

INDIANA KARST CONSERVANCY, INC.

PO Box 2401, Indianapolis, IN 46206-2401

Affiliated with the National Speleological Society



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

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*grottos with access agreements

Cover: A young Bob Armstrong in Wayne Cave, circa 1955. Photo by Don Martin.



QUARTERLY MEETING/COOK-OUT REMINDER

SATURDAY, SEPTEMBER 13th, 2:00 PM CLOVERDALE, INDIANA

Property of Tom Rea, 8527/8677 S South SR 243

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 cave 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 recaps of last quarter's activities; Wayne Cave post-acquisition status (fund-raising, management plan, "to-do list"); Update of other land acquisition projects; Carcass Crypt Pit clean-up grant proposal; Buddha kiosk; Buddha fence workday; and more....

Following the business meeting will be the annual pitch-in cookout (starting around 5 PM). This year it will be a joint activity with the Central Indiana Grotto. The IKC/CIG will provide the grilled burgers, hot dogs, and brats; condiments; and soft drinks. Please bring a salad or covered-dish to share. Finishing off the evening's activities will be the highly competitive dessert contest (12th annual). Bring an entry or enjoy sampling and selecting the winners. **Please bring lawn chairs, and the family, too**. Contact Kathy Welling for further details. NOTE: Those not wanting to drive home Saturday night are welcome to stay and camp.

Meeting directions (note the *meeting* will be held in Tom's new tenant house located just north of his main property): From I-70, exit onto SR 243 (exit 37). Turn north and go approximately 1/4 mile. Turn into the *second* driveway (8527) on the right after crossing a small stream. If you are skipping the meeting and coming just for the cook-out, go to Tom's main property which is the first driveway (8677) north of the small stream crossing. Proceed up the driveway to the open field on the right. See map on page 21.

ACTIVITIES CALENDAR

13 SEP = IKC QUARTERLY MEETING/COOK-OUT (see above)
13 SEP = HNF COMMITTEE MEETING, contact Steve Lockwood
20-21 SEP = CARCASS CRYPT PIT CLEAN-UP, Mitchell (see page 4)

27 SEP = LOST RIVER TOUR, Orleans (see page 4)

13-17 OCT = NATIONAL CAVE & KARST MANAGEMENT SYMPOSIUM, Gainesville FL

18 OCT = HNF FIELD WORK DAY, contact Steve Lockwood

08 NOV = BUDDHA WORKDAY, Bedford see page 8)

15 NOV = HNF FIELD WORK DAY, contact Steve Lockwood ?? DEC = IKC QUARTERLY MEETING (date and location TBD)

For more information on the Indiana Karst Conservancy, visit our web site at http://www.caves.org/conservancy/ikc or write to our PO box. Membership to the IKC is open to anyone interested in cave and karst conservation. Annual dues are \$15. Please see inside back cover for the membership application form or to make a much appreciated donation.

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 ...

"To pour forth benefits for the common good is divine." Ben Franklin



Well, we've done it again. As everybody knows by now (hopefully), the IKC has purchased the entrance to Wayne Cave and 20 overlying acres and has an option on an adjacent 12. This was a rather sud-

den opportunity and required the organization to move very quickly; something that a larger, less cohesive group could not have managed. Short-term, interest-free loans were arranged on the spot at a hastily set up special meeting. Details were worked out quickly but carefully, primarily by Keith Dunlap working with caver/realtor/geologist Kevin Strunk. Most of the Directors and Officers turned out for a site inspection and, a few hours later, voted unanimously to proceed.

Whew! I wonder if The Nature Conservancy could work this fast.

I've belonged to who knows how many organizations at one time or another, and

the IKC is the one where the individual member seems to be able to make the most difference and to produce the most actual results! You can really see where your money goes and enjoy the fruits of your labor. Before the IKC, I was used to going to meetings where when the chair calls for volunteers everybody seemed to take a sudden interest in scraping the gum off the bottom of their particular chair; not very helpful for the chairperson. In the case of the IKC, sometimes we have had to suggest that we don't need a huge number of people to turn out for a workday only to have a huge number turn out anyway. It's great! The mine gatings have been the most work and the most fun you could have and ended up benefiting the bats, the state and the cavers - by building up the Cave Acquisition Fund so that we have money to work with when properties like Buddha and Wayne come up.

Good work everybody! Keep those contributions coming. Remember, that even though the mine gate income has dried up for now, we need to finish paying off our latest success; and there are more opportunities waiting out there.

Richard Vernier

NEWS BRIEFS...

- □ Brian Leavell and the Eastern Indiana Grotto are organizing the 2003 Ohio Valley Region's annual conservation project. This year the task will be to clean up Carcass Crypt Pit near Mitchell in Lawrence County. It is unfortunate that the pit was used for many years as a trash pit, but the current owner is being cooperative and supportive in reversing the damage. Three preparation workdays have already been completed with the final work weekend being September 20/21. You will need vertical gear and vertical experience to work in the cave, but non-vertical volunteers are also needed on the surface to haul the trash to the dumpster and to install a new fence around the perimeter of the pit. Please contact Brian Leavell (bleavell@indy.net or 765-552-7619) if you would like more information on this project.
- □ Bob Armstrong and Dee Slater of the Lost River Conservation Association will be conducting their last guided Lost River tour of the year on September 27th. The auto/hiking adventure starts from the east at the head waters in Washington County, continues through Orange County to its disappearance near Orleans, and on to its rise near Orangeville. The orientation lecture starts at 7:40 AM at the southeast corner of the square in Orleans and will depart promptly at 8 AM. Reservations are not required. Tours will go, especially if it rains. There will be some moderate hiking so sturdy footwear and long pants/sleeves are strongly

recommended. The tour is free, but a small donation is suggested for the optional printed handouts. This is a must-do tour, if you are interested in Indiana karst. For more information, contact Bob or Dee at (317) 253-6951.

- □ Jug Hole pit in western Harrison County has long been a popular vertical destination for caver. The ownership of the entrance has long been disputed as it seemed to bisect the property line between State Forest and the private owner. Several years ago the boundary was surveyed and confirmed what the private owner had claimed, that the entire entrance was on his land (by about five feet). Since that time he has attempted to discourage visitation and asks for the caving community's assistance in spreading the word that Jug Hole is off limits. It should also be noted that Jug Hole is fourth largest Indiana bat hibernacula in Indiana with approximately 20,000 bats. As such it is doubly important to not visit this cave when the bats are present.
- □ Speaking of the Indiana bat, the report covering the 2003 Indiana biennial bat survey has just been completed. The 92-page document summarizes the latest population numbers as well as looks at trends over the past 23 years (systematic surveys were started in 1981). A few copies of this report are available by contacting Keith Dunlap (Keith.Dunlap@juno.com). A much abbreviated version of this information is included in an article starting on page 10.
- □ The recently published *Proceedings of the Indiana Academy of Science* (2003 #1) may be of interest to some with fours articles on caves or bats. The first article is by Jerry Lewis on cave millipeds. The second article is on the bats of Wyandotte Cave by John Whitaker, Virgil Brack, and James Cope. The third article is on Evening bats of Indiana by John Whitaker and Sherry Gummer. The fourth paper is on wintering populations of bats in Indiana by Virgil Brack, Scott Johnson, and Keith Dunlap. Reprints of the fourth paper can be obtained by contacting Keith Dunlap (Keith.Dunlap@juno.com)
- □ At this year's NSS Convention in Porterville, California, Indiana cavers and organizations were well represented (from BOG members, to photo salon contributors, to hot tub constructors). A few highlights included the Central Indiana Grotto, Indiana Cave Survey, and the IKC all winning ribbons on one or more of their newsletter covers in the Graphic Arts Salon (the IKC's ribbon was for newsletter #65 with a photo by Glenn Lemasters). During the annual auction, Bambi Dunlap's quilt and other creations raised more than \$1000 for the Save the Cave Fund (the fund that provides grants for organizations like the IKC for cave acquisitions). Finally, the IKC would like to congratulate Indiana cavers Brian Leavell, Jo Ellen Kimmel, and Bambi Dunlap for being named NSS Fellows.



- ☐ As a means of promoting the IKC within Indiana, each year the IKC donates a couple of our hats as door prizes for Cave Capers. All of the door prizes are then given way at the banquet by random draw. This year, it was statistically interesting that the first hat was won by IKC President Dick Vernier, and the second hat was won by his wife, Sue.
- ☐ On August 10th, Central Indiana Grotto cavers Glenn Hicks and Sherry "Daisy" Smith were engaged. The noteworthy part of this proposal was that it was made at the bottom of Shaft Pit. Congratulations to both one wonders where the wedding will be.
- □ Eight new members have joined the IKC in the past quarter. Welcome Frank Hedges (419), Paul Lundberg (420), John Walthers (421), Tom Chenier (422), Dwight Hazen (423), Larry Coker (424), Josh Rubinstein (425), and Brian Killingbeck (426). The IKC membership now stands at 182.

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Mike Dowden	Kristie Schavey	
Dave Everton	Steve & Diana Schuh	
Jaime Fee Scott Fee	Ray Sheldon Mark Sparks	
Scott Hammon	Brandon Stephens	
Dave Haun	Susan Strickland	
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WAYNE CAVE PRESERVE

by Keith Dunlap

As most IKC members already know, the IKC recently negotiated to acquire the entrance to Wayne Cave and 20 acres of overlying surface. The official transfer took place on July 2nd. In order to finance the deal, the IKC had to arrange \$34,000 in short-term loans and borrow another \$20,000 from internal accounts to use along with the \$19,500 we already had in our land acquisition fund. Since that time we have raised approximately \$16,000 in donations and have identified another \$24,000 in potential grants we will be seeking, but that still leaves us approximately \$15,000 short of the money needed to fully fund the acquisition. In addition, at some point the IKC would also like to deposit \$7600 (10% of the property value) into our Stewardship Fund and we will have another \$2000 or so in expenses related to hardening the driveway and parking area and other improvements. So if you have not yet made a donation, or would like to donate again, your support will be greatly appreciated.

In other activities, we would like to recognized Bill Baus, Keith Dunlap, Don Ingle, Tymme Laun, Bill Tozer, and Bob Vandeventer for assisting Jess Gwinn in surveying the property back in June. Also thanks to Bill Baus, Keith Dunlap, Scott Fee, Dwight Hazen, Tom Rea, Bill Tozer, and Dick & Sue Vernier for installing property boundary markers in July.



EDUCATION AND OUTREACH COMMITTEE REPORT

by Kriste Lindberg

In the June issue, we talked about the value of working on a local level to accomplish endeavors not only there but on expanded areas.

By doing so, you can get a lot done... Mainly because you're focusing on a smaller area and giving it more emphasis - kind of the quality over quantity thing. Therefore, you can get more in depth. Of course, it helps to reach out a bit, too. Others can learn from what you're doing and you can learn from them. For example, the most recent NSS convention...

The 2003 NSS Convention held during the first full week of August in Porterville, California was good. It featured the usual plus a few extras, including an Education Division luncheon. This was a new item. Several people from around the country participated, we had a full house. Topics included conversation about the various committees, Project Underground, etc. It was followed up by a Project Underground board meeting on Wednesday morning. Sandy Trout and I were elected Directors. She will represent the west and I'll represent the Midwest. As the program was basically developed in the east, it will give us nationwide coverage. In addition, Bob Vandeventer and I also attended a class on improving slide images in Photo Shop, although I think we could have taught it. Overall, it was a great time to network... Some of us even took the time to visit local sites such as Sequoia National Forest, the west coast, and a winery or two. Also welcome Anmar Mirza as

our new Safety and Techniques Committee Chairman.

Going back a little further in time... Our first week-long cave education program with WonderLab, "Caves, Critters, and Crystals," was a big hit! It took place during the first week in June. We had eight participants from Bloomington, four boys and four girls, ages 11 - 14. It consisted of activities from Project Underground and other related venues. We slowly warmed them up to caves by introducing larger concepts first and working our way in to caves and caving -ecology, geology, conservation, activities including a bit on land use, safety and techniques, caving practice, and culminated in a caving trip to Leonard Springs Nature Park. A good time was had by all. The museum staff were particularly happy with how things turned out. I have the feeling we'll be doing one again next year and more with them in general. Thanks to George Cesnik for making an appearance to give a little demo on vertical caving during the last day of class!

The following week, Bloomington Parks and Recreation (BPR) and Hoosier Heartland RC & D hosted a Project Underground workshop at BPR's Twin Lakes Lodge. It, too, was a success. We had eight participants from around the state, mostly from government agencies. I gave them the usual intro and followed it up with much focus on land use. Later, we also took a caving trip to Leonard Spring Nature Park. All were very happy with this arrangement, and we'll be

BUDDHA KARST PRESERVE WORKDAY NOVEMBER 8th, 10 AM

The last IKC workday of the year will be at the Buddha Karst Preserve south of Bedford. The primary focus will be on completing the fence started last year. The posts were all set then and have had a year to settle. What is left is to string the high tension wire along the posts. A secondary task will be to "adjust" the kiosk installed this spring. Due to some uneven settling, it has a noticeable lean which we will try to correct, then set the posts in concrete. There are also some down trees on the trail needing cut up. Come spend the day in helping with these projects as well as checking out the property.

If you need further directions or information, contact Tom Rea (765-653-4423 or TomRea@ccrtc.com)

doing more with them in the future, as well! Thanks to both Cathy Deal of the HH RC & D and Cathy Paradise of the Brown County SWCD for their help in arranging for this opportunity.

Over the next two days, BPR hosted a Hoosier Riverwatch Level 1 and 2 training at the same site. It, too, was a success. We had folks from all over the state... some were even on a waiting list. HR said it was one of the most successful classes they've ever held and that BPR is doing one of the best jobs they have seen with the program. As I've mentioned earlier, we're working to have all of our parks with flowing water monitored with their methods. Thanks to Jan Hosier for teaching these two valuable classes.

Our BPR sites are becoming valuable teaching resources for karst and related conservation and education. They are ideal. With Bloomington's unique geology - basically karst on the west side transitioning to the Norman Upland on the east side, it makes for an interesting contrast in land forms.

To help us understand them and their inhabitants better, Dr. Julian "Jerry" Lewis and company are working on a biota study at Leonard Springs Nature Park. They have made many interesting findings. I've been helping out here and there along the way. We've even discussed the possibility of tailoring Hoosier Riverwatch methods to include springs. As springs are a transition zone between caves and streams, they are unique in their own right. Both Jerry and Hoosier Riverwatch are in favor of this idea. Now, we just need more time in our schedules to be able to do it.

Morgan Peters-Darley and a friend have been moving right along with their monitoring of Leonard Springs, itself, at Leonard Springs Nature Park. She is using the more advanced kit, the Hach Kit. Eventually, she will be tying her findings in with the way the wetland plants filter water, amphibians, etc. Neat stuff!

Speaking of LSNP, thanks to the Bloomington Indian Grotto for conducting their yearly trail work day in the middle of July! They adopted the park via BPR's Adopt-A-Trail plan last year. It looks great. To further our conservation of the area as far as critters are concerned, Steve Cotter and I attended a meeting of various agencies interested in developing a plan to control invasive aquatic species. A plan is being developed, the Indiana Aquatic Nuisance Species



WonderLab - Kids working with Project Underground activities to learn more about caves and karst.

Management Plan. This was the second meeting. The next one is September 16.

A class that helped with learning more about the geology of the area was offered by the Indiana Geological Survey during the beginning of July, "Workshop on Indiana's Limestone Geology for Teachers." As far as cavers are concerned, those who attended were Bud Dillon of Bloomington, Steve Harriss of the Hoosier National Forest, and myself. It taught us more about limestone in general -- its history, properties, uses, etc. For example, it answered questions such as, "What is limestone?" Something so basic we don't always think about it in depth. Answers included that it is a biochemical sedimentary rock composed of the mineral calcium carbonate or calcite (CaCO3); can also contain small amounts of silica and other minerals; and that the calcite grains that make up the rock can be centimeters to microscopic in size. It, of course, got into more detail from there. There was even a little section on karst. Naturally, I had to expand that a little further for them and include other cave education sources such as Project Underground... Also included was a field trip to check out various road cuts, quarries, BPR's Cascades Park, the Monroe Reservoir dam, and Spring Mill State Park.

Things are moving right along with Bloomington's Environmental Commission, too. I've been helping them mainly with land use issues pertaining to karst. There are some proposed developments where it is a concern.

A STUDY OF APOSTROPHE USE IN A CAVE IN WESTERN MONROE COUNTY, INDIANA 1955 to 1979

by Thomas P Sollman

The following article was the result of a ongoing discussion related to the proper name of Wayne Cave. In recent years, the majority of cavers have used the name Wayne's Cave or the supposedly more properly punctuated version of Waynes Cave. Others used the longer version, Wayne's Lost Cave, while old-timers insisted upon it being called Wayne Cave. After reviewing the evidence, the IKC Board has agreed to call the new acquisition the Wayne Cave Preserve and to refer to the cave as Wayne Cave.

Wayne Cave was first described (to my knowledge) by William J Wayne in the *Proceedings of Indiana Academy of Science* for 1949, pub. 1950 (A Karst Valley in Western Monroe County, Indiana) in which he gives a description of all that was known at that time. He did not name it.

The Sept 1955 CIGNAL and Sept 1957 CIGNAL call it "Wayne Cave".

The Nov 1957 NSS News calls it Wayne Cave also and says the new cave was discovered on March 6, 1955 by Bill Auckerman. In the article he says the newly discovered part was sometimes called "Lost Cave". Purdue students were largely responsible for the early exploration. How exciting that must have been!

The March 1958 NSS News has a map labeled "Wayne Cave and Lost Cave" and describes "...the crawlway to Lost Cave..." and has a black and white photo of a young "Bugs" Armstrong [editor's note - a color version of this same photo is on our cover].

Dec 1959 $CIG\ Newsletter$, Dec 1959 $NSS\ News$ call it "Wayne Cave".

The first published reference I'm aware of to call it "Wayne's Cave" is the July 1959 *Big Newsletter* (also published as the 1959 Cave Capers guidebook). This was republished in the 1959 *Speleo Digest*.

Jan, Feb, March, Nov 1960 IU Spelunking Club; March, May, Dec. 1960, Feb, March, April 1961 CIG Newsletter;

March 1961 Speleo Epitaph back to "Wayne Cave". Oct, Dec 1961 Windy City Grotto, goes to "Wayne's Cave"; Dec 1961 Speleo Epitaph back to "Wayne Cave".

Here's an interesting one: the Sept 1961 *Big Newsletter* has a huge article entitled "Wayne's Cave" but has a **map** labeled "Wayne Cave".

Powell's *Caves of Indiana* (1961) calls it "Wayne's Cave".

Feb 1962 CIG is back to Wayne Cave. Feb 1962 *Speleo Epitaph* has a map showing the "Lost Cave" section of "Wayne's Cave". Nov 1962 CIG is "Wayne Cave".

Oct 1963 Speleo Epitaph "Wayne's". Dec 1963 Geo Lucufugus Letter calls it "Wayne's Cave".

March 1964 Speleo Epitaph "Wayne". June 1964 Windy City Grotto talks about a trip to "Wayne-Lost Cave" and in the same article calls it "Wayne's". June 1964 CIG has a map of "Wayne Cave Extension".

Feb 1965 *Geo Lucifugus* "Wayne's". March, April 1965 *NSS News* "Wayne", **but** later in the April issue talks about a field trip to "Wayne's". The 1965 NSS convention guidebook uses "Wayne".

April 1966; Dec 1967 Windy City Grotto "Wayne's". Sept 1968, July 1969 NSS News and CIG; April, Oct 1970 Speleo Tymes" use "Wayne". Nov 1970 NSS News, Sept-Dec 1970 BIG back to "Wayne's".

April 1971 BIG "Wayne Cave Resurvey". April 1971 NSS "Wayne". April 1971 Windy City Grotto "Waynes" -- note **no** apostrophe! (that's a first). Loves infamous guide, 1971, calls it "Wayne's 'Lost' Cave".

Jan, Feb, May 1972 CIG is "Wayne's Cave" -- also "Wayne's Wonderful Caverns"!

And, of course, that wonderful foldout map in the '73 NSS convention guidebook is "Wayne's Cave" on the **map** but "Wayne Cave" in the article.

Horton Hobbs Aug 1973 Phd Thesis says "Wayne's" while *Inside Earth* magazine #2, 1973 is back to "Wayne".

The man who started the IKC, Bill Wilson, in the Dec 1974 NSS News is back to "Wayne". American Caving Accidents 1967-1970 is also "Wayne".

April 1975 NSS is "Wayne's" in one article and "Wayne" in another (that terrible weekend the three collage kids drowned in Salamander)

BIG March 1976; CIG winter 1976 are "Wayne". Jan 1977 CIG and *American Caving Accidents* 1977 are "Wayne".

March 1977 CIG "Waynes" with NO apostrophe. June 1978 WCG "Wayne".

And finally (drum roll please) RBS labs in the Jan 1979 CIG is "Wayne's" (really, who could argue with RBS labs?????).

POPULATION TRENDS OF INDIANA BATS IN INDIANA

by Keith Dunlap

As part of the recovery plan for the federally endangered Indiana bat (Myotis sodalis), biennial population counts are conducted to assess the status of the bat. In this article, as in the past, I will present the cumulative data systematically collected over the past twelve censuses (1981-2003), along with some historic data dating as far back as 1950. The majority of the recent data has been amassed by Dr Virgil Brack, originally as part of his PhD work in the early 1980's, and more recently under contract with the Indiana Department of Natural Resources. The exceptions are the population figures for Batwing and Twin Domes caves which were obtained under the direction of Richard Clawson of the Missouri Department of Conservation. Clawson is the USFWS Indiana Bat Recovery Team leader and since 1981 has been responsible for censusing the original seven Priority I caves in Indiana, Kentucky, and Missouri.

The table below represents the summary of over 221 cave visits to thirty different caves documented to have had Indiana bats in recent years. In addition, another fortytwo caves have been visited one or more times over the past twenty-three years to look for Indiana bats without success (although four caves have historic records).

It is interesting to note that most of the current active hibernacula have been "discovered" in the last twenty years, many originally reported by cavers. Most of these new caves have small colonies that do not contribute much to the overall population; nevertheless, these caves could be significant in the long term recovery of the species.

The table lists the caves in descending order of colony size based upon the most recent census. Studying the right-most column of the table, one can see that nearly three-quarters of the state's population is in just three caves, while over 97% of the population hibernate in just seven caves.

The Indiana bat (*Myotis sodalis*) was one of the first species to be protected under the 1973 Endangered Species Act. The reason for the bat's listing was the well documented observations of population declines in the seven major hibernacula known at the time in Indiana, Kentucky, and Missouri.

	1981	1982/83	1985	1987	1989	1991	1993	1995	1997	1999	2001	2003
Ray's Cave (Greene)	12500	13475	16200	22990	28581	41854	38386	41157	51365	62464	48219	5094
Twin Domes (Harrison) ¹	98250	70750	56650	79650	70800	78500	87350	78875	67100	59775	50325	4935
Wyandotte (Crawford)	2152	4550	4627	6681	10344	12994	17304	23878	25424	26854	28584	3121
Jug Hole (Harrison)				5535	6424	7640	13924	12463	20741	11900	20151	1924
Coon Cave (Monroe)	1190	550	777	2950	2103	3696	4451	4455	4786	6341	6395	1067
Grotto Cave (Monroe)	3190	2692	4198	3778	2985	1996	1568	2018	2435	4361	5419	1033
Batwing Cave (Crawford)	29960	26650	14750	17450	14500	13150	9350	9300	7400	10125	9350	690
Endless Cave (Washington)		2		1		134	335	450	404	403	800	86
Saltpeter (Crawford)		352		427	295	508	375	647	577	800	849	68
Wallier Cave (Harrison)						36	72	465	409	381	310	54
Parker's Pit (Harrison) ²		(500)		1803	1104	926	1045	1276	1139	(987)	989	(44)
Clyfty Cave (Greene)		66		198	412	357	307	299	369	379	469	45
Panter/Neyman (Washington)								86	156	167	220	33
Gypsy Bill Allen											134	25
Robinson Ladder (Crawford)					(95)	388	376	219	326	223	366	20
King Blair/Brinegar (Monroe)3				(12)			442	514	663	453	263	19
Swinney Cave (Harrison)				,				0	(11)	29	39	18
Leonard Springs (Monroe)					135	112	92	82	92	81	25	13
Sexton Spring Cave (Greene)						(0)	67	117	98	75	100	11
Saltpeter (Monroe)		(83)		(19)		221	245	175	136	40	24	9
Buckner Cave (Monroe)		488	301	336	24	51	25	41	15	6	1	4
Nichols Cave (Orange)						•	(200)	.,		·		3
Mitchell Quarry (Lawrence)						9	(200)			31		3
Reeves (Monroe)*						•				٠.		(34
Achcraft Cave (Greene)							20	28		3		(0-
Wildcat Cave (Crawford)		29		0		31	61	34	48	19	35	1
Binkley Cave (Harrison)				•		٠.	٠.	٠.	84		9	
River Cave (Washington)		104		5		1			•	2		
Salamander Cave (Monroe)		74		0		Ö			1	2		
		0		·	3	v					0	

This steeply declining trend continues today as is shown in Figure 1 with critical declines in Kentucky and Missouri. The only positive observation is that Indiana's population (solid bars) is holding its own with approximately the same number of *sodalis* today as there were 30 years ago. Still, the population could be heading towards extinction if the overall trend continues.

Looking at population trends in individual caves is interesting in that several caves have been showing consistently increasing trends, others caves have been generally decreasing, while the remainder have undeterminable trends or there has not been enough data collected to make a determination.

Recent Indiana bat populations in Twin Domes cave (figure 2) have fluctuated up and down over the past twenty-seven years, but has shown a definite decrease during the last five census. The 2003 population was the lowest ever recorded and is cause for concern since this cave's population is such a large component of the total population. As a result of this decline, Twin Domes is no longer the largest hibernacula in Indiana.

Perhaps the biggest disappointment among Indiana hibernacula has been in Batwing Cave (figure 3) where the population has decreased almost every census since the cave was originally found to be a hibernacula in the mid-70's. The 2003 survey of 6900

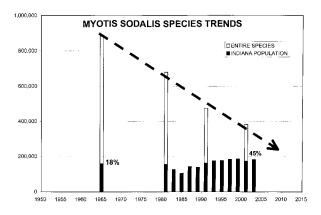
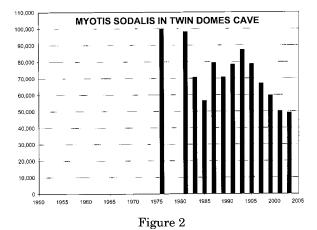


Figure 1

bats is the lowest number recorded, being only 14% of the 1977 population. While it is conceivable that the gate installed in June of 1988 could be part of the problem, the design has proven successful in other situations (including Wyandotte). It is also speculated that increased entrance debris may have restricted airflow causing the cave to warm

enough such that the cave is only a marginal habitat (temperature monitoring equipment was installed in 1998 to test this hypothesis). The latest explanation for the decreas-



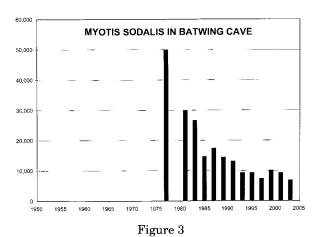
ing population is the observation that the bottom of the cave floods occasionally. In the spring of 1996, heavy rains caused water to back up into the cave to an estimated depth of 36 feet which was sufficient to drown at least several hundred bats (this observation was made in August of 1996). The bottom line is that no one really knows why the population is dropping, nor ways to reverse this trend.

Wyandotte Cave is an interesting contradiction in resource management. While it serves as an ever increasingly significant hibernacula, it is also a commercial tourist cave run by the Department of Natural Resources. Large populations of bats have been documented in this cave for over one hundred years (in fact, the *sodalis* was first classified as a separate Myotis species in this cave and thus the "Indiana" designation). Numerous gates have been placed on the cave with different degrees of air flow restrictions. A 1953 report by Mumford estimated the population at 10,000 bats (see figure 4). However, just a few years later and after a solid stone wall gate was installed, the population was only one-tenth that size. The population fluctuated around 2000 bats until the late 1970's when the original gate was replaced with a more open grate-type. It is presumed that this partially restored the pre-gate airflow into the cave, providing a better winter habitat. Since 1981, the population has increased every census to over 31,200 (third largest in Indiana). The gate replacement in July of 1991 apparently has been acceptable to the bats and may have further improved airflow into the cave, witnessed by the significant increases over the past six counts.

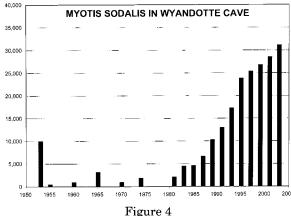
Last year, the Indiana DNR took a bold step by closing Wyandotte from September until May. It will likely take several years to properly access this action, but there were immediate changes observed during the 2003 census related to where the bats were located within the cave.

Just a short distance north of Wyandotte Cave is Saltpeter Cave. While the number of bats hibernating there is small compared to its neighboring caves just discussed, it is nevertheless an important cave for Indiana bats and was probably a very significant hibernacula historically (Merlin Tuttle, personal communication). Figure 5 shows a general seesaw, but increasing trend that hopefully will continue. The 2003 census showed a decrease compared to the previous two census, but not a significant fluctuation. The number of little brown bats (Myotis lucifugus) in Saltpeter was also down slightly.

Previous research supports the observation that Indiana bats are very habitual in using the same hibernacula year after year. But with the population increasing so fast at Wyandotte while similar decreases are being experienced at nearby Batwing and Twin Domes, one can only speculate that at least some transferring is occurring. To better quantify this Wyandotte area meta-popula-



tion, figure 6 shows the combined numbers from Twin Domes, Batwing, Wyandotte, and Saltpeter caves which accounts for approximately half of the total Indiana population. It can be observed that the population appears to be much more stable and indicates that the number of bats hasn't really changed much over the past twelve census. It is my hypothesis that the majority of new bats in Wyandotte are migrating from Batwing and Twin Domes because Wyandotte has become a better hibernacula with its airflow

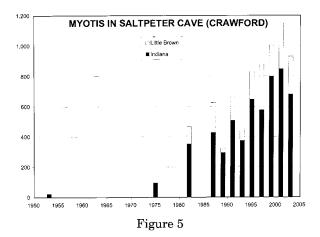


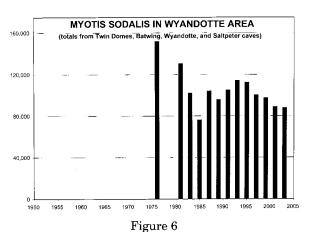
restored (and now with winter disturbance eliminated). However, since banding Indiana bats is disallowed and recovering banded bats in Wyandotte would be difficult anyway due to the inaccessibility of the bats on the high ceilings, the question of bat intercave transferring may go unanswered.

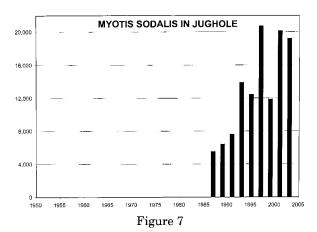
Of the other caves in the Harrison/Crawford area, Jug Hole is of the greatest importance with the fourth largest population. First censused in 1987 with 5500 bats (see figure 7), the populations in 1989 and 1991 showed modest increases, but nearly doubled in 1993 to almost 14,000 bats. The 1995 census showed a slight decrease, but the cave took another huge jump to over 20,700 in 1997, only to fall significantly in 1999. The past two censuses rebounded to nearly the 1997 number with the 2003 count at 19,240 bats. Thus the population here seems quite variable, although part of this may be explained by the difficulty of estimating cluster sizes on the high ceilings in this cave.

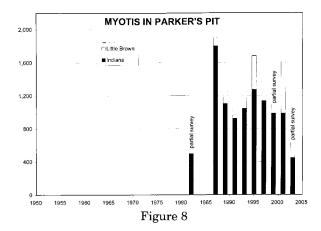
Figure 8 shows the number of bats counted in Parker's Pit. This is another difficult cave to census, not in counting the bats per se, but in getting the "counters" to the bats. Most of the counts include all areas from the entrance pit to the eⁱ Room. The 1982 count (performed by Michelle Wright) and the 1999 and 2003 count included only the entrance pit area and the room below the second drop (just before the S-bend). On the whole, since 1989, the population in Parker's seem to be relatively stable.

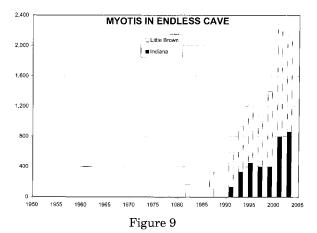
The final cave in the Harrison/Crawford area to highlight is Wallier Cave, southeast











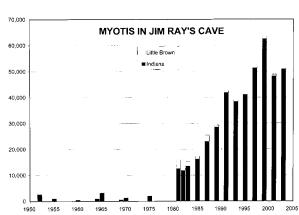
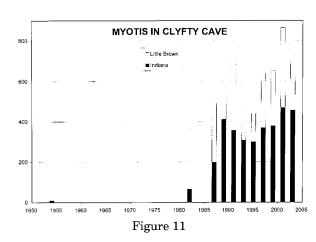
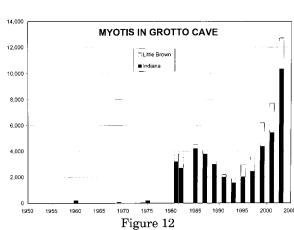


Figure 10





of Laconia. The 1991 and 1993 census included 36 and 72 Indiana bats respectively. The 1995 through 2001 counts were 465, 409, 381, and 310 bats. The 2003 jumped to 541, the greatest number to date. It is unclear what caused this significant jump in 1995 or where these additional bats came; and there are no other known hibernacula even remotely close. It will be interesting to see what the future holds for this cave.

Moving north to Washington County is Endless Cave in Cave River Valley. Visits in 1982 and 1987 found only 2 and 1 Indiana bats, respectively (see figure 9). However, the last seven counts have shown an encouraging population increase of both Indiana and little brown bats. In 2003, 863 sodalis were counted, the greatest number to date. Likewise, the number of little brown bats this census were high, second only to the 2001 survey.

Jim Ray's Cave in Greene County has had remarkable population growth in recent years (see figure 10). Historic records by Mumford and others showed the cave's population never exceeded 3200 bats in nine visits between 1952 and 1975. Brack's visits in the early 1980's showed the population had already jumped to approximately 12,000 Indiana bats and several thousand little brown bats. In 1987, 1989, and 1991, the population exploded, topping out at almost 42,000 Indiana bats (making it the second largest

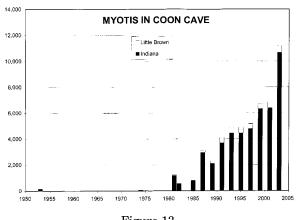


Figure 13

hibernacula in Indiana). In 1993, the population decreased slightly, but rebounded slightly in 1995 and made large jumps in 1997 and 1999 to over 62,000 bats. The 2001 and 2003 decreased to approximately 50,000 bats, but still enough to be the largest winter concentration of *sodalis* in Indiana (and the world).

The dramatic increase over the past twentyfive years has had no clear explanation, but two contributing factors may have played important roles. First it is known that a

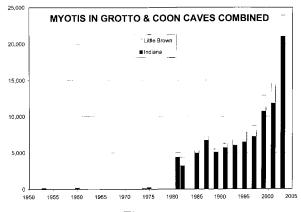


Figure 14

medical researcher from IU was illegally collecting perhaps thousands of bats each winter during the 1970's. This may have kept the population below some critical level to grow. Second, the "rear" entrance to the cave may have naturally enlarged itself, allowing more airflow to cool the cave, and thus making it a better hibernacula. Currently there are two winter temperature studies being conducted in Ray's (one by the DNR/IKC and one by BCI) to see if there is anything obvious to make this such a desirable cave for Indiana bats.

Approximately five miles to the north of Ray's is Clyfty Cave. Figure 11 shows a bat population that appears relatively stable over the past eight counts. Likewise, the population of little browns over that same time period appear to be stable too.

Moving to Monroe County, Grotto Cave has been another puzzling hibernacula. Historic records showed very small populations in the 1960's and 1970's (see figure 12). However, in the early 1980's Brack reported significant numbers of Indiana and little brown bats. The cave peaked in 1985 with 4200 Indiana bats and then decreased the next four census to a low of less than 1600. However, in 1995 and 1997, the population rebounded slightly, and in 1999 and 2001, the numbers jump substantially. In 2003, the population nearly doubled that of 2001 -a tremendous gain to 10,338 bats. Furthermore, the 2003 census recorded nearly 2400 little brown bats, the largest winter concentration known in any cave within Indiana.

The "sister" cave to Grotto is Coon Cave

located less than one-half mile away on the same property. It too had historic records in the 1950's through 1970's of only a few hundred bats (see figure 13). Brack's observations in the early 1980's were around 1000 bats. Since 1985 when only 777 bats were found, the population has increased significantly to almost 6400 Indiana bats in 2001. In 2003, like Grotto Cave, the population jumped substantial to 10,675 bats.

In the early 1990's when Grotto's population was dropping as Coon's was increasing, it was speculated that this might be another instance of inter-cave migration. However, looking at the combined numbers for Grotto and Coon (figure 14) shows that the metapopulation appears to be consistently increasing over the past twenty-five years with near "exponential" growth the past three surveys. The explanation for this growth

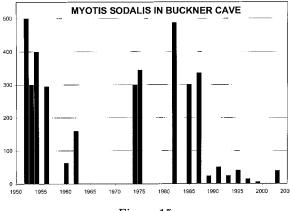


Figure 15

can only be speculated.

The last cave in Monroe County for which there is long term data is Buckner Cave. Historically (1950-1980) Buckner has had a relative stable population of 300 to 500 bats in its entrance room (see figure 15), but since 1989 there has not been more than 50 bats found. Obviously repeated disturbance could be blamed, but the sudden drop between 1987 and 1989 would be more indicative of a single-event, intentional or accidental eradication (e.g., shotgun or entrance room campfire). Only one Indiana bat was found in Buckner Cave in 2001 which pretty much tells the story. In 2003 number jumped back to 40, perhaps indicative of better oversight of those who are allowed to go into Buckner now. Regardless, there is little hope for this hibernacula to recover to previous levels unless there is a significant change in its winter visitation policy.

There are other interesting observations and speculations that can be made from this census data, but in the grand scheme of things, even twenty-five years of data is a relatively short time to truly make any meaningful conclusions. Perhaps in another twenty-five or fifty years of systematic censusing, definitive trends can replace general speculations and we will know the fate of this species.

IKC members who participated on the 2003 bat census were Keith Dunlap, Tom Sollman, Bambi Dunlap, Steve Collins, and Steve Harriss. Scott Johnson (DNR) coordinated the project.

continued from page 8...

Thanks to Joey Fagan, Karst Protection Specialist with the Virginia Department of Conservation and Recreation's Division of Natural Heritage for pointers here. Due to some good networking starting at the EPA conference and at the NSS Convention, our area is benefiting due to advances they have made. To help with outreach, Mark Deebel of the Saint Joseph Valley Grotto and I worked with The Nature Conservancy in mid-August to do a follow up to the big article that came out in the *Indianapolis Star* on the Lost River System. This time, we worked with WRTV-Channel 6 out of Indy to do a television news spot. Others were invited to

join, such as representatives from Congressman Baron Hill's office. It was an excellent networking opportunity! We had a chance to talk about political issues related to karst, of course. We now have more allies on that front in Washington... and an invitation to visit for a tour of the Capitol.

Congratulations to Frank Hodges of the IDNR for his recent promotion to Agricultural Conservation Specialist. Although he won't be working as much with the Lost River area, he will still be working with karst as he will retain some of the same counties he has and also expand more to the southeast.

INDIANA KARST CONSERVANCY TREASURY REPORT

Income/Expense Statement From April 1, 2003 to June 30, 2003

CO	М	

Dues Apportionment and Residuals	632.50
Donations - General	390.00
Donations - Land Acquisition Fund	9899.00
Hoosier Natinal Forest challenge grant	2000.00
Indiana Heritage Trust - stewardship	635.20
SpeLogger sales (2)	240.00
Interest	81.52

\$13,878.22

EXPENSES:

IKC Update (printing, production, mailing)	278.39
Stewardship/Conservation	1991.48
Education/Outreach	82.92
Wayne Cave acquisition (survey, closing costs)	1668.50
Business (Bank service charges, security box)	75.00
Tranfers to/from restricted funds/other adjustments	8244.34

(\$12,340.63)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD:

\$1,537.59

Balance Sheet June 30, 2003

ASSETS:

Cash in Checking/Saving Accounts/CDs	27036.55
Outstanding short-term loans	-34000.00
Wayne Cave Preserve (20.00 acres)	75000.00
Sullivan Cave Preserve (28.00 acres)	72000.00
Buddha Karst Nature Preserve (36.84 acres)	29000.00
Orangeville Rise Nature Preserve (3.07 acres)	7000.00
Indian Creek Conservation Easement (valued at \$1/acre)	13.16

\$176,049.71

LIABILITIES & OPERATING EXCESS:

Wayne Cave Acquisition Fund 1	-46210.48
Deferred Dues Fund (169 members)	2846.25
Stewardship Endownment Fund	10908.00

Previous Operating Excess 23968.35
Net Excess (Deficit) This Period 1537.59

Current Operating Excess 25505.94
Real estate liquidity 183000.00

Total Liabilities & Operating Excess

\$176,049.71

NOTES:

¹⁾ Wayne Cave Fund initially funded with the previous Land Acquisition Fund minus acquisition costs.

IKC SPECIAL BOARD MEETING MINUTES

Saturday, June 1, 2003 Bloomington, Indiana

BOARD MEMBERS PRESENT:

Richard Vernier, President
James Adams, Secretary
Keith Dunlap, Treasurer
Bruce DeVore
Kriste Lindberg
Bob Sergesketter
Tom Sollman
Bill Tozer (by proxy Sue Vernier)
Bob Vandeventer
Jaime Winner

BOARD MEMBERS ABSENT:

Bruce Bowman Dave Haun Don Ingle Steve Lockwood Nick Noe

This special meeting of the Board of Directors of the Indiana Karst Conservancy was called to discuss the possible purchase of the property containing Waynes Cave in Monroe County. Many Directors met at 10:30 AM at the property followed by further informal discussions at lunch. The meeting was called to order at 2:05 PM at the home of Kriste Lindberg in Bloomington.

At this time, the offer for the property made by Keith Dunlap the previous Tuesday (5/27) has not been accepted. It is believed that the owner is out-of-state.

Dunlap moved to pursue purchasing 20 acres of the property for approximately \$73,600 plus related expenses. Seconded by Bill Tozer by proxy. Motion passed: 9-0-1.

Dunlap moved to fund a survey of the property up to \$2,000. Seconded by Bill Tozer by proxy. Motion passed: 10-0-0. The survey is to verify the advertised acreage of the tract and to assure the entrance to the cave is actually on the property being acquired.

The need for an appraisal was discussed. Dunlap moved to waive getting an appraisal. Seconded by Bob Vandeventer. Motion passed: 9-0-1. The rational for not ordering an appraisal is based upon discussions with other realtors familiar with the area and knowing the previous offer for the same

amount was made by a realtor looking for a home site (until he realized the main passage of the cave was directly under where he was going to place his new home).

The property has been advertised as containing 31.92 acres but the owner does not have a survey. Our unaccepted offer asks that following a survey, the price will be prorated if the property surveys at less that 31.5 acres. After discussion, it was determined that Dunlap will remove this provision from the offer since it appeared to be a potential stumbling block.

There were several other topics regarding the property discussed without motions:

- We need a management plan.
- Caving activities should continue as usual.
- Tom Willet will remain Cave Patron.
- · A Property Manager will need to be appointed.
- Near term improvements might include a fence between the property and a nearby house.
- Fund raising should begin as soon as the property is acquired. Dunlap will apply for a Golden Eagle Grant.

The next regular meeting will be at 7:00 PM at the IU Geology Building in Bloomington. Meeting adjourned at 3:30 PM.

Submitted by James Adams, Secretary



IKC SUMMER BOARD MEETING MINUTES

Saturday, June 14, 2003 Bloomington, Indiana

BOARD MEMBERS PRESENT:

Richard Vernier, President
James Adams, Secretary (proxy by Dave Everton)
Keith Dunlap, Treasurer
Bruce Bowman
Don Ingle
Kriste Lindberg
Steve Lockwood
Nick Noe
Bob Sergesketter
Tom Sollman
Bill Tozer
Bob Vandeventer

BOARD MEMBERS ABSENT:

Bruce Devore Dave Haun

Jamie Winner

The meeting was called to order at 7:09 PM in Room 143 of the Geology Building on the IU campus, President Richard Vernier presiding. Dave Everton was accepted as proxy for James Adams. The minutes from the previous meeting were approved as published in the June 2003 *IKC Update*.

Treasurer Dunlap reported a cash balance of \$60,822 of which approximately \$20,500 is in the Land Acquisition Fund, \$10,900 in the Stewardship Fund, \$3,000 in the Deferred Dues Fund and \$26,400 in the General Fund. We have 192 members of which 164 have renewed. The members who haven't renewed will be contacted to urge them to pay their dues. Dunlap also reported that of the \$2,000 that the Hoosier National Forest provided to help with the Blanton property cleanup in March, only about \$1,200 was spent. He suggested that we might want to split the remaining money with the St Joseph Valley Grotto since they provided approximately half of the personnel on the workday. The actual amount would be \$392 to the SJVG and the same to the IKC. Bowman moved to split the overage from the Blanton cleanup with the SJVG, seconded by Ingle. The motion passed unanimously.

Lindberg reported that in addition to activities reported in the last *IKC Update*, she conducted a fiveday cave camp for twelve kids through Wonder Lab in Bloomington. She also had eight people participate in a Project Underground through Bloomington Parks and Recreation and also took part in Hoosier River Watch through Bloomington Parks and Recreation.

Lockwood neglected to tell the people who placed the geocache at the Orangeville Rise to move it. He still intends to contact them.

There was no report about the status of the MOU with Spring Mill State Park. Tom Rea has sent

word that he has been unable to contact the person in charge of this at the park. The matter was tabled until the next meeting.

James Adams was not present to report on the status of the Shiloh lease. The lease is about to expire. Vernier said he would contact Adams to see what is going on.

Dave Everton is now the Bloomington Grotto (BIG) liaison.

There was a very short discussion of the Indiana Cave Symposium. Everton thanked the IKC for the \$50 donation towards food and refreshments at the symposium and Tozer said that the weather was too cold. The presentations were held outdoors.

Bowman is trying to get official DNR markers for the Orangeville Rise property but the DNR said that they don't have any and they don't know when they will get any more. They suggested just using plain concrete posts. He said this is low priority and he will follow up periodically.

Dunlap reported that the kiosk at the Buddha property was installed on Under-Earth Day, April 12, 2003. He said it looks good though it has a slight lean and he doesn't know if any bats are using it yet. There are pictures of it in the June 2003 *IKC Update*. A discussion took place on what to display in or on the kiosk. Suggestions included visitation rules, a map of the property, a list of donors and an aerial photo of the property. Dunlap noted that photos of any kind could be expensive to display in an outdoor setting. The Education/Outreach Committee will prepare a proposal for the fall meeting.

Vernier and Dunlap reported that there are problems with the Blanton property. This is the land that contains Lost River Cave. The Nature Conservancy bought the property with the understanding that the Hoosier National Forest would buy it from them; but now, the Washington USDA Forest Service Office says it is not feasible to buy the property as it is outside of the approved purchase boundary and has several items of non-conformity such as an access easement for the barn. It is thought that most of the problem is political. Vernier and Dunlap requested that people write positive letters to Dale Bosworth, Chief of the USDA Forest Service, to demonstrate local support. Tozer said that if the barn is a problem, maybe that part could be sold off. Vernier posted Mr. Bosworth's address on the chalkboard and Dunlap said that he will come up with some talking points that we can use to persuade the powers that be to go ahead with the purchase.

Dunlap reported that on June 2, 2003, the offer on the Wayne Cave property was accepted and that closing should take place on June 30, 2003. The initial closing will probably be Dunlap buying the whole property and then a week later the IKC will buy the 20 acres containing the entrance from Dunlap. The whole deal is subject to the outcome of a survey, which will be done not only to set the boundaries but also to make sure that the cave entrance is actually on the property that we are buying. Jess Gwinn will do the survey, probably the week of June 16-20, and he will need some help. It will probably require one day to cut the line of sight and then another day to actually do the survey.

Dunlap moved to establish the Wayne Cave Fund, seconded by Ingle. The motion passed 13-0-0. Dunlap moved to roll the money in the Land Acquisition Fund into the Wayne Cave Fund, seconded by Tozer. Motion passed 13-0-0.

Dunlap stated that previous land purchase transactions were funded with short-term interest free loans from members and that, if possible, we would like to do that again. The loans were typically for about a year. Bowman asked how much was needed. Dunlap said that the purchase price is \$75,000. With \$20,000 coming from the Land Acquisition Fund, we will have to come up with \$55,000 by the June 30 closing date. Noe asked Dunlap to list the advantages of personal loans versus a mortgage on the property. Dunlap stated that simplicity is the big advantage. No appraisals, no interest, no applications to fill out. Dunlap said that he would ask persons who loaned money before if they would be able to help again. Vernier asked Dunlap if we want to have a committee or if he feels comfortable doing the asking himself. Dunlap indicated that he could handle it. Tozer then moved to issue promissory notes to meet the needs of the Wayne Cave Fund, seconded by Noe. Motion passed 13-0-0.

Dunlap posed the question; do we want to borrow from ourselves? Tozer asked how much we have. Dunlap replied that we have about \$40,000 of which \$26,400 is in the General Fund. Discussion about what was meant by borrowing from ourselves followed. Tozer moved to "borrow" up to \$20,000 from the General Fund and move it to the Wayne Cave Fund, seconded by Ingle. Noe asked if that would leave enough in the General Fund to meet our other expenses. Dunlap assured us that it would. The motion passed 13-0-0. Dunlap said that we have two CDs, a \$10,000 one on a 30-day rotation and a \$30,000 one on a 7 day rotation and he will cash them as needed so as to incur no penalties.

It was decided that the survey and closing costs will come out of the Land Acquisition Fund (as opposed to the General Fund). The costs were included in the \$75,000 price. The actual purchase price of the land will be around \$73,600, depending upon the actual acreage determined by the survey.

On the subject of grants to help with the purchase, Dunlap said that he will apply for an IPALCO Golden Eagle Grant. Tozer said that we can apply to the

National Speleological Society but they will require a management plan before considering a grant. If we can have a management plan in place by August, he can get it on the agenda for the Fall meeting in October. Dunlap asked Tozer what he thought we should be able to get. Tozer said that we got \$5,000 for Sullivan; we should be able to get at least that much from the Save the Caves Fund. Tozer will talk to Tom Lera (NSS AVP) to try and get an idea of what we can get and to make sure we get on the October 18 agenda. RASS and the Robertson Association will also likely require a management plan before considering a grant. Grottos will also be contacted. Noe said that he has learned that the Anthony Wayne Oil Company has been giving out conservation grants. He said that he will contact them to see if anything would be available. Tozer said that he has been in contact with Dick Blenz and Dick is supportive of this purchase but he has other commitments. He will decide how he will help after the NSS Convention.

Vernier reminded everyone that Dunlap is buying 12 acres of the 32-acre parcel with the idea that the IKC may purchase the 12 acres in the future.

There was a discussion of whether the IKC or Dunlap will pay for the survey and the closing costs or if these costs will be split. The transaction will probably consist of two closings, the first when Dunlap buys the whole property and the second when the IKC buys the 20 acres from Dunlap. Dunlap said that his first thought was to have the IKC pay for the entire cost of the survey since the survey of the extra 12 acres would involve little additional expense. Tozer reminded everyone that Dunlap is making it possible for the IKC to purchase this land but he could possibly profit from the eventual sale of his 12 acres. After more discussion, Tozer moved that the IKC pay for the entire cost of the survey and pay for the second closing (Dunlap would pay for the first closing). The motion was seconded by Bowman and passed 11-0 with 2 abstentions.

Dunlap said that he thought a donation solicitation letter should go out right after the first closing. This would be sent to every IKC member and to other known interested people. The letter will also contain a brochure about the cave. Sollman suggested contacting trip leaders of groups using the cave. Noe asked if the brochure will be ready in time for Cave Capers. Lindberg said maybe and she presented a sample, which was passed around for comments. Member Bill Baus thought that all of the photos on the brochure should be in color. Others thought that the black and white photo lent a sense of history. Dunlap said that he would try to have the brochures available at Cave Capers.

Sollman made a report on the proper name of the cave. According to information that Sollman has compiled, the name of the cave is Wayne Cave, not Waynes or Wayne's. The cave was first written about in 1949 by William J. Wayne, a geology professor at IU. All through the fifties, the cave was



called Wayne. The first time it was referred to as Wayne's Cave was in a 1959 BIG newsletter. He had more examples but in the end it appeared that Wayne Cave is the proper name of the cave so Dunlap moved to call the property the Wayne Cave Preserve. The motion was seconded by Bowman and passed 12-0 with one abstention. Tozer moved to change the word Cave to Karst. The motion died for lack of a second. Dunlap asked if we want a guideline on how to refer to the cave. Tozer said we should call it Wayne Cave. There was general agreement.

Noe said that someone should notify the Geology Department at IU that a cave named after a Professor Emeritus has been purchased by the IKC. He said that he would speak to someone there.

Vernier asked for volunteers to form a Management Plan Committee. The committee will be Jamie Winner, Bill Tozer, Keith Dunlap, and Richard Vernier. Bowman said that the committee should move quickly and establish a plan using the Sullivan plan as a basis. There was general agreement to keep the access the same using grotto liaisons. Vandeventer predicted that cave visitation will increase after the property is acquired. Tozer asked if we will have a property manager as well as a cave manager. Dunlap said we could have one person do both jobs or have separate positions. Everton said that the grotto liaison should be required to provide more information to the property/cave manager(s) about who is visiting the property. Tozer agreed saying that having multiple key holders is advantageous but they should be turning in information to the managers.

Dunlap said he thought we should wait until after the management plan is established before we begin work on improving the driveway at the Preserve.

Bowman asked for some high quality photos taken

in Wayne Cave to be used on the IKC website for fund raising efforts. He said the site will again have a "thermometer" to display progress with fund-raising.

Vandeventer said that the deadline for changes to the Wayne Cave fund-raising brochure is Tuesday, June 17.

No date was set for the fence completion project at Buddha. It will probably be in late October or early November. We'll set a date at the next meeting.

Lindberg asked if someone is interested in taking over her job as HNF coordinator. She said she can no longer fit the position into her schedule. No volunteers were forthcoming. Attendance at the HNF workdays/meetings is said to be falling off.

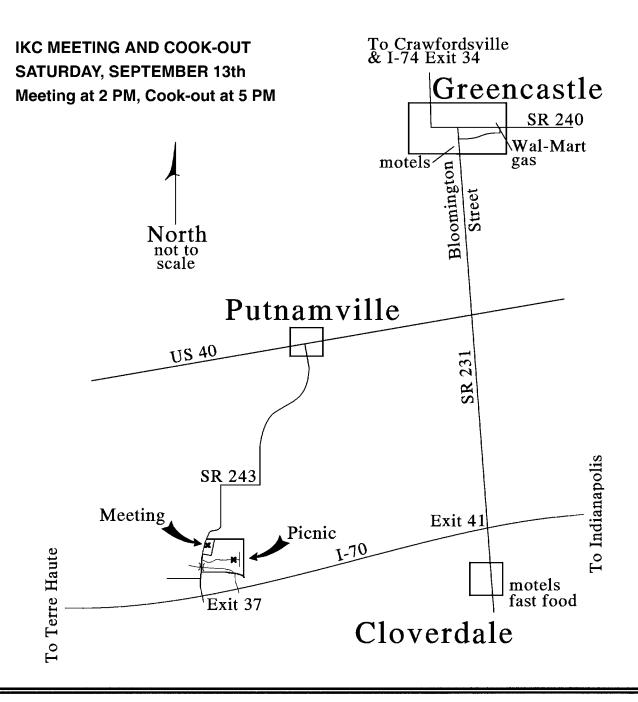
Vernier said that our membership in the Hoosier Environmental Council is about to expire but we haven't received notice yet. Bowman said that we usually send them \$100 and he moved that we give that amount when we receive notice. Ingle seconded and the motion passed 12-0 with one abstention.

Lindberg said that it might be nice if the IKC display were at Cave Capers. There was concern that there would be no secure place to keep it.

The next meeting, which traditionally features a cookout and dessert contest, will be on September 13, 2003. The location will be announced later.

Bowman moved to adjourn. The meeting was adjourned at 9:25 PM.

Respectfully submitted, Bob Sergesketter, Acting Secretary



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 ______ 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. PHONE #_____