have been responsible for the demise of my friend and mentor back in 1976.

The next day the class found themselves in Tazewell County, Virginia to look at Fallen Rock Cave, where John wanted to show us a unique isopod that lived in the cave. I remember looking at the isopods plastered onto rocks in the rushing current of the cave stream, which I'm currently (43 years later) describing as a new species. As the obituary in the *NSS News* notes, John "could also be irascible, and it is fair to say he did not suffer fools gladly." If I didn't know this aspect of John's personality already, I found out when the class was standing in the Appalachian Valley looking at the surrounding peaks. I made the mistake of asking John if those "hills" were what he considered to be mountains (my previous experience had been with the more impressive Rocky Mountains). John's response was, "You're damn right those are mountains! God damned flatlander! If you don't think that's a mountain try climbing up there. You wouldn't know a mountain if it bit you on the ass." From that point on, I became known as the "flatlander".

During the spring semester, I had a research assistantship that consisted of doing whatever John needed to have done, mostly inking drawings of amphipod appendages for one of his large works describing new species. It was a unique experience since I had a desk in John's office and had the opportunity to pester him constantly with questions. Generally patient with the barrages of questions,

one day I guess I asked one too many questions and he told me, "You're a smart boy, you'll figure it out..." a phrase that subsequently became axiomatic for me. Unfortunately, after that semester I opted out of completing my Master's degree at Old Dominion as my father had contracted a fatal case of lung cancer and I returned home to assist my mother. But I returned to Indiana having been provided by John with a firm foothold in the study of subterranean isopods, a pursuit that still continues now, 43 years later.

Our friendship continued through the decades that followed and our paths crossed many times. Surprisingly I only co-authored one paper with John, a description of a new species of subterranean isopod from Virginia. The vast majority of our interactions were long distance, which eventually evolved from the hundreds of letters we exchanged about amphipods and isopods into emails. Over the past few years I had heard little from John as his memory began to fail him and he eventually stopped working with cave animals.

My path might continue to cross John's in a manner of speaking, as I have a large unpublished manuscript on the amphipods of the genus *Stygobromus* that John had written over 25 years ago, but for some reason never published. Last year, friends Wil Orndorff and Chris Hobson (Virginia Natural Heritage Program) met with John and he was very interested in having this unpublished treasure trove of information come to publication. I also have a new species of *Lirceus* isopod that John discovered in 1967 in a cave in Washington County, Virginia. It was sitting on a shelf in the Smithsonian where I found it in 2016 and it seems fitting to name it in honor of John. With a little luck both of those projects can come to fruition before I see John again, but I'll miss him in the interim.

*Culver, D., W. Orndorff, and C. Hobson, 2019, John R. Holsinger - Obituary, *NSS News*, v. 77, n. 1, p. 28-29.

...continued from page 6

- ❑ In December, Webmaster Bruce Bowman added to our website (ikc.caves.org) the ability for new members to join the IKC, current members to renew dues, and anyone to make donations to our General fund and/or our Land Acquisition fund via a PayPal account or credit cards. Early indication is that this is a popular and convenient option. Further, our website is smartphone "friendly" to most browsers.
- ❑ The IKC has gained *eight* new members in the last quarter. Welcome Wyatt Williams, Sheree Belt, Raymond Moul, Ellie Wind, Jeff Timmons, Nick Griffith, Josh Brinson, and Chris Landis. The IKC membership currently stands at 205.

A LOOK BACK AT INDIANA KARST

by John M Benton

Interested in a deal on carbide lamps or carbide? This Look Back, takes a glimpse at what the prices were in the 1937 Belknap Hardware catalogue pages. Belknap was a giant hardware distributor based in Louisville, Kentucky. This company went bankrupt in 1986, but had been in business for over 100 years prior to that.

These pages are from a wholesaler's catalogue, so the prices shown are suggested retail. The actual retailer's costs would have been

33.3% less than the prices shown, the amount of their profit. For example, if the catalogue price shown is \$15, the hardware store retailer would have bought the item wholesale for \$10.

Check out some of these deals:

- JUSTRITE model #747 (this was the best seller) \$28.50 per dozen (\$2.38 each); model #85 \$30.75 per dozen (\$2.56 each); models #707 and 661 \$27.75 per dozen (\$2.31 each).

1937 #18 779

BELKNAP HARDWARE & MANUFACTURING CO.

MINERS' CAPS

WITH BARTA LAMP HOLDER

Extra heavy, special waterproof shrunk duck, lined throughout with flannel. 2 1/4 inch heavy sole leather visor and lamp support with top piece designed to carry correctly any carbide lamp eliminating danger of lamp jarring off.

No. 31W-6 1/4—Size 6 1/4	Per Gro
No. 31W-7—Size 7	\$150 75
No. 31W-7 1/4—Size 7 1/4	150 75
No. 31W-7 3/4—Size 7 3/4	150 75
No. 31W—Assorted sizes 1/2 doz each, 6 1/4, 7 and 7 3/4	150 75

One doz in cardboard box, one gro in carton; wt gro 4 1/2 lbs.

WITH BARTA LAMP HOLDER

Heavy weight, specially shrunk duck lined throughout with flannel. Visor and lamp holder made of heavy sole leather. Holder will carry any size carbide lamp. Especially designed for use in mines that are equipped with electricity, having overhead wires so that there is no chance for a contact.

No. 37-6 1/4—Size 6 1/4	Per Gro
No. 37-7—Size 7	\$157 50
No. 37-7 1/4—Size 7 1/4	157 50
No. 37-7 3/4—Size 7 3/4	157 50
No. 37—Assorted sizes 1/2 doz each, 6 1/4, 7 and 7 3/4	157 50

One doz in cardboard box, one gro in carton; wt gro 50 lbs.

MINERS' CARBIDE LAMPS

JUSTRITE

Seamless brass. Equipped with new, improved Protecto-Grip. Provides cool handling and better grip to remove bottoms for refilling. Detachable cap spring, holds lamp secure to cap. Fits all standard cap shields.



JUSTRITE—With Protecto-Grip and Self-Lighter Attachment.

Heavy gauge polished brass; 4 inch nickel plated reflector. Burns 2 1/4 hours on 2 ounce charge of carbide. Height over all 4 1/2 inches.

No. 747—Lamp only	Per Doz
	\$28 50

One in box; wt doz 7 lbs.



JUSTRITE—With Protecto-Grip and Self-Lighter Attachment.

Heavy gauge polished brass; 2 1/4 inch nickel plated reflector. Burns 2 1/4 hours on 2 ounces of carbide. Height over all 4 inches.

A dependable lamp operated by patented lever feed. Furnished with one No. J77 carbide container.

No. 85—Lamp with carbide container	Per Doz
	\$30 75

One in box; wt doz 8 lbs.



JUSTRITE—With Protecto-Grip and Self-Lighter Attachment.

Heavy gauge polished brass; 2 1/2 inch nickel plated reflector; height over all 4 inches.

No. 707—Lamp only	Per Doz
	\$27 75

One in box; wt doz 7 lbs.



JUSTRITE—With Protecto-Grip and Self-Lighter Attachment.

Heavy gauge polished brass; 2 1/4 inch nickel plated reflector; height over all 4 inches.

Miners preferring the upright style find this lamp cannot be surpassed for strength, durability and service.

No. 661—Lamp only	Per Doz
	\$27 75

One in box; wt doz 7 lbs.



GUYS DROPPER, Brass Finish.

Seamless brass. Has 2 1/2 inch deep brass polished reflector intended for miners working in wet places or where the roof is low. Fitted with Guys patented water dropper, valve cleaner and patented rubber bumper grip.

Height 4 inches.

Nos.	2 1/2 in. Pol.	3 in. N.P.
	Br. Ref.	Ref.
	28SL	235SL
1 to 3 doz, Per Doz	\$25 50	25 50
3 doz or more, Per Doz	24 00	24 00

One in cardboard box; wt each 6 ozs.

NON-BLOW OUT TIPS

No. 83—For No. 28SL carbide lamps	Per Doz
	\$1 95

One doz in cardboard box; wt each 2 ozs.

REPAIRS FOR GUYS DROPPER LAMPS

No. P190—Lighters complete for No. 28SL lamps	Per Doz
	\$2 25
No. P28—Polished brass reflectors; 2 1/2 inch diameter	Per Doz
	\$5 85

AUTO-LITE, With Bumper Grip.

Polished brass, self-cleaning ball dropper, non-leakable water lid, gives 20 candle power light and burns 3 to 4 hours on each charge. Bumper grip prevents breaking or denting bottom and provides a cool gripping device for removing the bottom.

1 to 3 doz,	Per Doz	3 to 6 doz,
	Per Doz	Per Doz
No. 106—2 1/2 inch silver nickel reflector	\$27 00	25 50
No. 103—3 inch bright brass reflector	27 00	25 50
No. 303—3 inch nickel plated reflector	28 50	27 00

One in cardboard box; wt each 5 ozs.

EXTRA BOTTOMS

For Auto-Lite and Guy Dropper Lamps.

No. 120—Brass nickel plated	Per Doz
	\$5 10

One doz in carton.

Repairs for Auto-Lite Miners Lamps.

No. P205—Lighters complete	Per Doz
	\$2 55
No. P206—Polished brass reflectors; 2 1/2 inch diameter	Per Doz
	\$6 15

Belknap Hardware and Mfg. wholesale catalog, #88, 1937, Louisville KY, pages 779-780.

- GUYS DROPPER models #28SL and #235SL \$25.50 per dozen (\$2.13 each)
- AUTO-LITE models #106, and #103 \$27.00 per dozen (\$2.25 each); Model #303 \$28.50 per dozen (\$2.38 each)

Some popular accessory items typically stocked by the retailers: The #J2 JUSTRITE repair parts outfit. The whole kit retailed for \$10.50 and included dozens of replacement gaskets, valve stems, packing, lava burner tips, and covers. The #J37 tip cleaners were \$3.00 per dozen or 25 cents a piece retail. The #P25 metal carbide can to hold

extra carbide (most cavers used baby bottles) could be had for \$3.90 a dozen or 33 cents each.

Carbide itself could be purchased for \$16.53 per 100 pound metal container, which the retailer would then resell in bulk by the pound. The popular #7, 2 pound cans were \$14.70 for a case of 24 cans or around 62 cents per can.

Lamon-Davis Hardware in Corydon IN, owned by longtime caver, Lewie Lamon, stocked all of these items and more for the cavers (and frog and coon hunters who also used carbide lamps for night-time hunting). Those were definitely the good ole' days...

780
BELKNAP HARDWARE & MANUFACTURING CO.

JUSTRITE REPAIR OUTFITS



Contents.
 6 doz. rubber gaskets.
 3 doz. felt packing.
 6 doz. burner tips.
 1 doz. cleaning wires.
 1 doz. felt holders.
 1/2 doz. valve stems.
 No. J2—Wt each 2 lbs. Each \$10 50

REPAIRS FOR JUSTRITE LAMPS

NOTE—Positively will not break packages on repairs for Justrite lamps.

No. J60—Rubber gaskets.....	Per Doz \$0 66
No. J4—Valve stems.....	6 75
No. J5—Felt packing.....	51
No. J6—Lava burner tips.....	1 14
No. J28—Metal shell, lava insert, burner tips.....	90
<i>One doz in cardboard box.</i>	
No. J3—Felt holders.....	1 20
<i>Half doz in cardboard box.</i>	

TIP REAMERS

Justrite.
 Hard rust-proof wire designed especially for use on carbide lamp tips.



No. J-145—Wt tube 2 ozs.....	Per Doz \$0 81
<i>One doz in metal tube.</i>	

REAMER CASES

No. J150—Brass, nickel plated; length over all 2 3/4 ins. \$1 05	Per Doz
<i>One doz in cardboard box; wt doz 2 ozs.</i>	

CARBIDE CANS



Screw Top. IX tin; seams not soldered.

No. P25—Capacity 1 pt; height 7 ins; size 1 1/2 x 3 ins; opening 1 1/4 ins.....	Per Doz \$3 90
<i>One doz in carton; wt doz 4 lbs.</i>	

POCKET CARBIDE CONTAINERS

JUSTRITE
 Heavy tin, concaved with slide cover and round corners. Fits hip pocket.



No. J77—Capacity 10 ozs; size 3 1/2 x 4 ins.....	Per Doz \$3 30
<i>One doz in carton; wt doz 2 lbs.</i>	

JUSTRITE ATTACHMENTS

LAMP CLIPS

Black enameled steel clip for holding cap lamps in rigid position. Easily attached to miners cap or hat.



No. J65—Wt doz 1/2 lb.....	Per Doz \$2 55
<i>One doz in cardboard box.</i>	

SPRINGS, Steel.

No. J173—Length 3/4 in.....	Per Doz \$0 51
<i>One doz in cardboard box; wt doz 1/2 oz.</i>	

TIP CLEANERS

Steel wire brush; brass case. The brush is protected when not in use.



No. J37—Length 2 1/4 ins.....	Per Doz \$3 00
<i>One doz in cardboard box; wt doz 1/2 lb.</i>	

EXTRA FLINTS, For Matchless Reflectors.

No. J27.....	\$0 24
Per Doz.....	\$0 24
Per Gross.....	2 25
<i>Packed 1 in a capsule, 12 capsules in cardboard box.</i>	

BRATTICE CLOTH



Medium heavy single warp non-inflammable jute brattice cloth.

Nos.....	10-36	10-48	10-60	10-72
Width rolls, ins.....	36	48	60	72
Wt roll, lbs.....	65	90	110	130
Per Sq Yd.....	\$0 50	450	450	450
<i>About 50 lineal yds to roll.</i>				

Heavy double warp non-inflammable.

Nos.....	12-36	12-48	12-60	12-72
Width rolls, ins.....	36	48	60	72
Wt rolls, lbs.....	80	110	135	160
Per Sq Yd.....	450 56			

CARBIDE

From Louisville Magazine Only.
Union Carbide is carefully screened and packed; contains about 400 to 450 cubic feet of acetylene gas to 100 pounds.
Cameo Carbide is carefully screened and packed; contains about 300 to 350 cubic feet of acetylene gas to 100 pounds.
UNION GENERATOR CARBIDE
 In sheet steel drums, contents 100 lbs.



Per 100 Lbs	
No. 1—Lump, size 3 1/2 x 2 ins.....	46 53
No. 2—Egg, size 2 x 1 1/2 in.....	16 53
No. 3—Nut, size 1 1/4 x 3/8 in.....	16 53
No. 4—Quarter size, 1/4 x 1/12 in.....	16 53

UNION MINERS' LAMP AND BICYCLE LAMP CARBIDE

No. 5—In drums, contents 100 lbs.....	Per 100 Lbs \$17 91
No. 5A—In cans, contents 25 lbs. In lots of not less than 4 cans.....	Per Can. 4 07
No. 7—In 2 lb cans.....	Per Case 14 70
No. 8—In 10 lb cans.....	Per Case 16 23
<i>2 lb cans packed 24, 10 lb cans packed 6 in case.</i>	

†Carbide—F. O. B. Kentucky Factory Only.
 †Brattice Cloth—F. O. B. Pennsylvania Factory Only.

INDIANA CAVE MAPPING WORKSHOP

MAY 4 - 5, 2019 AT MCCORMICK'S CREEK STATE PARK
9 AM - 5 PM EACH DAY

Join us for a weekend learning the basics of cave survey and mapping techniques at McCormick's Creek State Park.

Instructed by

Lee Florea

Indiana Geological and Water Survey

**LEARN
MORE**

and register at

igws.indiana.edu



INDIANA GEOLOGICAL
& WATER SURVEY
INDIANA UNIVERSITY

Indiana Geological & Water Survey | An Institute of Indiana University
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DNR
Indiana Department
of Natural Resources

INDIANA KARST CONSERVANCY TREASURY REPORT

Income/Expense Statement From October 1, 2018 to December 31, 2018

INCOME:

Dues Apportionment and Residuals	747.50	
Donations - General	264.25	
Donations - Land Acquisition Fund	1,010.00	
Gary Whittaker Bequest (Land Acquisition Fund)	44,101.63	
Education / Outreach reimbursements ¹	402.81	
Investment Earnings	510.93	
		\$47,037.12

EXPENSES:

IKC Update (printing, production, mailing)	230.13	
Education / Outreach	72.81	
Stewardship/Conservation	1,522.93	
Business (credit card fees, PO box rental, filing fees)	121.92	
Insurance premium	2,341.00	
Transfers to/from restricted funds/other adjustments	55,678.51	
		(\$59,967.30)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD: (\$12,930.18)

Balance Sheet December 31, 2018

ASSETS:

Cash in Checking / Saving / CDs / Brokerage acc'ts	200,587.58	
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 Easement (valued at \$1/acre)	13.16	
		<u><u>\$763,600.74</u></u>

FUNDS & OPERATING EXCESS:

Land Acquisition Restricted Fund ²	74,563.08	
Deferred Dues Restricted Fund (197 members)	3,408.75	
Stewardship Endowment Restricted Fund ³	68,900.25	
Previous General Fund (total)	66,658.84	
Net Excess (Deficit) This Period	<u>-12,930.18</u>	
Current General Fund (unrestricted)	53,728.66	
Current General Fund (committed)	2,600.00	
Real estate liquidity (basis value)	<u>563,000.00</u>	

Total Liabilities & Operating Excess \$763,600.74

NOTES:

- 1) Reimbursement for Natural Area Conference prior expenses
- 2) Excludes \$12,870 in outstanding pledges for the Wayne Cave expansion
- 3) A contribution of \$10,300 was made to the Stewardship Fund for the Wayne Cave expansion

IKC EXECUTIVE BOARD MEETING MINUTES

Saturday, December 1, 2018, 10:30 AM EST, Monroe County Public Library, Bloomington, Indiana

Board Members Present:

Jerry Lewis, President
 Marc Milne, Secretary
 Keith Dunlap, Treasurer
 Laura Demarest
 Danyele Green
 Dave Haun (proxied by Salisa Lewis)
 Everett Pulliam
 Matt Selig
 Bob Sergesketter
 Tom Sollman
 Carla Striegel-Winner
 Richard Vernier
 Sue Vernier
 Jamie Winner

Board Members Absent:

Bruce Bowman

Call to Order

The meeting was called to order by President Jerry Lewis at 10:30 am EST at the Monroe County Public Library, Bloomington, Indiana.

Acceptance of Proxies

Salisa Lewis was accepted as proxy for Dave Haun.

Email Motion since Last Meeting

On October 9, 2018 President Lewis received the following four motions from Keith Dunlap, and noting a discussion of the issues for four days, called for a second. Motions 1 – 3 were seconded by Carla Striegel-Winner, and motion 4 by Bruce Bowman. President Lewis then called for the vote. The motions were as follows:

- Motion 1: I move that we accept the quote of \$801/year for the Commercial Package Policy (General Liability Policy) as outlined in the Conserve-A-Nation proposal.
- Motion 2: I move that we accept the quote of \$219/year for the Volunteer Workers Accident Policy as outlined in the Conserve-A-Nation proposal.
- Motion 3: I move that we accept the quote of \$770/year for the Management Liability Policy (Directors & Officers and Entity Liability, and Employment Practices Liability policies) as outlined in the Conserve-A-Nation proposal.
- Motion 4: I move that we accept the quote of \$618/year for the Umbrella Policy (extended general liability policy) as outlined in the Conserve-A-Nation proposal. This motion is contingent on the successful passage of Motion 1, otherwise it is void.

On October 11th, all Board members had voted and President Lewis called the results on each of the four motions as follows:

- Motion 1 passed unanimously,
- Motion 2 passed unanimously,
- Motion 3 passed 14 for, 1 against, and
- Motion 4 failed, 5 for, 10 against.

Treasurer Keith Dunlap is now mandated to move forward with the purchase of the insurance as indicated by motions 1 – 3.

Approval of Previous Minutes

No comments. Minutes approved.

Treasurer's Report

Keith stated that we now have insurance due to the email vote results that were collected on October 11th. Keith said that the insurance started on October 30th. There have been some billing issues which Keith is getting resolved.

Current finances: Keith outlined the financial status of the organization: Cash assets totaling \$154,846.90 and land assets totaling \$563,000.00 for total assets of \$717,846.90. Funds include Stewardship: \$58,333.37; Land Acquisition: \$29,451.45 (note, this does not include a pledge of \$12,870.00 from The Nature Conservancy); Deferred Dues: \$3,945.00; and General Operating Fund (unrestricted): \$63,117.08.

Membership: Currently stands at 190 members. Ten members were dropped for non-renewal.

Keith encouraged us to solicit more members and proposed that we send out letters/emails to Indiana cavers on the NSS list. Keith proposed working with grottos to get their members that use our caves to become IKC members (e.g. CIG). Laura suggested printing sign-up sheets when she takes people on cave tours. Jerry suggested sending email to NSS list and link to IKC website. Keith said that NSS will not provide an email list, but will send out an email on the IKC's behalf. Jerry suggested using Facebook pages of grottos to reach out to local grotto members. Keith suggested making the IKC online payment method easier and suggested that there are similar websites that we could mimic. Keith warned that there is a fee for using such an option, but suggested that we could just pay for that fee in exchange for getting more members at a slightly lower net membership revenue. Keith said that there is probably no risk involved in using this payment option. Carla agreed. Keith stated that donating an amount of money that is not already stated (i.e. hav-

ing a fill-in form where one types in a number) is not available through PayPal. Tom Sollman stated that PayPal would be the safest. Jerry suggested to keep payment method simple and not to prorate the online cost of signing up because the cost is so low.

Gary Whittaker bequest and fund designation: Jerry stated that he received a phone call from the sister of Gary Whittaker, a caver and IKC member, who said that Gary bequeathed “a few thousand dollars” to the IKC. Keith stated that it was in a brokerage account at Fidelity and the IKC was listed as a beneficiary of 25% of the amount, which was approximately \$44,000 for our share. Keith stated that he created a Fidelity brokerage account for the IKC to transfer the funds and that the money is now in that account. The donation has not yet been designated within the IKC as a fund type, and Keith suggested that it be categorized for land acquisition. Jerry stated that the sister also thinks it should be designated for land acquisition. Keith made a motion that the donation be categorized as land acquisition funds (sue Vernier seconded). Carla suggested that we write a “Thank You” note. Motion passed unanimously.

Fidelity brokerage account: the IKC now possesses a money market fund with \$44,050. Rather than using National Speleological Foundation for investment, Keith suggested that we do our own investment now that we have a Fidelity brokerage account. He suggested that we appoint an investment committee and to use the Fidelity account to invest in CDs or funds other than CDs. Jerry suggested that Keith, Matt, and Tom would be on the investment committee. Jerry designated a committee of Keith, Matt, and Tom as the Financial Investment Committee. Keith suggested making a charter for the committee and then present the charter to the Board.

Short-term investment direction: IKC possesses a CD that matures on February 18th and Keith suggested that we move it over to Fidelity in the short-term until the Investment Committee is functional.

Shawnee Karst Preserve

Road maintenance update: Jerry reported that the road is completed and that he, Tom, and Keith cut down all the encroaching trees. Jerry stated that the truck driver was congenial and that there were no issues. Jerry said that they enlarged the parking area at the end loop. He stated that they came in under budget. Keith stated that the total cost was \$1250 out of a budget of \$1500.

Grassland maintenance update: Jerry stated that they (Jerry, Tom, and Keith) cut approximately 200 cedars out of the grassland area. Since they don’t re-sprout, Keith stated that they did not need to treat the stumps.

Upper Twin Cave entrance update: Jerry stated that Jaime Winner brought his tractor with backhoe and dug

out the entrance. Jaime stated that they pulled out a lot of the mud and dirt by the tractor and by hand. He said that there was a large wall of dirt and mud nearby and that later, the entrance had re-collapsed. Jerry said that he went back even later and that water was pooling above the entrance. Jaime suggested that we re-dig it out later. Jerry asked the Board if we want to put in a culvert. Keith suggested that once the entrance is re-opened, we wait and see if it will stay open rather than putting in a culvert. Jaime suggested that we need to wait to do anything because it’s too wet. Laura asked if the entrance ejects out water and Keith stated that it does not. Laura suggested peeling back the hillside to prevent further fill-ins. Jaime and Jerry stated that that would be a significant change to the environment and that it would be difficult to execute. Tom Sollman suggested doing nothing until next summer and wait and see what happens. Jerry stated that not having an entrance impacted Tom Sollman’s study and prevented himself from conducting his bioinventory of the cave. Jerry asked if a bigger hole could be made. Keith and Jaime said that they could create a bigger hole. Keith suggested that the through-caving field season is over and that there will not be many requests to use the entrance anyway for a while.

Kiosk planning: Jerry stated that it is in the planning phase.

Sullivan Cave

Stewardship activities: Keith stated that he sprayed for Stiltgrass and he mulched up the leaves in the camping area. He said that the port-o-john has been serviced. Keith said that there was an extra lock on the road gate chain and nobody knew where it came from. The lock was removed by Keith.

Wayne Cave Preserve

Kiosk update: Tom and Keith stated that one panel for the kiosk is electronically-created and that the other panel is in-process, waiting for the loop trail to be delineated. Danyele asked if the second panel could be adjusted with red dots for a trail after it was created. Keith stated that we’ll update the trail routes for the panel today.

Trail loop delineation: Keith stated that he flagged the trail, but would like feedback from other Board members before GPSing and clearing the trail.

Workday to remove fencing/posts: Keith stated that he will be using wire cutters to pull out barbed wire fence. He said that the neighbor (Matt) has a tractor to pull the posts and that Matt may want to keep the posts. Keith said that he plans to have workdays over the winter and he will invite volunteers to come out and help.

Conservation Stewardship Program application update (invasive contract): Keith filled out an initial application and now he has been tasked with speaking with officials about the application and plan. He said that

he has done what is needed to be done to keep IKC in the running to get the grant money. He said his plan is to do 15 acres, 20 acres, and then 22 acres of treatment over an extended time period.

Stewardship Endowment Fund (SEF) contribution (proposed \$10,300): Keith stated that in the past we have put 10% of the value of each new acquisition into the SEF. This summer we completed the Wayne expansion, which was \$103,000. He wanted Board approval to move \$10,300 from our General Operating Fund to the SEF (which currently had approximately \$58,000 in it). Keith stated that the SEF allows us some flexibility to pull money from a pool of funds for other activities. Everett Pulliam made motion to move money from the General Operating Fund to SEF (Sue Vernier seconded). Motion passed unanimously. Tom Sollman suggested that we separate the SEF from the IKC so that it can't be lost in a lawsuit.

Buddha Karst Preserve

Tree thinning update: Jaime Winner stated that Jerry, Keith, and he thinned trees to give space to larger oaks. Jerry stated that it looks more like a natural forest and less like trees in rows. Danyeale asked if trees could be used for lumber. Jerry stated that they were too small to be used for lumber. Keith stated that they were planted on a 6' x 6' matrix so therefore they were forced to grow straight up rather than be bushy.

Stewardship activities: Keith stated that he mowed the trail and that he hoped to cut grape vines over the winter.

Robinson Ladder Cave Preserve

Stewardship activities: Jaime said that he mowed most of the lower field this fall. He said that he made repairs to the wildlife pond. Keith said that half of the chestnut trees were looking good and the other half are not looking so good. Jerry asked how long the fences need to be kept up and Carla said that the fences should stay up until the trees can fend off deer. Keith said that he was not in a hurry to pull down any fences because of the many small trees still present there.

Land Acquisition Activities

Keith stated that the property north of the Shawnee Karst Preserve may be available for purchase and that he was pursuing the property personally (a non-IKC action) and if the acquisition was successful that he would tear down both houses. The owners of the property obtained an appraisal, but there were some issues with how the appraisal was done. Negotiations continue.

IKC Preserves Emergency Protocols Update

Danyeale suggested that we send out an email to make sure that all contact information are updated. Keith said that we still need information signs at Shiloh and Suicide caves. Tom Sollman said that he would put in posts at Shiloh and Suicide. Tom voiced his concern about

putting in a post because there isn't much soil near the entrance. However, Keith suggested that the post would be put near the parking area, which has more soil.

NCRC Introduction to Cave Rescue Program

Jerry stated that the IKC had been waiting to resolve the insurance issue before proceeding in planning the cave rescue training. Laura stated that we should get a date very soon. Keith suggested that we get a date in April 2019. Laura stated that April would be too soon to the May week-long training class to be held in Mitchell. Laura then suggested November 2nd and 3rd, 2019.

Education and Outreach Report

Natural Areas Conference field trip and symposium: Jerry stated that it was a big success and that the symposium had a standing-room-only audience. Jerry stated that there were many audience members present who were not the typical cavers or cave managers. Jerry stated that the field trip went well and that he had an enthusiastic audience.

Other outreach: Jerry said that he'll be speaking at multiple Nature Conservancy events next year. Jerry said that The Nature Conservancy pledged \$5000 towards Jerry's Indiana Subterranean Biology book. Laura said that she has used many IKC brochures, pamphlets, and other material in her work.

Website on-line payments (new members and renewals): Keith solicited input from the Board on adding the ability to accept memberships (new and renewals) and donations online. This would require creating a PayPal or similar account. There was general consensus that this was a good idea and that he should work with Bruce to implement.

Items from the Floor

Laura asked if there were any plans to put in a kiosk at Sullivan Cave. Keith stated that there are plans, but that we wanted to see how Jerry's current kiosk would work out as we would likely use a similar design.

Jerry was contacted by Allen Pursell (TNC), who stated that he is a co-owner of a cave near Marengo and that there was spray paint on all the trees leading to the cave and in the cave. Allen contacted a conservation officer and who will be attempting to find the vandal(s). Jerry suggested that we volunteer to do a clean-up.

Danyeale asked when the NSS last mentioned the IKC in the *NSS News*. She suggested that we could publish something in the *NSS News* for awareness. Jerry said that he wrote something for the NSS years ago, but that nothing awareness-wise came from it. Keith stated that NSS used to push a conservation issue in February and used to ask organizations for articles. Danyeale volunteered to write an article in *NSS News* for awareness purposes.

Robert Sollman stated that he will be retiring as Property Manager of the Wayne Cave Preserve after the kiosk

project is completed. He suggested that Tom Sollman should be the next Property Manager of the property.

March Election Nomination Committee

Jerry suggested that the committee members solicit Board members from current IKC members rather than non-IKC members. The following members agreed to appear on the ballot for another term: Keith, Danyele, Jerry, Marc, and Carla. Jamie requested to retire from the Board. Everett asked to only be nominated if no one else could be found. Jerry stated that he is encouraged by seeing younger members on the Board. Sue suggested that we email IKC members asking people to nominate themselves to be on the Board.

Tom Rea stated that IKC bylaws were originally an adaptation of the Michigan Karst Conservancy (MKC),

except that in the MKC bylaws, the President appoints one Board member. In that way, it's quite easy to get new, young people on the Board. Jamie suggested tempering the fervor to get new, young members because he thinks the more important part of being on the Board is being interested in conservation. Matt stated that because there are no longer large groups going caving, fewer people know about the IKC.

March Business Meeting Scheduling

The next meeting was scheduled for March 23rd at Ellettsville at 10:30 am.

Adjourn

Meeting adjourned at 1:10pm.

Respectfully submitted, Marc Milne, IKC Secretary



photo by David Black (May 2012)

Angela Klemenz in IKC-owned Robinson Ladder Cave, Crawford County, IN.

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.

