

IKC UPDATE

A Quarterly Publication of the Indiana Karst Conservancy
September 2012

Number 106



INDIANA KARST CONSERVANCY, INC

PO Box 2401, Indianapolis, IN 46206-2401

ikc.caves.org

Affiliated with the National Speleological Society



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

EXECUTIVE BOARD

President
Jerry Lewis (2013)
(812) 967-7592
LewisBioConsult@aol.com

Secretary
Kevin Smith (2013)
(317) 856-0500
FreeWheeler2Go@yahoo.com

Treasurer
Keith Dunlap (2013)
(317) 882-5420
Keith.Dunlap@juno.com

Directors
Bruce Bowman (2014)
(317) 539-2753
Bruce.Bowman@tds.net

Christopher Dick (2015)
(812) 988-8221
Espresso0000@yahoo.com

Dave Haun (2015)
(317) 517-0795
DEHcave@onet.net

Don Ingle (2013)
(812) 249-6985
D.Ingle5705@comcast.net

Everett Pulliam (2013)
(317) 745-7816
SpeleoRat@aol.com

Bob Sergesketter (2014)
(812) 482-5517
CableBob@insightbb.com

Karen Silvers (2015)
(260) 249-0924
BentBat@hotmail.com

Tom Sollman (2015)
(812) 753-4953
Sollman@juno.com

Carla Striegel-Winner (2013)
(812) 367-1602
CarlaStriegel@gmail.com

Bob Vandeventer (2014)
(317) 888-4501
VandeventerBob@netzero.net

Richard Vernier (2014)
(812) 385-5058
rsavcaver2@gmail.com

Jamie Winner (2013)
(812) 367-1602
JAWinner@gmail.com

COMMITTEES / CHAIRPERSON

Education/Outreach
Don Ingle
(see E-Board list)

Web Technologies
Bruce Bowman
(see E-Board list)

IKC Update Editor/Publisher
Keith Dunlap
(see E-Board list)

Hoosier National Forest
Jerry Lewis
(see E-board list)

Buddha Property Manager
George Cesnik
(812) 339-2143
GeoCesnik@yahoo.com

Orangeville Rise Property Manager
Steve Lockwood
(812) 944-8097
sknalockwood@yahoo.com

Robinson Ladder Property Manager
John Benton
(812) 389-2248
JMBenton1952@gmail.com

Shawnee Property Manager
Jerry Lewis
(see E-board list)

Sullivan Property Manager
Keith Dunlap
(see E-Board list)

Wayne Property Manager
Robert Sollman
(812) 753-4953
BobSollman@gmail.com

Indian Creek CE Monitor
Jerry Lewis
(see E-board list)

MANAGED CAVES / PATRONS

Buddha Cave
Jeff Cody
(317) 888-9898
codyjpme@att.net

Lost River Cave
Dave Tibbets
(574) 875-8498
DaveTibbets@gmail.com

Robinson Ladder Cave
John Benton
(812) 389-2248
JMBenton1952@gmail.com

Upper Twin Cave
Jerry Lewis
(see E-board list)

GROTTOES & LIAISONS

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Dave Everton
(812) 824-4380

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(317) 882-5420

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(574) 295-6673

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(630) 393-6746

Western Indiana Grotto*
Doug Hanna
(812) 208-4609

Windy City Grotto
Jack Wood
(773) 728-9773

*grottos with liaison agreements

IKC QUARTERLY MEETING & COOK-OUT REMINDER
SATURDAY, SEPTEMBER 22th, 4:00 PM EST
FERDINAND STATE FOREST, INDIANA
HOME OF CARLA & JAMIE WINNER

The quarterly meetings are for the elected Board to conduct business and for our members and other interested persons to have an open forum to talk about caves and karst conservation and related topics. Past, present, and future IKC projects are discussed to solicit comments and input from our members and the caving community as a whole. The meetings are informal, and everyone is encouraged to attend and participate. The IKC Board wants your input.

Preliminary Agenda Items: Shawnee Karst Preserve progress report and future project planning; Buddha stewardship activities; Land acquisition projects; I-69 status; White-nose Syndrome update and DNR cave closure; Increased insurance liability coverage; Financial reports; and more....

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

Meeting directions and camping details: See the inside back cover (page 17).

ACTIVITIES CALENDAR

Sept 9 – IKC Quarterly meeting (see above)

Oct ?? – Invasive Control at Buddha Karst Preserve

Nov ?? – Dump Cleanup at Shawnee Karst Preserve (see page 6)

Dec ?? – IKC Quarterly Board 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...

“Breathe out, take your time, see if you can push forward a little...”

I was lying in a crawlway about fifteen or so inches high in the Binkley system, listening to Rand Heazlitt coaching Seth Gower as he inched forward into virgin passage. The passage where I was lying had been trenched out enough to make it “comfortable”, while Seth was pushing into the unknown thirty feet ahead. As a new caver, Seth hasn’t developed that sense of what one will fit through yet. Most cavers who have been at it for a while have learned through experience to look at a space and have a pretty good idea of “I can fit through that” or “it’s too tight”.

It occurred to me as I was lying there in the crawl that Rand was putting into practice something that has repeatedly had a profound effect on my life: mentoring. The word “mentor” brings to mind a guy in a white lab coat with a pocket protector, tutoring an underling in some new facet of nerdiness. What I was watching Rand do, however, was also mentoring... he was sharing his experience as a caver with someone new and passing along the fruits of those experiences, pocket protector notwithstanding.

In thinking about the concept of mentoring, two people are obviously involved: a mentor and a mentee. The mentor is typically a person more experienced and knowledgeable than the mentee, but in addition has to have a great deal of patience and the desire to cultivate new people. When we got back on the surface Rand commented that he was bigger than Seth and knew that he could fit through it with some coaching, it was just a matter of being patient and encouraging him. A different person would have told Seth to scoot over and he would have cruised into the virgin passage himself... but that would not help produce a new generation of cavers. Another important aspect of mentoring is the ability to view a person as having potential and being

worthy of the investment of time. On the other side of that coin is usually found a highly motivated person, eager to learn and willing to listen.

It’s also possible to be whatever the opposite of a mentor might be. I recall well my trip to the Zoology Department at Southern Illinois University shortly after I began caving in 1971. I was full of excitement about the cave animals that I had seen in the caves of Perry County, Missouri and wanted to conduct an independent study to learn about cave fauna. I had been sent to talk to a person in the zoology department (who shall go unnamed) as a faculty sponsor. I met with the professor and told him, brimming with enthusiasm, about my prospective project. Unfortunately, the would-be faculty sponsor couldn’t see

beyond my long hair and unkempt appearance, and told me “No, I don’t think so...”. So this guy was like a mentor in the parallel universe of unhelpful people.

Next I found Dr Joe Beatty. To make a long story short, he spent the next four years sitting with me in his lab, patiently teaching me the ins and outs of biology. The rest, as they say, is history. In 1981 I named a subterranean isopod after him (*Caecidotrea beattyi*) and in 1984, my son (James Joseph Lewis). Joe and I remained life long friends and it was a great pleasure to be able to visit and give him a copy of the publication of the new species of

spider (spiders were his main area of research interest), *Oreonetides beattyi*. I had taken the specimens of the spider from a cave in the Hoosier National Forest for Joe to look at on one of my trips to SIU – Carbondale. He had identified it as a new species of troglobitic sheet-web spider *Oreonetides* and from there the specimens went to a specialist in that obscure group of invertebrates for description (Paquin, Dupérré, Buckle and Lewis, *Journal of Cave and Karst Studies*, 2009). Joe was very proud of the publication, and I would like to think, as well as being able



to see the fruits of his mentorship from decades before. He died about a month after I gave him the publication during what turned out to be my last visit with him.

I suppose the take-home message is that *you* can make a difference in someone's life, perhaps in a huge way, and do not make the mistake of thinking that it's age dependent. I've seen older kids mentor younger ones. And in what is certainly an unexpected turn of events in my life, I find myself in the role of mentee again. My friends all know that I've been attempting to learn French for several years now. Some of you

are so unlucky as to be victims of my French in e-mails...for some perverse reason I find it fun to write e-mail in French to some of my caver friends who then have to put it into Google to see what, if anything, I wanted to say (hi Dave, Keith, et. al...). But the surprising thing to me is sitting in the university office of Dr Charles Pooser, with whom I am now doing an independent study in conversational French... in a manner very reminiscent of the first time around with Dr Beatty 40 years ago.

You're never too old to learn something new.

Jerry Lewis

NEWS BRIEFS..

- In July, a graduate student from the University of Virginia, Hilary Edgington, visited Indiana to collect DNA samples from cave-dwelling salamanders for her PhD thesis tentatively titled the **Phylogeographic insights into the evolutionary history of *Eurycea lucifuga***. Phylogeography is a field of study which combines geography and phylogenetics in order to illuminate the ecological and historical parameters which have influenced a species' current range. This can allow researchers to not only better understand how populations have changed over time, but also to make predictions about future ecological and environmental impacts on population ranges and demographics. Species that inhabit caves present an excellent case study of how phylogeographics can inform our knowledge of evolutionary and ecological processes, as these species generally have been drastically affected by historical events and have responded in an extreme way. *Eurycea lucifuga*, the Cave Salamander, inhabits a wide range in mountain ranges throughout Eastern and Central United States. In contrast with other species of the genus *Eurycea* which exhibit morphological changes associated with cave living, *E. lucifuga* has retained a surface-dwelling appearance and at times ventures outside caves. Knowing more about the history of this species and the development of cave-dwelling could shed some light on its current habits and what we can expect in the future for this species. Hilary's field work consisted of collecting 5-10 samples per population (cave), in 5-10 caves per region. The regions visited in addition to Indiana were Virginia, Tennessee, and Oklahoma. While in Indiana, she camped at the IKC's Wayne Cave Preserve and visited Binkley, Donnehue, Elrod, and Sullivan caves. Her local escorts were Jerry Lewis, Dave Everton, and Keith Dunlap. The DNA collecting consisted of removing the tip of the salamanders' tail (which will regenerate within a year). Length, sex, and other characteristic of the animals were also recorded. The results of this study will be useful not only to the scientific community in adding to our knowledge of the evolution of habitat use and species interactions, it will also inform the conservation management of caves, which are valuable habitats for many species, and which are extremely vulnerable to disturbance. Information revealed by these analyses will be presented in the form of articles published in peer-reviewed journals and at scientific conferences, as well as to the general public through organizations such as the National Speleological Society.



photos: Jerry Lewis

- Over the past few years, Keith Dunlap has been working on a project for the Indiana Cave Survey to create an electronic reference library (eLibrary) of Indiana-based cave publications; primarily focusing on locating, scanning, and cataloging regional grotto newsletters. While this project is not finished, to date ap-

Continued on page 12...

SHAWNEE KARST PRESERVE PROJECT UPDATE

by Keith Dunlap

Since June, the Property Manager, Jerry Lewis, and his team of volunteers have worked on three projects at the Shawnee Karst Preserve. The first was to continue repairs on the western wildlife pond. Earlier in the year a four-inch overflow pipe was installed and the volunteers started filling the previous breach with dirt. This “bucket and shovel” process was labor-intensive, but sufficient to retain enough water for the spring frog season. However, the dam breach needed multiple cubic yards of fill – too much to repair manually. So in July, when we had a tractor/loader on the property for other projects, we spent an afternoon filling the void back up to the full height. The original dam could probably impound 36 inches of water, although the overflow tube is currently set to approximately half that depth. Once the repair material settles and we make any final grading on the

dam, and we see how well the pond holds water, we may raise the overflow pipe to create a little larger habitat.

The second project was to start on pulling debris from the “dump” located just about the entrance to Upper Twin Cave. August in 100+ degree weather is not the time to do this project, but we wanted to “scratch the surface” to see what kind of trash we were going to be dealing with and to get a better idea of the volume, so we could start planning details. The result was a cornucopia of trash including construction debris, automotive and tractor parts, exercise equipment, roof shingles, and small and large appliances (no kitchen sink yet, but we will probably find one before the project is done). Logistically we will probably have to handle the material several times to get it shuttled to where a dumpster can be positioned. We are also planning

SHAWNEE KARST PRESERVE GRANTS / DONATIONS			
\$10,000 or more			
The Nature Conservancy			
\$5,000 to \$9,999			
Richard Blenz Keith Dunlap National Speleological Society			
\$1,000 to \$4,999			
Bruce Bowman George Brutchen Andrew & Alison DuBois		Tom Sollman Bruce Trotter In Memory of Paul Barker	
\$250 to \$999			
Miriam & Paul Ash Robert Decker Jeff Farr Scott Fee David Lasser Jerry & Salisa Lewis	Carl & Louise Nelson Nate Pate Bob & Phyllis Sergesketter Gordon Smith Kevin Smith	Bill Tozer Sue & Dick Vernier Norbert Welch Rich Whisler Bob Zatarski	Bluespring Caverns Central Indiana Grotto Evansville Metro Grotto Northern Indiana Grotto Saint Joseph Valley Grotto
\$100 to \$249			
Joy Baiz Ray Beach Barb & Don Coons Ari Doucette Scott Hammon Barbara Hanka	Timothy Heppner Dan McDowell Bill Morrow Nick Noe Ernie & Jacqueline Payne Don Peters	Everett Pulliam Kelle Reynolds Gary Roberson Wes Roeder Russ Romme Richard Vanrheenen	Carla & Jamie Winner In Celebration of Carla & Jamie Winner In Memory of Robert Dunlap Eastern Indiana Grotto Greater Cincinnati Grotto
\$50 to \$99			
David Anderson Danielle Burden Pat & Debbie Burns Chris Carpenter	Mike Clark Jeff Cody John Dimit Dave Everton Allen Goodcase	Shannon Obendorf Kevin Rasmus Cindy Sandeno Ralph Sawyer Ray & Beth Sheldon	Brenda & John Shultheis Mark Webb In Memory of Wilbur Isom Near Normal Grotto
\$5 to \$49			
Ron Adams Tim Alkema Bob Armstrong Brad Barcom Ted Bice Chris Carpenter George Cesnik Thomas Chenier Larry Coker Patty Cummings Christopher Dick	Rick & Rhonda Gikas Dave Haur Hal Hempte Horton Hobbs III David Hughes Rob Jarboe Mark Kraus Brian Leavell Robert Masta Andrew Mehlihop Jon Miller	Lynn & Jane Miller Douglas Moore Gene & Jennifer Peltter Steve Ragsdale Tom Rea Charles Rex Patty Ruback Jay Salvage Bruce Silvers Karen Silvers Ty Spatta	Susan Strickland Dave Tibbets Mark Van Buskirk Nicholas Walden Kathy Welling Scott Worpell Kevin Wyatt Laura Young In Memory of Ava Darlene Mullen Elkhart Environmental Center
Project goal: \$102,600			
Raised/Pledged to date: \$89,668			
Percent of goal: 87.4%			
September 9, 2012			

to separate out any recyclables to reduce the landfill fees and help offset the dumpster rental. We have not set a date for this project yet, but probably several weekend in November after the ticks subside.

The final project is quarter was the “hardening” of the access driveway into the core of the property (about 1600 feet in length including the loop at the end). When the property was timbered in 2010, the loggers cleared a trail that was sufficiently wide for our needs. However, they did little to stabilize the soil or create proper drainage so the steeper sections of the road had considerable erosion issues. Our original plan back in March was to wait until late summer to tackle this project as we needed it dry to get the tri-axle trucks in to dump stone. Mother Nature provided the dry weather so our window of opportunity was wide open. We started on Saturday, July 7th using Jamie Winner’s tractor with a front-in bucket and two different blades. Jamie used his box blade to move material into the erosion ruts and we then switched over to his angled blade to add a crown to the road and to create shallow ditches along the edges. We also created four ditch diversions to get water away from the road and into the woods. We had scheduled two days for the roadbed prep, but by the end of the first day, we were all set for the crushed stone, which we had scheduled to arrive early Monday morning.



Keith Dunlap on the tractor, straddling trees to repair the dam breach to restore the western wildlife pond at the Shawnee Karst Preserve.

Unfortunately, in the middle of our record drought, Sunday evening, the property received about two inches of rain. We called the quarry Monday morning and told them to only send two trucks until we could evaluate how wet it was going to be. The first section of the driveway is level, but about 200 feet from the road is a steeper section and the drivers said it was too slick to negotiate, so we just had the two trucks spread their loads on the first section which was fine since each truck can carry about 20 tons and at six-inches of depth, a truck can spread about 100 feet. So all was good until two more trucks showed up. Apparently the quarry had extra drivers because a lot of other projects had been rained out, so despite us telling them we wanted to see how the first two trucks went, the quarry went ahead and dispatched the third and fourth truck. So to get these trucks unloaded, we had the third truck back down the lane as far as possible and dump its entire load in one pile. The fourth truck we doubled up on what had already been spread. Jamie then spent several hours using his tractor bucket to shuttle stone onto the next section of the lane. By the end of the day, we had the first 300 or so feet of the road spread and rough graded. We evaluated the situation and decided it was going to take several more days to dry out, so we rescheduled the trucks for Thursday morning. The other complication was that Jamie’s tractor developed a hydraulic problem. So he hauled his tractor back south and I arranged to borrow my brother-in-law’s tractor which was in Terre Haute, which I picked up and dropped off at the property on Tuesday.

Thursday morning our two truck drivers were back and under better conditions were able to skillfully spread the rock on the next sections of the drive such that we didn’t have to do much grading. However, once they got to the “forested” areas, the spreading was not quite as easy as trees were obstacles with their dump beds extended in the air. Still things went pretty well and by noon, the last of the nineteen loads was on the ground and the final grading was done. In total the driveway consumed 320 tons of stone, costing approximately \$3400.

Accessibility to the property was the main deterrent to visitation and enjoying the property. The new driveway should allow even low-clearance vehicles access to the two campsites and secure/private parking in the middle of the property, where the cave entrance is now just a two-minute walk. Please come check out our newest preserve.



As IKC Treasurer, I would be remiss to not mention that we have not had a lot of donations towards the Shawnee Karst Preserve over the past three months, and we are still about \$13,000 short of our goal. Please use the enclosed donation

form to: 1) make your first donation, 2) make an additional donation, or 3) to give the form to other covers you know and encourage them to donate. You can also make electronic donations via the donation button on our website. Thanks!



Above left: three “before” photos of the driveway. Above right: the same three locations after grading and stoning. Below left: Jamie Winner grading ruts and preparing side drainage. Below right: Tri-axle truck spreading crushed stone.



photos: Jerry Lewis & Keith Dunlap

INDIANA WATER RESOURCE ASSOCIATION CONFERENCE

by Jerry Lewis

The Indiana Water Resources Association had their 33rd annual conference at Spring Mill State Park from June 13-15. The theme of the meeting was the Lost River and I had been asked to give a presentation on the cave life of the area. The first day of the conference was presentations in the large meeting room at the Spring Mill Inn, and I gave my talk to a receptive crowd. Most of the attendees were geologists and I had been asked to give an overview of cave life for non-biologists. The take-home message of my talk was that the Lost River Cave System was a biological hotspot of subterranean biodiversity that is significant on a global level.

The banquet and award presentations were that evening and one of the highlights was the presentation of an award for lifetime achievement to Bob “Bugs” Armstrong in recognition of his dedication to the Lost River. The banquet speaker, Julie Perez from the US Forest Service, was to present the talk “*What’s so special about a Lost River?*”. I guess we’ll never know what’s so special because to the chagrin of the conference organizers she did not show up to tell us the answer.

Thursday was dedicated to a day-long field trip of the Lost River basin including stops at the IKC’s Orangeville Rise and current highway constructions along SR 37 just south of Mitchell. The field trip was led by Dick Powell and was a special treat for me because I had never met him, despite having three copies of his book “*Caves of Indiana*”. Like many other Indiana cavers, his book had led me to many of my first caves. It was very interesting to hear his information and stories about the Lost River, as well as some vignettes into his personal history. I was surprised to hear that his tenure with the Indiana Geological Survey had been with coal resources, rather than karst. It was a thrill to spend a day in the company of a living legend.

Friday morning was another field trip to see Bluespring Caverns, hosted by Jim Richards. I had never been on the commercial tour and it was great fun to see the cave and its abundant northern cavefish. Dick Powell was in our boat for the tour and provided some interesting commentary on the cave. The cave trip capped off a fun and successful conference!



photos: Jerry & Salisa Lewis



Above: InDOT’s way of “dealing with” a sinkhole containing a cave discovered during the widening of SR37. They will use over 500 tons of crushed stone to stabilize this karst feature by the time they are done (at least for the time being).

Left: Dick Powell with some of the IWRA conference field trip participants looking at a man-altered/stabilized sinkhole in Orleans.

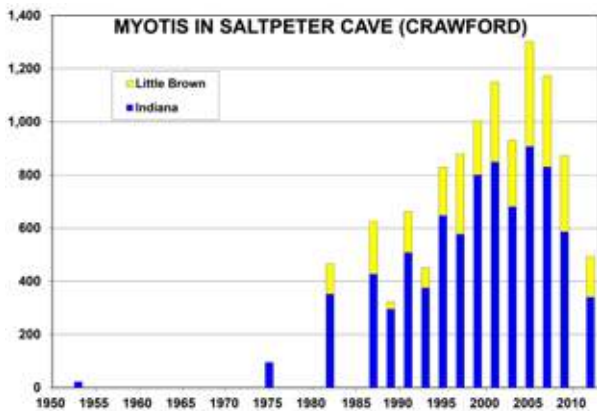
2012 WINTER HIBERNACULA SURVEY IN INDIANA

by Keith Dunlap

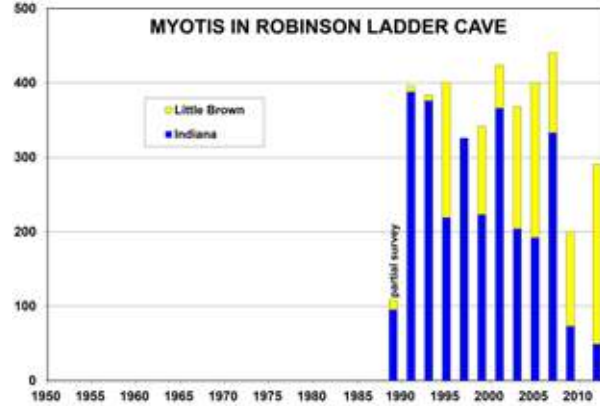
Traditionally, the Indiana bat hibernacula census is conducted biennially in the “odd numbered” winters, so 2012 would be an “off year”. However, due to the invasion of *Geomyces destructans*, the fungus that causes White-nose Syndrome, the 2011 census was abbreviated such that only the largest nine hibernacula were visited. These results were reported in the March 2012 *IKC Update*.

To fill in the data gaps, and to further access the infestation range of *G. destructans*, in February 2012 the DNR visited eleven more sites, nine of them being known Indiana bat hibernacula. This article will summarize those visits, and as in the past, present the census numbers from a historical perspective.

In Crawford County, DNR-owned Saltpeter Cave near Wyandotte Cave had been showing a gradual upwards trend until 2005 of both *Myotis sodalis* (Indiana) and *Myotis lucifugus* (Little Brown) species. However, in 2007, 2009, and particularly in 2012 the numbers of both species have dropped. The 340 Indiana bats recorded were the lowest since 1987 and the number of luci were the lowest since 1993. WNS was observed on multiple bats within the cave.

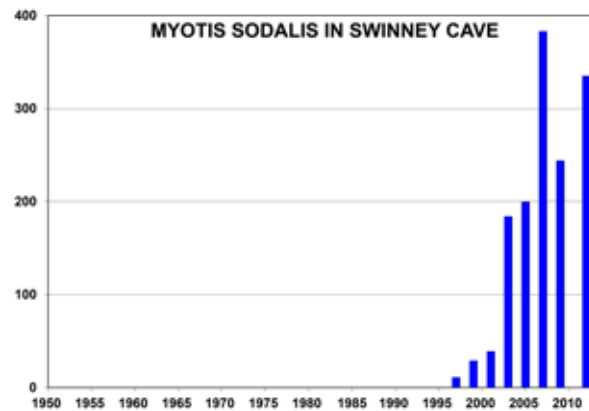


Also in Crawford County is Robinson Ladder Cave, owned by the IKC. In both 2009 and 2012, the number of Indiana bats were significantly lower than in the prior nine visits. The 2012 count found only 49 sodalis, the lowest number since the censusing began in 1989. Conversely, the number of luci, 242, was the largest number observed since censusing began. In the past, there have been some difficulty in distinguishing between the two similar species in this cave as they often cluster together, and most are located in the top of a dome where it is difficult to get an up-close view,



but that probably isn’t the full explain of the 2012 observations. *G. destructans* was observed on multiple luci and tri-colored bats (pips). There also appeared to be many more bats located in the entrance room than in the past. This is a consistent characteristic of infected bats attempting to survive and conserve energy by hibernating at lower (but less stable) temperatures found near the cave entrance.

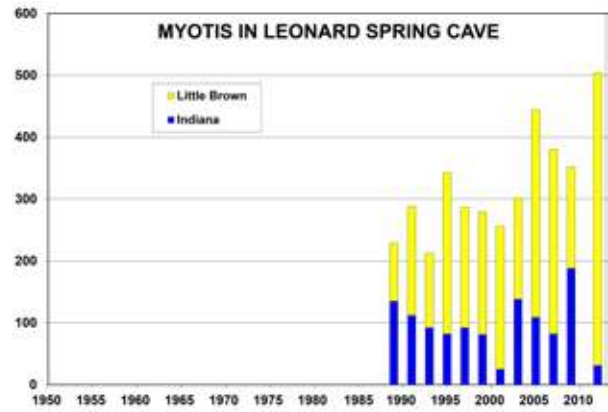
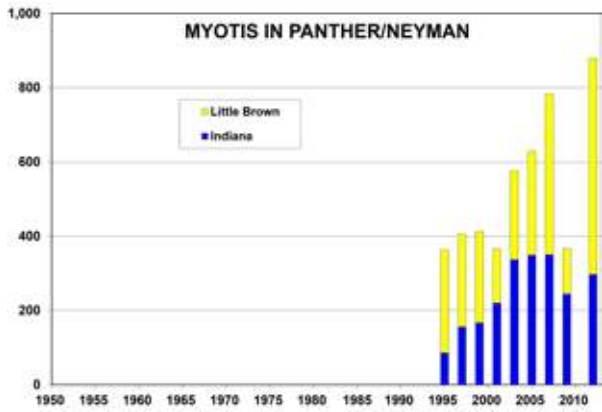
Moving to Harrison County, privately-owned Swinney Cave has been showing an upward trend since first visited in 1997. The 2012 visit found 335 Indiana bats, second only to 383 found in



2007. Swinney Cave was the only cave of those visited in 2012 to not have any observation of WNS, despite it being surrounded by infected caves. Part of this can be explained by the low number of luci (3) and tri-colored (7) bats found in the cave which are the species most often observed with the fungus.

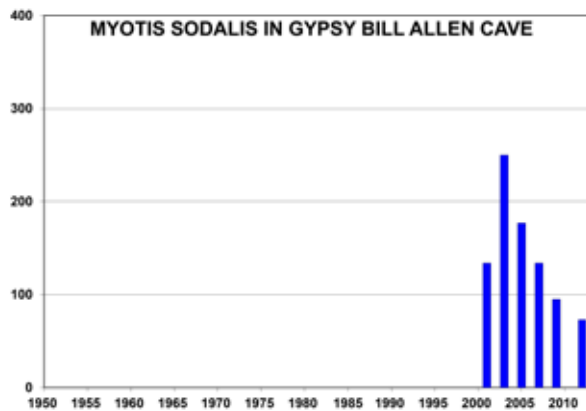
Moving to Washington County, privately-owned Panther-Neyman Cave recorded 297 sodalis which was consistent with past census (the largest number was 350 in 2007). The number of luci found was 582, which is the largest number observed since





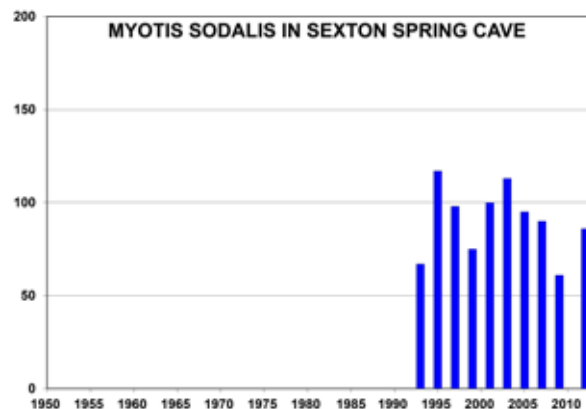
censusing started in 1995. Numerous WNS-infected luci and tri-colored bats were observed and like Robinson Ladder Cave, there was a noticeable shift of bats into the western entrance room where it is much cooler than the rest of the cave.

Gypsy Bill Allen Cave in Martin County is owned by the Hoosier National Forest. The cave was first censused in 2001 and has had declining



sodalis numbers since 2003. The number of other bat species in the cave totalled 41 and is typical of past observations. One luci was suspect for WNS and was collected and later confirmed to be positive with the disease.

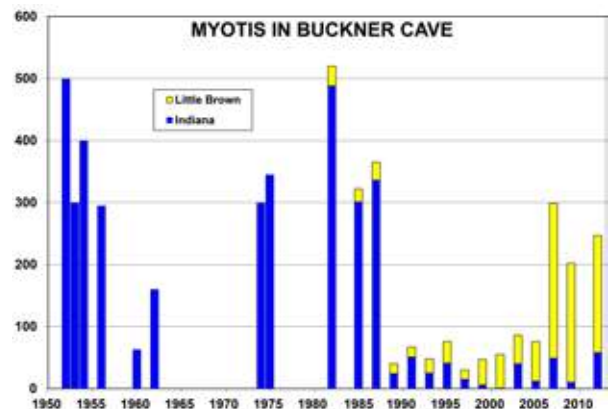
Moving to eastern Greene County, privately-owned Sexton Spring has had a fairly stable population of Indiana bats since censusing began in



1993. The number of sodalis found in 2012 was 86, consistent with past populations. While no bats inside the cave were observed with WNS, a single luci was found hanging and frozen on exposed rock just outside of the entrance, an obviously unsuccessful attempt to survive.

Privately-owned Leonard Spring Cave in Monroe County has, with one previous exception, a fairly stable population of sodalis, averaging 111 bats since 1989. In 2012, only 31 Indiana bats were observed. However, the number of luci totalled 473, significantly exceeding the previous high of 340 luci in 2005 and over twice the average count from the past eleven visits. The number of tri-colored bats found in Leonard Spring in 2012 was also an all time high of 111, but not extraordinary compared to prior observations. WNS-infected luci were observed throughout the cave, as well as one tri-color bat.

The last sodalis hibernacula visited was the NSS-owned Buckner Cave in Monroe County. The number of Indiana bats counted in 2012 was 58, the largest number since 1987, although not extraordinary considering the observed variability over the past twelve visits. One hundred ninety-two luci were counted which is consistent with the past two counts. The number of tri-colored bats observed was 129, which is four times greater than any previous count for that species. Considerable evidence of WNS was apparent in Buckner Cave. There



were many luci and tri-colored bats located close to the entrance and actually at the drip line of the cave in sun light. Some appeared to have been deceased.

Of the eight sodalis hibernacula, visited, four appeared to have statistical decreases in their populations. Countering that, three of the hibernacula had larger than normal *observations* of Little Browns and several had larger than normal *observed* populations of tri-colored bats. While not part of this study, observations during the winter of 2012 in Sullivan and Salamander caves also suggest more luci than in the recent past. All of these observations seem counter intuitive as luci and tri-colored are likely the species most susceptible to White-nose Syndrome. One viable explanation is that with the initial onset of WNS, the infected bats have moved from roosting further back in the cave and in “invisible” cracks and crevices, to cooler areas closer to the entrance that are more *observable*

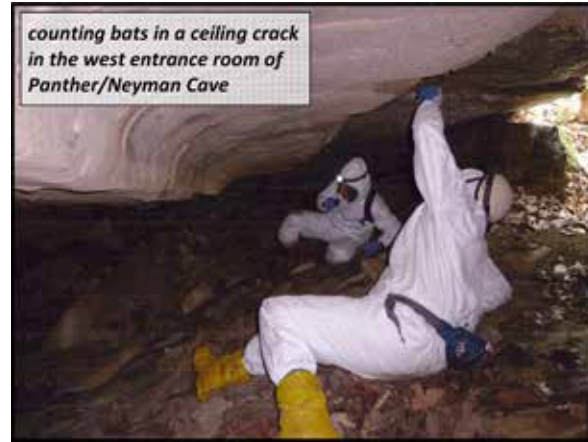


photo Tim Shier

by the researchers during the surveys.

At this point, it is unclear if the significant mortality observed in the northeastern states will be duplicated in Indiana, where our winters are shorter and milder, and thus survivability of infected bats may be better.

Continued from page 5...

proximately two dozen publications consisting of over 2400 issues have been identified and 94% of them have been scanned and are available on-line within the ICS's secure website. As a part of that project, all 106 issues (1986 to 2012) of the *IKC Update* are now available electronically in PDF format. While most of the early issues (#1-53) were physically scanned from the original galley proofs, and the later issues (#86-106) were natively converted from InDesign to PDF, the remaining issues (#54-85) were electronically “remastered” through a tedious process of converting the original WordStar files to postscript format, to PDF, to rasterized images where photos and graphics were inserted, then finally back to image-based PDF. This remastering process allows for very high-quality pages as good as the natively produced files, although somewhat larger in file size. The work on the older *IKC Update* issues (#1-85) are not done however, as they were originally all published in black and white so your editor is attempting to “colorize” as many photos as possible by tracking down the original prints, slides, and digital images to insert them into the issues. There is a lot of history and interesting projects contained in all these back issues and at some point the IKC may produce a DVD for easier viewing.

- ❑ Most of the IKC's basic operating expenses and obligations (newsletter, liability insurance, property taxes, routine stewardship activities) are paid with membership dues. However, we are greatly dependent upon additional donations to supplement and support the many other projects the IKC initiates. Since June 2011, 39 individuals/families and two organizations have made general donations totaling more than \$1,900. Donors include John Ahlberg, Bob Armstrong, James Arbuckle, John Benton, Dayton Boyd, Jeremy Brisch, Carl Brown, Larry Bundy, Paul Cannaley, Jaime Coffman, John Dimit, Keith Dunlap, Rick Gikas, Scott Hammon, Chris Haydel, Martin Heinlein, Timothy Heppner, Horton Hobbs, Tem Hornaday, Jesse Houser, Jason Kern, Glenn Kotnik, Jerry Lewis, George Mattson, Nathan Pate, Carl & Louie Nelson, Ernie Payne, Russ Pusilo, Kelle Reynolds, Martin Ryan, Cindy Sandeno, Ralph Sawyer, Matt Selig, Susan Strickland, Aaron Valandra, Richard Vanrheenen, Norbert Welch, Jack Wood, Scott Worpell, the Cleveland Grotto, and Venture Crew 101. General donations were down a little from years past due to our greater emphasis on fund-raising for the Shawnee Karst Preserve (those donors can be found on page 6).
- ❑ The IKC has gained two new members in the last quarter. Welcome Roberta Engel (524) and Paul Kolak (525). The IKC membership currently stands at 176.

BUDDHA KARST PRESERVE BIRD COUNT

by Jerry Lewis

On June 23rd, 2012, Ronnie Burns and I conducted our second survey of breeding birds on the Buddha Karst Preserve. The purpose of these surveys is to have a way to monitor changes occurring on the preserve as a result of our reforestation of the property (the IKC has planted over 12,500 trees there). The survey consists of listening (more birds are heard than seen, and most can be readily identified by their songs) and watching at 20 stops along the one mile loop trail circling the 37 acre preserve.

The 2012 results are shown in the below table and compared to 2010. Overall more birds were seen in 2010, 161 as compared to 100 this year. Thirty-eight species were seen both years, al-

though not entirely the same 38 each year. By far the predominant bird in 2010 was the Field sparrow, which as the name implies is a species that likes fields. Twenty nine of these birds were seen in 2010, but only 4 this year! This is exactly the kind of change that I would expect, as the habitat changes from a fescue pasture into a young sapling forest. Another indication of the changes occurring is the presence of a Blue-winged warbler this year in the older trees that were planted in the first years of the reforestation project. The Blue-winged warbler is a petite bird with a breathy song usually heard from forest margins. It will be interesting to watch the changes the occur as the forest grows older at Buddha.

Buddha Karst Nature Preserve Breeding Bird Survey																																								
Surveyors: Jerry Lewis, Ronnie Burns, 23 June 2012 (8:45 - 10:30 AM)																																								
General conditions: unusually warm year to date, dry, incipient drought																																								
Start conditions: 72 degrees, scattered clouds, sunny										Finish conditions: 78 degrees, scattered clouds, sunny																														
Other species noted on preserve: Northern Harrier, Belted Kingfisher																																								
Station	Turkey Vulture	Northern Bobwhite	Mourning Dove	Ruby-throated Hummingbird	Chimney Swift	Red-bellied Woodpecker	Downy Woodpecker	Eastern Phoebe	Great Crested Flycatcher	Blue Jay	American Crow	Tree Swallow	Barn Swallow	White-breasted nuthatch	Blue-gray Gnatcatcher	American Robin	Wood Thrush	Northern Mockingbird	Brown Thrasher	Cedar Waxwing	Blue-winged Warbler	Northern Parula Warbler	Prairie Warbler	Common Yellowthroat	Yellow-breasted Chat	Red-eye Vireo	White-eyed Vireo	Northern Cardinal	Indigo Bunting	Eastern Towhee	Chipping Sparrow	Field Sparrow	Song Sparrow	Red-winged Blackbird	Brown-headed Cowbird	Common Grackle	European starling	American Goldfinch	Total	
1		1				1										1							2	1	2			1										1	10	
2			1								1													1	1						1									5
3				1		1				1												1		1																5
4			1			1							1								2		1						2	1										9
5													1															1		1		1	1					1		6
6								2	1			2																												5
7			1							1																	1	1		1			1							6
8			1																						1	1			1		2						1		7	
9					1																																1		2	
10										1		1																				2							4	
11																							1		1						1			1					4	
12																													1			1							2	
13																	1									1		1	1										4	
14																															1								1	
15				1										1											1		1					1							5	
16			1																						1							1				1			1	5
17						4				1									1										1		1						1		9	
18																									1	1													2	
19			1											1										1					1										4	
20	2											1						1	1																				5	
2012:	2	1	6	1	6	2	1	2	1	4	1	4	2	1	1	1	1	1	2	2	1	1	5	5	7	1	2	8	4	3	7	4	2	1	1	3	1	2	100	
2010:	8	0	5	0	2	4	1	5	2	10	1	0	2	0	1	4	0	1	1	1	0	0	4	5	5	0	3	14	17	12	2	29	7	0	7	1	0	7	161	

INDIANA KARST CONSERVANCY TREASURY REPORT

**Income/Expense Statement
From April 1, 2012 to June 30, 2012**

INCOME:

Dues Apportionment and Residuals	652.50	
Donations - General	483.23	
Donations - Land Acquisition Fund ^{1,2}	56,840.00	
Interest	<u>339.35</u>	
		\$58,315.08

EXPENSES:

IKC Update (printing, production, mailing)	256.80	
Education / Outreach	69.73	
Stewardship/Conservation	2,122.19	
Property taxes	376.47	
Business (safe box, postage, NFG fees, etc)	127.75	
Shawnee Karst Preserve Loan Repayment	50,000.00	
Transfers to/from restricted funds/other adjustments	<u>7,163.55</u>	
		(\$60,116.49)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD: (\$1,801.41)

**Balance Sheet
June 30, 2012**

ASSETS:

Cash in Checking / Saving Accounts / CDs	91,835.86	
Robinson Ladder Cave Preserve (73.48 acres)	162,000.00	
Shawnee Karst Preserve (50.31 acres)	103,000.00	
Wayne Cave Preserve (20.00 acres)	75,000.00	
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>\$539,849.02</u></u>

FUNDS & OPERATING EXCESS:

Land Acquisition Restricted Fund	10,887.87	
Deferred Dues Restricted Fund (174 members)	3,352.50	
Stewardship Endowment Restricted Fund	42,071.60	

Previous General Fund (total)	37,338.46	
Net Excess (Deficit) This Period	<u>-1,801.41</u>	
Current General Fund (unrestricted)	35,537.05	
Current General Fund (committed)	4,946.84	
Real estate liquidity (basis value)	<u>448,000.00</u>	

Total Liabilities & Operating Excess \$539,849.02

NOTES:

- 1) Includes \$50,310 partnership grant from The Nature Conservancy
- 2) Includes \$5,000 grant from the National Speleological Society

IKC QUARTERLY BOARD MEETING MINUTES

Saturday, June 9th, 2012 – Bloomington, IN

Board Members Present:

Jerry Lewis, President
 Keith Dunlap, Treasurer
 Kevin Smith, Secretary
 Chris Dick (proxy by Sue Vernier)
 Dave Haun (proxy by Bruce Silvers)
 Don Ingle
 Everett Pulliam
 Bob Sergesketter
 Karen Silvers
 Tom Sollman
 Bob Vandeventer
 Richard Vernier
 Carla Winner
 Jamie Winner

Board Members Absent:

Bruce Bowman

The quarterly Meeting was called to order at 2:00 PM at the IKC's Wayne Cave Preserve located in Bloomington, Indiana. IKC President Lewis presiding. Sue Vernier was accepted as proxy for Christopher Dick and Bruce Silvers was accepted as proxy for Dave Haun.

Minutes of the March 17, 2012 meeting were accepted as published in the March 2012 *IKC Update*.

E-mail Motions

The following e-motion was made by Bruce Bowman on 5/17/12, seconded by Don Ingle on 5/17/12:

"In consideration of the proposed TNC contribution of 50% of the purchase price of Shawnee Karst Preserve (i.e., the sum of \$50,310); and with the entire board having had the opportunity to read and discuss the content of the Shawnee Karst Preserve Management Agreement, the Private Grant Agreement for Land Assist, and the Notice of Grant Agreement to be recorded; I [Bruce Bowman] move that the IKC's Executive Board authorize Julian J. Lewis, President of the IKC, to execute both Agreements, to sign and record the Notice; and for the Treasurer, R. Keith Dunlap, to receive the proposed funding from The Nature Conservancy."

The voting was 14 "Yes" and 1 "Abstain" and Jerry announced that the motion passed on 5/22/2012.

Treasurer's Report

Treasurer Dunlap reported cash assets of \$90,940.02, land assets of \$448,000.00, and an outstanding loan of (\$50,000.00) for total assets of \$488,940.02. Funds include Stewardship: \$41,748.05; Deferred Dues: \$3,840.00; Land Acquisition: \$10,992.87; and General Fund: \$34,359.10. \$4,250.00 from the General Fund

has been committed by previous Board actions.

The IKC has 192 members (24 not renewed).

Shawnee Karst Preserve Update

The Nature Conservancy has initiated contribution of \$50,310.00 to the IKC to assist with purchase of the preserve. In addition, a grant in the amount of \$5,000.00 has been received from the NSS in support of the purchase. As of June 9, 2012, 86% of our funding goal has been met with a balance of \$14,136 left to raise. The IKC Cave Acquisition Fund stands at \$11,000.00. Donations are still being accepted.

Jerry Lewis agreed to develop a presentation for the National Speleological Foundation trustees on the SKP to be presented by Bob Vandeventer at the 2012 NSS Convention. We are requesting a \$5,000 grant from them.

Survey of the property has been completed including placement of corner and intermediate boundary markers. For erosion control purposes, the clearing near the property entrance along State Road 60 has been replanted with prairie grass by a professional landscaping company. Tom Sollman led the installation of a new entrance gate. Geoff Lewis has been working on repairing a wildlife pond as a Boy Scout conservation project and the creation of two campsites has also begun. A large group of volunteers assembled at the preserve on April 21st to work on various improvement projects including the restoration of a glade area near the north end of the property. In addition, efforts are being made to remove invasives such as honeysuckle and autumn olive.

Future improvement activities include access road hardening, log removal from the sinkhole pond area near the front of the property, debris removal from the ravine near the cave entrance, and continuing improvements of the two wildlife ponds.

Jerry Lewis expressed a desire to conduct a bio-inventory of the Shawnee Cave System and ultimately publish a bio-inventory of all IKC caves. Bob Sergesketter moved to allow Jerry to conduct a bio-inventory of IKC-owned portion of Upper Twin Cave. Don Ingle seconded the motion. Motion passed with a vote of 13-0 with 1 abstention.

A discussion was had regarding the possibility of arranged trips into the IKC entrance of Upper Twin Cave during the upcoming CIG Cave Capers event.

Communications with Mark Young, property manager at Spring Mill State Park have been initiated. Jerry will be doing a conference presentation on the bio-inventory of the Lost River Cave system at the park on June



13 for the Indiana Water Resources Association 33rd annual conference.

Robinson Ladder Cave Preserve

A good report of a trip made to the cave during Hogfest was noted as being published in the *IKC Update*.

Wayne Cave Preserve

Robert Sollman reported that the road gate is in need of repair as a gate bolt had failed (Dunlap volunteered to perform the repair). Walking paths and campsite areas have been mowed and a chainsaw was used to clear some downed trees. General weed control has been done, several autumn olive bushes eliminated, as well as road-side trash collected and removed.

Buddha Cave Preserve

Dunlap reports that tree planting efforts have concluded and the focus now is on weed control. Dunlap and Property Manager George Cesnik have conducted three applications of glyphosate for weed control thus far covering 4 to 5 acres of the property. The balance of the 2010 trees (another 4 to 5 acres) will hopefully be treated later this summer. Dunlap reports the trees are growing well and that mechanical spraying is acceptable, but hand spraying is preferred. Fescue grass needs attention per recommendation from District Forester, Janet Egler. A reminder that an EQIP grant pays us \$51 per acre to conduct weed treatments on the property.

Jerry received an e-mail from John Bacone with the Indiana Heritage Trust who has IHT signage which will be installed next to the existing kiosk.

Sullivan Cave Preserve

Dunlap reports that open areas were recently mowed. The smaller field has a lot of honeysuckle which needs to be addressed. Bob Vandeventer agreed to help Keith Dunlap with spraying weeds in July.

Orangeville Rise

Nothing new to report

Indian Creek Conservation Easement

Jerry Lewis noted he will be inspecting the easement property sometime during the summer. Gary Roberson's book, *Fifty Years Under the Sinkhole Plain*, will be delivered to easement landowners who indicated interest in receiving a copy during his visit.

WNS Status

A discussion was had concerning what the IKC can or should do to address cave closures. Per Dunlap, Kevin Strunk has asserted that the IKC is looked upon as a leader in declaring policy for cave access issues and the IKC should take an active role in helping to get caves back open. Others contended that the IKC is primarily a conservancy-based or-

ganization and can only submit opinions on cave access policies. Based on historical decisions, the State has primarily taken direction on cave access from US Fish & Wildlife Service. It was noted that Scott Pruitt (USFWS) has great influence on decisions made concerning WNS given that his office is responsible for the management of the federally protected Indiana Bat. It was also noted that Ty Spatta has proposed the formation of a lobby group to influence legislators and indirectly the IDNR with regards to blanket cave closures.

Land Acquisition Activities

Nothing new to report.

Education and Outreach Report

Don Ingle reports he had made two school presentations. One presentation was made to all 300 students of East Washington Elementary School near New Pekin. The other was during Caitlin Farm Day for the Salem. Ingle will also attend the Indiana Bat Festival in Terre Haute again on September 15.

Items From the Floor

Dunlap and Lewis reported that Hilary Edgington, a graduate student at the University of Virginia, had contacted the IKC (through Dave Everton) regarding a phylogenetic study she is conducting for her thesis. The study involves genetic analysis of cave salamanders within various geographic regions and entails the removal of a small portion of a salamander's tail for DNA analysis. Carla Streigel-Winner moved to grant permission to Hilary to sample salamander populations from IKC-owned caves. Everett Pulliam seconded the motion and the motion passed with a vote of 11-3.

Jerry Lewis reported that he had been contacted by Jim Richards, owner of Bluespring Caverns, regarding a public notice that had been placed in the Bedford paper regarding a permit renewal to discharge up to 4000 gals/day of "treated" waste water into a sinkhole that directly drains into Pless Cave, which is known to be hydrologically connected to Blue Spring Caverns. Recommendations were made to have IKC attend future public hearing to voice concerns on the adverse impact to groundwater and cave biology. Jerry Lewis agreed to compose a letter to IDEM to request a formal public hearing to discuss the permit and suggest preferred alternatives.

Next Meeting

The next quarterly meeting was scheduled for September 22nd at Ferdinand State Forest at 4 PM. A cookout will follow the meeting.

Meeting adjourned at 3:30 pm.

Respectfully submitted, Kevin Smith, IKC Secretary

Directions to Ferdinand State Forest (FSF) and Jamie and Carla’s House:

From State Road 64, just east of St Anthony: Turn south at County Road 600 East (there is a green FSF sign) and go exactly 3 miles to the entrance gate.

From State Road 162, just north of Ferdinand: Turn east onto State Road 264 (there is a green FSF sign), which ends at the entrance gate after several miles.

At the entrance gate: Stay on the main road about a mile and a half until it ends at the Sycamore Shelters. Park in the gravel lot there. The house is on the left just across the lot. Normally the gate house is closed at this time, but if it would happen to be open, just tell the attendant you are here for the meeting and they will let you through.

You can mapquest with success: **7985 S 600 E, Ferdinand, IN**. This will get you to the entrance; follow our directions to the house from there.

Overnighters: Folks are welcome to stay over, we have futon and floor space and a small yard for a tent. Also, a primitive campground is available at FSF for \$8 per night and you are welcome to use our shower!

Ferdinand State Forest also has hiking and mountain biking trails, a 38 acre lake, which is a fun canoe/kayak and has great fishing, so come early or stay over!

If you get lost, call (812) 367-1602.



K. Lindberg

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.

SHAWNEE KARST PRESERVE

The **Shawnee Karst Preserve** is located just south of Spring Mill State Park and consists of 50 acres of classical Mitchell Plain topography. The property contains the most upstream entrance to the 5+ mile Shawnee Cave System, known for its water filled passages and large population of northern cavefish.



The **Indiana Karst Conservancy** purchased the property in early 2012 for \$103,000 and has invested another \$5,000 in infrastructure to make the property accessible to visitors. The Management Plan provides for caving, camping, hiking, and other low impact activities on and under the property. Restoration of the property will take additional financial and human resource commitments over the next several years.

We are now asking the caving community to once again show their support for our land acquisition efforts by making a donation to help offset this investment. Donations may be made using the form below or by visiting our website (ikc.caves.org) and selecting the donation button.

The IKC is a 501(c)3 IRS recognized non-profit organization and all donations are qualified deductions under current federal tax laws.



Yes, I would like to support the acquisition of the Shawnee Karst Preserve with a donation!

Name _____ \$ _____ donation

Address _____

City/State/Zip _____

E-mail _____



Make checks payable to the "Indiana Karst Conservancy" and mail to :
Indiana Karst Conservancy, PO Box 2401, Indianapolis, IN 46206