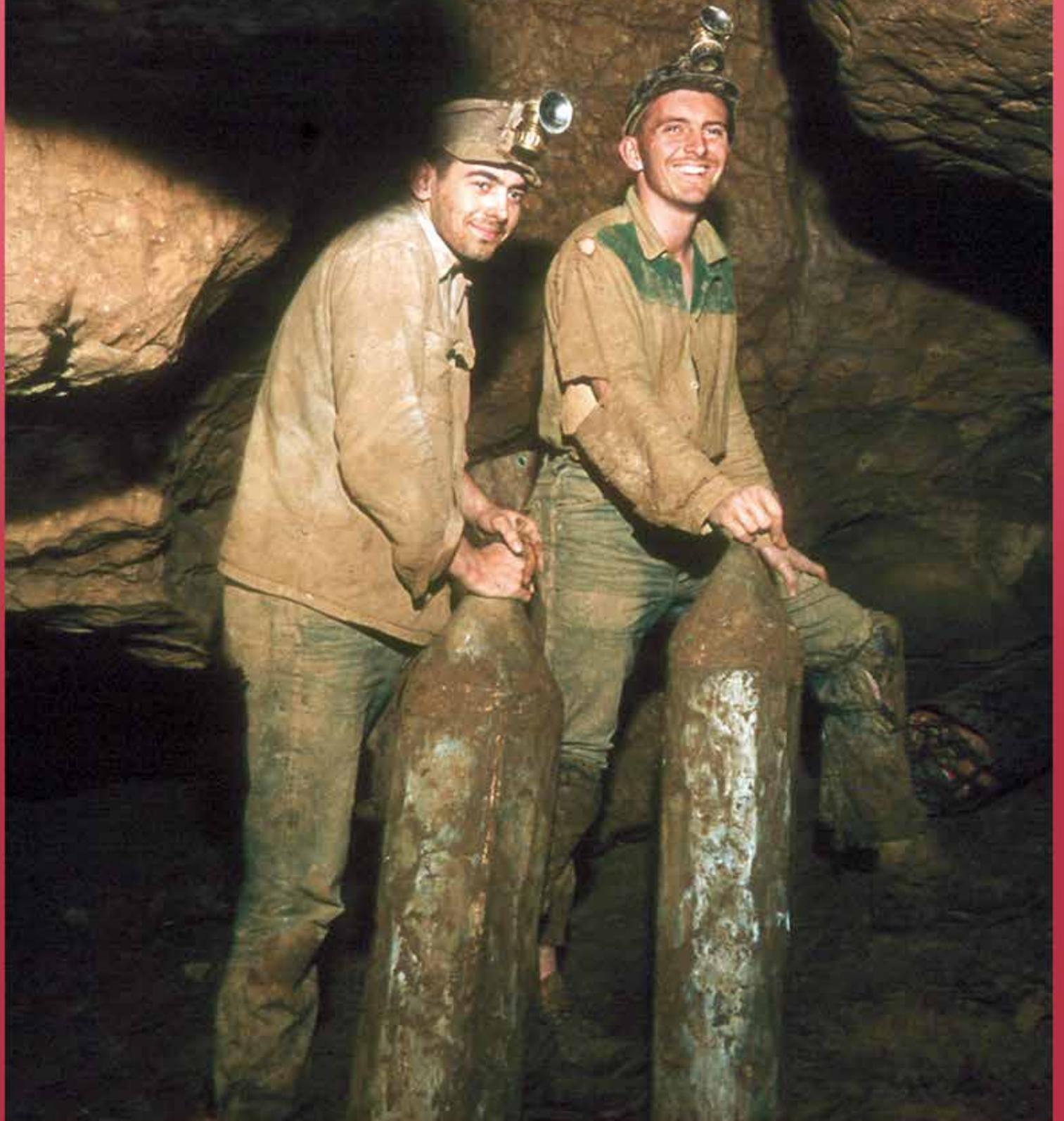


IKC UPDATE

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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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Cover: Larry Fisher (left) and Bob “Bugs” Armstrong with their Gurnee cans near Camp I in Wayne Cave (Monroe County). Photo by Don Martin, 1956.



IKC QUARTERLY MEETING REMINDER
SATURDAY, DECEMBER 10th, 2:00 PM EST
ELLETTSVILLE, INDIANA
MONROE COUNTY PUBLIC LIBRARY (ELLETTSVILLE BRANCH)

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 and past quarter's stewardship activities Bylaws Committee update; Land acquisition projects; Financial reports; Upcoming elections; and more....

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

Directions: The Ellettsville Branch is located at the intersection of Highway 46 (Temperance Street) and Sale Street. To reach it from Bloomington, travel west on Highway 46 until you reach the stoplight at Sale Street. Turn left. The library and parking will be 1 1/2 blocks on your right.



ACTIVITIES CALENDAR

Dec 10 – IKC Quarterly E-Board meeting (see above)

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

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...

This issue of the *IKC Update* centers around Tom Sollman's extensive work on the history of Wayne Cave in the Garrison Chapel karst area. I'm adding a few other random and rambling thoughts that are unlikely to make it into any histories. My introduction to the caves of the Garrison Chapel area was during the 1973 National Speleological Society Convention held in Bloomington. At the time I was a shiny new caver, having joined the organization (NSS # 13576) just two years earlier as a member of the Little Egypt Student Grotto at Southern Illinois University – Carbondale.

At the '73 convention I never made it into Wayne Cave, but did visit some of the other caves in the area. The first was Shaft Cave, which features a 76 foot deep entrance pit (for those who haven't done the pit, it's a classic silo). That day when my friends from Illinois and I arrived, there were ropes hanging off the lip like spaghetti. Bouncing the pit only took the three of us an hour or so, since we elected not to explore any of the cave beyond the entrance drop. At that time there were no fences or gates or anything else at the entrance, just a bare spot surrounding the hole. In our group, I was the first to exit the



cave, using my new first generation Gibbs ascenders, and while I waited for the others on the surface, I viewed a strange phenomenon. Another group of cavers from the convention had arrived to do the pit and had discovered their rope was too short to reach the bottom. Their solution was to tie the rope to a tree and get as many people as they could enlist to pull on the far end to stretch it out so it would be of sufficient length. I thought that was insane, but when my friend Don Coons emerged from the cave, he explained that they were using Goldline and that the rope had enough elasticity that it would stretch, at least some. I still thought using a rope too short to reach the bottom was a crazy idea. Welcome to caving in the 1970s. This might also go some ways toward explaining why so many people have been injured at Shaft.

We next walked over to Salamander Cave. After the short entrance crawl we emerged into the stream trunk for which the cave is known. We

spent a couple hours looking at the cave, undoubtedly a time that was significantly drawn out by my taking photos with my old Nikon F camera, using M3 flash bulbs for illuminating the passage. The only other cave I visited in the Garrison Chapel area during the convention was Buckner Cave, where I accompanied cave biologist Lynn Ferguson. Lynn was searching for primitive insects called diplurans that occur in some Indiana caves and unfortunately he chose Buckner to sample. I say "unfortunately" because at that time, Buckner Cave was entering the height of its popularity as a party cave. At that point in my career I didn't have a lot of experience with vandalized caves, so I was pretty appalled by the spray-painted walls and trash strewn everywhere. Beyond the entrance room, Lynn and I did the crawlway and found that the spray paint and trash continued despite the

crawl. Lynn attempted to do some biological sampling, but the condition of the habitat was so poor that he eventually gave up and left empty-handed. The cave was gross.

I found myself back at "The Barn" again over the fourth of July holiday weekend in 1977. By that time I was sampling for cave crustaceans

and was visiting caves and springs around the Bloomington area. During that era, "Blenz's Barn" had the reputation that one could just show up and do whatever they wanted, thus the vandalism of the cave. I was camping in the back of my van and needed a place to stay, so I found myself parked near the barn on a hot, humid summer night. I entered Buckner on July 3, then visited Salamander and Trapdoor caves on Independence Day (the isopods from those cave trips almost 40 years ago now reside in the collection of the Smithsonian Institution).

At that time four decades ago some of the caves in the Bloomington area were rapidly becoming environmental train wrecks. Wholesale visitation by partiers from nearby Indiana University, as well as other clueless spelunkers, led not only to the extensive vandalism of the Garrison Chapel caves, but serious accidents as well, some of them fatal. The drowning deaths at Salamander Cave,



and falls in Shaft Cave, come to mind.

Now let's skip forward... In 1986, the IKC worked with the landowners and installed a gate to protect the cave and managed access. Then in 2003, the IKC purchased the Wayne Cave property, permanent securing the entrance to the second longest cave (4+ miles) in Monroe County. An adjacent parcel was added in 2014, bringing the preserve to a total of 32 acres. Responsible cavers are welcome (contact IKC Wayne Cave Patron Dave Everton for access), but spelunkers need not apply. In the cave, trash and vandalism were cleaned up and on the surface a parking lot, camping area and trail to the cave established. Also in 2014, Property Managers Robert and Tom Sollman completed construction of a kiosk (see *IKC Update* No 115) and have been actively researching the history of the property (see Tom's article starting on page 9) for preparation of the information panels to be placed in the kiosk.

The epicenter of Garrison Chapel vandalism, Buckner Cave, was gifted by Dick Blenz to the National Speleological Society and is now the centerpiece of the Richard Blenz Nature Preserve. Numerous cavers have made much progress toward restoring this 3+ mile cave to a more "natural state" by sand-blasting and mud-washing the paint and other graffiti, and surface management is also being conducted in a more conservation-friendly manner.

Nearby Leonard Springs was long-owned by the city of Bloomington as a water source (since around 1914), but with its dedication as the Leonard Springs Nature Park in 1999, the management of the property has enhanced its conservation and focused use on public education and enjoyment. The nature park protects 85 acres of prime karst topography that includes two prominent springs, three caves, and numerous other karst features.

In the caves around the infamous Shaft Cave – I say infamous because of the incidents of would-be spelunkers falling down the entrance pit – management has been checkered. A gate

was placed on the entrance to keep out people who thought it was a good idea to do the pit hand-over-hand on a clothesline, while allowing continued access to qualified and properly equipped cavers. The gate was repeatedly vandalized (see *IKC Update* No 3) and finally the solution reached was to give up on the gate and place a fence around the pit entrance.

Nearby Grotto Cave was also fenced, not because of an entrance pit, but in an attempt to dissuade visitation in this important bat hibernaculum. The cave was managed for the landowner by the IKC from 1986 until the US Fish & Wildlife Service assumed management as part of an I-69 mitigation easement in 2010. The bat population in Grotto Cave has not prospered since that time during this new era of White Nose Syndrome, with the numbers of bats dropping precipitously from 28,531 in 2011 to 176 in 2015 (a 99.4% drop in just four years). Sadly, except for rare exceptions, Shaft, Grotto, Coon, and Salamander caves are now closed to visitation because of their inclusion in I-69 mitigation easements, controlled by the U.S. Fish and Wildlife Service.

To conclude, the tide seemingly turned about twenty years ago and a new era of cave conservation was ushered in at the Garrison Chapel karst area. This is not to say that everything is wonderful and there is no longer any reason for concern. I occasionally hear from Anmar Mirza that acts of vandalism continue to occur at Buckner... cultural change at this long-abused cave has been slow to arrive, despite the best efforts of many, many cavers there. Work continues, like the gate that was placed on Truitt Cave at the owner's request because of continued vandalism (see article by Danyelle Green in *IKC Update* No 122). As you will see in reading Tom Sollman's in-depth look at the history of Wayne Cave, the Garrison Chapel area is rich in caves and their culture, and well-worth the continue efforts for its protection.

Jerry Lewis

NEWS BRIEFS...

- ❑ As you may have noticed, this issue is much thicker than normal. This is primarily due to the extensive article prepared by Tom Sollman on the history of Wayne Cave. This "thesis" was a long time in the making and Tom did a tremendous amount of research digging through old grotto newsletters, as well as taking the effort and opportunity to track down and interview/correspond with many of the old timers involved in the early exploration of this cave (including 94 year old



William Wayne, who the cave was named after). Because of the length of the Tom's article, the editor elected to postpone John Benton's historical article on a 1903 promotional publication on Wyandotte Cave (a teaser for the March 2017 *IKC Update*).

- ❑ In mid-September, a survival survey was conducted on the 200+ trees planted last spring at the Robinson Ladder Cave Preserve. The special planting, in cooperation with The American Chestnut Foundation, was to re-establish the American Chestnut, a species nearly wiped out due to a fungal blight. While the "new" American chestnut trees are a selective hybrid cross with Chinese chestnut to add more resistant to the blight, their long-term viability are still in question, so three other compatible tree species were planted to provide a re-forested area regardless of the success of the chestnuts. With that said, the survival survey showed three of the four species suffered considerable mortality in what should have been an ideal planting/growing season. The survival results were: Red oak 96%, Black walnut 71%, American chestnut 61%, and Butternut (aka White walnut) 53%; with an aggregate survival rate of 70%. There will likely be more mortality over the winter and we have already discussed replacing the dead trees next spring.
- ❑ On November 20th, IKC President Jerry Lewis spent the day at Corydon Central Jr High School giving a presentation on life in caves for each of the six 7th grade science classes. The teacher, Debbie Haeberlin, was a friend from his days at IU Southeast, where he tutored her in French while she was working on a degree in geology and education. She requested a presentation on what happens when people have the philosophy "out of sight, out of mind" in dealing with caves and karst. The classes had viewed the "Cave Biologist" episode of the Discovery Channel's "Dirty Jobs" the day before, that featured the environmental issues at Hidden River Cave in central Kentucky. Jerry picked up from there, coming "in costume" with helmet, pack, vertical gear, and a coil of rope (see photo on page 4). He first elaborated on the pollution history of Hidden River, then talked about the destruction of caves and their communities at Indiana's Jefferson Proving Ground (now Big Oaks NWR, north of Madison, Jefferson Co.) and the Indiana Army Ammunition Plant (Charlestown, Clark Co.). Finally, he showed a cave map overlay of the Binkley Cave System, some of which lies almost directly under the kids' school. A photo of the well drawing water from Binkley River was shown and discussed. Once used by the owner of the main entrance to provide water for his commercial chicken operation, the water is now too polluted for even a chicken to drink. And the cavefish once common under the area of the school have now been all but eliminated by septic pollution. It was a long day... the same fifty minute slideshow was given six times in a row...but worthwhile for this class of youngsters living above Indiana's longest cave.
- ❑ Winter is coming and there is no better time to slip on a wetsuit and venture into the IKC entrance of Upper Twin Cave and make a invigorating through-trip to the Boat Dock entrance in Spring Mill State Park. So as to not conflict with Spring Mill's commercial boat tours, our agreement with the DNR only allows through-trips from November 1 to May 15. This is one of the best cave trips in Indiana. For more information and the process to request permits, visit ikc.caves.org/dnr/spring_mill.htm.
- ❑ December is the time when the IKC starts thinking about the upcoming March elections for the Executive Board. The three officers are elected annually, while the twelve directors serve staggered three year terms, so typically there are four director positions open each election. While candidates do not need any specific skills, they should have a good understanding that the IKC is a business with important assets to manage and protect. Further, candidates need to commit to being involved in various IKC activities, and especially in attending the quarterly Executive Board meetings (or when there is a conflict, to appoint a proxy). If you are interested in learning more about becoming involved in managing the IKC, please contact President Jerry Lewis by early January.
- ❑ The IKC has gained one new member in the last quarter. Welcome William Wayne (570). The IKC membership currently stands at 197.

HORTON H HOBBS, III (1944-2016)

by Jerry Lewis

I first met Horton “Beep” Hobbs III sitting around a campfire in the campground of the 1973 NSS Convention in Bloomington. At that point in life, he had already completed an MS in Zoology from Mississippi State University in 1969, and was completing his PhD in Zoology/Limnology at Indiana University. In 1976 he joined the faculty at Wittenberg University, a small liberal arts college in Springfield, Ohio. During this tenure, Horton became a much-beloved professor, touching the lives of countless students in a personal way, instilling in them his passion for caves and their inhabitants. He retired in 2012 and moved to North Carolina.

Dr Hobbs had a distinguished career with many honors and accomplishments along his life’s path. He was a fellow and honorary life member of the NSS and sat on the boards of the American Cave Conservation Association, Karst Waters Institute, and Cave Conservancy of the Virginias. Closer to home, he was past-president of the Ohio Academy of Science and sat on the board of the organization. And he was a long-time member of the IKC.

From a professional standpoint, Horton III had a tough act to follow, as his father, Horton Hobbs Jr, had an illustrious career conducting research on crayfish. I only met Horton Jr once, during my first trip to the Smithsonian Institution in 1976 where he was a Curator. Shortly after I arrived, a gentleman came from the office next door and said he wanted to meet me... It was Horton III’s dad. I immediately understood where Horton got his kind personality and warmth toward students, as it was almost palpable with his father. Horton III once told me he would have preferred to have conducted his doctoral work on cave crayfish, but wanted to get out from under the shade of the paternal tree. He didn’t travel far however, researching not the crayfish, but the commensal

entocytherid ostracods that lived on them.

I want to give a bit of a measure of the man that isn’t in other obituaries. Last summer I was preparing to teach a workshop at the Edge of Appalachia Preserve in southern Ohio, and e-mailed Horton to ask for suggestions on caves to use for the workshop. This wasn’t particularly an unusual request – we’d been in frequent back-and-forth e-mail conversations for many years about various things in our pursuits of cave biology. What was unusual was that he told me he was having some medical issues and was going to have to get back with me in a week or so when he returned from some testing.

I responded that it wasn’t urgent and I’d look forward to hearing from him when he got the opportunity.

A week or so later he responded (on August 13) and told me that he was heading to the Cleveland Clinic for more tests. He said, “Nothing too serious, I hope...”, but suggested it would probably be more expedient if I asked another individual (a mutual acquaintance) for the cave information, as he wasn’t certain when he’d be returning from Cleveland. I had no clue that Horton would enter



hospice, and return to North Carolina where he died peacefully on August 29. I was shocked to hear that his Cleveland trip had taken such a horrific turn for the worst, but somehow not surprised that he was offering to help me almost up to the last.

Horton’s wife of 41 years, Susan, had died in 2009. For the past four years Linda Marsh had been his friend and companion. He is survived by two children, Heather and Horton H. IV.

Perhaps Horton’s greatest endowment to us might be his former students, many of whom continue as living legacies of their mentor. In that vein I close with a favorite quote by composer Irving Berlin: “*The song is ended, but the melody lingers on...*”. Horton’s tune will be greatly missed.

WNS: NEW POLICIES NEEDED FOR CAVE MANAGEMENT

by Merlin Tuttle

As reported in my keynote address at the 46th Annual Symposium on Bat Research last week, despite our best efforts, White-nose Syndrome has spread rapidly from coast to coast, and there is nothing we can do to stop, slow, or find a safe, effective, and practically applicable cure. It is here to stay, and eventually will reach every species and habitat that is susceptible. Bats are spreading it far more effectively than humans ever could. It is time to refocus our efforts on helping the few survivors rebuild resistant populations, as apparently has already happened in Asia and Europe.

The overwhelming response from colleagues was that it is time to refocus our efforts on providing the best possible protection at a time when populations are at critical lows. Each winter entry into a bat hibernation site forces at least partial arousals, adding a potentially insurmountable burden to already life-threatening energy losses caused by WNS. No matter how well intended, we can't afford to risk becoming the proverbial straw that broke the camel's back.

I was encouraged to speak with several colleagues at the conference who are already documenting apparent recovery of protected colonies of little brown bat (*Myotis lucifugus*) in the Northeast. Though this is one of the hardest hit species, current studies are documenting apparent reproductive success and gradual recovery. That's very encouraging!

It is time to focus all possible resources on protecting surviving remnants from unnecessary disturbance. It is also time to acknowledge that closing all caves, even those never used by bats, is counterproductive, needlessly risking partnerships with cavers that we can't afford to lose.

Members of the National Speleological Society have been extremely cooperative during this multi-year period in which access to many of their favorite caves has been denied in hope of slowing the spread of WNS. They have played key roles, contributing financially in addition to helping researchers and resource managers find and protect key sites. Nevertheless, broad cave closures clearly have failed. Though reasonable precautions to avoid disturbance in caves suitable for bat occupancy should continue, there are no further reasons to restrict cavers from using caves which are not suitable for bats.

So how does one differentiate between caves suited for bat use versus those that are not? In the coolest climates caves are seldom used except for winter hibernation, and the opposite is true in the warmest climates. Southern caves are used mostly for rearing young. In intermediate climates, a few typically multi-entrance caves may provide effective cool or warm air traps, and to the extent that their volume is sufficient to trap large quantities of cold or warm air that remains relatively stable, they may provide ideal sites for hibernation or rearing young.

Throughout mid-latitudes, where a large proportion of North America's caves are located, fewer than ten percent are important for either hibernation or nursery purposes. However, at extreme northern or southern latitudes, large proportions of caves may be important for bats in winter or summer only. A few also may be important as migratory stopover sites.

The largest, most complex caves, with the largest (especially multi-level) entrances have traditionally sheltered the biggest and most diverse bat populations, mostly because they provide the widest range of temperatures, especially important during times of climate change. Any mid-latitude cave that traps and holds large volumes of exceptionally cold or warm air likely has been critically important for bats in the past. Large volume also means improved survival due to less unpredictable fluctuation. When bats are no longer using such caves, it is normally due to human disturbance or changes that have altered air flow unfavorably.

So how does one determine historical bat use? In a large proportion of caves, past use can remain clearly visible for hundreds of years after bats have been extirpated. Most limestone is light in color and is typically stained a rusty reddish color by prolonged bat use. With a little experience, bat roost stains are typically easy to recognize. Caves where limestone is too hard or soft for leaving long-lasting stains are rare in North America. Old guano deposits, if not completely obscured by human traffic, may prove additionally useful.

By measuring areas of bat-stained limestone it is possible to make ballpark estimates of past population sizes. Most cave-roosting bats of North America cluster at densities of roughly 200 or more bats per square foot, so by measuring the approximate

Continued on page 49...

A Chronology of Wayne Cave and Associated Karst Features Monroe County, Indiana – 1949 to 2016 with Comments

by Tom Sollman

1949 – First Description

In the first published description of the Wayne Cave, William Wayne described “...a small cavern in the NE quarter of sec 17, T8N, R2W... The entrance of the cave, which was in the past explored, is in an insignificant looking sinkhole perched on the side of a valley. A vertical hole in the ground about ten feet deep enters on a leaf-strewn platform. This platform is about ten feet above the floor of a cavernous room. The size of the chamber, as well as the opening to the surface appear to be due in great part to collapse and stoping. The floor of the room is partially alluviated, and during a storm carries the water from the surrounding sinkholes.”

Included in the description was this tantalizing sentence: “Two openings, both about two feet high and six to eight feet wide lead out from the first room. One of these, toward the southeast, appeared to get smaller and was not followed...” The description also included an area map of the karst valley showing notable drainage, dry-beds, caves, and swallow-holes. (Wayne, 1950) Note that the word “stopping” above is used geologically to refer to the enlargement of an opening by the breaking off of blocks from a wall or ceiling. (William Wayne, personal communication, Sept 2016)

Dr Wayne, sixty-seven years later (at the age of 94), recounts the cave: “When I enrolled as a geology student in 1946 after WWII military service, Dr Clyde Malott became my mentor until he died. He had a few years earlier published an abstract about karst valleys, and suggested that I expand on it. Because I was developing an interest in karst features, he suggested that I describe in print the karst valley in western Monroe County that I had been visiting and writing notes on. As I recall, the only cavern in that karst valley that I had been able to enter was the one my wife helped me explore and which I described, and which later became called Wayne Cave... I entered that cave twice, once before I wrote that little report, and again a couple years later. To get into the cave we had to go down a fairly small vertical opening – it may have been 15 feet or so deep. The part we went through was perhaps 100 feet or so long and contained one room. We noticed some small crawl openings, but didn’t try to go through them so we never saw the much bigger part of the cave. Dick Powell told me about them when he was preparing his book *Caves of Indiana*. I regret having missed the bigger part of the cave...” (William Wayne, pers comm, Aug 2016)

As to why Dr Wayne picked this seemingly insignificant cave: “What I investigated, at the suggestion of Dr Clyde Malott, was the karst valley... I visited all the sinkholes in the karst valley. Any that went farther than just a hole, and was big enough to get into, I entered to see where it went. Both my wife and I went into any caves we found, but this was the only one I found in this karst valley. As I recall, all the rest were just swallow holes and didn’t seem to lead anywhere.” (William Wayne, pers comm, Sept 2016)

1950 thru 1954

“Old Wayne” was visited occasionally. Ray Beach remembered this: “We (the Purdue Outing Club) had often used the cave for new caver introduction and practice. Several of us had started down this crawlway many times, but gave up after a half-hour or so of crawling, saying ‘it is obvious that this doesn’t go anywhere!’ Were we wrong!” (Ray Beach, e-mail dated Jan 9, 2003 in Bill Tozer collection)

Don Peters gave one of the first caver written descriptions of Wayne Cave in a letter to Bill Auckerman (although at the time, Don did not know the name of the cave): “...The cave is a small sink located above the pong (sic) on the hillside, in the woods near the intersection of two fence rows. A rope is handy in reaching the bottom of the small ten foot deep dome-pit into which the sinkhole leads. From there one can follow a walkable passage for about 300 feet. This passage is slightly muddy, and does contain a little dripstone, but is clearly not the lowest level of the cave, as evidenced by crevices in the floor too small to get through. All leads, except a few unpromising crawls were checked, and no good possibilities were observed...” (Don Peters, unpublished letter, Sept 20, 1954)

1955 – Breakthrough!

March 6 – Bill Auckerman, and Purdue students Bob Carlisle, Ray Beach, and Jack Dorsey in what is destined to be one of most famous trips in the Garrison Chapel Valley area, squeeze through the “Rimstone Squeeze” and into a crawlway, going about 300 feet into virgin cave. At the time they didn’t even know the name of the cave,



only having its location from Don Peters. (Arnold, 1961; Dorsey, 1986) Note that the “Rimstone Squeeze” name had evolved to the present day “Stalactite Squeeze” as early as on the March 15, 1957 map.

Bill Auckerman, six years later, recounts the March 6 trip: *“I first entered this cave on March 6, 1955. The party was composed of Bob Carlisle, Roy Beech, Jack Dorsey, and myself. We didn't know the name of the cave at that time – referring to it as ‘unnamed cave’. We learned its location from Don Peters. While Beach and Carlisle were working the breakdown near the end of the known portion of the cave, I started to nose about in a crawlway on the lefthand side of the passage. I found a possible squeezeway which looked like virgin passage on the other side. The squeeze was over an inactive rimstone dam and is now known as ‘Rimstone Squeeze’... I shouted back for Dorsey to come along as I wanted to get through the squeeze. I managed to get through and Dorsey waited for me at the squeeze. I went for maybe 100 yards before turning back... The crawlway beyond the squeeze was virgin as nearly as I could tell...”* (quoted in Arnold, 1961)

Jack Dorsey, thirty-one years later, recounts the trip: *“Bob Carlisle took the first possible lead on the right and it very quickly pinched out. I took the second lead which was on the left. I went perhaps twenty-five feet before pinching out. Auckerman took the next lead which was on the right. In just a few minutes he called back and said it looked like it might be going... I crawled in perhaps a hundred feet... I stayed there about forty-five minutes and called to him about every three to five minutes... When Auckerman finally came into view, he was a sorry looking mess. The front of his sweatshirt was almost totally gone... He told me he would estimate the passage to be about 1,200 feet long... He said he got to a cross-passage which was much larger...”* (Dorsey, 1986)

April 7 – Bill Auckerman, Jerry Clark, Ray Beach, and Warren Dunham worked their way through the crawlway and broke into a system of large passages. Auckerman wrote: *“We were careful to note that there were no signs of previous human occupation: no foot prints, no marks on the walls, etc.”* (quoted in Arnold 1961) The new discovery was named the “Lost Cave”. (Auckerman, 1957) A map was drafted in 1955, but was deemed “lost” as of 1971. (Cox, 1971)

Bill Auckerman, six years later, recounts the trip: *“...On April 7, 1955, Ray Beach, Warren Dunham, Jerry Clark, and myself returned to the cave. Clark and I spearheaded the attack on the crawlway, while Dunham and Beach poked around at the end of the known part of the cave for a while. They later followed us through the crawlway. We penetrated all the way back to the big passage where we waited for the other two members. We explored the easy stuff within about 200 yards of the emergence of the crawlway into the big passage. We were careful to note that there were no signs of previous human occupation: no foot prints, no marks on the walls, etc. This was such an exciting find that we returned to the cave three days later, April 10. Although Ray Beach had left the party, we picked up Carlton Sprague at Mitchell. This time we got all the way to Camp II and mapped part of the big passage.”* (quoted in Arnold, 1961)

Ray Beach remembers this about the April 7 trip: *“When we reached the ‘Big Room’, we found Bill running around in circles shouting, ‘Look what we found! Look what we found!’ over and over again.”* (Ray Beach e-mail, undated, in Bill Tozer collection)

During the summer of 1955, 4,650 feet of the cave was surveyed. Notable participants were Ray Beach, Harmon Woodworth, Bill Auckerman, Jerry Clark, and Don Peters. Organizations represented were the Central Indiana Grotto, Indiana Memorial Union Spelunking Club, and Rose-Polytech Institute. They used the map by the earlier Purdue group.

Note that cavers today don't realize just how tight it was in the crawlway initially. Ray Beach remembers it, speaking of his first trip through: *“When we reached the ‘Why in the Hell Did I Come in Here’ squeeze... I wasn't sure that I could make it through... with much strenuous effort, a little inhaling and much, much exhaling... I made it...”* (Ray Beach quoted in Bill Tozer collection)

From an early cave trip report: *“...In order to reach the spot where Bill [Auckerman] had his team set up camp, it was necessary to squeeze through two very tight places in the crawlway. One of them is barely large enough to permit my body to pass through...”* (Streib, 1955)

The two “tight places” are much larger today. The “Why the Hell Squeeze”, near Camp I, was dug out in March 1958 and the first thirty feet of the crawlway was dug out in October 1984 to permit a stretcher to pass through.

Aug 27-29 – Auckerman, Clark, Peters, and another spend three days camping near Camp I and mapped the American Bottoms section. (Arnold, 1961)



Note the map had many written details beside the drawn passages that were never reproduced on any succeeding map. It was reminiscent of many 1800s show cave maps that named *everything*, as in Wyandotte cave. An example is calling the end of Old Wayne as the “Dining Room”. The map has thirty-two different cross-sectional profiles included.

Larry Fisher, fifty-five years later, recounts surveying during one ninety-six-plus hour survey trip with Robert “Bugs” Armstrong: “*We were surveying through the breakdown area in the main passage approaching Camp II. I was on one end of the tape and Bugs on the other... Of course being students at an engineering school, some had some interesting ideas, such as Bugs insisting that a certain amount of tension had to be applied to the survey chain (a 100’ long steel surveying tape in this case) when measuring distance. I had the start end and had to lean out from standing on the top of a pile of breakdown to touch the survey mark on the adjacent wall – Bugs let go of his end, causing me to fall – cracked a couple ribs.*” (Larry Fisher, pers comm, Aug 2016)

Summer – A group of cavers are scouting sinkholes to the east of the cave and “dropped into” Fisher’s Fissure. In his personal cave log, Larry Fisher wrote: “*Fisher’s Fissure is a small cave perhaps twenty feet in length through which passes a stream generally considered to be that which feeds Wayne Cave. It was discovered quite accidentally when I fell through the bottom of a sinkhole into a six foot shaft.*” (Fisher, 1959b)

Larry, fifty years later, recounted it the event (without reading his cave log, which was lost at the time): “*A group of us were poking around in some sinks not too far east of the entrance to Wayne Cave and I was digging around in the bottom of a trash and debris cluttered sink when I slipped down through the tree branches and clutter into a small crevice at the bottom of the sink. A small stream was flowing through the bottom of the crevice, but the stream passage was too small to allow for human passage. This was named Fisher’s Fissure.*” (Larry Fisher, pers comm, Aug, 2016)

In August of 2016, Keith Dunlap, Sam Frushour, and Tom Sollman looked for Fisher’s Fissure. They walked downhill east from the Wayne Cave entrance and encountered a very long meandering dry stream channel with exposed limestone (when active, the flow would be north to south). Walking downstream led to two impressive swallow-holes. The northern one is about fifteen feet wide and thirty feet long and was completely covered with rafted trash, tires, and debris with no stone visible in its muddy walls. One would need to do a *lot* of digging to get through, and it appears this drain takes a *lot* of water. In the ICS database, this feature is now listed as Fisher Fissure II. It is believed this is likely the sinkhole that Larry Fisher entered and is the source of the stream in Wayne Cave. When this drain reaches flow capacity, the excess water overflows an embankment and continues another 150 feet further south along the channel to a second swallow hole. Again, the visible drain is trash-filled and would require a *lot* of digging to open. This second swallow hole is listed as Fisher Fissure I in the ICS database. There were several old (1940s to 1950s) cars abandoned in the channel between the two swallow-holes.

August – The *NSS News* front cover is a photo by Don Martin of “*...Pure white onyx candles in Wayne’s Cave...*” (NSS, 1957) In the September 1961 *BIG Newsletter*, Tom Arnold further describes the photo’s location as “*Just before the mud fill termination of... a passage over a breakdown pile... at the end of the R.P.I. Discovery.*” (Arnold, 1961)

Sept 8 – In a trip report it mentioned “*...A new well was found in Armstrong’s Folly...*” (Davis, 1957) Note that “Armstrong’s Folly” is not shown on the 1973 Cox map, and on earlier maps it was shown as “Bug’s Folly” in the Wells Area north of Camp I... Also, just how many “Armstrong’s Follies” are there in Indiana caves?

Nov – The *NSS News* front cover was a photo of Don Martin “*...Emerging from Indiana’s fabulous Wayne Cave...*” (NSS 1957b) This widely disseminated image also appeared in the Aug 30, 1959 *Indianapolis Star*, the Aug 30, 1959 *Fort Wayne Journal Gazette*, and the Sept 21, 1959 *Chicago Sun-Times*, and others.

An article by Bill Auckerman gave a history of the cave to date, and included the famous photo by Don Martin of Robert Armstrong sitting “*...Amid profuse onyx decorations in the newly discovered third formation room...*” (Auckerman, 1957; see also: IKC, 2003, 2014)

Nov 11 – The “Wayne Cave Crawlway to Lost Cave & Tributaries” map drafted by Peters, Lettsinger, Armstrong, Fisher, Wilcoxson, and Arnold. The map included surface features “Pit Cave” about 730 feet from the Wayne Cave entrance to the southeast, and “Fisher’s Fissure”, also about 860 feet southeast of the entrance.

1958 – The Expedition Years

What prompted the “expedition” craze? It was thought at the time that expeditions were the only effective way to survey a cave. Witness camps I and II in Brinkley Cave, which were established about the same era and



the Floyd Collins Crystal Cave C-3 expedition in February 1954. While Camp I in Wayne Cave was used frequently, camps II, III, and IV were rarely used.

Feb 15 – Five members of the Edinburgh Cave Club surveyed in Wayne Cave “...*In the crawlway at survey point 22, Streeval, being the smallest, got seventy-five feet in the crawl.*” Included in the ECC’s *The Guano News* was the “Wayne Cave & Tributaries – 4th edition” map by Larry Fisher (ECC, 1958a). Larry was asked what the “4th edition” meant and he remembers it meaning the fourth map of the cave. (Larry Fisher, pers comm, Sept 2016)

March – On a 5-1/2 day expedition in the cave, Bob Armstrong, Jack Derry, Harry Brown, and Dave Fassburg, with a two-man support crew, dragged in 400 pounds of supplies to Camp I in eight “Gurnee cans”. They: 1) “...*Gained experience in living underground...*”; 2) Dug out the mud fill behind the “Why-The Hell-Squeeze” just before the crevice starts down cutting into Camp I; 3) Surveyed between Camp I and Camp II; 4) Attempted to find a new entrance – following the recent discovery of the upper level passages and domes, it was widely believed another entrance was near; and 5) On the night before the expedition ended, they found about 200 feet of virgin cave behind a small hole near Camp I, “...*Which opened into a number of tall domes with shear, fluted walls. We scaled one of these domes and discovered an overhead passage containing large deposits of moon-milk. Both time and carbide ran out, and we left the virgin area virtually unexplored.*” (Derry, 1958)

Note the “Gurnee can”, developed by Russ Gurnee and John Spence to solve logistical problems during the Mammoth Cave C-3 expedition, was a torpedo-shaped tube about the size of a stovepipe with welded seams, a cone on the front, and the rear closed by canvas. A ring was attached at the front where a rope was tied and the can was then pulled through crawlways. [See the front cover of this newsletter]

Richard Blenz however, recalled that Gurnee cans sometimes *made* problems, as he described on a later trip into Wayne: “*We decided we needed this [Gurnee can] in Wayne and, managed to drag it in, which got stuck somewhere in the crawl. There was no way to go further with it, and so we abandoned it, until our consciences later got the best of us and we went back into Wayne, and after much hammering got the can out of the cave in a rather deformed shape.*” (Richard Blenz, pers comm, Nov 2016)

Maybe this was the same can? Mike Wischmeyer recalls a New Year’s Day trip in 1962: “*On our way out of the crawlway, Tom [Rea] and I tried to recover a Gurnee can lodged in a ceiling crevice. After twenty minutes of cramped struggling, we admitted defeat and literally ‘crawled away’.*” (Wischmeyer, 1962)

March – An *NSS News* article included a map of “Wayne Cave and Lost Cave” dated Nov 11, 1957 by Peters, Lettsinger, Armstrong, Fisher, Willcoxson, and Arnold. The article stated the map was an improved copy of the original map charted by Don Peters in 1954. (Derry 1958; Arnold, 1961) Note the date error, as the new part of the cave was not discovered until 1955. Also noteworthy in this *NSS News* article was a picture of helicities by Don Martin that was printed upside down! (Soule, 1985)

Richard Powell remembered an overnigher in Wayne around this time: “*I remember a trip to Wayne Cave with Jim Langhamer, and a couple of others. We camped at Camp II overnight in US Army mountain tents with Coleman lanterns to fight the humidity. I woke up wet. Langhamer threw his shoulder out there and we had a hell of a time helping him out of the cave.*” (Richard Powell, pers comm, Aug 2016)



Expedition life at Camp I, circa 1959. Bob Armstrong is on the right. Photo from the Don Martin Collection

March – The *BIG Newsletter* printed “Buckner Survey Completed”. In its Geologic History section, Wayne Cave is mentioned: “...*The surface water of Indian Creek began to flow through open joints and along bedding planes in the limestone towards Richland Creek. As more and more water entered the openings they became greatly enlarged and allowed, eventually, all of the waters of Indian Creek to flow underground into Richland Creek. Only flood waters were forced to flow along the abandoned surface route. But the cycle repeated itself, as it has several times, and Indian Creek continued to deepen its channel and erode deeper into the limestone. The waters again entered open joints and bedding planes, but this time dissolved and enlarged the upper level of Wayne’s Cave to the north of Buckner’s.*” (BIG, 1958)

May 10 – The “Wayne Cave, Camp II Vicinity – Showing Formation Rooms Passage” map was drafted by D. Staggs, H. Brown, and J. Derry. (unpublished from Larry Fisher collection)

Aug 10 – Four members of the Edinburg Cave Club went to the lower levels around Camp II and discovered “a small room”. (ECC, 1958b)

Oct 23/24 – Three members of the Edinburg Cave Club camped overnight at Camp III where they established a food cache. They reported the average air temp was 48 and water temp was 45 degrees F. (ECC, 1958c)

Winter – Members of the Edinburg Cave Club, while ridge-walking in search of another entrance to Wayne Cave (a popular past-time in this era) stumble upon a recent collapse about 2,000 feet south of the Wayne entrance at the edge of the valley. The collapse, or washout, had an opening of about ten by five feet. Entering, they found a crawlway and followed it for about two hundred feet stopping only because the candle they were using to test for carbon dioxide went out and their matches wouldn’t light. (Streeval, 1959) Note, an undated and unpublished, map of Wayne Cave with no scale shows a “Streeval’s Crawl” somewhere southeast of the Wayne Cave entrance, south of “Pit Cave” and “Fisher’s Fissure”. (Terry Cox collection)

1959

April – Don Martin sends a letter to the Central Indiana Grotto secretary stating that the cave entrance is in the process of being gated due to vandalism, and the project should be completed by April 1. “*Keys are to be given to the Central Indiana Grotto, Bloomington Indiana Grotto, Edinburg Cave Club, one key at the house at the entrance, and one with the owner...*” (Martin, 1959)

July – The 1959 *Cave Capers Guidebook* (which was also the July 1959, Vol 2#4, *BIG Newsletter*) described Wayne Cave, including that portions of the cave were unmapped and unexplored, and included a map “From various sources.” (CCGb, 1959) Terry Cox pointed out that “...*One of the high-level passages southwest of Camp II is shown on this map with the correct alignment. Maps before and after this guidebook show it trending northward from Camp II.*” (Terry Cox, pers comm, Sept 2016) All caves in the guidebook were part of an article by Richard Powell’s “Guide to the Caves of the Bloomington, Indiana, 15’ Quadrangle”.

Sept 4-16 – Don Martin, President of the I.M.U. Spelunking Club, with Jim Neawedde and Dave Mercer, camp in the cave for twelve days in a controversial and much publicized “expedition”. Prior to, and afterwards, they underwent *exhaustive psychological testing* to check for any mental effects of their long stay underground.

A telephone on a regular party line with a “top-secret” phone number (Valley 5-2430) was installed by the Smithville Telephone Company to Camp I. There were daily interviews with local radio stations. (*Indianapolis Star*, Aug 28 and 30, 1959; a Bloomington newspaper, Sept 14, 1959; Tozer, 2014) Additionally, a radio speaker system was ran into the cave from the neighbor’s house that was designed by “Bugs” Armstrong (who was attending Rose Poly Institute at the time studying electrical engineering). The tuner and amplifier were in the house, and they put the speaker at the end of one of the Gurnee cans so it acted like a bass reflex speaker. They had to call the house on the phone to get them to change the radio station. (Martin, 2003)

Yes, pizza was delivered to Camp I. Don Martin remembered it, forty-five years later: “*We even called the Pizzeria in B-town, who advertised they delivered ‘anywhere’. They had been forewarned that we would call and they had a couple of cavers who worked for them build a special Gurnee can just for carrying the pizzas through the crawlway. It worked! The pizzas were still warm when they reached Camp I and, they were free!*” (Martin, 2003)

Trips into the cave increased dramatically after the “expedition”. (Arnold, 1961)



Oct 31 – Three member of the Edinberg Cave Club toured the cave and commented: “*We found a very disgraceful mess left by the twelve-day stunt a month previous...*” (Fisher, 1959b)

Dec – A letter to the editor of the *CIG Newsletter* by Larry Fisher described trash (some from the recent twelve day expedition) and heavy vandalism throughout the cave. In the same issue, the CIG Chairman wrote an editorial further describing “... *The sorry condition of the cave.*” (Fisher, 1959a)

Dec – John Derry wrote “The Tragedy of Wayne Cave” article in the *NSS News* describing trash and vandalism in the cave, “*At the time of this writing, Wayne Cave looks more like a garbage heap – dump or junkyard – than a natural wonder.*” Particularly, he describes the destruction of the formations in the RPI formation room, which had only been discovered 2-1/2 years before. (Derry, 1959)

Surprisingly, Wayne Cave was *not* included in *A Catalog and Description of Some Indiana Caverns* compiled by Clark, Jansen, and Melhorn for the Purdue EAS Library in 1959, even though Purdue cavers were involved and it lists thirty-four Indiana caves, some which were right around Wayne Cave.

1960

March – Don Martin rebutted the unfavorable press in other caving publications and said he planned to build a cement block “house” over the entrance. Included was a sketch of his proposal. (Martin, 1960) The house was never built.

April – Larry Fisher wrote that during the CIG grotto trip, they wire brushed names at Camp I and buried litter. (CIG, 1960)

Dec 26 – Members of the SISG spent four days and three nights in the cave. Photos were taken in the RPI formation room using white gas lanterns for illumination “...with good results.” Also, “...*Better than 1,000 feet of passage downstream beneath the trenches were explored. A great deal of this was either virgin or had been explored by only one person. This passage consisted of low wet crawls, muck, and gravel.*” And interestingly, “...*It was found that the telephone wire from Camp I would work as an antenna for a transistor radio.*” (SISG, 1961)

Dave Gahimer, fifty-six years later, remembered that expedition: “*Seven of us camped in the cave for five days and explored to Camp IV and did some surveying. The haul through the crawlway to Camp I took five hours for all our gear. Camp I was set up as our base camp. There was a black rubber insulated telephone cable that led outside. Not connected to the system, but it made a great antenna for a small AM/FM transistor radio, that were just available at that date. We listened to the Bloomington radio station each evening. We dug, moved breakdown, and saw probably ninety percent of the present cave on that expedition. We returned for one- and two-day surveying trips several times till all the cave was surveyed.*” (Dave Gahimer, pers comm, Oct 2016)

1961

Jan 8 – Art Davis wrote of a fourteen hour CIG grotto trip, describing one area: “...*We proceeded to Camp II, visited the nearby formation room with its beautiful helectites, then pushed on into the Gypsum Passage. Although it was slow and rather torturous in places, it was beautifully decorated with gypsum flowers and varied gypsum encrustations.*” Later, “Bugs” Armstrong was napping with his carbide light “...warming his rear” when someone tried to help him out and nudged it a little-bit-closer. “*He took off like a rocket with a lit fuse.*” (Davis, 1961)

Jan 29 – Rick Russel related how no one could get their carbide lights working at the entrance before realizing that, at 10 degrees F outside, all the water had frozen in the lamps. “*By putting the lamps near the exhaust from the car they thawed out, and we were ready to go.*” (Russel, 1961)

Circa Feb – A group of cavers from Shelby County were somewhere between camps I and II when one of them dropped a carbide lamp borrowed from Larry Fisher into a hole. They worked their way down through the breakdown trying to retrieve it, finally reaching it where a small stream was flowing on the floor into a smaller round passage that left the main passage. They explored only a short distance before turning back and never re-found this passage. They assumed that the stream they found was the continuation of the stream at Camp I. At that time, most people believed that the stream did not reach the Camp II area. (Larry Fisher, pers comm, Nov 2016)

Terry Cox was asked about what he thought this group had found: “*In my opinion, they were talking about the water passage we later mapped (circa 1971) and called the Lake Passage. It was not a pleasant borehole,*



mind you, and flooding was always on our mind when we were down there. But I simply cannot imagine anywhere else such a passage could be. I do remember the first part of the passage, where we left the main tall canyon passage, started as a wet, slick slab of chert.” (Terry Cox, pers comm Nov 2016)

Feb 11 – Jeff Poxen and four others toured the cave. He described part of the cave: “...*We proceeded to Camp II, where we saw the helectite rooms and cornflake formations...*” They “re-carbided” twice in the cave. (Poxen, 1961)

March 18/19 – The SISG returned to the cave to survey the new section discovered in December 1960. “*It had been raining off and on for most of the day, but when Camp I was reached, the stream was barely flowing, but this did not cause any alarm.*

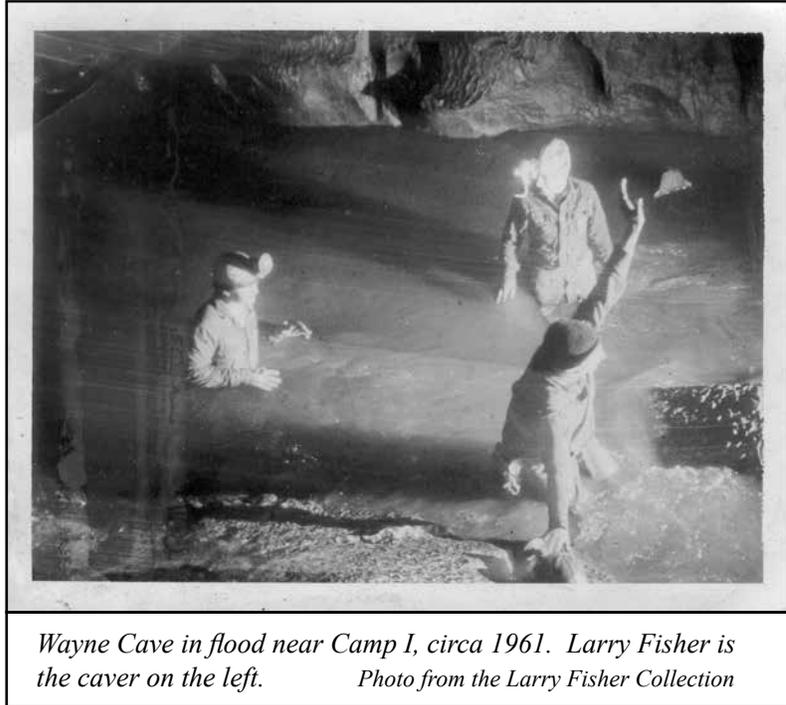
While in the Mountain Room, a large roar was heard coming from the stream. When a check of the stream was made, it was found that the stream had risen over two feet and was increasing at a visible rate... It was decided to retreat to Camp I and to wait out the flash flood. A check of the stream at Camp I was made and it was found that the water had risen an additional sixteen inches in the next 1-1/4 hours. The stream was running approximately four feet deep and fifteen foot wide...” They wisely called off the survey. (SISG, 1961)

Dave Gahimer, fifty-five years later, vividly remembered the trip: “...*It was a wet springtime and the sinkholes along the Garrison Chapel Road were full of water, that should have been a Warning!! We geared up and made the long 1,528-foot crawl to Camp I. There we took an hour break and snacked and told jokes. On down the main stream passage toward Camp II we climbed the breakdown and stopped for pictures. As we were packing up to continue on, a building roar engulfed the chamber. Clambering over the breakdown back toward the stream bed we saw a tumbling wall of muddy water four feet high come surging down the passage and disappear into the breakdown. We held a quick council of possibilities and decided to risk the water to get back to Camp I. By the time we had struggled wading against the rising swift water, it was up to our armpits when we climbed up to Camp I. We sat for another half hour and the water finally crested at 9.5 feet high. Had we not stopped to tell jokes and rest, we would have been on the stream bed, crawling under the breakdown and somebody surly would have drowned!*” (Dave Gahimer, pers comm, Oct 2016)

March – In an article called “DANGER! Flash Flooding in Wayne Cave”, a theory was advanced as to how the cave floods so fast: “*During a rain, the stream becomes choked in the small passage of Fisher’s Fissure with trash and silt causing great amounts of water to back up in the valley above the fissure. As the rains increase the pressure of the choke increases causing it to break. This results in a tidal wave form of flooding ...*” (SISG, 1961)

Richard Blenz remembered the flood and his thoughts on the very rapid water level rise: “*We think that the river at Camp I has a siphon arrangement somewhere upstream, which holds water back until it exceeds a certain level and suddenly releases the whole stored amount in one rush, much like a toilet flush operates. This siphon effect has been seen in other caves, rarely.*” (Richard Blenz, pers comm, Nov 2016)

Terry Cox also had ideas as to why Wayne flooded so rapidly: “*While we have no continuity in observing the stream levels in this or any other cave, I suspect that the stream stays near base level the vast majority of the time. I postulate that somewhere east of Wayne, possibly in the middle of the valley, is a very low level tube carrying water from Saltpeter, Eller’s, and Baugh Swallow-hole to the Queen Blair Spring. During floods, the drainage overloads and floods into Wayne via an overflow route similar to the Lake Passage. Observations by four cavers trapped by flood waters in 1975 imply that the stream rose very quickly to as much as twelve feet deep.*” (Terry Cox notes, undated, in Keith Dunlap collection).



Wayne Cave in flood near Camp I, circa 1961. Larry Fisher is the caver on the left. Photo from the Larry Fisher Collection

So why does Wayne Cave flood so rapidly? Is it surface water backing up against a debris plug that suddenly bursts through? A siphon effect? Unmapped, overflow tubes that suddenly let flood water in? We may never know.

April – In “A Report on the Geomorphological Survey of Three Well-Known Indiana Caves”, Jack Derry has a treatise that is a partial summary from a prominent speleologist that Jack said he can’t reveal the identity of. The following quote is reflective of the article: “*The availability of water for the Jorgenson test was also a factor in Wayne Cave. For example, there is very little natural flowing water in the Great Crawlway Passage, thus a modified corollary of subaeric (sic) and vertiginous moisture was supplied by condensation of the vapor-laden cave atmosphere.*” (Derry, 1961) After that, the article got complicated.

April – The front page of the SISG *Speleo Epitaph* has a sketch picture of two cavers standing in “Clarks Passage – Wayne Cave”. (SISG, 1961)

Aug 4 – Ted Will describes a twelve-hour trip in the cave during which, “...*Made use of the [Norm] Pace, [Chris] Will Bypass, along the main route near Camp I. The P-W Bypass is a little used passage a few hundred feet long which contains a deposit of rare dog-tooth gypsum.*” He added, “*Wayne has one of the world’s largest and most sensuous moon-milk deposits.*” (Will, 1961) Sensuous?

Sept – Tom Arnold wrote a thorough article about Wayne Cave published in the *BIG Newsletter*, which includes a complete area-by-area description, and history of the cave with a map drawn by Richard Powell. In the article, Tom stated: “*The map which is included cannot be considered much more than a sketch map. It is a composite of several surveys of unknown accuracy. There is, however, a more accurate total map being prepared by Bob Armstrong.*” (Arnold, Sept 1961) The article and map were re-published in the 1963, *Speleo Digest* and the editor did some “neatening up” of the map. The map title and scale were moved to the top, all the hand written words were now typed, the word “crawlway” was gone, and most egregious, the name of the man who drew the map, Richard Powell, was missing! (NSSSD, 1963)

As a side note, Tom Arnold and Ralph Mooreland died in Show Farm Cave shortly before the article’s publication. In the foreword to the article, it said: “*This map is a compilation by Dick Powell of several existing maps. Until the hoped-for completion of a Wayne’s map by Bugs Armstrong, which includes the newly mapped portions, no map at present shows all of the mapped portion of the cave.*” This, and Terry Cox’s 1971 *BIG Newsletter* article, are the two best articles written on the cave.

Oct – *Caves of Indiana* by Richard Powell was published. This is probably the most influential book about Indiana caves ever published, includes a brief description and map of Wayne Cave. The map is credited to the “Rose Polytechnic Institute Spelunking Group 1957”. (Powell, 1961)

Terry Cox’s comments on the map of Wayne Cave in *Caves of Indiana* and its origin: “*The only ‘complete’ map that Dick Powell had at the time of publication was the ‘Armstrong’ map, so I am 99.99% certain it was the map he used in Caves of Indiana.*” (Terry Cox, pers comm, Sept 2016)

Dr William Wayne had an interesting comment on figure 4, page 13 in *Caves of Indiana*, which was modified from his 1950 report: “*My block diagram is a pretty close representation of the karst plain from just west of Bloomington to the entrenched Richland Creek. The redrawn one Dick [Powell] used is more of an idealized view of the same type of terrain, but doesn’t go far enough to show the entrenched stream that would have controlled the water table in the karst areas.*” (William Wayne, pers comm, Sept 2016)

Circa the early 1960s – Richard Powell discovered “Powell’s Lost Passage” in Wayne Cave. From Terry Cox’s notes circa 1970s: “*Sometime in the 1960s, Dick Powell pushed through some breakdown in the vicinity of Camp I and found a large virgin canyon passage. He only explored it for a short distance. He sketched the passage onto [a copy of] Don Peter’s 1957 map, but unfortunately the orientation of the upper level passages near Camp II were incorrectly rotated about 135 degrees too far to the right. After realization that the passages were misaligned, several trips were taken to explore for the ‘lost’ passages, one of which included Powell. [Powell’s] passage was never found. It is felt that the passage does exist and the most logical extension of known cave suggests that the right hand upper-level passage west of Camp II is the place to concentrate attention. This part of the cave is typified by slabby unstable breakdown near the mid-Paoli shale break. Perhaps the roof has collapsed since Powell’s trip. It would also be wise to thoroughly check the upper levels of the breakdown room in the American Bottoms area, which lies underneath the 150 Yards Passage.*” (Terry Cox, personal notes, circa 1970s)



Richard Powell remembered the trip some fifty-four years later: “*There is a passage off of the area of Camp II in Wayne’s Cave that was traversed for several hundred feet that was about six feet high, more or less, that appeared to end in breakdown. At floor level on the left side, at the edge of the breakdown, was an undercut crawlway that passed on the left side of the breakdown to a low rocky floored room where one could cross the passage to the right hand side of a succeeding collapse. Following the right hand side between the breakdown and the wall for twenty to thirty feet, more or less, the passage opened into a room with a large block of breakdown about three to four feet high, and about fifteen to twenty feet across with some shale debris on top, beyond which the passage opened up to a standing plus height. We stopped here at the beginning of a deep canyon passage which we did not enter. Crossing the shale covered flat rock gave me a feeling I did not want to be there. James Langhammer was on this trip and maybe another, I do not remember. I believe Langhammer left Bloomington in 1962, so the trip was early 1960s... Anyway, on a succeeding trip with Terry Cox and others, I could not locate the passage with the breakdown blockage.*” (Richard Powell, pers comm, Nov 10, 2016)

1962

Feb – A very rough sketch map of the cave, with no article, was published. (SISG, 1962) On the map is a dashed passage labeled “*Virgin passage explored by S.I.S.G. 12/60*”. Note on Cox’s 1973 map, this passage is simply labeled “*Lake Passage*”, while on Love’s 1972 map, it is labeled “*Lake Passage 1960 SISG discovery*”. (BIG, 1971; Love, 1972)

Feb – Mike Poxon wrote a trip report describing garbage, graffiti, and entire areas covered with spent carbide, particularly in the Camp I area. Apparently, there was a sign outside the cave as Mike mentioned: “*...It is obvious that the sign made by Chip Phillips is not doing its job in this cave...*” (Poxon, 1962)

Nov – Tom Rea wrote an article describing a previous clean-up trip to the cave in March by the CIG, removing trash and names, and burying carbide, but by his next trip in November, the cave was full of trash, graffiti, and spent carbide again. (Rea, 1962)

1962 – Richard Blenz remembered the Wayne Cave resurgence back in 1962: “*...What is interesting was that the little stream at Camp II was traced to the water coming out of the hillside down in the valley just below [Blenz’s later constructed] house. The property owner kept a cup there at the spring and we drank Wayne water more than once. Just after I got the land in ‘62 and started coming down to visit it, I would occasionally see an old man wandering in the woods. It turned out to be a man named Keller... In that valley was a grain mill, a community, and a school on the hilltop overlooking it. By the 1920s, everything except Keller had abandoned the valley. The mill used the water coming from three springs to operate, with Wayne water being one of them. Keller owned and kept the cup at the springs...*” (Richard Blenz, pers comm, Nov 2016)

1963

Dec – Wayne Cave is mentioned to have good examples of mud stalagmites in an article entitled “The Form and Origin of Less Common Speleothems” published in *The Lucufugus Letter*. (Richards, 1963)

1964

Feb – Nancy Wayne and father William Wayne complete their monthly testing of twenty-eight drilled wells and three springs in the Mitchel Plain of central Monroe County that was started in June 1963. All three springs and three of the wells showed large contamination by coliform organisms *every* time they were tested; at fifteen wells, coliform contamination was variable largely depending on rainfall, and at ten wells, they never tested positive for coliforms. The ten coliform-free wells had their casings correctly grouted and sealed deep enough to seal out surface water. (Wayne, Nancy, 1965) What is fascinating is William Wayne’s remembrances of one home owner’s comments: “*...One of the homeowners mentioned to me that he never had septic tile field problems because his tank drained directly into a sinkhole. His [water] well showed high coliform bacteria every time...*” (William Wayne, pers comm, Sept 2016)

June – An article by Sam Frushour was published about finding new cave passage close to Camp I on April 12, 1964. Included was the “Sketch Map of Wayne Cave Extension”, which was a detailed map of the area. (Frushour, 1964) Only the map was reprinted in the 1964 *Speleo Digest*, but it was not the exact map that was in the *CIG Newsletter*, as it has been “prettied up”. Handwritten words were now typed, some features that had been identified in the original map were missing (pool, dome pit, stream, etc), and breakdown features were drawn differently. (NSSSD, 1964)

March/April – Dye tracing was performed in Wayne Cave by members of the Windy City Grotto, led by Jack Knight. A pound of fluorescein (dissolved in aqueous potassium hydroxide) was dumped near Camp III over a period of fifteen minutes and traced to a small spring (named the Wayne Cave Resurgence) on the north side of Blair Hollow, about one quarter mile downstream from Big Blair Spring. A few weeks later, one half pound of fluorescein was poured into the stream near Camp I. They determined that the cave had two distinct stream passages in it, the stream between camps I and II and the stream at Camp III. (Knight, 1965)

Seven years later, Terry Cox discussed this dye tracing and mentioned that Knight “lost” one pound of dye on his first attempt, and that he (Cox) had lost dye in the same stream twice. He suggested that another spring may carry flood water overflow and more dye tracing was necessary. (Cox, 1971)

By 1964 the original gate/grate had been removed and another one consisting of half-inch rebar welded together was put over the remaining concrete foundation. (Keith Dunlap, pers comm, 2016)

1965

April 3 – Jack Knight conducted more dye tracing, pouring one pound of fluorescein into the very low flowing stream where it disappears under the breakdown downstream from Camp I. (Knight, 1965)

April – The *NSS News* had a front cover photo by Don Martin of the “Medusa’s Head” formation (a foot-long formation almost entirely with helectites) with Dan Etchison. (NSS, 1965)

June – The 1965 *NSS Convention Guidebook* had a description of Wayne Cave by R.S. Nicoll and a map titled “Mapped by R.P.I. Spelunking group”, but no length was given. (Nicoll, 1965)

1966

Sept 16-18 – The 1966 *Caveman Expedition Handbook* included Wayne as one of their guided tours: “*Wayne’s Cave; one of the largest, toughest, and most beautiful caves in Indiana. Has ¼ mile crawl to enter cave, many large passages and beautiful formations. Recommended only for those with prior caving experience and proper equipment, 6 ½ hour tour – rated very strenuous.*” No map was included. (CME, 1966)

1967

Nov 4 – Richard Powell wrote of a rescue in the cave. A person was caught by loose rock in a small passage about 2/3rds of the way between camps I and II. By the time help arrived, his companions, Jerry Long and Max Miller, had managed to move and chip enough rock to free him. (MRN, 1967; NSS, 1974; Powell, 1967)

Leroy Vanscoy had a different, perhaps more colorful, remembrance of the incident forty-eight years later: “*I was at the barn one weekend and these guys came to get help... We were kicking around what to do and I said we were gonna have to use a small charge of dynamite to move that rock. Dupont GL-60 is what I always used to use. A couple of guys from the cave took off fast, back to the cave and before we could get ready, the guy somehow got free, when they told him we were gonna blast him free.*” (Leroy Vanscoy, interview of Oct 9, 2016)

1969

Feb 12 – Don Martin wrote the “Adventure is Underground” in the *IU Indiana Daily Student* with a description of caving adventures in Wayne Cave with photos. (Cox, 2016b)

Feb 22 – As part of a dye tracing between nearby Saltpeter Cave and Big Blair Spring, a charcoal detector was placed in the Wayne Cave stream near Camp I. While they proved a hydrological connection between Saltpeter and Big Blair Spring with eight ounces of fluorescein, there was no subsequent record of having retrieved or checked the detector placed inside of Wayne. (Bassett, 1969)

Spring – An exploration party in nearby Saltpeter Cave emerge from its Cobble Crawl into a 300 foot-long breakdown floored room. They initially thought they had somehow broken into Wayne Cave, prompting the room to be called the “Wayne’s Room”. (Keith 1971)

June 25 – The “Wayne Cave, Trip #1, 1,014 Feet” map was drawn by C. Roy (NSS 7209). This was a hand-drawn inked map on thin tracing paper that included all of Old Wayne and about 800 feet of the crawlway ending at their survey point C20. Barely visible, after almost half a century, were penciled in notes describing features such as anastomoses, flowstone, and stalagmite formations. What was intriguing about this map was at the extreme northwest end of Old Wayne (at the opposite end from the cave’s *only* entrance), at their survey point



A12, was a note depicting, “sewage filled crawl to historical entrance” just past what is marked as a “cesspool”. (unpublished map in Larry Fisher collection) In an interview forty-seven years later, Leroy Vanscoy, who was listed as “point” person on the survey team, couldn’t recall details of the map or survey trip. A “historical entrance?” Wayne has always had only one entrance – *hasn’t it?*

Summer – Leroy Vanscoy conducted a radio survey of parts of the cave showing that the two upper level passages beyond Camp II were miss-aligned on some of the old maps by as much as 135 degrees. (Cox, 1971)

Leroy recalled the radio survey: *“All we did was locate one spot to verify it was out of rotation (we looked at several old maps, noting that on some maps the passage went north and some to the south)... I think, that may have been what clued me in, we had looked at different maps and passages conflicted coming off around Camp II. Dick Blenz had built a survey unit... they used it in Buckner’s quite a bit and whenever someone had a special project he let them use it... It was about two feet square on plywood, a coil of wire, several turns going around it, had a 6-volt lantern battery and a level on it, the coil had to be level to be accurate. I was on the surface with my wife Lillian, and Frank Reed was in the cave. I can’t remember who was with him. I know he put it at the end of the passage that we thought was mapped wrong in the breakdown in the end. We had another unit with a level on it, you looked for the strongest signal, we finally pinpointed it in the side yard of a house on Gardner road. We spread the word on it when we radio mapped it. I let Blenz know, of course Frank Reed was there so he knew, and the BIG knew. I told them they needed to resurvey that passage and told them why, but I’m not aware any of them ever did. I never did anything about it other than let them know.”* (Leroy Vanscoy, interview of 10-10-2016) The house he indicated was south of Gardner Road and west of the cave entrance. Leroy looked at the current topo overlay map of Wayne and was surprised the point he located showed so far south of the road.

Richard Blenz remembered that early radio cave mapper he built: *“I was working at the University of Chicago when, in the September 1960 issue of Electronics Magazine, an article appeared ‘Mapping Caves Magnetically’ by a fellow from Naval Avionics of Indianapolis. It was all in vacuum tube technology. Transistor technology was ascendant and so I redid the design of his transmitter and used his antenna design. I was able to reduce the size of his unit into a fifty-caliber military container box. It ran at 2 KHz frequency... About the time I moved to work at Indiana University, Frank Reid, an electronics engineer from Kentucky, arrived and got interested in the cave mapper. Integrated circuits technology was just arriving and he used them to create a superior cave mapper using the original antenna.”* (Richard Blenz, pers comm, Nov 2016)

Fall – Dave Gahimer recalled an ill-fated trip in the fall of 1969 where he and a fellow Rose Polytech student were planning an overnigher to Camp IV: *“...We made it thru the crawl and were almost to Camp II when Charlie fell on his right arm. He would not turn and go back. At Camp II, I finally saw he was really hurting and we struggled getting him out of the cave and back to Rose at Terre Haute. I made sure he went to the doctor on Monday and he had fractured his arm!!”* (Dave Gahimer, pers comm, Oct 2016).

Dec 27 – Leroy Vanscoy, Larry Fisher, and Dan Wisler dug in the breakdown in Old Wayne. The extension to the north was pushed to a crevice. (Vanscoy, 1970)

Leroy remembered that trip forty-seven years later: *“We didn’t find anything of significance, just wanted to see what was there. I remember (laughing) we got to the end of our carbide and I said to Fisher, ‘You got the carbide?’ and he said, ‘No, thought you had it.’ Wisler didn’t have it either. So we dug out our flashlights and they weren’t any good either. We sat there in the dark for a while and finally felt our way back out.”* (Leroy Vanscoy, interview of Oct 10, 2016)

Circa late 1960s – John Findley’s autobiography, *Just Lucky*, has a chapter about his caving as a youth called “Caves are not for Sissies”. This is an excerpt where he is taking some “newbie spelunkers” through the crawl: *“...I’m sure my knees hurt every bit as bad as Jim’s did, but I am tough. I had been here before and knew what to expect. For Jim, it was torture. Every time he put his knees down in that gravel, every foot we gained, he paid for in pain. We had been crawling, on our way out, for more than two hours, and Jim had become a quaking bowl of Jello. Finally, he could take it no more. The poor guy was blubbering as he said, ‘John leave me. I can’t go on. I want to just lay here.’ I knew he was close to total breakdown. I felt like his father as I sat there beside him and said, ‘Jim don’t worry about. Rest as long as you want. We only have a short way to go.’ I was lying. We still had plenty far to go, but if I could convince him that we were getting close, maybe I could keep him moving. I told him, ‘Jim when you’re ready, try turning around, and scoot backwards on your butt. That will give your knees a rest.’ Jim tried it half-heatedly and then said, ‘I can’t. I’m too tired. Please let me alone. I want to stay right here.’ I’m sure he was beyond caring whether I thought he was a crybaby or not. He was simply at the end*



of his rope. I replied, 'Alright we'll take a short break.' So he lay his head down on his arm, right where he was, and closed his eyes..." (Findley, 2010) After that, it gets pretty dramatic.

Circa late 1960s – Jack Countryman mentioned about the discovery of “Buddy’s Lost Passage”: “*They [Buddy Rodgers and Billy Zikes] were in Wayne and the water was up when they got down around the breakdown pile at Camp II. There was a stream of water going into the breakdown pile separate from the main stream flow. They followed it and it took them into a canyon passage that they walked through for several hours, they got into a belly crawl in water and he crawled out and was looking through a hole onto what he thought was the back of a stream cutting across in front of him in daylight. He was convinced it was around where we dug in the Wayne Cave Resurgence. They didn't mark their way through the breakdown and as far as I know, nobody's ever found it since. He told me about it in the early 70s.*” (Jack Countryman, interview of Nov 2016)

Larry Fisher also had heard of this lost passage: “*I have heard of 'Buddy's Lost Passage'. As far as I can remember, it was never re-discovered. As far as I know the head-water of the stream going into the American Bottoms region has never been discovered and explored. This may be where he was at. Logically, it would be in the area of Camp II at a lower level. Sometimes Buddy could be a bit confusing and also a little secretive about some of the places he had been in caves...*” (Larry Fisher, pers comm, 11-04-2016)

Terry Cox had these comments on a “lost passage” somewhere in this area: “*...I further noticed mention of the report (looking through his notes) of a large walking passage beyond Camp II. We tried several times to find that passage, five times by June 1971, and Spaulding, Bittinger, and I fully believed it existed. I still do. But the truth was, we could never discover the origin of the story. We finally gave up the effort.*” (Terry Cox, pers comm, Aug 2016)

Bill Tozer also had a “Lost Passage” tale further in the cave: “*...As I recall, a group pushed way past Camp II, beyond Camp III or IV and saw daylight. That passage gets low back there, mostly belly crawl. I do not know anyone who personally saw the opening. I guess, I would place this as a 'story of the past, but not confirmed since'. Of course, sinks open and close with rains. It may have existed then, but since closed.*” (Bill Tozer, pers comm, Nov 2016)

Here’s another supposed passage: “*A passage is reported to take off somewhere in the crawlway and go about 500 feet. We have been unable to locate it though.*” (Cox, 1971b)

How about this one?: “*In the Wells area is a dome that can be seen from the muddy dome through a hole in the wall. This dome can be reached by climbing the Moon-milk Dome. A passage exists on the other side of this dome and appears to go. However, this passage can be reached only by bolting and this has not been tried to my knowledge.*” (Cox, 1971b).

Buddy Rogers helped to open and explore several caves in the Garrison Chapel area and ran Bent Arrow Caving Supplies on Eller Road for many years. Buddy passed away in April of 2015 and took the secret of his “Lost Passage” with him. Lost passages, distant daylight seen filtering through cracks... if nothing else these are damn good stories and, who knows, just might be there.

1970 – The Resurvey

July 7 – The first of many survey trips of Terry Cox’s cave resurvey. They surveyed 1,013 feet. (Cox, 2016a)

Oct 23-25 – Wayne Cave was included in the 1970 *Caveman Expedition Guidebook* with a brief description, including: “*...The cave has been extensively damaged by vandals. It has also been the scene for several extended stays...*” The full page map was labelled, “*From maps surveyed & sketched by R.P.I, I.U S.C., B.I.G., C.I.G., E.C.C., & S.I.S.G.*” (CME, 1970)

Oct 27 – Peggy Keller recounted in a trip report how they started in the cave and encountered some Saturday night campers leaving, who told them they, “*...Had abandoned three sleeping bags back there.*” (Keller, 1970)

Terry Cox, forty-six years later, vividly remembers those sleeping bags, describing an aborted surveying trip: “*...When we got to Camp I, we encountered a new pile of trash, including empty cans, moldy bread, and a couple of sleeping bags... Someone had left a large Army duffle bag, so we loaded it up with garbage and took turns dragging it out of the crawlway. The downside was the sleeping bags had started to rot and one of the villains had spilled a bottle of soy sauce on one. We couldn't avoid the smell of soy-flavored rotting bedding. And the smell was so powerful that we had to fight the urge to throw up all the way to the entrance. While*



we did our bit for cave restoration that day, it took probably fifteen to twenty years before I could tolerate the smell of soy sauce.” (Terry Cox, pers comm, Aug 2016)

December – Terry Cox reported that the ongoing resurvey of Wayne Cave headed up by him and Greg Spaulding was at the two-mile mark. Dye tracing in the “elusive” Camp I stream was still being attempted. (BIG, 1970)

Privately, Terry wrote a more detailed account of the dye tracing: *“During our mapping project in 1970, Greg Spaulding and I tried confirming the [1964/65] WCG trace of the Camp I stream. This time we placed a pound of dye in the pool at the Camp I sump and two times we failed to get a positive reading either visually or with bugs... We decided to try a trace at a higher flow rate.”* (Terry Cox notes in Keith Dunlap collection)

1971

Jan 24 – Art Stone wrote a trip report which mentioned: *“...The crawl... had an unbelievable assortment of trash in it... On the way out someone got so disgusted with all the garbage laying around, so... we put most of it in the room before the crawl into a pile and we took out as much as we could...”* (Stone, 1971)

April – Terry Cox and Greg Spaulding dye traced in the sump area near Camp I. Attempting to have the dye enter the stream only during a flood (due to the failure of their 1970 attempt, possibly due to low water flows) they dig a hole in a mud bank about two feet out of the stream, line it with plastic, and partially fill the hole with water with a pound of fluorescein. (Terry Cox notes in Keith Dunlap collection)

May 7 – A large rainstorm hit the Bloomington area causing Wayne Cave to flood as much as six to seven feet deep just downstream from Camp I. Terry Cox and John Bassett got a positive visual at six separate resurgences from the dye place in the cave in April. Surprisingly, they also got a positive visual at Queen Blair Spring which proved *“...some overflow connection between Wayne and Queen Blair.”* Musing on this, Terry wrote: *“...I doubt that the Lake Passage is the overflow route to Queen Blair. I think that the overflow would have to be somewhere south or southwest of the end of that passage.”* (Terry Cox notes in Keith Dunlap collection)

June – The resurveyed map of Wayne Cave by Terry Cox, was published in the *BIG Newsletter* showing 3.47 miles of length. The map is dated July 7, 1970 to May 1, 1971, and included: “Original map by Cox, Spaulding, & Moore.” to distinguish it from all the previous cobbled maps of various efforts. (Cox, 1971a)

In the same newsletter, David DesMarais described air tracing experiments he conducted in an article entitled, “Air Tracing in the Garrison Chapel Ridge”. He placed ethyl mercaptan, which has a distinctive powerful odor, at the spring entrance to Queen Blair Cave. Queen Blair draws air into itself strongly during the winter. He then checked for the smell at various other local caves. Wayne Cave’s entrance, which *“...issues respectable volumes of steam,”* was negative at 4,600 feet away from Queen Blair. (DesMarais, 1971) The article was reprinted in the 1971 *Speleo Digest*, but the Digest editor changed the name of the article to “Queen Blair Air Tracing”. (NSSSD, 1971)

June – A SISG group dug and blasted in Old Wayne unsuccessfully trying to extend the cave. (Terry Cox notes in Keith Dunlap collection)

June – A lengthy article by Terry Cox in the IU Spelunking Club’s *Speleotymes* gave a description of Wayne Cave area by area, history, and geology. Included is a reprint of the May 1, 1971 map and a sketch map showing an enlargement of the Camp I area showing great detail and passage relationship.

Terry also gave a tantalizing clue about a possible new entrance: *“About 200 feet past station 110 in the IU Discovery is a passage that trends south into the karst valley. This passage ends in a very damp breakdown and sandstone fill. There are always bats here, and there is usually a good airflow and a temperature difference that might suggest a very possible opening to the surface. Though one shallow sinkhole was dug in, I might suggest that if any future effort is begun, it should be radio-mapped first. Probably the opening, by our map, is a trash-filled sinkhole that takes a good deal of water during rains.”* (Cox, 1971b)

One interesting item was the conflict between the ongoing survey and the previous map in the upper two passages beyond Camp II. Terry wrote that the ongoing survey was proven correct in its orientation by the radio survey of parts of Wayne Cave by Leroy Vanscoy in the summer of 1969. *“This survey showed that the two upper level passages beyond Camp II were mislocated on the old maps by as much as 135 degrees.”* (Cox, 1971)

So how *could* someone have made a 135-degree mistake? This was more than just sloppiness. Sam Frushour provided a clue: *“Concerning Wayne Cave maps from the 1950s. Bob Armstrong told me different people gave him parts of the cave map they drafted and he and Jack Derry put together the best map they could.”* Sam also



indicated there were some scale problems and that one of the surveyors routinely carried a fifty-caliber ammo box that Sam speculated may have impacted the compass readings. (Sam Frushour, pers comm, July, 2016)

Terry Cox also brought up the ammo box: “...Powell also thought [in 1973] he remembered that one of the guys from the earlier survey carried a metal ammo box and may well have used it as a platform for his compass.” (Terry Cox, pers comm, Aug, 2016)

Terry Cox totaled up known errors between the 1950s and 1970s surveys: “...About 56 minutes can be attributed to the migration of the earth’s magnetic poles between the time of their survey and ours. Part of the difference, approximately another degree, can be attributed to the appearance that the Armstrong-Peters survey used magnetic north to map the ‘front part’ of the cave. Our survey used true north as we assumed it to be at the time.” (Terry Cox, pers comm, Sept 2016)

That’s only about two degrees. How did the other 133 degrees of error happen? To test the “ammo box error” theory, I used a Suunto KB-77/360T compass and a fifty-caliber metal ammo box to see how the proximity of the compass to the box affected accuracy. Laying the compass on the middle of the box, next to the handle, gave *dramatically* erratic readings, varying 216 degrees! The compass had major, but consistent, errors within seven inches of the ammo box, between seven and twelve inches errors progressively became less. The compass had to be at a foot away to provide consistently accurate readings. I then laid down and used the ammo box to rest my chin on, that put the compass three to four inches away and gave a consistent twelve degree error, but this wasn’t a very comfortable position. Next, I used the box to rest the edge of my helmet on, this was pretty comfortable. This placed the compass two to three inches away for a consistent error of about thirty degrees. I can’t believe the ammo box was used as a compass platform, as the readings would have varied so dramatically it would have been apparent. Resting your helmet comfortably on the box would have produced a consistent error of about thirty degrees. Just having the box laying around within a foot of the compass would introduce random errors. The moral of the story is, don’t take a metal box when you’re surveying.

Summer – Jack Countryman attempted to open up the largest of the potential springs in the area of the Wayne Cave resurgence. This work was never published. The first reference found of it was in Terry Cox’s unpublished chronology: “In the summer of 1971, Jack Countryman led a project at the largest of the springs at Wayne Cave resurgence. Though much effort was expended, both digging and dynamiting, only about thirty feet of totally water-filled passage was ever accessed. Since the spring entrance had been lowered to the base level of the main creek, and the water-filled passage was in bedrock and not breakdown, the project was abandoned.” (Terry Cox, unpublished, *Wayne Cave Chronology*)

Jack Countryman, remembered the dig forty-five years later: “...We dug all over that area that summer. There was an outcrop about waist high with this spring where we saw a crevice, about two inches wide. We dug a channel to lower the spring down to the stream level so we could work on it. The rock was kind of fractured, fairly well broken up, and we used a sledgehammer and a rock chisel and started breaking off pieces on both sides of the crevice and pulling the chunks out. I remember a lot of crowbar work. We got it opened up where we could belly crawl in. We worked our way in maybe one and one-half to two body-lengths to where your head was against the top of a little dome. You were right up against the ceiling with your face over the water, which was maybe five or six feet to the bottom. You could see a passage underwater down there, maybe a couple of feet wide and a foot high on the other side. Since the dome was five or six feet deep and we were only about a foot above the stream on the outside, that meant there was no way to drain the water. It was way too tight of quarters for anybody to get an air bottle or anything like that in. I suppose you could have tried to pump it out, but we didn’t have the money for anything like that.” (Jack Countryman, interview of Nov 2, 2016)

Terry Cox also remembered the dig project: “...I don’t remember it well, although I clearly recall it scared the hell out of me. I was the smallest guy, so I was the only one who’d fit. I remember holding my breath and sticking my head underwater to take a look... I could not wait to get out of there and was absolutely convinced it was a no-go.” (Terry Cox, pers comm, Nov 2016)

In November of 2016, Keith Dunlap and Tom Sollman looked for the Wayne Cave resurgence. Walking west in Blair Hollow, they counted fourteen springs on the north side of the stream. Only the sixth and twelfth springs seemed large enough to be candidates for the Wayne resurgence.

The sixth spring, about 700 feet west of Queen Blair Spring, they believed to be Barry’s Gurgling Spring (ICS # 53377). This spring is perhaps 60 feet from the creek and has large rocks that appear to have been moved to make about a five foot wide channel from the spring to the creek. The spring could be entered through a three



feet high by five feet wide rock face that immediately became a body-size slide down over sharp rocks for a body length to a low space about six foot in diameter. You could just barely turn around in there. A small passage flowing from east to west had broken out to form the spring. Only twelve foot or so of passage was visible in either direction and only a small determined individual could enter them.

The twelfth spring, 500 feet further down the creek from the sixth spring, they believed to be Vanne's Spring Cave (ICS # 53376). A two foot diameter tree had recently uprooted just above the spring entrance and radically changed the spring face. To the right of the tree root ball, water was visible from outside. Moving several rocks, it was possible to squeeze over sharp rocks into the spring about a body length. A few short stalactites were seen on the right side. A small stream was flowing from east to west. Looking to the right, or upstream, the roughly triangular shaped passage would be tight for a small person and extended maybe a couple of body lengths to a curve. There were fragile unbroken black nodules extending out of the passage walls suggesting this passage had never been entered. To the left the passage looked larger, almost a hands and knees crawl curving to the left past a small mud bank on the right.

Adding to the confusion is "Waynes Spring Cave" (ICS # 53022). The 1989 report and map of this cave roughly matches what was observed in Vanne's Spring Cave, a very tight passage to the right and a larger, two-foot passage to the left. In the ICS files it states: "...*The passages can be negotiated with wetsuits and caution*". The listed location, however, is suspect as it places the cave over 2,000 feet further west in Blair Hollow close to Keller Spring. This information was never published. Recent inquiries from those involved suggest the location of this cave is closer to where the spring resurgence(s) are located.

The surface overview map of the Wayne Cave dye traces done by Jack Knight in 1964/65 most closely matches the location of the twelfth spring, but read this from the June 1971, IUSC *Speleotymes*: "*A recent dye test was made in Wayne Cave during flood flow. Green water was seen squirting out of most of Wayne's springs in Blair Hollow. All those springs that did not prove visually were positive in the bug. The most significant find was that Queen Blair is also a flood overflow for Wayne's.*" (IUSC, 1971, see also: May 1971)

In flood, every spring in Blair Hollow, including Queen Blair herself likely takes water from Wayne Cave! My personal impression is that all fourteen springs are just where the same small channel, running from the east to west parallel to the hollow, has broken out to the surface. I predict a future dye trace would also show a positive in Jim's Hole (ICS #53138) which lies uphill between Wayne and the Blair Hollow springs and has a stream passage running from the east to the west too.

Spike Selig describes the stream in Jim's Hole: "...*We tried to dig rocks out downstream, but the whole thing caved in and the dig was just too dangerous to continue. It had an upstream in the water lead that came in to a flooded small room with water flowing off to the west, but sumping immediately.*" (Spike Selig, pers comm, Nov 2016)

Dec – The Wayne Cave re-survey was reported at 4.1 miles. (BIG,1971)

Dec – The front cover of the IU *Speleotymes* was a hand-drawn picture of the Lake Passage by Terry Cox. Included also in that issue was a report of the dye tracing of the Lake Passage in Wayne. (IUSC, 1971)

Dec – *The Effect of Cave Information Distribution on Visitation and Rescues in the Garrison Chapel Valley* referred to a December 1971 incident at Wayne Cave for a "*dislocated shoulder after stumble on boulder slope.*" (Wilson 1974)

1971 – William W Gardiner's *A Study of Pollution Levels at Selected Underground Streams, Monroe County* showed the only really appreciable gross pollution in the Garrison Chapel Valley were from samples from Wayne Cave. The main passage pool in Old Wayne near Gardner Road tested at 1,000, 680, and 750 coliforms/ml in three tests. (Gardiner, 1971)

1971 – Terry Cox mentions pollution too: "*Cesspools occur in different places throughout the cave – at the end of Old Wayne, in the crawlway at Stalactite Squeeze, just beyond Camp I in the Wells area, and in the vicinity of the formations at Camp II. This shows that surface percolation is active, that the cave water is bad, and that something should be done about the sewage disposal in the overlaying ridge.*" (Cox, 1971b)

1972

Jan – "RBS Labs" reported on the commercialization of Wayne Cave with "...*A stepladder in the entrance, ... remote control flashlights, emergency back-up lighting... consisting of candles connected with primer cord... a*



crawlway conveyer system... consisting of two speed reversible conveyer...” (RBS Labs, 1972a)

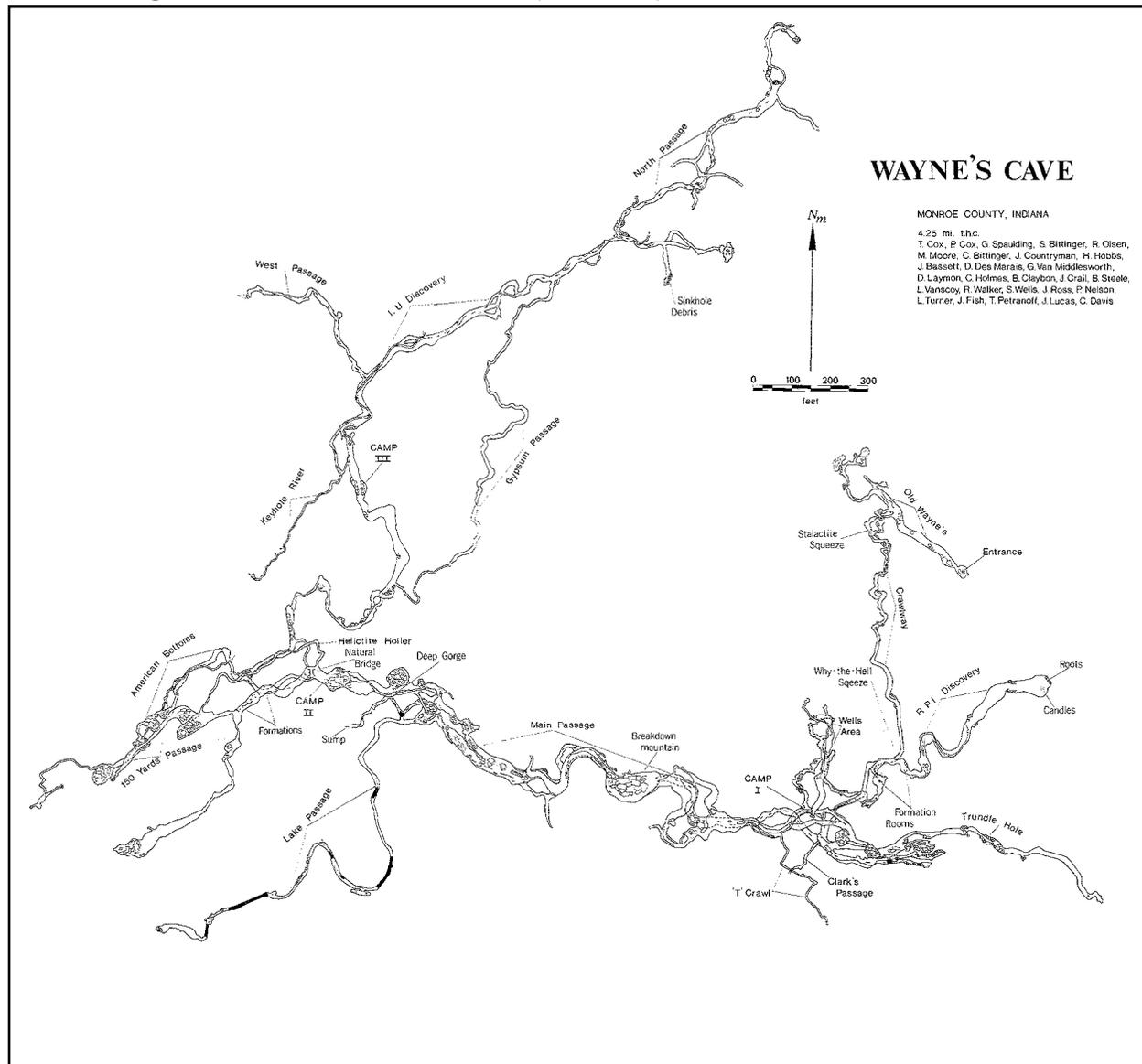
Feb 5 – Last survey trip of Terry Cox’s twenty trips in the resurvey of the cave. (Cox, 2016a)

Feb – “Hodags” were discovered in the cave by RBS Labs. (RBS Labs, 1972b) This conflicts with a later RBS report that Hodags were first sighted in Wayne Cave in 1967. (RBS Labs, 1993)

May – RBS Labs gave an update on the commercialization of Wayne Cave, reporting: “...A great success... we have spent \$89,000... and taken in \$29.75... a few problems... recent rains have... clogged our conveyer system... our Hodags have all died and... we are trying to import some from New Zealand.” (RBS Labs, 1972c)

Dec – Dave Luckins wrote a trip report, telling of a Northern Indiana Grotto venture where they encounter three other groups in the cave. All three had copies of *Caves of Indiana* with them. One group was sitting in the dark trying to relight their carbide lamps, with no back up lights, and so low on carbide they would have had only one lamp to get out. Another group was using a Coleman Lantern as the main source of light in the crawl (Luckins, 1973).

1972 – *The Spelunker’s Guide to the Caves of the Garrison Chapel Valley* by Douglas Love was printed and widely distributed, igniting much controversy in the caving community about the disclosure of cave locations to the general public. The publication included maps (many redrawn/adapted without permission) and descriptions of all the area caves, as well as an area map making it easy to find all the caves. Included was a list of “A number of pits and holes have been dug out or blasted into the ridge around Wayne’s...in an attempt to open new caves...” that gave the location of Fisher’s Fissure. (Love, 1972)



1972 – As a parody, *The Speleoboper's Guide to the Caves of the Gruesome Chapel Valley* was printed, igniting much chuckling in the caving community about the distribution of cave guidebooks. It included descriptions of trash, formation destruction, spray-painting, accidents, and pollution in the cave. No maps or locations were included at all. To show the feelings of the time, here was the acknowledgements: “*I am not going to thank anybody for anything, it took a lot of time for me to pick over and choose what I wanted to steal from the best maps to the best written material, so if anybody expects to see their name in this book, they can just forget it! I don't care who did what, so long as I get all the credit, and money.* – Dungass F Luvless, *Butthoe, Indiana.*” (Luvless, 1972)

1973

July 7 – Tom Bartlett wrote of a Windy City Grotto trip and described pollution in Old Wayne: “*We finally got to Wayne's Cave about 1 p.m. and trucked on in, only to discover, to our disgust, that since we had last been there, either sewage water or the raw sewage itself (in any event, very stinky black water) lay in pools all through the area before the crawl. Ugh!*” (Bartlett, 1973)

Aug – Horton Hobbs III, in his PhD dissertation, documented *Orconectes inermis testii* (the white crayfish) and *Cambarus laevis* (the brown crayfish) with *Uncinocythera xania* and *Dactylocythere susanae ostracods* clinging on them. (Hobbs, 1973)

1973 – The *1973 NSS Convention Guidebook* has a good description of Wayne Cave with two photos by John Bassett, “Formations near Camp II” and “Exploring a dome”. Included was an incredible 22 by 26 inch map by Terry Cox, et al, showing Wayne Cave at 4.25 miles in length (see previous page). (*NSSGb*, 1973)

1973 – Tom Rea described a typical grueling trip through Wayne Cave in *Inside Earth* magazine and has some nice descriptions of various areas in Wayne:

The Wells: “*...A group of dome-pits about forty feet high with high level leads to tantalize the climber. The walls of the most remote dome-pit are covered with white, splashing flows of moon-milk.*”

The area beyond the Wells (the RPI Discovery): “*...The passage continues as a gypsum lined crevice two or three feet wide and up to fifteen feet high. This crevice leads you through a string of three profusely decorated formation rooms. Broken columns, with the bases displaced an inch from the tops and fallen slabs covered with stalactites sticking into the mud floor or pointing off to the side at crazy angles attest to the force of an ancient earth-quake. Beyond the formation rooms the passage becomes wide and low and then lower until it ends at a hillside. Here you find a small group of white stalagmites known as the Candles. Near the end, in the ceiling, are a group of delicate blue-white helectites so tiny and perfect they seem unreal.*”

Helectite Hollar: “*...A torturous crawlway with ceiling and walls lined with helectites.*”

And, of course, the crawlway: “*...that damned crawlway...*”

Included was the famous picture of Robert Armstrong, first printed in the November 1957 *NSS News*. (Rea, 1973)

1974

Dec – *The Effect of Cave Information Distribution on Visitation and Rescues in the Garrison Chapel Karst Valley* by William Wilson theorized a link between the distribution of caving guides, particularly *The Spelunker's Guide to the caves of the Garrison Chapel Valley*, and the volume of caving visits and accidents. (Wilson, 1974)

1975

Feb – Douglas Frost publishes *Geochronologic Methods for Karst*, his Senior Thesis at Ohio State University. It included a chapter on the Garrison Chapel Valley with a map pinpointing (without identifying) every local cave and spring, including Wayne Cave, nearby Fisher's Fissure and Stansifer Pit. (Frost, 1975) The map showed caves and springs merely as points. There were no roads marked, only contour lines at fifty foot increments. As I slowly identified each cave, a strange mix appeared. I *knew* I had seen this odd combination of features... Sure enough, in the references was Doug Love. That guidebook wasn't *all* bad.

Feb 22 – Four Illinois school teachers entered Wayne Cave at 10:30 am (Saturday), just as a light drizzle started and were trapped for twenty-seven hours. When they entered, the water downstream from Camp I was two inches deep, but when they were ready to leave the water was four feet deep and blocking the exit. They retreated to a forty foot tall breakdown room and measured the water hourly, at one point it was twelve feet deep. About noon on Sunday, they heard Tom Rea and Kevin Komisarck hollering and were



led out. (Cox, Mike 1975; Ellis, 1975; Moore, 1975a, 1975b; Moutoux, 1975; NIG 1977a, 1977b; Noe, 1975a, 1975b; NSS, 1977; Smith, 1975; Watson, 1975).

Tom Rea provided more details on the rescue: “...*We got to them by staying high from Camp I instead of dropping down to stream level as usual. Kevin and I didn't know if it would work, but it did. Nobody goes that way because it is difficult, but with eight feet of water in the stream... We got to a place where we were stuck and we yelled and they answered – lucky! When we found them, we were separated by them by the flooded stream. We put a piton in the wall, tied on a rope, threw it across, and had them tie it on and jump. Three guys made it. The fourth fell into the stream and it forcefully swept him away. We pulled him over. The rope saved his life; who knows where he would have ended up without that rope. Remember that at this point, just 100 feet or so from Camp I, the stream is normally six inches deep and going through a crevice about eight feet wide with ledges on both sides. This day the water was up to the ledges and we were on ledges a couple of feet or so wide.*” (Tom Rea, pers comm, Nov 2016) Note this was the same night that three people drowned in nearby Salamander Cave.

Terry Cox wrote in his personal notes, circa 1975, about the flood dangers in Wayne: “*Anyone familiar with the Garrison Chapel area knows of the danger of visiting Salamander when rain is predicted. It is my firm conviction that the downstream section of the Camp I stream in Wayne is every bit as dangerous, if not more so. People familiar with the 1975 deaths in Salamander comment on the rapid rise of the stream there. I feel that were a group trapped by a similar flood while in the Lake Passage, their chances of escape would be practically non-existent. Fortunately, the Lake Passage has had little visitation, probably because it was never on any previous map. It is with trepidation that I add it to [my] map.*” (Terry Cox notes in Keith Dunlap collection)

1976

March – *Pollution of Karst Waters in the Bloomington Area* by Kathleen Hoey repeated the pollution tests done by Gardiner in 1971, concluding that pollution levels had risen and are of human origin. The Main Passage fecal coliforms which were 1,000 in 1971 now test at 2,400 coliforms/100ml. At the Camp II Rise, that was 1 in 1971, it was now 380 coliforms/100ml. (Hoey, 1976) The state of Indiana recommends avoiding bodily contact with water containing greater than 200 coliforms per 100 ml.

Winter – The *CIG Newsletter* reprinted Nicoll's description of Wayne Cave from the 1965 NSS Convention Guidebook. (CIG, 1976)

1977

Jan – Paul Wells wrote an interesting trip report where he was by himself at the end of Old Wayne in a one foot tall passage with three inches of water, squirming through the breakdown and his hardhat fell off. The carbide light flint didn't work so well covered in mud, so he got his lighter out of his back pocket, but drug it through the mud too. His back up lights were in his cave pack left somewhere in the larger passage. He yelled for his partner, but his light had gone out too. Two hours later he found his back up light and they went ahead through the crawl. (Wells, 1977)

Feb – Bill Tozer wrote a trip report that said there was four inches of snow on the ground and it was fourteen degrees F when they started in. They removed several bags of trash from the cave. As they were returning and entered the crawlway, they could feel cold air blowing in, and the entire entrance area was foggy. (Tozer, 1977)

1978

Aug – Kent Wilson was crawling under a large rock in the RPI Passage when it fell on his leg, pinning him briefly before the rock broke up as he jerked. He managed to get out of the cave with minor bruises. (IUSC, 1983)

1980

April – Gordon “Fishman” Lindamood wrote a trip report in the *CIG Newsletter*, saying they found four muskrats someone had skinned and dropped down the entrance. (Lindamood, 1980)

June – Dave Patrie, wrote a trip report in the *NCR News* describing Camp I: “...*The mess there is appalling.*” (Patrie, 1980)

Sept – Mark Collins wrote a report telling of a long trip where they were mostly lost. He described one of the wells in the RPI Passage: “*A short crawl brought us to the moon-milk dome. We were amazed at the*



sparkling, white walls of the thirty-foot dome and noticed a small puddle of the creamy white liquid where it flowed from the wall of the cave.” (Collins, 1980)

1981

April – Dennis Johnson wrote of an ordinary overnight trip in Wayne Cave and describes some formations: “... *We had reached the Natural Bridge and what we call the Maze... There are five or six passages converging there... Some of them contain mud stalagmites, and others have pure white stalagmites that haven't been disturbed by vandals.*” Heading back, they experienced a cavers nightmare: “... *We reached a point about 200 feet from the crawlway, where one climbs out of the stream passage and enters dry passage above, when suddenly the water rose about one foot and turned a muddy brown... In a matter of minutes there was an eight to ten-foot-deep river where two inches of water had been just moments before. We could hear large rocks being moved by the force of the water, and from somewhere upstream, we could hear water roaring.*” They reached their dry camp at the base of the breakdown near the crawl and calmly watched the flood after eating. Later, needing drinking water, they found some clear water (the main stream water was still muddy) pouring from a ten-inch tube at the domes northwest of the crawlway and Dennis reported it was, “...*Some of the best water I've ever tasted.*” (Johnson,1982)

Before you drink the water see: *A Study of Pollution Levels at Selected Underground Streams, Monroe County* (Gardiner, 1971) and *Pollution of Karst Waters in the Bloomington Area.* (Hoey,1976) Earlier on, however, people *did* drink the water with no ill-effect. They drank the water from the stream in Camp I during the September 1959 expedition, and Richard Blenz routinely drank water from the Wayne Cave resurgence in the early 1960s.

Dec – In a trip report George Cesnik said: “*The crawlway... is very badly trashed out. Paper, foil, cans, bottles, batteries, carbide, and various other items are among the litter.*” (Cesnik, 1981)

1982

Wayne Cave is included in: *The 100 Longest Caves in the United States* at 4.250 miles length. The survey status of each cave in the article is included, such as: “survey in progress”, or “survey complete”. Tantalizingly, Wayne Cave is listed with a question mark. (Gulden, 1982)

1983

Aug – The 1983 *Cave Capers Guidebook* had an article describing the cave, taken verbatim from the 1973 Convention Guidebook. Also included Cox's 1973 map. (CCGb, 1983)

1983 – Robin Miessen described in a trip report how her eighty pound Doberman “Bitten” made it through the crawlway “...*He could only fit through the Torpedo Tube on his side because his chest was too large...*” (Miessen, 1983) Wow, how'd you like to see *that* coming at you in a squeeze.

1984

Oct – “The Wayne Rescue” by Bill Tozer told of a person who fell into a fifteen foot crevice between camps I and II. The sheriff was contacted and three paramedics entered the cave, treating him. A phone line was run through the crawlway to the accident site. He was carried out on a stretcher, at times sliding across people's backs to proceed, and tight places in the crawlway were enlarged. He was listed in serious condition in the critical care ward in the hospital. (Tozer, 1984) In “A Memorable Experience”, Scott Fee further recounts the rescue. (Fee, 1985)

Nov – The definitive recount of the rescue was however, in “Wayne Cave Rescue” by Noel Sloan, MD, the NCRC Central Regional Coordinator, who gave a very detailed recounting of the in-cave treatment and extraction of the person. Describing the area, he wrote: “...*Beyond the crawl is a maze of parallel passages, which vary from crawlway to crevice and stoopway. The accident site was beyond 600 feet of this passage at the bottom of a forty foot drop... The exit route in this section involves avoiding three dead-end side leads...*” Continuing, he wrote of the extraction: “*The passage was sufficiently enlarged in advance of the litter at all but one point, only thirty feet from the end of the 1200-foot crawlway [going out]. At this obstacle, four attempts to move the litter, followed by additional digging, were required to pass an 'S' bend in the body sized passage... The total evacuation time was roughly five hours.*” (Sloan, 1985; see also: NSS,1985)



Nov – *Cave Levels and Stratigraphy of the Garrison Cave System* by William L Wilson gave the position of the Indian Creek Beds (the informal name of the Levias Member of the Ste Genevieve limestone) in the cave: “*In Wayne’s Cave, at Camp I, the top of the Indian Creek Beds occurs about two feet below the crawlway. At Camp II, the upper walls are Indian Creek Beds, and the lower walls are sandy limestone of the Spar [Mountain Member].*” (Wilson, 1984a)

1985

Feb 23 – A guidebook for the February 23, 1985, fieldtrip of the Earth Sciences Club, Department of Geography, Indiana State University, Terre Haute, Indiana briefly mentioned Wayne Cave, stating: “*In Wayne’s Cave, at Camp I, the top of the Indian Creek Beds occurs about two feet below the crawlway. At Camp II, the upper walls are Indian Creek Beds and the lower walls are sandy limestone of the Spar [Mountain Member].*” (Wilson 1985a)

Sept – A trip report stated, “*...Even this crawlway is loaded with litter, including telephone wire from the 1958 survey party...*” (MVG, 1986)

Oct – William Wilson initiates contact with the owner of the property containing Wayne Cave, suggesting a written lease on the property (unpublished letter dated Dec 23, 1985, Keith Dunlap collection).

Nov – *Stratigraphy of Wayne’s Cave* by William L Wilson gave a very thorough explanation of the strata visible in the cave, with multiple diagrams of passage levels and stratigraphy: “*In Wayne’s Cave the Paoli Limestone is approximately twenty-four feet thick ... The Moon-milk Passage is stratigraphically the highest passage in the Garrison Chapel area ... The RPI Discovery is the second highest passage in Wayne’s Cave ... The Spar Mountain Member probably ranges from fifteen to twenty-six feet thick in Wayne’s Cave Camp II ... The member was measured and it was twenty-six feet thick, which is the thickest known section in the Garrison Chapel area.*” Bill continued, commenting on future expansion: “*The most interesting possibility left is the RPI Discovery. This passage trends N 60 E and has asymmetric scallops that show water flowed southwest. The northeast end of the passage is truncated by surface erosion, but where does the southwest end go? The passage may bend and pass north-northwest across the top of the domes in the Wells area. Or, it may meander further southwest passing completely under the Moon-milk Passage and over Main Passage at a point 130 feet downstream from Camp I. The southwest extension of the RPI Passage may be blocked by breakdown beneath the Moon-milk Passage, or it may be difficult to reach because it is high on the wall of one of the domes in the Wells area. I think the southwest end of the RPI Passage is worth one more look and maybe moving a little breakdown. The RPI Passage does not end at the Wells.*” The article was reprinted in the 1985 *Speleo Digest*. (Wilson, 1985b)

Dec – In a cave cleanup by the CIG, thirteen cavers removed nineteen bags of trash and four tires from the cave. (Collins, 1986; Fee, 1986; Tozer, 1986a, 1986b)

Dec – Anmar Mirza reported at a BIG meeting that he and his friend Terry went caving in Wayne Cave and Terry’s pack blew up. (Mirza, 1986) It seems like every “carbide” caver has one good explosion story, usually involving burst cave packs, burnt hair, charred flesh, clothes on fire, etc... And people complain about Li-ion batteries now!

1986 – Gating & Controversy

Jan – William Wilson negotiated a verbal lease agreement from the Wayne Cave property owner that allowed access and control of the cave entrance (unpublished letter dated January 5, 1986, Keith Dunlap collection).

Feb 15 – The cave entrance was gated by members of the IKC and CIG. The \$125 gate (and ten sacks of concrete) was placed on top of a previous gate’s concrete foundation. Tom Rea was appointed the first Cave Patron. Keys were handed out on a case by case basis. (Keith Dunlap pers comm; CIG, 1986; IKC, 1986; NSS, 1986; WCG, 1986; Wilson, 1986)

The 1986 gate was the third iteration on the cave. The first was constructed of half-inch re-bar, welded together and merely fastened down with cables going down into the cave. Don Martin reminisced about the first gate: “*The only gate I can remember from the September 1959 expedition was the rebar gate shown behind us in the exit photo. It just lay on top of the cave opening to keep animals from falling into the cave, and was removed and leaned up against a tree when we were in the cave...*” (Don Martin, pers comm, Nov, 2016) The second gate had a poured concrete foundation with an opening of eighteen inches by thirty-six inches, with natural limestone on the east side. This concrete is still in place and scraps of the wooden forms



are visible below it. The exact date when the second gate was installed is unknown, but a 1964 picture of the entrance by Don Martin shows a re-bar grate loosely laying on the natural limestone. Visible below the grate looks like concrete. Maybe they poured the concrete and never attached a gate? Or perhaps the gate was already torn off by 1964? No one remembers now. The third (present) gate had a two foot by two foot (measured inside) channel frame and was placed directly on top of the concrete of the second gate. Concrete was then poured around the frame to secure. The steel door/gate was hinged at the back and when open, the available opening is 19 inches by 24 inches. Keith Dunlap remembered the present door/gate kept evolving as vandalism persisted: *“The original gate had two inch solid round bar at the front and rear with two inch square as the side rails. It then had perpendicular cross bars, creating four square openings. The openings were large enough that a really small person with small hips could slide through. I don’t remember if the square side rails were solid, or hollow tube filled with concrete. At some point, I removed the 1986 gate door (due to continued vandalism) and rebuild/reinforced it. In the subsequent design, the two cross bars were parallel rather than crossed with five inch by twenty inch rectangular openings. I added a plate over the front opening, and added a vertical plate to ‘hide’ the lock completely. Finally, I used ‘hard surfacing’ welding rod to coat all the edges to thwart hacksaw blades. The main problem with the re-designed gate door was that it was now very heavy to open, especially from the inside, after a long trip.”* (Keith Dunlap, pers comm, Nov, 2016).



Trash-filled sinkhole adjacent to Wayne Cave entrance, October 1986. Photo from the Keith Dunlap Collection

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Feb 24 – The IKC’s *Cave Management Plan Wayne’s Cave, Monroe County, Indiana* was drafted by Tom Rea and William Wilson. Included was an area map (fig 1), a map of the cave based on Cox’s 1973 map (fig 2), a diagram of cave levels, stratigraphy and water table elevation (fig 3), and an area map showing elevation of water tables in the Garrison Chapel area based on static water levels on thirty-one wells (fig 4), and a map showing ground water drainage basins in the Garrison Chapel area (fig 5). (*Cave Management Plan Wayne’s Cave, Monroe County, Indiana*, 1986, Keith Dunlap collection)

The first locks were combination locks and three were rapidly broken. Stronger key locks started in use about August, which were still broken off twice. (IKC 1987a; NSS, 1986a, 1986b, 1987; Rea, 1986; Wilson & Fee, 1986)

March – There was concern that the gating of Wayne Cave would cause other caves in the area to have increased visitation and damage, particularly Reeves Cave. Reeves Cave was monitored for increased visitation and damage by members of the BIG. (Mroz, 1986)

April 6 – The CIG and IKC have a cave cleanup: *“The weekend prior, a caving group from Columbus Indiana had gone to Camp IV and thoroughly cleaned up graffiti and trash. The trash was left at Camp II... On April 6th it was brought to Camp I...”* (Fee, 1986) The clean-up trips become an annual event until 1995.

June – *Stratigraphy Sections in the Garrison Chapel Area* by Garre Conner mentions Wayne Cave’s relationship to karst in the area: *“...The northern most cavern system considered here is comprised of the hydrologically integrated streams flowing through Salamander, Shaft, Grotto, and Coons caves. Wayne and Buckner caves lie to the south as separate hydrological drainage system.”* (Conner, 1986)

Oct – The Wayne gate was completely destroyed by having its bars sawed through and most of the gate was stolen. A new gate was constructed and installed about a month later. (see Feb 1986 notes) Many tons of debris from a sinkhole adjacent to the entrance were removed, filling a tri-axle truck. (IKC, 1986; Rea, 1986)

Oct – There was much controversy in the caving community over cave gating. (CIG, 1986; Haun, 1986; Hornaday, 1988; NIG, 1987)

Dec – In “Some Early History of Wayne’s Cave”, Jack Dorsey recounts the initial breakthrough into the crawlway on March 6, 1955. (CIG, 1986; see March 6, 1955, entry for excerpt of article)

Dec – At a BIG meeting, it was brought up that Buckner Cave has more traffic and trash than ever before. It was thought that this was due to Wayne Cave now having controlled access. Reeves’s Cave, however, had *not* seen increased visitation. (BIG, 1986)

Dec 27 – The Wayne Cave gate lock was sabotaged with broken metal and glue, with a group in the cave. After a four hour struggle, they managed to open the lock. (Dunlap, 1987; IKC, 1987; NSS 1987)

1987 – The Recovery Years

Feb – The gate lock was sabotaged again, but no one was in the cave at the time. Locks on the gate continued to be destroyed and replaced. (IKC, 1987b)

March 17 – A group, after a twelve-hour trip, found the gate lock sabotaged with tooth picks jammed in the lock. They wait eight hours to be rescued. The IKC placed bolt cutters inside the cave. (Dunlap, 1987; NSS, 1987b, 1987c)

Oct 11 – Ray Sheldon wrote of a CIG trip in which he noted trash at bottom of entrance pit, that Camp I still needs graffiti removal, and there were carbide dumps around the Breakdown Mountain. He Added: “...*But Wayne’s looked real good considering just two years ago there was a great deal of trash throughout the cave... The walls and ceiling (in Camp IV) still look great after being cleaned... in March 1986.*” (Sheldon, 1987)

Dec – The IKC sponsored a clean-up in cave with twenty-one people: “*Most of the visible trash has now been removed from the cave, but much graffiti and carbide remains.*” (IKC, 1988)

1987 – Garre Conner writes *Stratigraphic Sections in the Ste. Genevieve Formation (Middle Mississippian) Exposed in Garrison Chapel Karst Area Caverns – Western Monroe County, Indiana USA*. He observes that Wayne and Buckner caves are separate hydrological drainage systems. Surrounded to the north by the hydrologically integrated Salamander, Shaft, Grotto, and Coons caves, and to the south by the similarly integrated Blair Springs system comprised of Triple J, Brinegar, Trap Door, and King Blair caves. He also noted a 1949 Wayne Cave area map, which described a karst plane, or sinkhole plane as a region underlain by limestone in which all of the drainage is underground is principally the same area as Malott’s map. Included was an area map showing cave and valley margins. (Conner, 1987) Note, Clyde Malott was William Wayne’s mentor and advisor at IU.

1988

Sept – Keith Dunlap explained various techniques in hiding graffiti that cannot be removed by wire brushing in: “Brown-Washing: An Advanced Technique in the Fight Against Graffiti”. (Dunlap, Sept 1988)

Oct – *Leases as a Management Tool for Privately Owned Caves* by Kathy Hornaday discusses the IKC’s history in leasing caves: “...*The gating of Wayne created significant controversy and heated exchanges between the IKC and some other cavers... which lead to the Grotto Liaison system... Improved communications have reduced the level of animosity...*” (Hornaday, 1988)

Dec 11 – The third annual clean-up in Wayne Cave by the IKC and CIG. Twenty-eight cavers wire brushed, brown-washed, and removed trash. (Dunlap, 1989)

1989

Jan – “Waynes Spring Cave” report and map was filed with Indiana Cave Survey. The map by Spike Selig, Gary Linedecker, and Barry Hornaday (Welling) is located in Whitehall Quadrangle. The report states: “*This cave drains Camp III of Wayne Cave, which is about a mile away. Also, location may be connected to water flow from Airport Cave and Saltpeter Cave. This flow passes north of Buckner and south of Wayne, crossing under the ridge that runs north and south of Wayne, crossing under the ridge that runs between Buckner and Wayne.*” (ICS Index 53022/ICS # MN022) This information and map were never published.

June – Trash, carbide, and new graffiti were reported in the cave. New locks were installed and policies concerning who gets the key were reviewed. (IKC, 1989; NIG, 1989)



Dec 10 – The fourth annual IKC/CIG joint clean-up trip in Wayne. Thirteen people concentrated in the Camp I and Well's areas wire brushing, brown washing, removing trash, and burying spent carbide. (IKC,1990)

1990

April – Al Goodcase recounted a Windy City Grotto trip in which they remove some trash, including a moldy helmet they retrieved from a deep and narrow crevice by using a hook on the end of a strap. He committed: *"It was a pleasure to be a guest in a cave where so much work had been done to clean it up."* (Goodcase, 1990)

May – In an article called "How Hard is This Cave", a rating system was designed that takes into account cave length, type of passage, climbs, and water on a scale of 1 to 10 with 10 being the hardest. Wayne scored a "6" or "moderate" overall, the same as Ted's Dig and Reeves Cave. (NIG, May 1990) Interestingly, Wayne received a "2" (on a scale from 0 to 4) in the passage type category, which means "no crawling" in the cave (so much for all the whining about that crawlway), and a "0" which means "not there" in the water and climbing categories. Before you use this rating system in Wayne, you would be well advised to read: "DANGER Flash Flooding in Wayne Cave" (SISG, 1961, 1962); "The Wayne Rescue" (CIG,1984); and "Four people trapped overnight in Wayne Cave" (NSS, 1975; NIG, 1990).

May 12 – In an article in the *Michiana Caver*, Tony Cunningham recounted a wet trip to Wayne: *"...There is a channel on the way to Camp II where one is forced to wade through the stream. Going in it was at eight inches deep. An hour later on the way back, the water was over nine feet deep. So, we spent a short while waiting for the water level to go down. We were never endangered, just bored. The section which has us stuck was only about thirty feet long, but there was really no other safe way across... We figured to go for it when the level fell to four feet ...The water was barely two feet deep by the time we were packed up and ready to go..."* (Cunningham, 1990)

Dec 8/9 – About thirty-six cavers from the WCG, NIG, MIG, CIG, IKC, and others wire brushed, buried carbide, and hauled out trash. Jay Savage wrote afterwards: *"The crawlway had a fair amount of trash... mostly batteries, duct tape, and glass. The main cleanup task in Wayne's is the removal of years of carbide dumps. One dump I found was eighteen inches across and four inches deep. Take your putty knife to Wayne's"* (Savage, 1991)

1990 – Skeletal remains of a Timber rattlesnake were documented in the cave (88 trunk, 4 caudal vertebra) as a disarticulated mangle (a solitary skeleton), indicating the unusual finding that a living snake crawled into the entrance of the cave in: *Quaternary Distribution of the Timber Rattlesnake (Crotalus horridus) in Southern Indiana.* (Richards, 1990)

1991

March – Long time Cave Patron Tom Rea retires and Serena Smith replaces him. (IKC, 1991a)

Summer – Original painted sign outside the entrance was destroyed. A new routed sign was made by Tim McLain. (IKC, 1991b)

Dec 8 – Twenty-six cavers participated in the sixth annual clean-up sponsored by IKC and CIG. Keith Dunlap described one part of the cleanup: *"This year's trip... focused on the Camp II area, specifically cleaning up the spent carbide that had accumulated from decades of thoughtless visitors. The WCG folks literally cleaned up in this area, using spoons and small trowels to collect carbide in stuff sacks. Mud painting and wire brushing were performed in other places..."* (CIG, 1991; Dunlap, 1992; IKC, 1991c)

1992

Jan – Jim Adams in the *CIG Newsletter*, bragged on Wayne Cave: *"Wayne's Cave in Monroe County has at least two interesting things going for it. A 'formation forest' can be found in the RPI Discovery section of the cave. The speleothems are so thick you can't walk between them. Wayne's also has a large deposit of 'moon-milk'. This thin, white deposit is said to be rare... Wayne's definitely has the best display."* (Adams, 1992)

March – The *CIG Newsletter* and the *IKC Update* report that the property containing Wayne Cave had been sold after having being listed less than one day on December 23, 1991. (CIG, 1992; IKC, 1992)

Oct – The gate hinge pins were sawed through, replacement hardened pins were installed. (IKC, 1993)

Dec 6 – The IKC, CIG, and WCG co-sponsored the seventh annual cleanup. Twenty-five cavers attended removing trash from the cave and along the county road. (CIG, 1992; IKC, 1992)



1992 – The 1992 *NSS Convention Guidebook* copies both the description and map from the 1973 convention guidebook. The map was a disappointing 6-1/2 by 8 inches, instead of the big fold out map. (NSSGb, 1992)

1993

Feb 20 – In a “Letter to the Editor”, Scott Webb reported fresh trash in the cave: flashlights, gloves, a shoe, a large lantern, that was new since the cleanup in December. While in the cave he reported the stream was flooded to within two feet from the level at Camp I, making it impossible to reach Camp II. (Webb, 1993)

March 20 – Mark Deebel wrote of a trip to the cave, “...*There is trash throughout the cave and spent carbide everywhere.*” (Deebel, 1993)

March – Writing in the *CIG Newsletter*, RBS Labs presents a fascinating article, “Hodags, A Vanishing Species”. The article reports the first Hodag sighting in Wayne Cave was in 1967, and they were subsisting on gum wrappers, not spent carbide as previous thought. Further, the number of sightings have been diminishing since the 1960s and 1970s. The last confirmed report of a Hodag in Wayne Cave was by Larry Reece. Caution: the article includes sketches of Hodags mating. (RBS Labs, 1993) Amazingly, the article is reprinted in the 1993 *Speleo Digest*, which does include this caveat: “...*The material contained herein has not been reviewed by any expert or technical review committee.*” (NSSSD, 1993a) Dr Jerry Lewis wisely declined to comment on Hodags when asked, claiming to have never seen them. (Jerry Lewis, pers comm, Sept 2016)

Dec 5 – The IKC and CIG co-sponsored the eighth annual clean-up trip with thirty-six participants. (Dunlap, 1994; WCG, 1994)

Dec 5 – Bill Owens wrote about participating in the clean-up at Wayne and describes one room: “*Just past Camp II, all of us enjoyed an approximately three to four foot high formation room. The ceiling was totally filled with stalactites and a small path made its way through many stalagmites and some columns.*” (Owens, 1994)

Dec – In the *CIG Newsletter*, Dr Justin T Dargue included Wayne Cave in his “Conservation of Cave Passage Theory”, noting that the crawlway was reported at 1,000 feet long in 1961 and 1,250 feet long in 1972, a 250 foot increase in just 11 years! He suggests suspending all cave surveying until, “...*All cave passages achieve a state of rest at an equilibrium length... Due to the unpredictable nature of passage expansion and contraction...*” (Darque, 1993)

1994

July 23 – Julie Angel of the Near Normal Grotto wrote of a nine-hour trip and reported on cave life seen: “*An orange and black salamander was at the entrance to greet us as we entered and exited. We did see some other cave critters: a couple of white, blind crayfish in the stream, a few cave crickets, and a friendly bat...*” (Angel, 1994)

Dec 11 – The IKC and CIG co-sponsored the ninth annual clean-up trip to Wayne with twelve participants. Bill Owens wrote in *The Windy City Grotto Speleonews*: “*I did not notice any batteries, wrappers, or graffiti. What remains is a handful of carbide dumps...*” (Owens, 1995)

1994 – Jason Stallard, in a trip report in the *Carbide Courier*, described some moon-milk: “*There is a whitish substance bleeding from the stone. At first glance I think a great Angelic battle has taken place, and many an angel had spilled blood here. On further examination though, I find that it is a common mineral substance; but a beautiful sight none the less.*” (Stallard, 1994) The whole article went on like this – weird.

1995

July 1 – Ken Redecker, wrote in the *WCG Speleonews*, describing the Gypsum Passage in a long fourteen-hour trip to Camp IV and back: “...*The further we headed, the gypsum became quite abundant. The gypsum sparkled like stars and began blanketing the ceiling and walls... Gypsum flowers were squeezing out from the rock, some of which were longer than my fingers. Someone found a formation called angel hair. These crystals were a few inches long, thin as human hair, and swayed from our breath.*” To help dull the agony in their knees, they sang “One Hundred Bottles of Beer on the Wall” down to zero while crawling out. (Redecker, 1995)

Dec – A case of minor vandalism (writing a name and date in the mud) was traced to a specific trip, letters were exchanged between the IKC President and the trip leader, and published. (Bowman, 1995; Redeker, 1995)



Dec 10 – The IKC and CIG co-sponsored the tenth annual (and final) clean-up trip to Wayne Cave with seventeen participants. Transparent soda straws were seen. (NIG, 1996)

1996

March 2 – Two adults and twelve Explorer Scouts entered the cave. One girl slipped on the first ledge at the entrance and fell two feet, sustaining a severe strain. (NIG, April 1996)

April 26 – Parking problems along the county road, with fourteen vehicles, led to the discovery that no keys were handed out that weekend. Discussion widened to illicit key copying. Finally, trips were limited to two vehicles per group permitted to park along the county road during trips. (Dunlap, 1996)



Pristine formation area in Wayne Cave, RPI Discovery, November 2000. Photo courtesy of Willie Hunt

Sept – Jim Jacobs, wrote in the *Near Normal News* of a dome they repelled into through a tight slot in the floor near the hole at the beginning of the RPI Passage: “*The room is an irregular dome, with a crystal clear pool of water at one end with a sandy basin. The walls are black and gray limestone, with belts of mud in which were inscribed various initials and dates by the fingers of previous explores who also had to know what was down here. There was no spray paint, garbage, or other vandalism. There was some pretty moon-milk dripping down the black wall near the pool...*” (Jacobs, 1996)

Nov 2 – A group of seven cavers enter the cave. Four became exhausted and lost after ten hours, the other three made it out and called for a rescue. (NSS, 2000)

Nov 14 – *NUVO* (an Indianapolis based newsweekly) printed an article titled, “Going Underground”, which described vandalism in Indiana caves and included a picture of the Wayne Cave entrance. (Remos, 1996)

Nov 26 – A group exiting the cave discovered a large rock laid on top of the gate. They finally manage to get the gate open with great difficulty. (Paul Sipe, pers comm, Dec 2, 1996)

Dec – The IKC discontinued the annual clean-up started in 1985 as a result of the cave’s improved condition (IKC, 1996) I picked this point to change from “Recovery” to “Stewardship” because the annual cleanup trips were stopped.

1997 – Stewardship

Aug – The 1997 *Cave Capers Guidebook* gave a description and, except for a lead-in paragraph, repeated the 1973 NSS Convention description. Included was the 1973 Cox map. (CCGb, 1997)

1998

Sept – A St Joseph Valley Grotto trip announcement included a brief description of cave, the 1973 Cox map, and this: “...*There have been persistent rumors for many years of passages in the cave that are not on the map.*” (SJVG,1998)

1999

June 18-20 – The 1999 *Cave Capers Guidebook* reprinted the 1997 guidebook description. Included was the 1973 Cox map. (CCGb, 1999)

Sept – Cave Patron Serena Smith retired and Tom Willet replaces her. (IKC, 1999)

2000

Oct – The Purdue Outing Club did a fourteen-hour tour of the cave. They described one part of the cave: “*The ‘Gypsum Passage’ is about a quarter mile long, and we had been told that it was overrated. It was the coolest thing since sliced bread. We saw a gypsum flower ‘garden’, there were so many of them, the first we’ve seen. We also saw some gypsum hair, which rocks!!*” (POC, 2000)

Oct – The Indiana Geological Survey published: *Map Showing Selected Subsurface Dye Traces in South-Central-*



Indiana, which included two dye traces from Wayne Cave to the Wayne Cave resurgence, listed the reference as: Cox, Terry, *Speleotymes*, 1970, V 2, No 2. (IGS, 2000) Note the error in that the year was actually 1971.

2001

March – In his annual report, Cave Patron Tom Willett reported seventeen trips totaling 76 people in 2000. (IKC, 2001)

2002

June – In his annual report, Cave Patron Tom Willett reported twenty-nine trips totaling 143 people in 2001. (IKC, 2002)

2003

April – Don Martin wrote of his early memories of the cave in the “1959 Wayne Cave Expedition” in the *CIG Newsletter*. (Martin, 2003)

June 1 – A special IKC Board meeting was called to discuss the possible purchase of the property containing Wayne Cave. It was voted to purchase the property and fund a property survey. Discussion continued about future needs such as a Management Plan, Property Manager, fencing, etc. In the same issue, Tom Willett’s annual report showed twenty-one trips totaling 112 visitors to Wayne in 2002. (IKC, 2003)

June 14 – During a regular Board meeting, Keith Dunlap reported that the offer on the Wayne Cave property of 31.92 acres was accepted. Dunlap will buy the entire property and then sub-divide off a twenty-acre tract to the IKC containing the cave entrance. Dunlap will retain the remainder of the property. Closing the deal was dependent on the survey showing the cave entrance was, in fact, on the property. It was voted to establish a Wayne Cave Fund. There was much discussion about funding and applying for grants. The correct name for the cave was a hot topic. Tom Sollman submitted an article entitled, “A Study of Apostrophe use in a Cave in Western Monroe County, Indiana 1955 to 1979”, (Sollman, 2003) which discussed the history of the cave’s various names: Wayne, Wayne’s, Wayne’s Lost, Lost, Wayne’s Wonderful Caverns, conclusively showing “Wayne” to be the most correct. The dazed Board votes for “Wayne Cave”. (CIG, 2003; IKC, 2003; Keith Dunlap, pers comm, 2016) Terry Cox also remembered he and Greg Spaulding discussing the name of the cave in the early 1970s and also concluding “Wayne Cave” would be correct. *Caves of Indiana* in 1961 had however, published it as “Wayne’s Cave” and that, as they say, was that. (Terry Cox, pers comm, Sept 2016)

June 17 – A driveway permit was issued by the Monroe County Highway Department for the driveway and new parking area at top of hill above cave. (Keith Dunlap collection)

June – In his annual report, Cave Patron Tom Willett reported twenty-one trips, totaling 112 people visited the cave in 2002. He reported new trash and graffiti with one group not being allowed access in the future. (IKC, 2003)

July 2 – A twenty-acre tract over the entrance was purchased by Indiana Karst Conservancy: “...*The property consists of twenty acres of mostly wooded terrain. The property is approximately 750 feet wide (east-west) and 1,300 feet in length (north-south) with the northwest corner removed, bordered by Gardner Road. The cave entrance is located very near to northeast corner of the property. The property has approximately 100 feet of vertical relief, being low at the north and south ends of the property with a high east-west ridge across the middle of the property. There is a small clearing (approximately 1/2 acre in size) on this high ridge...*” (Wayne Cave Management Plan, IKC, 2003a)

July – *Bedrock Aquifer Systems of Monroe County, Indiana, Aquifer Systems* map 05-B plainly showed two dye traces from Wayne Cave to the Wayne resurgence without specifically naming the cave (nor were any other karst features named) or cited a source. (Maier, 2003)

Sept – The front cover of the *IKC Update* reprinted the famous photo by Don Martin of Bob Armstrong in the third formation room of Wayne Cave that was first published in the Nov 1957, *NSS News*. The 1957 picture was in black and white, while the 2014 reprint was in living color (IKC, 2003b).

Sept 13 – “Wayne Cave and Property Management Plan, Monroe County, Indiana” was approved by the IKC Board. From the plan: “...*Wayne Cave will be managed as a natural ‘wild cave’... The cave is open to organized, responsible cavers.*” Also at the September meeting, finances concerning the Wayne Cave property were



discussed. \$51,000 had been raised toward the \$75,000 commitment. (IKC, 2003)

Oct 8 – The application to enter the Wayne Cave property in the Classified Forest Program was applied for, and was officially filed Feb 3, 2004. (Keith Dunlap collection; IKC, 2004)

Dec 6 – The IKC rejected a \$5,000 grant from the NSS that included a Right of First Refusal on the property. Robert Sollman was selected as first Property Manager. (IKC, 2004a)

2004

Feb 21 – During a Board meeting, the IKC discussed and stood by its rejection of the NSS grant. (IKC, 2004a)

March 27 – The IKC accepted an amended \$5000 grant from the NSS that includes an agreement to repay the grant in full should the IKC sell or transfer the property within ten years, or fail to manage the cave/property per the approved Management Plan. Cave Patron Tom Willett reported twenty trips totaling 110 people visited the cave in 2003. Property Manager Robert Sollman reported the official purchase of the property on July 2, 2003, a temporary cable and lock was installed across the driveway, and a list of work to be done yet. (IKC, 2004b; IKC 2004c)

July – At the Indiana Cave Symposium, Property Manager Robert Sollman gave an overview of upcoming projects and workdays. (CIG, 2004)

Sept – Keith Dunlap, in the *IKC Update*, wrote a four-page article with step-by-step details of the construction of the driveway, parking lot, and driveway gate at Wayne Cave. (Dunlap, 2004)



Installing the driveway to the Wayne Cave property, July 2004. Photo from the Keith Dunlap Collection

2005

June – In the annual reports, Cave Patron Tom Willett reported sixteen trips totaling 82 people in 2004. Property Manager Robert Sollman reported that in June 2004, the parking lot, driveway, and driveway gate were constructed. In August the road gate was finished and much clearing done in the upper clearing. In November the trail to the cave was constructed. (IKC, 2005)

2006

March – Cave Patron Tom Willett retired and Dave Everton was appointed to replace him. (IKC, 2006a)

June – In his annual report, Cave Patron Dave Everton reported ten trips totaling 60 people in 2005. (IKC, 2006b)

2007

June – In the annual reports, Cave Patron Dave Everton reported fourteen trips totaling 81 individuals and 91 total in 2006. He kept finding arrows scratched on walls pointing the way out, which he covered with mud, but no other damage or trash in the cave were observed. Property Manager Robert Sollman reported no problems above ground. (IKC, 2007)

2008

June – In the annual reports, Cave Patron Dave Everton reported nineteen trips totaling 87 people in 2007. He was still finding arrows marked in the cave, identical markings were reported in Sullivan Cave. It is suspected one group is making them. Small pieces of trash are found and removed. Property Manager Robert Sollman reported in 2007 the property lines were marked with steel posts with 2-inch-wide plastic “sleeves”. A couple of trees were planted in the clearing at the top of hill and basic “care-taking” activities were done. In the same meeting the Board approved a bio-inventory of the cave by Dr Lewis. (IKC, 2008a; IKC, 2008b)

Dec 13 – A clean-up in Old Wayne at the bottom of the entrance climb-down removed some very old trash (including part of a tri-cycle) from before the IKC gated the cave. Ten participants removed five trash bags. (IKC, 2008c, 2009a)

Dec 23 – *The Cave Fauna of the Garrison Chapel Karst Area: Part I, Wayne Cave* is published. The report gave a history of biological sampling in Wayne and surrounding area caves. Sampling in Wayne and nearby Tiparillo Hole showed a total of forty-seven taxa represented, of which fourteen were obligate subterranean species. (Lewis & Lewis, 2008)

2009

June – In the annual reports, Cave Patron Dave Everton reported fifteen trips totaling 70 people in 2008. He also reported finding small pieces of flagging tape left between camps I and II, and minor small pieces of trash removed. (IKC, 2009b)

2010

June – In the annual reports, Cave Patron Dave Everton reported twenty-one trips totaling 129 people visited the cave in 2009. Property Manager Robert Sollman reported five trees were planted in the clearing, the driveway was heavily rutted in February 2009, and several trees had fallen across the path to the cave, which were cleared. (IKC, 2010)

Dec 4 – At the IKC Board meeting, negotiations with InDOT about a potential Conservation Easement were discussed. (IKC, 2011a)

2011

June 11 – At the IKC Board meeting, the potential InDOT Conservation Easement was again discussed. Keith Dunlap had already accepted a Conservation Easement agreement with InDOT on his adjacent twelve-acre tract. Keith proposed to donate his tract to the IKC, which the Board supported without an official vote. (IKC, 2011b)

June – In the annual reports, Cave Patron Dave Everton reported twenty-one trips totaling 92 people in 2010, and no problems. Property Manager Robert Sollman reported routine maintenance. (IKC, 2011b)

Sept 10 – At the IKC Board meeting, the transfer of Keith Dunlap's adjacent property was discussed again, along with the possibility of including of the southern part of the IKC property as a Conservation Easement (mitigation property) for the construction of Interstate 69. (IKC, 2011c)

Aug 12-14 – The 2011 *Cave Capers Guidebook* reprinted the 1997 guidebook description, including the 1973 Cox map. (CCGb, 2011)

Dec – The twelve-acre Dunlap property, adjacent to IKC property, was proceeding to be transferred to the IKC. (IKC, 2011d)

2012

June – In the annual reports, Cave Patron Dave Everton reported twenty trips totaling 129 people in 2011, and no problems. Property Manager Robert Sollman reported just routine maintenance. (IKC, 2012)

Aug 10-12 – The 2012 *Cave Capers Guidebook* reprinted the 1997 guidebook description, including the 1973 Cox map. (CCGb, 2012)

Sept 13 – The walking path to the cave and campsite areas were mowed, autumn olive trees eliminated, road side trash removed, and driveway gate hinges repaired. (IKC, 2012)

Oct 13 – The professional geologists of Indiana print the *Cave and Karst Hydrology of Indiana Field Trip Guide*, which shows Wayne Cave and its dye traces along with other major caves in a map in Appendix 1, page 12. (Florea, 2012)

2012 – *Habitats and Ecological Communities in Indiana Pre-settlement to Present* was published. Included is a list of the longest caves in Indiana, listing Wayne Cave as the ninth longest at 4.25 miles length. (Whitaker, 2012)

2012 – Samuel Frushour published *A Guide to Caves and Karst of Indiana*. Wayne Cave is mentioned as part of the Garrison Chapel Valley subterranean drainage system: “*The valley abruptly deepens 1,000 feet southwest of the junction of Airport Road and Garrison Chapel Road, where intensive drainage into the subsurface was formed with water transmitted westward through Wayne Cave to springs in Blair Hollow. The valley widens to nearly ½ mile south of the Wayne Cave source area and has many broad sinkholes that have been partly filled in by erosion from poor farming practices.*” Included was an image of the Garrison Chapel Valley (fig 19) showing several swallow-holes, caves and dye traces including the Wayne

Cave entrance and its two dye traces. Also shown was a swallow-hole to the southeast of Wayne, probably Fisher's Fissure. (Frushour, 2012)

2013

June – In the annual reports, Cave Patron Dave Everton reported twenty-six trips into the cave totaling 129 people and no problems. Property Manager Robert Sollman reported just routine maintenance. (IKC, 2013)

2014

March 22 – At the IKC Broad meeting, construction of a substantial kiosk on the property was discussed. \$1,500 was approved for the project. (IKC 2014a)

June – In the annual reports, Cave Patron Dave Everton reported an incident in 2013 where the key was accidentally broken off and the lock had to be removed with a cutting torch (viewed through a mirror), and there were eleven trips into the cave totaling 65 people in 2013. Property Manager Robert Sollman reported that the assistant District Forester inspected the property, the clearing on top of the hill was being let grow up naturally, trash was picked up, autumn olive trees removed, and the trail to the cave maintained. (IKC, 2014a)

Sept 13 – At the IKC Board meeting, there was discussion about restoring an old wildlife pond on the property. (IKC, 2014b)

Oct – A kiosk was constructed at the beginning of the trail leading to the cave from the parking lot. It was ten feet square with ten-inch cedar posts at the corners and four-by-six inch ceiling joists. (IKC, 2014c)

Oct 31 – The adjacent twelve acres was finally transferred to the IKC from Keith Dunlap, increasing the Wayne Cave Preserve to 31.85 acres. (IKC, 2014b)

Dec 13 – At the IKC Board meeting, it was reported that the transfer of Keith Dunlap's adjacent property to the IKC was completed. Also, an additional \$1,000 was transferred to the Stewardship Fund to bring the funding up to the desired 10% of the property's appraised value, as a result of the adjacent property donation. (IKC, 2015a)

Dec – The *IKC Update* had four articles about Wayne Cave. The front cover reprinted the famous picture of Robert Armstrong in the third formation room of Wayne Cave that was first published in the November 1957, *NSS News*. The picture was reprinted on the front cover of the September 2003, *IKC Update* when the IKC purchased the cave to show the formation resources. It was reprinted again in this issue to show the man. Robert "Bugs" Armstrong, who passed away on Aug 29, 2014. Bob was a pioneer in the exploration of Wayne Cave. (IKC, 2014) Also in that issue, Sam Frushour wrote "In Memory of Robert (Bugs) Armstrong" where some of Bug's earlier exploits in Wayne Cave were mentioned. (Frushour, 2014) Keith Dunlap wrote "Wayne Cave Preserve's New Kiosk", describing its design and construction. (Dunlap 2014a) Finally, Keith Dunlap wrote "Wayne Cave Preserve Expanded", describing the details of the transfer of the twelve-acre tract from him to the IKC. (Dunlap, 2014b)

2015

June – In the annual reports, Cave Patron Dave Everton reported ten trips into the cave in 2014 totaling 67 people. Property Manager Robert Sollman reported a kiosk had been built, the clearing at the top of the hill was still being let grow naturally, trash was picked up, and routine maintenance was performed. (IKC, 2015b)

Aug 7-9 – The 2015 *Cave Capers Guidebook* reprinted the 1997 guidebook description with a nice preface that included special hazards (a ten-inch squeeze) and specific instructions (don't bother the people at the house to the east). (CCGb, 2015)

Aug – In *The Subterranean Asellids of Indiana (Isopoda), with the Description of Caecidotea Dunlaporum, New Species* published by Julian Lewis. Wayne Cave was listed as a locality for *Caecidotea stygia* Packard. (Lewis, 2015)

Aug – Garre Conner wrote *Karst Spring Cutoffs, Cave Tiers, and Sinking Stream Basins Correlated to Fluvial Base Level Decline in South-Central Indiana*. The article explained cave formation, base level lowering, karst spring cutoffs, and everything else in the Kirby Watershed (of which Wayne Cave is in, in the Garrison Chapel sub-area). Wayne Cave was largely unmentioned, only referred to it was in fig 5, which was a map of dye traces and springs with the notation, "Wayne's Cave and trace not shown". (Conner, 2015)

Dec – John Benton, wrote in the *IKC Update* another in a series of "A Look Back at Indiana Karst" articles. In this article, he had an explanatory paragraph and then a reprint of a Terre Haute, Ind. newspaper article



about the 1959 twelve day “expedition” in Wayne Cave. (Benton, 2015)

2016

June – In the annual reports, Cave Patron Dave Everton reported there were fourteen trips into the cave in 2015 totaling 69 people and no problems. Property Manager Robert Sollman reported no problems and routine maintenance. (IKC, 2016)

July – Writing in the *CIG Newsletter*, Charlie Veters had an eleven-page article of a trip to Camp IV containing a good description of the cave. The article is also a very good guide to finding correct passages in the cave. He observed: “...*The further you go in, you will find there is very little to no graffiti...*” and described one passage almost poetically as: “*Helictite Holler is one of the most beautiful belly crawls through light mud you can do.*” Included were several photos (some even of cave formations) and reprint of the 1973 Cox map. (Veters, 2016)

Aug 5-7 – The 2016 *Cave Capers Guidebook* reprinted the 2015 guidebook description including the 1973 Cox map. (CCGb, 2016)

Dec – Tom Sollman compiled and published “A Chronology of Wayne Cave and Associated Karst Features, Monroe County, Indiana – 1949 to 2016 with Comments”. Included were two maps and several historic photos. (Sollman, 2016)



Tom Sollman exiting Wayne Cave on a clean-up trip, December, 2008. Photo courtesy of Jerry Lewis

CONCLUSION

Wayne Cave has always been known as one of the toughest caves in Indiana. For cavers, it is a story of discovery, exploration, tragedy, conflict, and perhaps redemption. Most of the discovery in the cave occurred before 1958, except for the upstream extension past the breakdown. No published extensions have occurred since the early 1970s mapping push by Terry Cox, yet rumors of “lost passages” have persisted for decades. I firmly believe Powell’s Lost Passage *is* there. Buddies Lost Passage *may* be there. Other passages and cracks through which daylight filters into the cave could be there. There are two different places in the cave where new entrances might be opened. Wayne could yet be connected to near-by caves to form a grand “system”.

Here’s a tip from Richard Blenz: “*Buckner Cave lies in the same body of rock as does Wayne, a sort of ridge of limestone running, sort of north-south. If at the Tee Room in Buckner, you start the circle route through the cave clockwise, looking down at the map, the first side passage crawl running off to the north is the WPA passage which ends in a dig project in the dirt blockage. It is headed directly north easterly up the ridge towards Wayne.*

There are several karst features on the surface indicting cave passage down below between the two caves; a deep, but closed and large sink hole, holes that blow air leading to impassable crevices, and the like. We have never pushed that crawl in Buckner to find new cave. (Richard Blenz, pers comm, Nov 2016)

Looking at an overview of the area, this dig is about 2,200 feet from the Lake Passage or 2,500 feet from the end of the ‘T’ Crawl in Wayne. Actually the end of the Keen’s Grotto Passage in Buckner is closer to Wayne at about 1,800 feet to the ‘T’ Crawl, but Richard thinks that’s a dead end: “...*I always thought that the Keen’s Grotto Passage was really heading to the hillside because it ends in a lot of breakdown which indicates the instability occurring when a passage tries to exit to the surface or which was an old entrance.*”

The generation that discovered and explored Wayne is passing. Future generations, with stamina, determination, and luck might yet rediscover fabled lost passages and discover new passages, chambers, and wonders in Wayne.

In closing I will quote Tom Arnold, writing in the September 1961 *Bloomington Indiana Grotto Newsletter*:

“Those who know this cave, doubt that it has yet revealed all of its secrets.”



ACKNOWLEDGMENTS

I could not improve on the descriptions and histories by Bill Auckerman (*Wayne Cave*, 1957), Tom Arnold (*Wayne's Cave*, 1961), and particularly Terry Cox (*Wayne Cave Resurvey* 1971), except that I just had more history to work with.

I wish to thank the following cavers for sharing their recollections and contributing to this history: Ray Beach, Richard Blenz, Terry Cox, Jack Countryman, Keith Dunlap, Larry Fisher, Sam Frushour, Dave Gahimer, Don Martin, Richard Powell, Tom Rea, Spike Selig, Paul Sipe, Bill Tozer, and Leroy Vanscoy. Keith Dunlap provided much editing and guidance. Particularly gratifying was talking with Dr William Wayne, who first described the cave in 1949, and had an extraordinary memory of things that occurred some sixty-seven years before. Dr Wayne joined the IKC after our conversations.

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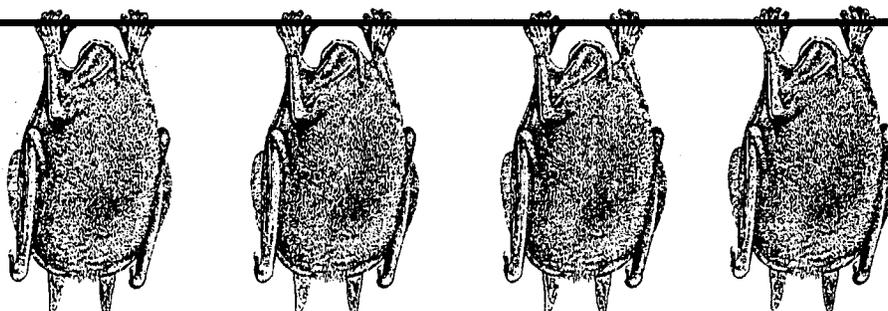
INDIANA KARST CONSERVANCY TREASURY REPORT

**Income/Expense Statement
From July 1, 2016 to September 30, 2016**

INCOME:			
Dues Apportionment and Residuals	692.50		
Donations - General	116.50		
Donations - Land Acquisition Fund	0.00		
Interest	<u>295.49</u>		
			\$1,104.49
EXPENSES:			
IKC Update (printing, production, mailing)	290.70		
Education / Outreach	23.53		
Stewardship/Conservation	19.68		
Business (website, donation fees)	13.50		
Transfers to/from restricted funds/other adjustments	<u>209.79</u>		
			(\$557.20)
NET OPERATING EXCESS (DEFICIT) THIS PERIOD:			<u><u>\$547.29</u></u>

**Balance Sheet
September 30, 2016**

ASSETS:			
Cash in Checking / Saving Accounts / CDs	148,690.52		
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><u>\$608,703.68</u></u>
FUNDS & OPERATING EXCESS:			
Land Acquisition Restricted Fund	37,287.95		
Deferred Dues Restricted Fund (180 members)	3,607.50		
Stewardship Endowment Restricted Fund	56,528.03		
Previous General Fund (total)	50,732.91		
Net Excess (Deficit) This Period	<u>547.29</u>		
Current General Fund (unrestricted)		51,280.20	
Current General Fund (committed)	600.00		
Real estate liquidity (basis value)		<u>460,000.00</u>	
Total Liabilities & Operating Excess			<u><u>\$608,703.68</u></u>



IKC QUARTERLY BOARD MEETING MINUTES

Saturday, September 10, 2016, 4:00 PM EDT – Ferdinand State Forest, Indiana

Board Members Present:

Jerry Lewis, President
 Sue Vernier, Secretary
 Keith Dunlap, Treasurer
 Joy Baiz
 Bruce Bowman
 Danyelee Green (proxied by Bambi Dunlap)
 Dave Haun
 Everett Pulliam
 Bob Sergesketter
 Kevin Smith
 Tom Sollman
 Carla Striegel-Winner
 Bob Vandeventer (proxied by Salisa Lewis)
 Richard Vernier
 Jamie Winner

Board Members Absent:

none

The meeting was called to order by President Jerry Lewis at 4 PM EDT at the home of Carla and Jamie Winner in Ferdinand State Forest.

E-Mail Motions

There were no E-mail motions since the last meeting.

June Meeting Minutes

The minutes from the June Board meeting were approved as published in the September 2016 *IKC Update*.

Treasurer's Report

Treasurer Keith Dunlap reported cash assets totaling \$148,593.86 and land assets totaling \$460,000.00 for total assets of \$608,593.86. Funds include Stewardship: \$56,318.24; Deferred Dues: \$4,200.00; Land Acquisition: \$37,287.95; and General Fund (unrestricted): \$50,787.67. The IKC membership currently stands at 196 with 12 yet to renew. The paid membership of 184 includes two who have recently passed: Ray Long and Horton Hobbs.

Shawnee Karst Preserve

Jamie and Carla Winner reported on trail maintenance. Fallen trees were cut and removed from the trail and a rock at the entrance to Upper Twin Cave was broken up and removed (Jamie said it was a miserably hot day). Keith Dunlap reported that the chestnut trees planted three years ago had a set back with some dying back and re-sprouting. Tubes had fallen over on some of the trees and these were removed. Keith mowed the trails. He reported the cave entrance has enlarged with the rain flushing out some of the mud. The entrance appears stable at the moment.

Sullivan Cave Preserve

Jerry Lewis summarized a research proposal from Gavin Bradley, a graduate student at the University of Louisville, who wishes to do behavioral studies with Cave salamanders in Sullivan Cave Preserve (copies of the proposal were distributed to the Board). No harm will be done to the salamanders during this research. Bruce Bowman made a motion to permit Gavin to conduct his research as stated in the written proposal and also requested that Gavin write an article for the *IKC Update*. Everett Pulliam seconded. The motion passed unanimously.

Keith Dunlap has mowed the campground. The tree over the driveway has been removed and Tom Sollman has cut down another small tree. Stilt grass has taken over the camping area, but has been mowed before setting seed.

Wayne Cave Preserve

Tom Sollman gave a status update on the kiosk information panel. He has started investigating the history of Wayne Cave which he wanted to do before starting on the kiosk panel. An article will be in a future *IKC Update*. Tom and Keith Dunlap will pull pertinent facts from the article to go on the kiosk panel. Robert Sollman weed-eated the parking lot, driveway, campsites, and around the gate.

Buddha Karst Nature Preserve

Keith Dunlap reported a tree down on the trail at the far corner. Keith has mowed the trail twice this year. All the oak trees have survived from the 2006 planting, mainly white or chinkapin. The chestnut trees planted in 2013 are actually growing out of the top of the tubes.

Robinson Ladder Cave Preserve

Keith Dunlap advised that the upper field, camping area and along the lane have been mowed by Jamie Winner. It should have been an ideal season for the 200 trees (50 each of chestnuts, red oaks, walnuts and butternuts) planted inside of the fence; but, apparently, there may have been too much rain. There has been 30% mortality and 30% of the remaining trees may not survive. The red oaks appear to have survived best. The butternuts were the worst performing. Keith guesses 50% of the remaining chestnuts will probably not survive. The dead trees were flagged and new trees will be back planted next spring.

Land Acquisition Activities

Keith Dunlap reached out to a property owner in the Sullivan Cave area, but received no response. Mike Van Note has contacted Keith regarding King Leo and Hell Hole. The land owner lives in Florida. Neither



cave is on The Nature Conservancy's priority list, so Keith is not sure we would be overly interested. The cut-over land was badly timbered. Keith also reported that the Green Eye Pit I owner has passed.

Bylaws Revision Committee

Bruce Bowman (committee chair), Keith Dunlap, Tom Rea, Jerry Lewis, and Tom Sollman make up the committee. Jerry Lewis had originally requested clarification of the "nominations from the floor" and a rule to deal with it. At the last meeting, Bruce Bowman requested input from the Directors; and taking those ideas, Keith Dunlap distributed a draft of the proposed revisions to the Bylaws at this meeting. Basic changes will be to eliminate write-in candidates or nominations from the floor during the annual meeting. The proposal will go out to the membership before next March's annual meeting and will be voted on and adopted at that meeting. This means that the next election cycle will operate under the old system.

Keith also wants to address the interpretation of "requests to make Bylaws changes". Does the Board approve a petition either from the membership or one Board member to change a Bylaw before it is sent to the entire membership for a vote? Three scenarios: Option 1) No approval is needed from the Board for wherever a petition originates, either from the membership or one Board member. Option 2) The Board will approve a petition from a Board member, but not a membership petition. Option 3) The Board will approve all proposed Bylaw changes from either one Board member or the membership (the lesser of 25 people or 20% of the membership). Bruce Bowman asked, since this has nothing to do with the original job for the Bylaws committee, should this be considered? After more discussion, the consensus of those present was to propose Option 3.

Education and Outreach Report

Jerry Lewis confirmed the Wyandotte Cave re-opening did happen and an article is in the *IKC Update*.

Jerry announced that the Bat Festival is September 24. He said that since the IKC has donated the inflatable cave to the bat festival, we need to locate it and get it to them. Keith Dunlap said there were some minor maintenance issues with it; but since

Bob Vandeventer will not be able to work on it now, Keith will get it moved to the festival people. Jerry advised the festival needs volunteers to help watch over the inflatable cave during the festival.

Tom Sollman has installed all of the bat houses at the IKC properties of Sullivan, Wayne, Shawnee, and Robinson Ladder. The bat houses were donated by the Caving Club at IU (Bloomington).

Keith Dunlap reported that the Truitt Cave gate has been installed. Tom Sollman, Bruce Trotter, Bill Baus, Danyele Green, and Keith worked on the project. With financial support from caver organizations the owner will only owe just over \$200 in out-of-pocket costs.

Jerry Lewis advised the status of the proposed Sauerkraut Cave gate project. The USFWS archaeological survey team has completed their work and sometime in the future Jerry or Keith will visit the cave.

Keith Dunlap announced that the *IKC Update* covers he entered this year in the NSS Cover Art Salon won one green and three blue ribbons.

Items from the Floor

Carla Striegel-Winner distributed flyers on the S.H.I.T. Hoot (Society of Honorable Indiana Troglodytes) event, and a brochure from a company that makes kiosks and interpretive displays (pricey).

Next Meeting

The next meeting will be Saturday, December 10 at 11 AM EST. Location will be in Bloomington or Ellettsville, location to be confirmed later. [The meeting was later changed to be at the Ellettsville Library branch at 2 PM EST.]

Adjourn

The meeting was adjourned at 5:50 PM. A fine cook-out and dessert contest followed.

Respectfully submitted, Sue Vernier, IKC Secretary



Post-meeting action photo of the pitch-in cookout at Ferdinand State Forest.

...continued from page 8

area of staining, and conservatively multiplying the area times 200, one can gain rough estimates of past population sizes. Certainly, when hundreds, or thousands of square feet are stained, that would indicate a past mother-lode roost for bats.

Even when no bats remain in such a cave, large populations often can be rebuilt if protected from disturbance, and human alterations to air flow are remedied. Cavers are typically the first to discover and report such evidence and already have proven invaluable in restoring some of America's largest bat populations. This is a time when such cooperation is especially important, potentially contributing greatly to the recovery of cave-dwelling species.

It is tempting to point out that in North America's richest cave areas, most caves are unused by bats, and that those used are normally occupied only in summer or winter. Unfortunately, it is the largest, most complex caves that are often the most sought after by both bats and cavers. Nevertheless, when wise managers and cavers cooperate, they will often find that even in these complex caves, bats only need relatively small proportions in any given season, and that parts can remain open to responsible caving during specific times or even year-round.

For example, the famous Fern Cave in northern Alabama includes miles of passages critical to hibernating bats as well as miles of passages of extraordinary interest to cavers, but not to bats. For more than twenty years, responsible members of the Huntsville Grotto of the National Speleological

Society played a critical management role through a cooperative agreement. As site managers, they regulated access in a manner very helpful to responsible cavers, to more than a million hibernating bats and to the U.S. Fish and Wildlife Service (the owner responsible for its protection).

The agency lacked the manpower and resources necessary to provide adequate protection for this remote property, so were happy to have on-site help from the Huntsville Grotto. Organized cavers were present year-round in the parts unused by bats, and near enough to check the entrance to hibernation areas for possible vandals or other problems. They also were able to use the bat area during the bats' summer absence. Cavers provided the eyes and ears the Service lacked and did an exemplary job of ensuring that only authorized, supervised entry occurred.

Unfortunately, when WNS became a threat, the cooperative management agreement was canceled, and no further entry by organized cavers into any part of the cave was permitted. The subsequent lack of regular monitoring by trained grotto members resulted in extensive vandalism when the government was unable to protect it from entry by an uninformed public. Moreover, the official closure appears to have had no effect in preventing the arrival of WNS. I hope this sad lesson will serve as an example of the importance of cooperation between cave owners and managers and responsible members of organized caving groups.

Reprinted from a blog on Merlin Tuttle's Bat Conservation website www.MerlinTuttle.com

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.

