

IKC UPDATE

A Quarterly Publication of The Indiana Karst Conservancy
September 2018

Number 130

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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IKC QUARTERLY MEETING & COOK-OUT REMINDER

SATURDAY, SEPTEMBER 22nd, 4:00 PM EST

FERDINAND STATE FOREST, INDIANA

HOME OF CARLA & JAMIE WINNER

The quarterly meetings are for the elected 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 Items: Brief reports on the various IKC preserves, summer stewardship activities, and possible fall workdays at some of our properties; National Areas Conference; Rescue training status; Liability insurance status; Invasive control funding; Stewardship Fund investments; Financial reports; and more....

Following the quarterly meeting (around 6 PM) will be the annual pitch-in cook-out. The main entree(s) will be provided. Please bring a salad, dessert, and/or other covered dish to share. If there are enough entries, we will also have a dessert contest. ***Please bring a lawn chair if you want to sit down during the meeting.***

Meeting location: You can google map/mapquest with success: **7985 S 600 E, Ferdinand, IN.** This will get you to the entrance of the State Forest property. If the entrance gate is staffed, just tell the attendant you are there for the IKC meeting and they will let you through. From the gate house, follow the main road to the end. The meeting is at the residence uphill on the left, opposite from the Sycamore Shelter and parking area. If you get lost, call (812) 367-1602.

ACTIVITIES CALENDAR

Sept 22 – IKC Annual Business meeting (see above)

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

Spring ?? – 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. Donations can also be made by credit card using the donation button located on our website's home page.

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...

In this rambling, I'm going to talk about a situation that I view as a yin-yang dichotomy, although whether or not (in the sense of Chinese philosophy) it becomes complementary or synergistic remains to be seen.

First the yin. Among cavers I know a lot of people who I would term "old-school", although this categorization is more one referring to an attitude rather than age-related. Many of the people I place in this category are, for one reason or another, awesome. I would bet that most of you could probably name five of these people in ten seconds... you know the type. Among other things, these folks are a resource of almost endless information on some aspect of caves and karst: exploration, mapping, photography, geology, biology, conservation, whatever. And like other resources, this one can be tapped if approached judiciously. I cite a recent personal situation as an example. Earlier this summer I was going out to Seattle to visit my son and his wife, and while I was in Washington I wanted to make a trip to a reportedly well-known cave to find a very unusual troglobitic isopod that inhabited the cave. The obvious problem was that regardless of how well-known the cave was, I didn't know where it was, nor did I know anyone in Washington who might go with me. So, there were some challenges.

Taking the path of least resistance, I put up a request on Facebook for assistance, since half the people I know there are cavers. I quickly received several suggestions and the one that led to a successful outcome came from Anmar Mirza, an example of (in my opinion) one of Indiana's old-school cavers who also happens to be the national coordinator of the National Cave Rescue Commission (NCRC). Like I said, the old-schoolers are an assemblage of awesome people. Through NCRC, Anmar is connected to cavers across the USA, and he connected me with Eddy Cartaya, the NCRC regional coordinator for the Pacific northwest. The other thing that Anmar did for me

was to provide an introduction and vouched for me personally... because we all know how readily cavers are going to hand out cave locations to complete strangers. So, with that foundation in place, Eddy offered to go to the cave with me, and a couple other northwestern cavers provided the location for the entrance to Deadhorse Cave, as well as a map.

After arriving in Seattle, I drove down to Hood River, Oregon and checked into the Columbia Gorge Hotel (which was sort of pricey but a historic, scenic place to use as a "field station" that I can recommend if you're in the area). After checking into the hotel, I departed again, crossing the Columbia River back to Washington and

driving about forty miles north to see if I could find the cave. This turned out to be a simple matter with the directions I'd received. Using a new set of caving gear to eliminate the possibility of transmitting White Nose Syndrome (although it had already been reported there), I made a short trip into Deadhorse Cave and quickly found the stream. I placed a jar trap baited with a dead shrimp to see what it might attract overnight, and then exited the

cave as I recognized that I was bending a few caving rules by venturing solo into the cave.

The next day Eddy Cartaya met me at the hotel in Hood River and we again drove up to Deadhorse Cave. To me this alone was a big deal, in that Eddy was making a six hour round trip to go in this cave with a complete stranger – me – and there was absolutely nothing in it for him other than whatever satisfaction he might derive from helping someone else. Another awesome person. It turns out that Deadhorse Cave is the longest lava tube in the continental United States, complete with a stream flowing through part of it. That's unusual because unlike Indiana caves, water has nothing to do with the formation of lava tubes, which simply put, result from molten lava flowing under a congealed surface then exiting to leave behind the transit conduit. The presence of a stream



is unusual since it requires some mechanism for water being captured after the creation of the tube.

Eddy and I geared up and climbed down through the cave entrance, which was located in the bottom of a sinkhole created by the collapse of the underlying tube. Scrambling across the lava boulders in the entrance passage, we came to the stream passage within 100 feet. I pulled the baited jar trap and it contained several large, white caver-nicolous flatworms, but none of the isopods that I was searching for. The isopods had been collected in 1972 by Frank Howarth, a cave biologist now retired from the Bishop Museum in Honolulu in which he had spent much of his career deciphering the fauna of Hawaiian lava tubes. In 2001, I described the Deadhorse Cave isopod as a new species that I named *Salmasellus howarthi*. Now I wanted to collect freshly preserved specimens for DNA sequencing, and it turned out I was with the right person: Eddy turned out to be excellent at spotting the isopods and getting the specimens into a vial. With both of us collecting specimens, in an hour or so we had a splendid sample and exited the cave.

After finding and entering another nearby lava tube that turned out to be streamless (thus no isopods to collect), we packed up our gear and headed back to Hood River. It seemed like the least I could do was buy Eddy dinner, and over margaritas and a Mexican meal, I found out that my new caving buddy was leading an expedition the following week to caves formed in the glaciers around the rim of Mount St. Helens. This multi-disciplinary expedition included a team to study the microbial communities that lived in this unique environment, where the chemicals breathed out by active volcanic fumaroles combined with the meltwater flowing from the icy fabric of these glacier caves. Perhaps the most noteworthy participants were going to be a team from the Jet Propulsion Laboratory, who were bringing a prototype of a robotic caver being sent to explore and conduct sampling for cave life... on Mars. Wow. Another example of an awesome caver.

The cloth from which old-school cavers is cut produces people for whom problems are things to be solved and surmounted, and this is a genre of person who doesn't get themselves into things they can't get out of. Sure, bad things happen. Personally, I've been part of organized caving for 47 years and during that time, I've broken a foot, blown a knee, and Salisa, myself and another caver were trapped by flood-waters in a cave in

Illinois after an unexpected seven-inch deluge. In each instance we got ourselves out of the situation and moved on. Suing the cave's owner – the person nice enough to allow us to enter their cave – never would have occurred to me.

And now the other side of the yin-yang equation. As a result of an incident in one of our caves, the IKC was recently informed that our liability insurance is being canceled. As an organization, we have lived under the belief that “cavers don't sue cavers”, but times change and the IKC is going to have to change with them. We are currently working on obtaining new liability coverage, but there are going to be some realities to be faced. First, depending on the timing, there may be a period of time during which we are going to have to suspend visitation to our properties, including trips into the caves... we just can't allow visitation without liability insurance in effect. This is a situation that will not be permanent, but it is going to take time to establish new insurance coverage.

The next problem is that when we do find a new insurer, it is a foregone conclusion that it is going to be more expensive. We charge nothing to hike or camp on our properties, nor enter IKC caves, and that will not change, but the money for the more expensive liability insurance is going to have to come from somewhere. The IKC is a non-profit organization and we do not sell anything that produces income, nor do we have the proverbial deep pockets. Individuals and organizations that enjoy our properties and caves need to think about that when it comes to keeping your dues paid and making additional donations to our general fund.

Regardless, it's up to each and every one of us to redouble our efforts toward keeping everyone safe while on our preserves. Sometimes problems happen, and the IKC has put a lot of effort into establishing safety protocols and getting the information posted on our preserves. Trip leaders have special responsibilities to keep everyone on their trips safe while recognizing the responsibility they have to the IKC to protect our interests, as well as ***being positively certain that liability waivers are read and signed before anyone sets foot in one of caves*** (and preferably executed the day before). Clearly not everyone visiting our preserves and going in our caves is a caver, and this fact needs to be recognized. Some of our visitors may become cavers, but many of them do not and haven't yet developed the old-school caver ethic. These are just the realities of the situation.

To conclude, I'm optimistic that the IKC will



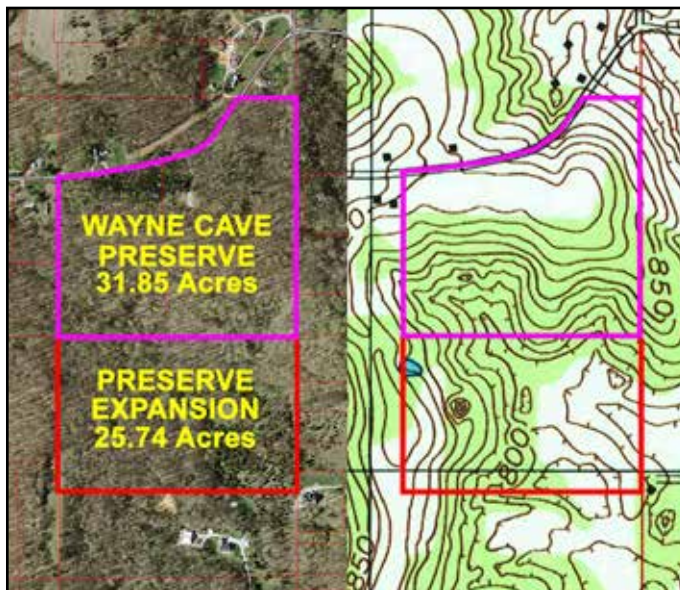
overcome our current challenges. Our greatest resource is our members and the breadth of the experience and knowledge of our membership as a whole is encyclopedic. Our organization has ac-

complished a lot of great things, and *you* can play a part in continuing this trend... become part of the old school!

Jerry Lewis

NEWS BRIEFS...

- ❑ It's now official! The IKC closed on the 25.74 acre tract of adjacent land to the Wayne Cave Preserve, making the expanded preserve 57.59 acres, second in size only to our Robinson Ladder Preserve. We closed on July 19th and have already added permanent posts along the southern property line. This fall/winter we hope to delineate a loop walking trail and get it cleared. Next spring we hope to aggressively work to control invasives on the preserve (both the original tract and the expansion tract). Thanks to everyone who donated to make the expansion happen. Please see the updated donor's list at ikc.caves.org/wayne-expansion-donors-list



- ❑ The IKC Board has been discussing sponsoring a two-day Orientation to Cave Rescue presented by the National Cave Rescue Commission. At the June meeting, the Board approved this initiative and further agreed to cover a portion of the cost for IKC members to encourage them to take this training. We had hoped to schedule this training for this fall, but because of our insurance situation and some other scheduling issues, we are now looking at next spring. Hopefully we will have full details in the next newsletter. Regardless, consider this a heads up for this training.
- ❑ At the June IKC Board meeting, two new Property Managers were appointed. Carla Striegel-Winner will take over responsibilities for our Orangeville Rise Nature Preserve, replacing Steve Lockwood, who has been the steward of that property for the past nineteen years. Also, Keith Dunlap will officially become the Property Manager of our Buddha Karst Nature Preserve, having been the acting manager for the past year. Both of these preserves are pretty much in "maintenance" mode, meaning most of the stewardship work is trash pick-up, trail mowing, and invasive control.
- ❑ With the help of Bruce Bowman (webmaster) and Keith Dunlap (newsletter editor), *all* of the back-issues of the *IKC Update*, dating back to 1986 are now available on-line on our website. Check them out at ikc.caves.org/ikc-updates
- ❑ Thanks to Carla Striegel-Winner for making a \$98 Land Acquisition fund donation in honor of the marriage of Dr Jeanine Ash and Dr Laurence Yeung. Jeanine, Carla's cousin, is the daughter of the late Dr Don Ash, who left his mark on Indiana caving.
- ❑ The IKC has not added any new members this quarter, but all but eleven prior members have renewed, which is a little better than usual; and several who have not renewed have indicated they still intend to do so. Thanks to Carla Striegel-Winner for volunteering to personally contact and follow-up with our delinquent members to encourage their renewals. The IKC membership currently stands at 185.

RICHARD J. BLENZ, NSS 5671 (1924-2018)

by Sam Frushour

Dick Blenz lived very frugally and yet was the most generous person you may ever meet. He came to Monroe County, Indiana in the summer of 1962 to visit Buckner Cave and was so impressed with the cave and property that he bought it for \$7000. Until moving to Bloomington in 1965, he made weekend treks from Chicago to explore the area and renovate the barn on the fifty acres that he purchased. That purchase was the beginning of fifty-six years in which he worked for the Indiana University Physics Department, taught electronics at Ivy Tech Community College, pioneered cave radio development, participated in numerous cave digs, and mentored a great number of young people enriching their lives and futures. Dick was generous with his monetary resources by providing funds to various cave conservancies, the American Cave Conservation Association, the Robertson Foundation, the National Speleological Society, and Wonder Lab (the children's science museum in Bloomington).

In Dick's early years in northwest Indiana and Chicago, he was once riding his tricycle in the living room of his parents home when he stuck a fork into an electrical outlet, and from that time on, he was an avid researcher and tinkerer in all things electrical. This was encouraged by his family who owned an appliance store that also sold phonograph records. He attended one semester at Purdue University, but was drafted into the Army in March 1943, and after basic training was sent to the Army Specialize Training Program. In a secret meeting, by a tank commander, he and several others in the Army Air Corps were warned that they needed to flunk out of the program because it was being terminated and they would be sent to the infantry. He and others did flunk out and returned to the Army Air Corps where he was sent to radio school at Truax Field in Madison, Wisconsin. Following four cold months at Truax, Dick was sent to electronics school in Chanute Field at Rantool, Illinois. Af-

ter graduation, he was transferred to Boca Raton, Florida to a RADAR school for training that was very secretive in those days. He was promoted to Corporal at graduation and after two weeks leave, he crossed the Atlantic on the ocean liner Queen Elizabeth, zigzagging across the ocean to avoid attack by U-boats. He was assigned to the 100th Bomb Group and under special orders traveled by train to a different station than the others going to his destination. It was deserted except for a telephone that he was to use. He was picked up and taken to a remote building on the base of "The Bloody Hundredth" Bomb Group. His job was to install, maintain, and repair RADAR counter measures equipment in B-17 bombers. There

followed 12 to 18 hour days servicing equipment, setting transmitter frequencies, and learning to get along with a variety of commanders, some good and some very difficult. The flight crews understood the equipment he was working with helped get them home safe, so they got him a pass to the officers mess hall and better rations. After the WW II end in Europe, Dick was sent back across the Atlantic on a B-17, then home by train to await or-

ders for assignment to the Pacific Theater. The atomic bomb changed all that, and he was eventually mustered out of the Air Corps.

Dick's work history after the war consisted of working with gamma ray detection and analysis electronic equipment flown on large balloons at the edge of the atmosphere. He spent years repairing equipment and chasing balloons all over the United States and Canada. This was while being employed by the University of Chicago. Then he came to Indiana and with his father built a home in Bloomington for his parents, and in the mid-1970s he and his father built the home on the property with Buckner Cave.

From the mid-1960s through the 1970s, the area around the Blenz property and Buckner Cave was the center of major caving and cave mapping



photo by Dave Black, 2018

in south-central Indiana. Literally dozens of caves were located and mapped by the Chicago-area Windy City Grotto cavers, cavers of the Indiana University Spelunking Club, and the Bloomington Indiana Grotto cavers. The property was a gathering place for cavers to learn, and to have a good time. "The Barn" served as a place to meet for cave trips and find a warm refuge in winter. Dick and others made certain the hay portal high up on the barn was available for vertical cave training. In 1963, Dick was invited to participate in the second Sullivan Cave Expedition where he and ten others spent twenty-one days in Sullivan Cave mapping and participating in psychological testing to learn effects of the long term stay on participants and to

some extent what makes cavers tick. He was responsible for plotting cave survey data and maintaining a phone line between underground camps.

When he decided it was time to transfer his property to the National Speleological Society, cavers in the Bloomington area, especially Anmar Mirza, suggested forming a conservancy organization to manage the property and Buckner Cave. Dick was very agreeable and helped fund the formation and incorporation of the Richard Blenz Nature Conservancy in March 2005. The actual transfer of his property to the NSS occurred in 2008. The ol' guy is certainly missed by a bunch of us in Indiana and will be for a long time. There will never be another one like him.

MEMORIES OF RICHARD BLENZ

by Jeff Cody

Back in 1980, when I was in high school, I had discovered several of my friends were going caving. I was in Franklin, Indiana at the time, and there were no caves in my immediate area, but had learned in science class about caves being in southern Indiana. After asking some of those who were "spelunking", I found out they were going to an area just outside of Bloomington, about an hour's drive away. I listened to their caving stories, but at first never had a great desire to go, until a couple of my best friends started caving. Five months after graduation in October of 1981, I went on my first trip with them. They told me I needed a hard hat with a mounted light and an old military type backpack to carry water, an extra flashlight, and spare batteries. We went to a cave called Buckner Cave. We drove down a long gravel road, around a curve up a little hill, past a stone house, and then a short way further to where we parked at an old barn. Others were also parked at this barn. We, like many others in that area at the time, were there to cave, but also to drink beer. This was a great spot to drink underage and consume other recreational substances away from law enforcement on private property where the landowner al-

lowed anyone. I thought it was a bit strange, but what more could an eighteen year old guy want?! We did the cave that included crawling, walking, and other maneuvers that I had never done before. I enjoyed it and was eager to return.

We soon began to make regular trips to this "speleo-spot" and were told of a few other caves



close to this barn. We were told that the guy, Richard Blenz, who lived at the house, had been a caver for years. It was not long before we met Dick. He was very hospitable and seemed to enjoy the interest that others had in his cave. He had lots of stories. It was not long before Dick told us of the NSS and local caving

clubs, and about Indiana Cave Capers. Dick informed us that he maintained the NSS cave files in his basement, and showed us the files. Going into the house was an experience. It smelled strongly of "cat" and was a complete mess inside. He was a very smart man, but I could not understand how anyone could live like that. The cave files were in neat order and we read about all these caves we did not know about, many in Indiana. Dick told us about Sullivan Cave and others in the area. We were hooked on caving and one by one, we joined the NSS and wanted to check out the closest cave

club to us in Indianapolis, about thirty minutes north of Franklin. With that said, we had lots of caving friends and did not really need others – we just needed to know where the caves were. We gained Dick's trust after repeated visits to see him when we came down and found our way to other caves. We gained confidence quickly and soon found our own way through several caves with maps we photocopied from the cave files.

We got to know Dick pretty well in those early years and even went ridge walking with him out on power line hill not far from his house, with him showing us interesting sinkholes he had been watching grow for years. We learned much from him. We told Dick about how we were not sure about joining the Indianapolis grotto and he suggested we start our own grotto. He told us how to go about doing this.

Soon after, the Mid-Hoosier Grotto was formed as an Internal Organization of the NSS. One of our friends worked in the print shop at Franklin College and another surveyed caves. With these assets, we soon began to print our own newsletters with new cave maps. Dick was pleased with those professional looking newsletters as we always gave him copies. Without him, we would have never had the inspiration to get serious about caving. Dick always told us of how he wished cavers would buy caves. We met many other cavers along the way, but had lots of caving friends right in our small town of Franklin to cave with.

Later we began to branch out of Indiana to caves in Kentucky and Tennessee with information from the cave files and using guidebooks we purchased from the NSS. This led us away from

Dick and the Bloomington area, but we would still stop by occasionally, and see and speak to him at Indiana Cave Capers. The Indiana Karst Conservancy (IKC) was formed in 1986 and later the Southeastern Cave Conservancy (SCCi). The message Dick gave us years before about cavers buying caves stayed with us. I and another friend joined the IKC in its first year, and I later became a Director, and then the IKC Cave Patron for Shaft Pit Cave, and later Buddha Cave. I have maintained my membership in the IKC, as well as the SCCi. I learned that Dick was very generous to these groups when they would buy caves. Neat to see both these organizations grow and mature.

Dick had no family and told us not long after we met him that he was going to donate his property to the NSS. He did this prior to his recent passing, leaving stewardship of this property to a local group. I last spoke to Dick in April of 2018 at the Indiana Cave Symposium. I had not seen him for several years and he was very frail and did not really remember me. I knew it would not be long before he would be gone. Since his passing, I realized the impact he had on my life. Without him, I may have never visited Buckner Cave that first time, or gotten involved in organized caving, and may of ended up in lots of trouble given my path, prior to meeting him. I have now been caving for thirty-seven years with the same enthusiasm I had back in the 1980s. Dick will certainly be missed by me, and I suspect many other fellow Indiana cavers have similar experiences with him and stories about him. His legacy will live on with the NSS's Richard Blenz Nature Preserve.



MEMORIES OF RICHARD BLENZ

by Bruce Bowman

My main memory of Dick Blenz was running into him after we had made a trip through the spring entrance of Queen Blair. As we made our way up out of Blair Hollow, he was out in front of his house splitting wood. My wife and I were supplemental

heating our home with wood at that time and we got into a discussion on that. He made a casual comment about "wood warming you twice" from Walden, and that got us started on another lengthy conversation on Henry David Thoreau. Eclectic, he was.

WHAT ARE THESE 'INVASIVES' WE KEEP TALKING ABOUT?

by Danyele Green

Anyone who has a yard, goes hiking, or just drives along an Indiana road knows, we have a big problem with invasive species. For those on the IKC Board, we talk about it regularly, schedule invasive removal projects, and even apply for grants to offset the costs of removing these “pests” for our properties.

Clearing up some misconceptions: Native vs. Non-native vs. Invasive. **Native** plants, animals, or organisms are those living things that have historically occurred in our specific areas. **Non-native** plants, animals, or organisms are those that have been intentionally or accidentally introduced by humans or other activities. **Invasive** plants, animals, or organisms are a subset of non-native species whose introduction causes or can cause environmental harm, economic harm, or harm to human health. In most situations, a non-native species that is not invasive is not a concern and can be left alone. A final question: Can a native species be invasive? By definition, no, but some native species can be considered aggressive and may need some remediation/attention to keep under control.

According to an article in the Indiana Native Plant & Wildflower Society (INPAWS) newsletter, “...invasive species costs the United States over \$138 billion a year. Approximately 42% of threatened or endangered species are classified ‘at risk’ directly due to invasive species.”

Here is a non-exhaustive list of invasive species that have been or could be found on IKC properties (and your own!). There are many look-alikes so research before you take action to eradicate them:

Autumn Olive – A fast growing bush/tree which used to be planted as a decorative landscape shrub, especially along highways (to discourage deer from crossing roads). It spreads rapidly and crowds out native plants. It is best recognized by its silvery leaves and it leafs out early in the spring.

Bush Honeysuckle – Another fast grow-

ing/spreading bush with nice white/yellow smelling flowers. The berries have little nutritional value to birds and the plant prevents native trees and underbrush from growing around them by secreting chemicals into the soil (allelopathy). It is typically one of the first plants to leaf out in the spring and the last to lose its leaves in the fall, another biological advantage it has over its competition.

Japanese Honeysuckle – A climbing vine that can be distinguished from native honeysuckle in a few ways – the invasive berries are black, while native berries are red. The flowers of the native trumpet honeysuckle are pinkish/reddish with orange/yellow inside the tubes, whereas the Japanese variety are often white/light yellow. The vine can easily overtake small trees and mat over other native plants.

Garlic Mustard – An edible plant (see feel free to eat all that you pull). It grows well in the understory of woods. Also allelopathic.

Japanese Stiltgrass – An annual grass that very quickly crowds out native plant growth and quickly takes over areas that have been disturbed (post-timbered areas, logging trails, mowed areas). It is well-known for its seeds hitching rides in

tires and shoe treads, and spreads easily.

Johnson Grass – A perennial grass which is so troublesome to farmers that most states require landowners to kill it. With that said, it is very common along county roads and ditches.

Multiflora Rose – A fast growing, fast spreading, tangled and thorny, clothes tearing bush not to be confused with native Greenbrier (which has all of the same characteristics, but is considered “good”). White flowers in the spring, red berries in the fall, and spread by birds. Aggressive in sunny areas and will also flourish in wooded understory.

Tree of Heaven – A rapidly growing tree that can grow to 100 feet tall. Another allelopathic producing invasive that will kill off its native competition. If not controlled cor-



autumn olive

rectly, it will resprout profusely. It is often confused with Sumac.

Callery (Bradford) Pear – A common oriental tree that was promoted as the “perfect” tree for landscaping because it was specifically bred (genetically modified) to be sterile. However, slight derivative of this tree were developed by competing nurseries to skirt the original patents, only to negate the sterile characteristic when the variations in nature are crossed, creating an aggressive invasive that birds have done a great job of spreading, especially in suburban fields.

Periwinkle/Vinca – A perennial evergreen herb once used as ground cover with purplish blue flowers. It creates a dense mat that competes with natives. It is used as a medicinal herb which also helped it gain popularity here in the states. As invasives go, this one is “pretty” and slow spreading, but never the less needs to be controlled.

Giant Hogweed – Not yet found on any IKC properties (that we know of), but is spreading south from northern Indiana. The sap from any part of this plant when exposed to the skin or eyes, and exposed to UV/ moisture will act as the opposite of sunscreen, and can cause severe burns and/or blindness.

Wild Parsnip – The sap inside this plant causes horrible blistering of skin, if contact is made. It has yellow flowers and the plant looks similar to dill. It is found in our area so be on the lookout.

Emerald Ash Borer – This insect kills the vascular system of the Ash tree, resulting in the entire tree dying. If anyone mushroom hunts or spends much time in the woods, you will have seen the recent effects of stands of dead ash trees. Subsequently there are risks of falling limbs, then whole trees. To prevent spreading into un-infested areas, ash firewood should not be transported.

Pseudogymnoascus destructans – Everyone reading this knows this invasive fungus as the cause of White-nose Syndrome. Easily spread by social bats and it likes cold/humid environments which is the reason it does well in the caves. Susceptible to UV light which is another reason caves are a preferred habitat for the fungus.

So, what is being done at the IKC properties to combat all of these invasives? A lot actually!

The individual Property Managers regularly keep most of these invasives in check using mechanical or chemical (herbicide) tools. With that said, some areas need a more systematic/thorough approach, requiring more labor/volunteers. Such will be the case at our Wayne Cave Preserve. There is a ten to fifteen acre infested area on the original tract, and much of the new expansion property needs attention. As such, we are planning on applying for an EQIP grant (administered through the Monroe County NRCS office) to partially offset the costs associated with treating this property. Assuming we get the funds (or even if we don't), we are planning several work days in 2019.

Even if you don't participate in one of our workdays, there are things you can do to passively reduce the spread of invasives. Foremost, spray off and scrub your shoes, especially the treads, before going hiking to prevent spreading seeds from one place to another. Likewise hose

off mowers if you mow different properties. Finally, don't transport firewood out of your area.

Check out some of the following websites to learn more about invasive species in your area and how to help control them:

www.inpaws.org/biodiversity/threat-of-invasive-plants
www.in.gov/dnr/3123.htm
www.indianawildlife.org/wildlife/invasive-plants
www.invasivespeciesinfo.gov/unitedstates/in.shtml



A LOOK BACK AT INDIANA KARST

by John M Benton

This month I have scanned several older (and some more recent) cave memorabilia items I have collected over the years, most of it from Indiana caves and people, some from Kentucky. A lot of the contact information is no longer valid, e-mails, phone numbers, positions, etc. so don't rely on those as shown. Interesting to note the changes and some things as they were.











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NATURAL AREAS CONFERENCE: PREVIEW OF IKC EVENTS

by Jerry Lewis

In October the national Natural Areas Conference (NAC) will be hosted at Indiana University in Bloomington. Earlier this year the IKC was contacted by John Bacone of the Indiana Natural Heritage Program (DNR Nature Preserves) and invited us to participate. We have opted to support the NAC in three ways. First, the IKC Board approved to financially sponsor the conference with a \$500 donation as part of our organization's education and outreach mission.

The second prong of the participation in the NAC is a karst field trip that will be conducted in collaboration with the Indiana Department of Natural Resources at Spring Mill State Park. The plan is for the field trip to be led by Jerry and Salisa Lewis along with Wyatt Williams, the park's Naturalist at Spring Mill. We will meet the field trip participants at the parking area for Twin Caves – they'll be arriving by bus from Bloomington – and three areas will be

some of the terrestrial life of the cave. Finally, we will walk over to the boat landing at Upper Twin Cave, where everyone will get in boats and enter the cave. With a little luck we will have the opportunity to see cavefish and cave crayfish, as well as look at more of the cave system.

The third part of IKC's participation in the NAC is putting on a symposium on the conservation of karst. The structure of the symposium was dictated by the conference organizers and will consist of presentations by five invited speakers. I'll be kicking off the symposium with an introductory talk about

karst, caves, and subterranean ecology. Next will be four other speakers who have been chosen based on their broad experience with caves and karst, as well as demonstrated abilities as dynamic speakers. These speakers will be Wil Orndorff (Director of the Karst Program, Virginia Department of Conservation and Recreation) to talk about rare and endangered cave



visited. First, we'll take a short walk into Donaldson Woods, a rare remnant virgin forest growing on the undulating topography of the Mitchell Sinkhole Plain. There Wyatt will discuss the old growth forest and efforts to rid it of invasive species, e.g., vinca. The other topic of discussion will be the ecology of sinkholes and a look at some of the karst invertebrates that inhabit sinkhole floors in Indiana. Next, we'll go over to the Bronson entrance of the Shawnee Cave System, where we'll make a short excursion into the cave. Salisa and I will talk about the ecology of Indiana caves, demonstrate aquatic cave stream censusing and sampling, as well as look at

species of the Appalachians; Scott Johnson (Indiana DNR) speaking about endangered cave vertebrates in Indiana caves, especially woodrats and the Indiana bat; Rick Olson (Resource Management, Mammoth Cave National Park) to talk about the opportunities and challenges of managing the ecosystem of the world's longest cave; and Mike Slay (Ozark Karst Program, The Nature Conservancy) to wrap up the program with his perspectives on the conservation of Ozark karst.

Anyone is welcome to participate in the Natural Areas Conference, but must register for the conference. www.naturalareas.org/conference.php

Thanks to our 2018 Natural Areas Conference Sponsors



INDIANA KARST CONSERVANCY TREASURY REPORT

Income/Expense Statement From April 1, 2018 to June 30, 2018

INCOME:

Dues Apportionment and Residuals	658.75	
Donations - General	282.90	
Donations - Land Acquisition Fund	28,152.50	
Speloggers	1,800.00	
Interest	<u>388.92</u>	
		\$31,283.07

EXPENSES:

IKC Update (printing, production, mailing)	235.03	
Education / Outreach	657.99	
Stewardship/Conservation	430.47	
Business (renewal letters, annual meeting, etc)	77.00	
Property Taxes	44.76	
Transfers to/from restricted funds/other adjustments	<u>28,416.95</u>	
		(\$29,862.20)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD: \$1,420.87

Balance Sheet June 30, 2018

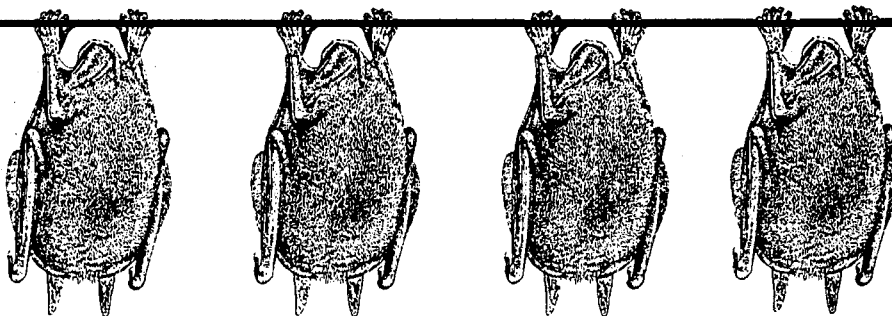
ASSETS:

Cash in Checking / Saving Accounts / CDs	259,189.06	
Robinson Ladder Cave Preserve (73.48 acres)	162,000.00	
Shawnee Karst Preserve (50.31 acres)	105,000.00	
Wayne Cave Preserve (31.85 acres)	85,000.00	
Sullivan Cave Preserve (28.00 acres)	72,000.00	
Buddha Karst Nature Preserve (36.84 acres)	29,000.00	
Orangeville Rise Nature Preserve (3.01 acres)	7,000.00	
Indian Creek Conservation Easement (valued at \$1/acre)	<u>13.16</u>	
		<u>\$719,202.22</u>

FUNDS & OPERATING EXCESS:

Land Acquisition Restricted Fund	130,733.45	
Deferred Dues Restricted Fund (199 members)	4,425.00	
Stewardship Endowment Restricted Fund	58,067.71	
Previous General Fund (total)	64,555.19	
Net Excess (Deficit) This Period	<u>1,420.87</u>	
Current General Fund (unrestricted)	65,976.06	
Current General Fund (committed)	3,100.00	
Real estate liquidity (basis value)	<u>460,000.00</u>	

Total Liabilities & Operating Excess \$719,202.22



IKC EXECUTIVE BOARD MEETING MINUTES

Saturday, June 30, 2018, 1:00 PM EST, Wayne Cave Preserve, Bloomington, Indiana

Board Members Present:

Jerry Lewis, President
Mark Milne, Secretary
Keith Dunlap, Treasurer
Bruce Bowman
Laura Demarest
Danyeale Green
Dave Haun
Everett Pulliam
Matt Selig
Bob Sergesketter
Tom Sollman
Carla Striegel-Winner
Richard Vernier
Sue Vernier
Jamie Winner

Board Members Absent:

none

The meeting was called to order by President Jerry Lewis at 1:00 pm EST at the Wayne Cave Preserve, Bloomington, Indiana.

Acceptance of Proxies

No proxies were needed.

Approval of Previous Minutes

The minutes from the March Annual Business meeting were approved as published in the June, 2018 *IKC Update*.

E-Mail Motions Since Last Meeting

On 1 April, 2018, IKC President Jerry Lewis opened discussion on the issue of sponsorship for the national Natural Areas Conference (taking place in Bloomington in October, 2018). On 3 April, 2018, an e-mail motion was made by Carla Striegel-Winner that the IKC sponsor the Natural Areas conference at the \$500 level. The motion was seconded by Keith Dunlap. President Lewis commenced the vote on 3 April, 2018, and the motion was passed unanimously via e-mail on 4 April 2018.

Treasurer's Report

Current finances: Keith provided the numbers for the minutes. Cash assets totaling \$259,189.06 and land assets totaling \$460,000.00 for total assets of \$719,189.06. Funds include Stewardship: \$58,067.71; Land Acquisition: \$130,733.45; Deferred Dues: \$4,425.00; and General Fund (unrestricted): \$65,976.06. Once we close on the Wayne expansion property, we will have approximately \$40,000 in the Land Acquisition fund for the next project, about the same as we had in June of 2017 before the expansion project started.

Last quarter we had a \$40K Certificate of Deposit mature. We instead split it up into three multiple-laddered CD accounts for higher investments and more flexibility.

Tom Sollman suggested that the Stewardship Fund should be invested separately, perhaps with the National Speleological Foundation. We have about \$60k in that fund. The NSF charge a small management fee to invest the money. This would increase our rate of return. Current their returns are 4 – 8%, which is a lot better than 1-2% for our current CD strategy. The downside is that we could lose some of the principal. Dave stated that our money could be liquid and removed if we write it into the contract beforehand that we have the ability to take it out. Our Stewardship fund is not being used for day-to-day stewardship. Right now, it's being kept as money to be transferred with our properties should that ever become necessary, or for legal fees, property taxes, insurance, taxes, etc., similar to an endowment. The IKC has been adding 10% of value of each purchased property into the Stewardship fund. Tom suggests isolating the Stewardship fund, especially from lawsuits (if possible). He says that the NSF investment is super conservative and low-risk. He also suggests that it would save time for Keith on management of our funds. One negative brought up by Keith is that the NSF holds money and it's not as accessible. Currently it is available for the IKC to "borrow" against if needed for cash-flow. Keith cleared up the point of confusion – that the NSF is not NSS – they are separate organizations, with separate boards and people. NSF manages money for other caving groups around the country, including the Michigan Karst Conservancy. Jerry suggests two options: let Keith investigate further, or take a motion and move forward. Keith asks to investigate further. Jerry suggests allowing Keith to investigate further and report back in September.

Membership statistics: Currently stands at 199. Twenty-three have not renewed. The list was sent to the Board. Reminders were requested by Keith, especially personally (call or email). Many are long-time members and have had two letters mailed to them. Laura volunteered to contact the Shultheis. Jerry volunteered to contact Hank Huffman. Carla volunteered to go through the list to contact the other people.

Wayne Cave Preserve

Preserve expansion update: The transfer paperwork will be signed on July 19th. This is the tentative closing date. The Nature Conservancy (which pledged \$12,870), may require an appraisal on the property. Monroe County Planning has signed off on everything.

Invasive treatment cost-share agreement: The every-five-year DNR Classified Forest inspection of property

was conducted. Tom and Keith were on property with the District Forester. They walked the property and the District Forester noted a lot of invasives and suggested that we work to eliminate them. The DNR representative said that we could apply for money to offset the costs. Keith has talked to the NRCS (which manages the EQIP program), and suggested that we pursue a contract to get money to fight invasives. Basically, the contracts run for three years: Year 1 = hit everything systematically, Year 2 = less, Year 3 = less; we are then expected to follow up for two more years with no additional funding. Depending upon the degree of infestation, the initial, first year reimbursement would be between approximately \$70 to \$400/acre? The second and third years would likely be approximately \$70. This is somewhat less than what the District Forester indicated. We would like to be in the “medium” invasion category – \$100/acre for year 1. The IKC could either contract just the worse portion of the property, or the entire property, but reimbursement is done by the amount of invasives present at each area. Depending upon the county, it may be the DNR or NRCS that does the pre- and post-inspections. Laura suggested that county-wide ranking of proposals is an important consideration. Laura suggested modifying the proposal in a certain way to get a higher ranking. Keith suggested doing 10 to 15 acres (specifically, the area closer to the road that possesses a high number of invasives). The new property is also highly invaded and we may want to consider writing that into the proposal too (or in the future). However, Tom suggested that it may be too large to do ourselves. The NRCS starts accepting new applications after September 30th. Carla suggested that 15 acres would take only one day if we have 12 people helping. Keith suggested getting two contracts staggered to test our ability to tackle 15 acres. Carla suggested that we just go for a large acreage in fear of not getting a second contract due to uncertain future money. Jerry suggested for Keith to go forth and get a report to present at the next meeting.

Stewardship activities: Tom and Robert Sollman thanked everyone who came to help with Wayne Cave property clean-up on June 30. Robert showed an example of a map and history text of Wayne Cave for the kiosk display (north panel). He stated that the south panel will have a donor list, rules, and a whiteboard for comments. He will see how much a board (4 x 8 ft) costs (thought to be about \$300/each). They are very hardy and they wipe off and clean very easily. He said we could purchase spares at a lower cost in case the original is damaged. They are 20 to 25% the cost of traditional signs printed on aluminum. The Wayne Cave property doesn't have much evidence of vandalism, so there is low risk of the board being vandalized. Jerry suggested putting Plexiglas over the top, but Tom thought that would be too expensive and would cost more than the panels being protected.

Tree Planting: Keith asked about a tree-planting on 3 to 4 open acres on the property adjacent to Wayne Preserve, perhaps another Chestnut plantation for next spring. He asked the board about their opinion on doing a similar planting like was just done at Robinson Ladder property. Jerry held a straw poll to see what people thought about the idea – most people voted “yes” to go forward with another Chestnut planting. Danyele thought that it would be too much work and we should focus on allowing native growth rather than planting Chestnut. Jerry asked Keith to inquire about the Chestnuts, amount of work, amount of help we'd have, and the quality of our property to grow Chestnuts.

Orangeville Rise

Proposed new property manager: Steve Lockwood has been the Property Manager since 1999, but is willing to pass it on to another person. Carla volunteered to take the responsibility. Bruce Bowman made a motion that Carla Striegel-Winner take over the Property Manager position for Orangeville Rise. Bob Sergesketter seconded the motion. No discussion. Unanimous vote in favor of the motion. Jerry suggested that Carla evaluate the need for a Management Plan for the property and to tell us about it at the September meeting.

Shawnee Karst Preserve

Stewardship activities: Tom sprayed the trail from the parking area to the cave.

Entrance status: Our entrance re-collapsed recently. Tom has checked on it every two weeks. He states that dirt has collapsed onto the entrance faster than it's washing through, particularly when it rained. He suggested that it might clear itself over time. We previously installed straw netting to stabilize the soil above the entrance to prevent it from slumping onto the entrance, but that was unsuccessful and the netting will make it harder to dig out the entrance. There was concern voiced about clearing the entrance now as the mud is too wet and sucking to clear it efficiently. Jerry asked board their opinion and most members suggested to wait and see what happens.

Information Kiosk: Jerry proposed building a kiosk for Shawnee Property, but a smaller one, more like the Buddha kiosk, with one flat panel instead of three panels. Keith suggested building one similar to some he has seen on HNF properties where it's one panel, front-and-back, and a roof. Jerry stated that he will research a budget and a plan for the construction of such a kiosk, and then present it to the board at the September meeting.

Buddha Cave Preserve

Proposed new property manager: George Cesnik, the previous Property Manager, stepped down from the position about 1.5 years ago. A new candidate, Keith Dunlap, offered to become the Buddha Cave Preserve

Property Manager since he does a lot of work there anyway. It would entail mowing the trail and nearby areas. Bruce Bowman motioned to nominate Keith Dunlap as Buddha Cave Preserve Property Manager. Sue Vernier seconded motion. Motion passed unanimously.

Stewardship activities: Keith stated that the oak trees planted in 2006 were doing well and that he thought it might be appropriate to thin some of the trees. Jamie Winner will help Keith evaluate and thin as needed later in the year. He stated that sinkholes and pits on the property are opening and closing regularly.

Sullivan Cave Preserve

Vandalism report: A report was received by the IKC about possible gypsum mining within the cave. Laura stated that she was in the cave within the last two weeks and said that she did not see anything unusual. Jerry suggested that if anyone sees anything to let the IKC know.

Stewardship activities: Laura did lock maintenance on the cave gate a few weeks ago.

Robinson Ladder Cave Preserve

Chestnut planting update: Some are looking good; others are not, put on the whole, the planting appears to be successful. The deer fencing around the planting area has been very effective in preventing browsing.

Stewardship activities: Keith and others cleared a path to the wildlife pond so Jamie's tractor may be used to re-enforce the pond embankment.

Indian Sinks Conservation Easement

Inspection: On June 8th, 2018 we had the annual inspection of property performed by Jamie and Keith. They also treated invasives (multiflora rose, poison hemlock, and Johnsongrass). The owners of one lot have been previously asked to stop excessive mowing, and he has stopped. A new owner of Lot 10 appears friendly and allowed access to perform the invasive treatments.

Land acquisition activities

TNC Harrison County acquisition: Keith and Jerry met with Allen Pursell and Dawn Slack who informed them that TNC had completed the purchase of the approximately 900 acre Wallier Woods property in southern Harrison County. IKC members will likely be allowed access to the property during the summer (starting in 2019), although TNC wants an access policy to control visitation.

Danyeale stated that Shirley Wells of Wells Cave has passed away. The property is now owned by Brent Bledsoe and Stephen Free, who owns surrounding property. Nobody at the meeting knew the new owners, other than they were relatives of Mrs Wells.

Education & Outreach

Groundwater Model: Laura used the groundwater model twice and thanked the IKC for usage. Laura asked if the model was purchased or made. Kriste Lindberg purchased the model with grants according to Jerry. Keith said that it was associated with a company that was making them for a university. Jerry said that a second groundwater model is going to Carla, as well as some other materials that could be used by Laura or Carla.

Spring Mill State Park guide training report: Tom, Keith, and Jerry met with Wyatt Williams and the new seasonal Interpreters and cave/boat tour guides a few weeks ago, as was done in 2017. This time it was a short trip into Bronson Cave and explained features for about 1.5 hours. An offer to do a similar training session for Wyandotte Cave guides (in O'Bannon Woods State Park) was also extended, but the offer was not acted upon.

Carla suggested that we get into the DNR's interpretive training workshop/program so that our message would go further than visiting every cave. Jerry suggested giving out a "fact sheet" to cave guides or cave administrators.

NCRC training session: Jess Deli and Jerry discussed two options: 1) a standard Orientation to Cave Rescue (OCR) training for two days, or 2) a one-day training session not in a cave. Laura discussed this with NCRC and found that the closed, one-day training session would be like a talk-through scenario and would not be applicable to a wider group of people. Keith wanted to promote it heavily to our membership and suggested that we could potentially use it as a membership recruitment tool, i.e., join the IKC for \$15 and get a \$25 credit for the OCR. Cost for 2-day course is typically \$50 (NSS member) and \$65 (non-NSS member). Capacity is about 50 to 60 people, but ideal number is 30, while 12 to 15 is minimum amount. Keith expressed worry about us not getting 12 people and then IKC would have to pay for the rest. Laura thought that we would get enough people and was not worried about not getting the minimum. Carla suggested that to encourage membership and participation, that the IKC pay a certain amount as part of registration process and for non-members, they get a one-year IKC membership instead. Jerry suggested 2-day option – asked the attendees and they agreed. Jerry suggested a cap on the number of discounts offered.

Dave Haun motioned that the IKC will sponsor a NCRC 2-day training session and IKC members (up to a max of 25) will get a \$25 discount on the session and that this applies to new or old members. Laura Demarest seconded motion. Motion passed unanimously.

For a time of the year, Jerry suggested November and said

he would speak to Jess about scheduling. Laura suggested that we get a classroom for Powerpoint presentations and that Sullivan Cave would be an appropriate cave to use.

Natural Areas Conference – request for speaker support: John Bacone (Director of the Indiana Natural Heritage Program) had previously approached Jerry and Keith about IKC participation in the national Natural Areas Conference being held in Bloomington in October, 2018. The IKC will lead a field trip/work shop to Spring Mill State Park. Leaders will be Jerry, Salisa, Keith, Tom, and Wyatt William (Spring Mill SP Interpreter). The field trip is three hours with a maximum of 16 participants. Jerry is envisioning three segments to the field trip: 1) Donaldson Woods to talk about sinkhole ecology, issues with virgin forest on sinkhole plains, and invasives control, 2) a short trip into Bronson Cave to demonstrate sampling and aquatic stream censusing, and 3) the boat trip into Upper Twin Cave to possibly see cavefish and cave crayfish. At the conference, the IKC will hold a symposium on karst conservation, organized by Jerry. Jerry has invited five speakers: Jerry Lewis, Mike Slay (TNC), Rick Olsen (Mammoth Cave National Park), Scott Johnson (IDNR), Wil Orndorff (Virginia Natural Heritage Program). Jerry requested \$500 in IKC honorarium funding. Danyele offered her house for people to stay for the conference.

Dave made a motion to spend \$500 on the two unsupported speakers for their NAC participation. Mo-

tion was seconded by Everett Pulliam. Motion passed unanimously.

Items from the Floor

Laura stated that an Indiana Cave Rescue Scholarship fund with Danyele is undergoing fund-raising. She stated that they will accept any donations for scholarships. Keith gave Laura two pieces of artwork originally donated by Kriste. Donations will be sold in silent auction at Cave Capers to raise money.

Jerry received a bat house as a Christmas present and he donated it to IKC to put it near the kiosk (either on the kiosk or on a tree nearby).

Next Meeting

September 22nd is next meeting at Ferdinand State Forest (hosted by Carla and Jamie). 4:00 EST is time established with pitch-in dinner after the meeting.

Adjourn

Meeting adjourned at 3:09 pm.

Respectfully submitted, Marc Milne, IKC Secretary



photo by Bruce Bowman

The June IKC Board meeting under the trees at the Wayne Cave Preserve.

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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).

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