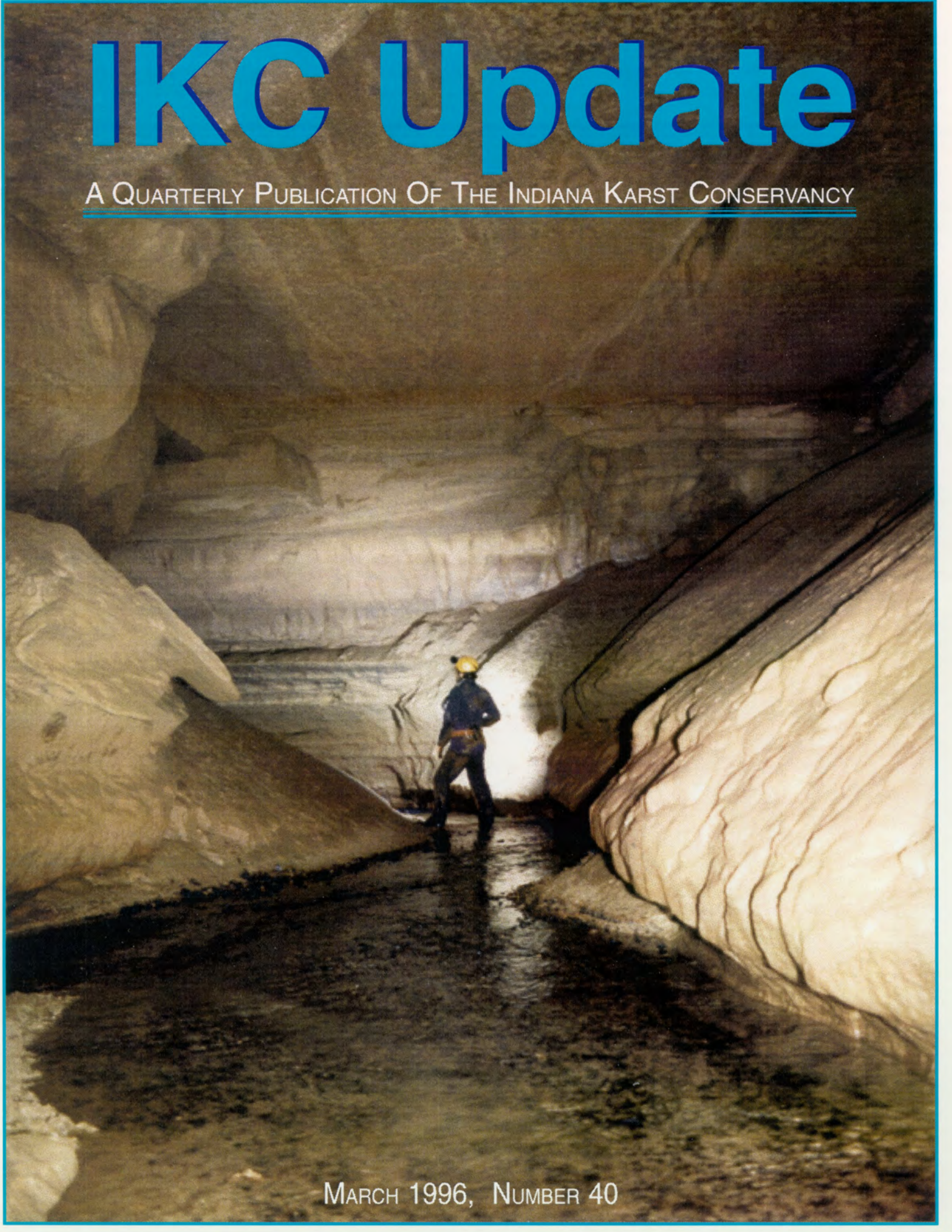


IKC Update

A QUARTERLY PUBLICATION OF THE INDIANA KARST CONSERVANCY

A photograph of a person wearing a yellow hard hat and dark clothing, standing in a narrow, shallow stream within a cave. The cave walls are composed of light-colored, layered rock formations. The person is holding a flashlight, which illuminates the rock wall on the right. The water in the stream is dark and reflects the light from the flashlight. The overall atmosphere is dim and mysterious.

MARCH 1996, NUMBER 40

INDIANA KARST CONSERVANCY, INC.**PO Box 2401, Indianapolis, IN 46206-2401***Affiliated with the National Speleological Society.*

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

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Cover - A seldom visited stream cave in Washington County, Indiana.
 Photo by James Adams © 1996, duplicated on a Tektronix 540
 color laser printer courtesy of an anonymous corporate sponsor.



Publishing courtesy of *Myotis Press*, Editor and Publisher Keith Dunlap.

ANNUAL BUSINESS MEETING REMINDER

SATURDAY, MARCH 16th, 10:00 AM

INDIANAPOLIS, INDIANA

INDIANA WAR MEMORIAL

The annual business meeting is for the explicit purpose of elections. It is also for members and other interested persons to have an open forum for talking 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 meeting is informal, and everyone is encouraged to attend and participate.

Preliminary Agenda Items: elections; brief recaps of last quarter's activities; trespassing on IKC leased property; Wesley Chapel Gulf homestead maintenance; Gory Hole fence; Shiloh pollution; Hoosier National Forest cave activities; IDNR activities; Indiana Cave Symposium; Indiana Earth Day booth; Under Earth Day VII; and much more....

Meeting directions: The War Memorial is located four blocks north of the circle in downtown Indianapolis. It is bounded by Michigan, Pennsylvania, Vermont, and Meridian streets. Enter by the north (Michigan) doors. The meeting room is in the northeast corner of the building (turn left as you enter).

EVENTS CALENDAR

- 16 MAR = IKC ANNUAL BUSINESS MEETING/ELECTIONS, Indianapolis (see above)
- 17 MAR = WESLEY CHAPEL GULF HOMESTEAD WORKDAY, Orleans (see page 4)
- 30-31 MAR = GORY HOLE FENCE CONSTRUCTION, Bedford (see page 10)
- 06 APR = WYANDOTTE RESTORATION PROJECT, Leavenworth (contact Roger Gleitz)
- 13 APR = LOST RIVER TOUR BY BOB ARMSTRONG, Orleans (see page 6)
- 20 APR = INDIANA CAVE SYMPOSIUM, Spring Mill State Park (see page 8)
- 20 APR = INDIANA EARTH DAY CELEBRATION, Indianapolis
- 21 APR = UNDER-EARTH DAY VII, Sullivan Cave (see page 8)
- 04-05 MAY = HNF KARST WORK WEEKEND (see page 5)
- 11 MAY = LOST RIVER TOUR BY BOB ARMSTRONG, Orleans (see page 6)
- 11 MAY = HNF WORK DAY, Harden Ridge (see page 5)
- ?? JUN = HANCOCK PROPERTY WORKDAY, Bloomington (same day as meeting)
- ?? JUN = IKC QUARTERLY MEETING, Bloomington (date/location TBD)
- 31 AUG = COON CAVE RESTORATION TRIP, Bloomington (date tentative)

Membership to the Indiana Karst Conservancy 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 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...

One of the most satisfying aspects of being "in charge" of an organization like the IKC is the knowledge that we are so grassroots. By this, I mean that no one in the IKC has an axe to grind -- no paid staff, no one lining their pockets. Nothing to gain but improving the welfare of the karst. It lends a certain level of integrity and legitimacy that you just can't aspire to otherwise. It's nice to know that whatever you do, whatever decisions you make, no one can point at you and say, "you're just looking out for number one."

The same goes for all the Directors and members as well. We do this because we care...no other reason. Well, maybe because we're fools, too...after all, we do indeed march in where angels dare not tread, right?

But seriously, volunteerism is very much a part and parcel of everyday life in the IKC. And in that spirit, we continue to line up and promote a host of activities in which our members can participate. A quick glance at the Events Calender on page 3 will bring to light a wide range of activities: workdays at Wesley Chapel Gulf and Gory Hole, ridge-walks and mapping projects, Earth Day and Under-Earth Day...the Indiana Cave Sym-

posium and workdays at the Hancock Property...Lost River tours and the Wyandotte Cave cleanup. Have you ever wondered, "what can I do to help the karst?" Well, the document lying in your hands can answer that question in very short order. [If you do nothing else...you can come to Earth Day and help me man the IKC display. Please? Pretty please?]

One other note...be sure and send in your vote. Each of you should have received a mailing in mid-February outlining the candidates for the openings we have this year; if you didn't, let one of the officers know immediately. Even better than sending your vote, come to the Annual Business Meeting on March 16th at the War Memorial in Indianapolis. This is a great opportunity to make your voice heard and to meet, select, and influence those people who will be calling the shots for the next year. Put democracy into practice.

The IKC will gladly take your dues money and we definitely appreciate the extra donations...but your participation is what makes the IKC the organization that it is.

- Bruce Bowman

IKC WORKDAY AT WESLEY CHAPEL GULF HOMESTEAD - MAR 17th

The Indiana Karst Conservancy has volunteered to perform surface maintenance on the property containing Wesley Chapel Gulf in Orange County. The property is currently owned by the US Gypsum Company in anticipation of it being transferred to the Hoosier National Forest as part of a land exchange agreement. The exchange will not be completed until later this year, and thus maintenance is needed during the transition period. The IKC has volunteered to assist in keeping the homestead presentable to discourage vandalism. Tasks to be accomplished on the first workday, March 17th, will focus on the removal of downed limbs from several large trees. The main tools needed are chainsaws. You can take as much firewood as you can carry off.

For those of you who may not be familiar with Wesley Chapel Gulf, it is one of the primary karst features associated with the Lost River drainage basin. The Gulf is basically an eleven acre karst window with a large spring rise at its southern end and several sinks located around its perimeter. Several caves are located on the property (note: for liability reasons, we do not have permission to enter the caves). Come and spend the day, have some fun, see the sights, accomplish some work, and help preserve the homestead. Starting time is 10 AM. For more information and/or directions, call Bruce Bowman or Keith Dunlap (phone numbers on page 2).

NEWS BRIEFS...

- ☐ On February 14th, the Indiana Karst Conservancy officially turned ten years old. While it was actually organized by a handful of cavers in 1985, it did not receive its incorporation papers until February 1986 with its first elections in early March. Of the 36 members who joined in 1986, 14 are still members including George Brutchen, George Cesnik, Jeff Cody, Steve Collins, Keith Dunlap, Scott Fee, Dave Haun, Glenn Lemasters, Lynn Miller, Ernie Payne, Tom Rea, Noel Sloan, Kevin Strunk, and Bill Tozer.
- ☐ You may have noticed on your membership renewal letter above your name and address there was a membership number and a "member since" date (this information is also included in the membership roster starting on page 25). This data was added to the permanent database by examining the past ten year's financial and membership records to determine when each member joined so that we could assign sequential membership numbers. Over the past ten years, there have been 298 different members, approximately half who are still with the IKC. While this retention rate may seem low, it is actually relatively high (the NSS has retained only about 20%).
- ☐ In addition to the Wesley Chapel Gulf workday and the Gory Hole work weekend outlined on pages 4 and 10, the Hoosier National Forest also needs volunteers for other karst related projects including ridgewalking for new caves and karst features, verifying existing cave locations, cave mapping, cave value inventorying, and library researching. These projects can be completed by individual groups or organized as grotto projects. May 4/5 and 11 have been designated field work days, but volunteers can set their own schedules. For more information, contact Larry Mullins at (812) 275-5987.
- ☐ In November, Bruce Bowman attended the annual meeting and banquet of the Hoosier Environmental Council (HEC) in conjunction with a Water Quality Workshop at Abe Lincoln Lodge in Brown County State Park. The HEC has received several grants over the past year and is now much more financially solvent than it has been in the past. This has allowed HEC to retain the segregated funds to pursue its various initiative in protecting Indiana's environment. Most noteworthy is the Groundwater Quality fund which means karst-related protection activities will remain high on their agenda for 1996. In a last-minute political campaign blitz, Bruce was also elected to serve a three year term on the HEC Board of Directors.
- ☐ On a related note, the IKC received the Hoosier Environmental Council's *Organization of the Year* award for 1995. HEC cited our continuing vigilance regarding the SR 37 highway project as one of the accomplishments worthy of recognition. HEC is the largest environmental organization in Indiana and the IKC should be very proud of this honor.



- Bob Armstrong will once again be conducting his guided tours of the Lost River area, starting from the east at its head waters in Washington County, through Orange County to its disappearance near Orleans, and on to its rise near Orangeville. The spring dates include April 13th, May 11th, and June 22nd. The tour will leave the southeast corner of the square in Orleans at 8 AM sharp on each of those days. The tour is free, but a small donation is requested for the optional printed handouts. For more information, contact Bob at (317) 926-4266.
- While long term disposition of most of the Jefferson Proving Ground (JPG) is still in limbo, the fate of the 4,300 uncontaminated acres south of the "firing line" has been decided. Approximately 1,000 acres will be deeded to Jefferson County to be used as a county park. The remaining land and buildings were sold at auction to a local agribusinessman who plans to farm some of the land while hopefully finding alternative uses for the remaining industrial areas. The bid was reportedly between \$4 and \$5 million. There are new efforts to revive the 51,000 acre USFWS wildlife refuge plan, but this will not happen unless the US Army agrees to retain liability for the contaminated areas.
- Fourteen cavers participated in the CIG/IKC December restoration trip to Wayne's Cave. Accomplishments included trash and carbide removal from the crawlway, trash and carbide removal from Old Wayne's (including several buried trash dumps which were exhumed), and photo-documentation of the RPI formation section (see pages 7 and 10). Cavers making the trip included M.E. Armbruster, Ted Bice, Dave Carothers, Mike Dowden, Dave Haun (leader), Kevin Howlry, Don Ingle, Tony Jones, Tom Liddle, Kristie Lindberg, Henry McFall, James Owensby, Julie Volle, and Kurt Volle.
- As was reported in the last *IKC Update*, several "cave-for-pay" outfitters have been advertising trips to private caves in the Garrison Chapel area. One of these organizations is the Indiana Memorial Union Outfitters which advertised trips to Buckner and Small Dull caves. The IKC sent two letters expressing our concern regarding fees, insurance, and whether the organization had asked and received permission to visit Small Dull, which is believed closed. IMU Outfitters clarified that the fee paid was supposedly for equipment rental only. They also felt that they have adequate insurance, but they never really responded to the trespassing issue.

It may be that IMU Outfitters has decided not to continue with the practice of taking novices to Small Dull, or perhaps an alternate route to the cave has been arranged with the landowner. If anyone has more information on this matter, or encounters an IMU Outfitters trip in the Garrison Chapel area, please inform one of the IKC officers.
- Expanding our influence to the west, the IKC has appointed Richard Orr as the grotto liaison for the Stygian Grotto in St Louis. Richard is the chairman of the grotto and is very interested in cave conservation activities. As grotto liaison, his responsibilities will include notifying the grotto members of IKC activities and communicating items of local importance back to the IKC. The IKC welcomes Richard and the Stygian grotto.
- The IKC is saddened to report that the owner of Suicide Cave, Thomas McGrain, has passed away late last year from cancer. The ownership of the property has been transferred to Mr. McGrain's children who appear interested in continuing the existing cave management agreement with the IKC. Please continue to arrange all trips through the cave's patron, Ronnie Burns. Mr. McGrain's support of IKC activities on this property has been very much appreciated. He will be missed.
- Distributed with this issue, members should have received a copy of our Special Reprint #7, *Some Features of a Small Cavern at Marengo, Crawford County, Indiana* by Marion Fidler. This 1934 reprint from the Indiana Academy of Science carefully details the observations made by Fidler on several trips into Old Town Spring Cave. Part of the cave was recently purchased by the owners of Marengo Cave and has been gated for its protection. The owners are also using the cave for "adventure" trips, providing educational and conservation experiences along with the recreational aspects typical for these types of excursions.

- ❑ The report detailing the 1994/95 Indiana bat census has now been published and is available upon request. The 74 page report, co-authored by Dr Virgil Brack, Dr Karen Tyrell, and Keith Dunlap documents results from their biennial visits to known hibernacula. The research was sponsored by the Indiana DNR Non-game Section. The findings were previously summarized in the June 1995 (#37) *IKC Update*.
- ❑ On a related topic, the Indiana DNR Non-game and Endangered Wildlife Section has published their 1995 Annual Report (contact Keith Dunlap for a copy). The report summarizes the status/progress of a number of projects being conducted by their staff biologists and other researchers performing work under funded contracts. Projects included work on River otters, Bald eagles, Peregrine falcons, Barn owls, Allegheny woodrats, bobcats, badgers, Indiana bats, Swamp rabbits, Northern cavefish, and many other species. The Non-game Section, with a staff of five, is funded almost entirely by the Indiana income tax-checkoff (line 28) donation.
- ❑ The only remain task to complete on the 1995 National Cave Management Symposium is to compile and publish the symposium's *Proceedings*. Bruce Bowman is diligently hounding presenters to submit their papers while Tom Rea has the unenvious task of editing and formatting the papers. Currently about 70% of the papers have been submitted and formatted. The goal is to have the publication to the printer by early June so it will be available for sale at the NSS Convention in early August.
- ❑ Attached to the back of this issue is a cumulative index for the *IKC Update* covering years 1993-1995 (issue numbers 28-39). Larry Reece compiled the index as he has done for all previous issues and his efforts are appreciated.
- ❑ Results of the silent book auction are in. Helen Wright of Howell, Michigan had the highest bid of \$70 for *Trapped!*, the ill-fated story of Floyd Collins. The book had been autographed by the author, Roger Brucker. Many thanks to Helen and to Kent Wilson who originally donated the book.
- ❑ Several other donations have been received over the past several months including donations from Bruce Bowman, George Brutchen, Danielle Burden, Scott Fee, Joe Gasperi, Tem Hornaday, Susie Strickland, and Bob Vandeventer. Special recognition should go to Jeff Farr and Bob Masta for their generous donations. Finally the IKC has also received donations from Boy Scout Troop #21 and Sycamore Schools as a result of cave related presentation conducted by Dave Haun and Bill Greenwald. Thanks to you all for your extra support.
- ❑ Six new members have joined the IKC since December. Welcome individual members Harold Geick, Mary Ellen Murphy, Bob Thompson, and Dan Thornton, along with organizational members the Stygian Grotto and T.E.A.M.S. Our current membership now stands at 154. Welcome.



photo by Don Ingle

THE FOURTH ANNUAL INDIANA CAVE SYMPOSIUM

by Keith Dunlap

The fourth annual Indiana Cave Symposium will be held at Spring Mill State Park, Donaldson's Shelter on Saturday, April 20th. This year's event is being co-sponsored by the Indiana Karst Conservancy and the Indiana Cave Survey with funds from the 1992 NSS Convention Committee honorarium. There is a \$2 per vehicle entry fee into the park, but otherwise the symposium is free.

This year's Symposium will begin at 6 PM in the shelter. The purpose of the event is to allow the active caving groups in Indiana to share their projects with each other and to promote cooperation among the groups. The emphasis of each presentation will be on exploration, surveying, and conservation projects. It is preferred that the talks be on activities within Indiana, but if the caving group's most significant project is outside the state, exceptions will be made. The talks should be from 15 to 30 minutes in length with time for questions. There will be a slide

projector and overhead projector available, but visuals are not required.

Prior to the presentations, starting at 4:30 PM, will be a pitch-in dinner. Hot dogs, chips, and related condiments will be provided. It is suggested that everyone bring a salad, dessert, or drink to share.

Camping for Saturday night will be available at the Spring Mill campground (camping fees are the responsibility of those who camp).

On Sunday the IKC will host their Under Earth Day cleanup at Sullivan Cave (see the article below for more information).

For the weekend to be a success, there needs to be involvement of the active cavers throughout Indiana and the neighboring states. It will be a great weekend with the cookout and Symposium on Saturday and the Sullivan Cave Cleanup on Sunday.

For more information or to schedule a talk, contact Dave Black at (812) 951-3886.

UNDER EARTH DAY VII, APRIL 21st

by Keith Dunlap

The Indiana Karst Conservancy will once again be sponsoring a cleanup in Sullivan Cave (Lawrence County) to celebrate Earth Day. This year's date is Sunday, April 21st, starting at 10 AM.

For cavers who are not familiar with Sullivan Cave, it is Indiana's third longest, with over nine miles of passage. The cave is privately owned, and has seen its share of abuse over the last thirty years. In 1989, the Central Indiana Grotto installed a gate on the entrance at the request of the owner. Since that time, numerous restoration trips have been completed, improving the aesthetics of the cave significantly. However, there is still much to be done and your participation is needed.

Sullivan is a caver's cave, offering something for everyone. If you are a novice caver, an easy trip to the Mountain Room and back will wet your appetite for this cave. There is plenty of wire brushing and mud-washing that can be done in the Backbreaker area and beyond. For the experienced caver, you may wish to venture up or downstream in

Sullivan River (assuming the water is not too high) removing graffiti and collecting trash in the lesser traveled area. Haul bags, plastic bags, wire brushes, and other equipment will be provided, but feel free to bring your own.

Sullivan is appropriate for beginners and older children. ***All that we ask is that everyone have a helmet, proper footwear, and adequate light sources.*** A liability waiver must also be signed for the owner.

For those coming from the north, we plan to car pool (parking is limited) from the west side Bloomington K-Mart (SW quadrant at SR 37 and 48, specifically directly behind Bob Evans), leaving at 9:15 AM. There will be a short safety/orientation meeting at the cave's entrance at approximately 10 AM. Someone will be stationed at the cave's entrance all day, so you may show up later and still participate. Plans are to be out of the cave by 4 PM. To obtain further information, contact Keith Dunlap (317-242-2505/882-5420) or Bob Vandeventer (317-888-4501).

MAYFIELDS CAVE AND NORTHWEST INDUSTRIAL PARK

by Bruce Bowman

On December 5, the IKC's attorney and President met with the attorney and an engineer of the developers of Northwest Industrial Park (Coyne and Smith, respectively). This industrial park is in the recharge area of Mayfields Cave, site of a significant bioinventory in the early 1900's. Previous reports in the *IKC Update* have outlined the situation with the rezoning of the property and the efforts of the DNR and IKC to obtain baseline measurements of the cave fauna to assess the impact of the development.

Although initially tense, the meeting eventually became very cordial. However, the developers strongly believe that the development has been done assuming "worst-case" scenarios for the welfare of the karst from the outset (they had hired EarthTech as a consultant). Since the zoning variance went through long ago, it was clear we would not have a great deal of influence on them. Mr. Smith seemed very interested in some inexpensive ideas that were used for holding ponds in the widening of state road 37. He took several notes and hopefully implemented them.

The actual plans were shared with the IKC and are on file. The significant karst is not being developed on at all, but there was clearly room for improvement...two sinkholes had already been paved over. Standard techniques (i.e., riprap) were used to "stabilize" the sinkholes. Swales have been put in place to channel heavy rainwater to holding ponds rather than into sinkholes.

The IKC presented several options which we felt might be able to help alleviate concerns:

- 1) We offered to hold a the conservation easement on the properties being set aside. The attorney clearly felt this was out of the question, as they felt no one would buy a parcel if there was an environmental organization watchdogging

them all the time. Mr Coyne felt that the county ordinances for conservation set-asides would be adequate for that purpose.

- 2) We offered to dye-trace the sinkholes, explaining that we had a scholarly interest in the property that went beyond just protecting the karst.
- 3) We asked if we could walk the property during off-work hours and do a karst inventory, explaining that karst features are often best found in the winter. They have very detailed maps with 1-foot contour lines that would have made this very easy to do...three caves have already been found on the property.

The IKC also put forth a major concern over erosion control, stating that this was a major point of contention with state road 37. It was interesting how word gets around... the developers were aware of our activities with regard to INDOT and assured us that any grading would be promptly seeded to avoid a repeat of this situation. Whether this actually happens remains to be seen.

The attorney said he would consult with his client and get back with us on points 2 and 3 above. About two weeks later, we were notified that they did not want anyone outside of workmen walking the property, citing liability concerns.

The concerns about this development remain very real and will continue to be followed closely by the IKC. Although stopping the development was probably never something that could have been done with effect, we must remain alert to new hazards and take action immediately when warranted. Even after the development is completed, it could be several years before all the plots are sold and built on; and we will need to keep an eye on these other contractors as well to make sure they don't introduce new hazards to the karst in this area.

DON'T FORGET TO RENEW YOUR DUES

HOOSIER NATIONAL FOREST GORY HOLE FENCE PROJECT

by Larry Mullins

The Hoosier National Forest needs your help on the weekend of March 30 and 31 (9:00 am both days) to build a split rail fence approximately one hundred feet in diameter (300 feet in circumference) around the entrance of Gory Hole in Lawrence County. This fence will be in the classic "Abraham Lincoln" style with interlocking split rails. There will be no digging of post holes or other forest disturbance. The rails are being cut and split by fellow caver Richard Newton owner of Eastern Red Cedar Products. They will be delivered on site prior to our 9:00 AM Saturday starting time. Camping at Gory Hole parking area, with free chili, corn bread and singing of cave ballads (such as "Gory Gory...") will be enjoyed by all well into Saturday night.

Work will continue on Sunday until the fence project with associated signage is completed. Ridgewalking assignments to locate cave and karst features will be offered to willing participants if time is left after the fence is completed. Like other HNF projects, all participants will need to sign a volunteer's agreement. T-shirts will be provided to new KARST team participants. For safety and liability reasons, no

caving in Gory Hole will be allowed while work on the fence is underway.

Gory Hole is generally recognized as the longest free drop pit cave in Indiana. This pit is 142 feet deep (more or less). Gory Hole pit and most of the associated passage has been known since the early 1800's when it was virtually in the backyard of Colonel Bryant the namesake of Bryantsville. The Hoosier National Forest acquired the cave and the forty acres surrounding it in 1993 because of the cave's significance.

It has been determined that this cave has sufficient danger associated with its pit entrance that it is necessary to provide some warning for unsuspecting hikers who might be in the area of the pit. Cavers certainly share this desire to prevent accidents both for humanitarian reasons and to assure continued free access.

Please set aside the last weekend in March to give something back to caving. Come out to join us in this fun work project! Your efforts will be appreciated!

If you have questions, call Larry Mullins at (812) 275-5987, or e-mail to /S=L.Mullins/OU1=R09F12a@mhs-fswa.attmail.com

Formations in Wayne's Cave, RPI Discovery area. Photographed during the December IKC/CIG annual restoration trip.

photo by Don Ingle



American Caves -- Objects Of Beauty Become Victims Of Vandalism The Destruction of our National Treasures

by Peggy Nims and Debbie Foster

The aesthetic value of nature is a difficult thing to measure. How do you put a price tag on a mountain or a river? Is a forest worth more than the base value of the timber? How many pieces of silver is the world's greatest cave worth?

In the eyes of the three young men who have been indicted for allegedly removing hundreds of pounds of formations from Crystal Cave, the value of one of the world's most significant caves is apparently about \$1.00 per pound. Yet, to many who know and love this unique natural cavern, the mineral formations destroyed in this act of vandalism were priceless.

Crystal Cave is one of several extensive cave systems located within the boundaries of Mammoth Cave National Park. The cave officially became part of Mammoth Cave when explorers with the Cave Research Foundation physically connected the two caves in 1972. The cave also goes by the earlier names "Great Crystal Cave" and "Floyd Collins Crystal Cave."

Floyd Collins, America's most renowned cave explorer, discovered Crystal Cave in 1917 during the height of the "Cave Wars." This was a period of intense economic competition when rival cave operators aggressively vied to attract the increasing numbers of tourists who ventured to Kentucky for the first time by automobile.

Collins' 1925 entrapment and death in Sand Cave while trying to find a more commercially accessible entrance to his "Great Crystal Cave" was one of the most famous human interest stories between the World Wars. After Collins' death, Dr. H.B. Thomas purchased Crystal Cave and was successful in attracting thousands of visitors to see the newly named and, by then, nationally known "Floyd Collins Crystal Cave."

To early explorers, Crystal Cave was an extraordinary cave. The cave was profusely decorated with some of the most unusual displays of rare helictites and gypsum flowers known anywhere in the world. Early Crystal Cave travel brochures described crystals "whose brilliance rivals the most costly of jewels... duplicates of all the varied flowers of the field and garden... thousands of them, and no two exactly alike."

Furthermore, the cave seemed endless!

Many of Crystal Cave's passages were known only to Floyd Collins and were, subsequently, lost when he died. By the 1960's, however, a new generation of cave explorers had begun mapping and exploring this immense labyrinth. Today, Crystal Cave is part of Mammoth Cave, the world's longest cave system with a surveyed length of more than 350 miles.

For most of this century, Crystal Cave has reigned among the great cave systems of the world. Because of a single incident of vandalism, Crystal Cave, once an object of incomparable beauty, has undergone a sad transformation.

On September 13, 1995, we descended the narrow, crumbling stairway into Crystal Cave to take a closer look at the vandalism which had occurred. We passed the engraved Floyd Collins discoverer stone, which stood as the cave's sentinel, and proceeded through the original cave gate which stood ajar on its rusty hinges. We soon arrived at the main gate, a solid steel enclosure with an opening just large enough to slip one's hand through to fit a key into the padlock. In early spring of 1995, the alleged vandals had breached this second gate by digging underneath it. Shamelessly, the alleged intruders had spray painted their names in bold, white letters just to the right of the cave entrance.

As we entered the cave, we noticed test sites where pieces of gypsum had been chipped off to determine the quality of the specimens and the ease with which they could be removed. Descending into Grand Canyon Avenue, the cave's impressive entrance canyon, we saw scuff marks on the cave floor where the vandals had dragged their loot.

Bearing to the right, we discovered crumbs of gypsum flowers littering the cave floor. Gypsum crust, some pieces weighing 60 pounds, had been systematically hacked from a 20 foot long by 5 foot high section of the wall. These once glistening formations now lay strewn at our feet. This trail of destruction continued for a mile into the cave.

Retracing our steps to Grand Canyon Avenue, we climbed the steep trail to the Helictite Gallery. This area of the cave had been filled with helictites that twisted and curled in every direction. When we arrived at the Gallery, we were dismayed to discover once spectacular formations that now resembled lifeless fingers

and bones lying scattered on the red Kentucky clay bank.

The destruction we saw in Crystal Cave was more than a simple act of vandalism. Those who were responsible were involved in a large scale removal of cave formations for commercial purposes. As testimony to the demand for cave rocks, nearly six hundred pounds of the formations taken from Crystal Cave were recovered from souvenir shops in the Mammoth Cave area. Obviously, if a market for these items did not exist, caves and their treasures would be less vulnerable.

Instances of Vandalism

Dr. Floyd Scott, a professor at Austin Peay University in Clarksville, Tennessee, discovered the intrusion into Crystal Cave on June 8, 1995. Indictments issued by a federal grand jury indicate that the cave had been entered on six occasions from April 13 to June 8, 1995.

On September 20, 1995, two Munfordville, Kentucky men, Wendell Leon Reynolds and Anthony Dale Stinson were arraigned and charged with the theft of government property (formations from Crystal Cave). Reynolds, Stinson and a third man, Anthony Wayne Hawkins of Radcliff (Kentucky), were charged with destruction of government property. All three pled not guilty to the charges.

The trial is scheduled for January 16, 1996, in the U.S. District Court in Bowling Green, Kentucky. It is hoped that the publicity sur-

rounding the trial will help bring public attention to the problem of cave vandalism and deter future incidents of vandalism. Defacing, breaking or damaging cave formations is a serious problem and is, in national parks and many states, a punishable offense.

Unfortunately, vandalism of cave formations is a common occurrence throughout the United States. What makes the vandalism of Crystal Cave unique is the scale of the destruction. Brad McDougal, one of the investigating National Park rangers, lamented, "Our children, grandchildren and no one else will ever see Crystal Cave the way it was. It's gone. This was a case of wholesale mining instead of vandalism."

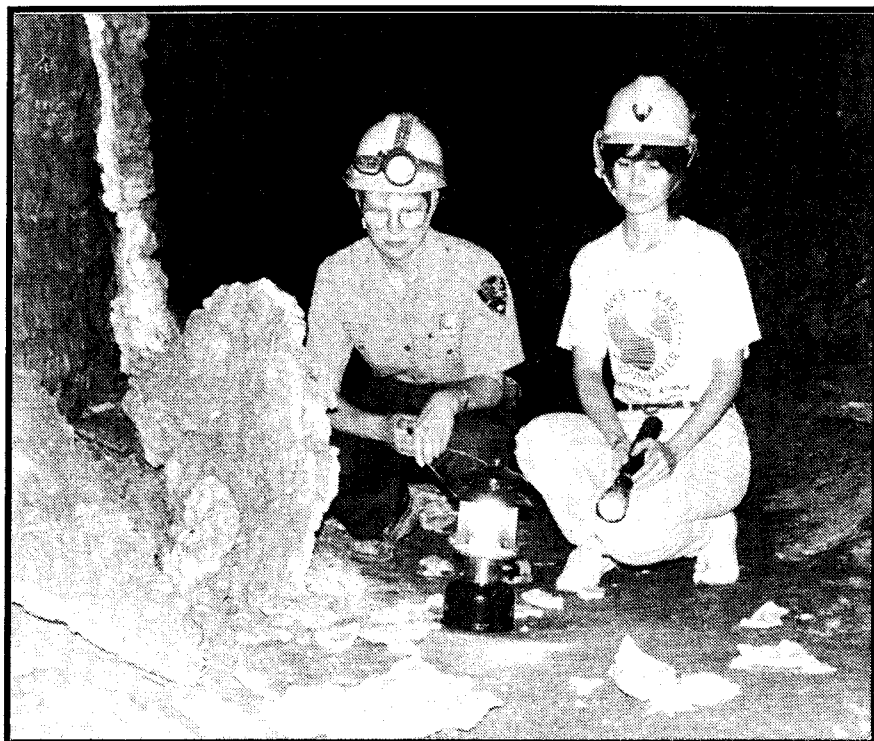
Ronald Switzer, Superintendent at Mammoth Cave National Park, sadly concluded, "Crystal Cave has been damaged to the extent that it cannot be used for interpretive purposes except to show what happens if we destroy our natural resources."

But what happened at Crystal Cave is not all that unique. Almost every significant cave in America has been impacted by vandalism in one form or another. The damage has been done in both commercial and noncommercial caves. It occurs in both publicly and privately owned caves. Pristine caves in the United States are well on their way to becoming an extinct resource.

Much of the damage is caused by so called "flashlight cavers." These are inexperienced weekend spelunkers who are usually not affli-

Vickie Carson, Mammoth Cave National Park public affairs officer and Debbie Foster, ACCA associate director view the damage to gypsum wall in Floyd Collins' Crystal Cave.

photo by Peggy Nims



ated with organized caving clubs. Typically, these individuals are poorly educated about cave conservation and safety practices. They think nothing of stepping on or breaking formations during their subterranean adventures. Serious formation vandalism also comes in the form of souvenir collecting at America's commercial caves. The millions of people who walk tour paths come within tantalizing reach of a variety of cave formations. A guide leading as many as thirty or more people through a cave often has a difficult time policing the behavior of people at the back of the line.

Ed Hay, owner of Crystal Onyx Cave, Kentucky, related one such incident. Tour visitors recently reported that two people had broken off cave formations and concealed them in their backpacks while on a tour of Crystal Onyx Cave. Unfortunately, the pair disappeared before they could be detained.

The removal of a few formations multiplied by thousands of such incidents has had a devastating effect on even the most spectacular of America's caves. For example, a monitoring study in Carlsbad Caverns National Park revealed the loss of an estimated 18,480 cave formations between 1985 and 1993.

Despite extensive losses at Carlsbad, National Park Service officials have been reluctant to implement management policies to stop visitor abuse of federally operated caves. Self-guided tours at Carlsbad Caverns, for instance, have for years left the cave vulnerable to approximately six hundred thousand annual visitors.

The problems affecting National Park Service operated caves underscore the nation's cave management problems as a whole. Arguably, if America's best known national treasures can't be protected, what hope is there for the protection of caves that lie beyond the boundaries of nature preserves and park lands? Most of the 45,000 known caves in the United States are privately owned and easily desecrated.

How bad does it get? ACCA's executive director, David Foster, recalled an incident related to him several years ago by a Texas caver. The caver had joined several local residents on a trip into a newly discovered pristine cave. The cave was coated from wall to wall with fragile calcite crystals. When they reached the crystal room, the local boys picked up rocks and began shattering the irreplaceable crystals.

Last year, an article in the Winter/Spring 1994 issue of American Caves Magazine reported a similar incident at Texas' Cave Without A Name. One of the youths who admitted to participating in the vandalism explained that he just "did not think" about what he was destroying.

The problem of cave vandalism involves a deeply rooted lack of public awareness and re-

spect for cave environments. Cave vandalism has become a national epidemic which threatens to destroy the most fragile natural geologic features on Earth.

Preventative Measures

As more and more caves are destroyed by vandalism, cavers and conservationists are stepping up efforts to combat the problem. Some commercial cave owners have adopted rather innovative protective measures. At Fantastic Caverns in Springfield, Missouri, propane powered jeeps are used to drive visitors through the cave. From this unique viewpoint, visitors are allowed to observe fragile formations such as flowstone and cave pearls but are prevented from trampling them.

High tech equipment, such as motion sensing devices and infrared cameras, have also been installed to deter vandalism. Such methods are, however, expensive and impractical for most caves. A more common method of reducing damage to formations is by constructing trails and installing lights in ways that restrict visitor access. Limits on the size and number of cave tours, and, in some cases, the actual closure of sensitive caves or cave areas have also been employed.

A major cave protection strategy in the less populated western regions of the United States has been a philosophy of secrecy. A few significant caves have been kept hidden literally for decades because of the fear that public knowledge of their location would lead to their destruction. However, secrecy works only if local looters and flashlight cavers don't already know where the caves are. In these situations, the only effective management strategy is a good cave gate backed by a long term management commitment.

Over the past decade, ACCA helped design a type of bat friendly cave gate which has been widely used throughout the United States. ACCA Director Roy Powers has designed more than a hundred of these gates in significant caves and in mines which have become bat habitats.

In terms of expense, cave gates are very cost effective. Their biggest weakness is the tendency to build them and forget about them. For cave gates to work, they must be maintained. A cave gate which has been breached is worse than no gate at all. A breached cave gate leaves the cave open and may create a potential hazard if parts of the gate have been weakened by blasting or cutting.

Cave gates must be monitored regularly, repaired and painted as needed, and replaced when they become old and too rusty to prevent

continued on page 24

MARENGO CAVE CLEAN-UP

by Larry Reece

The 1996 annual Marengo Cave clean-up was held on January 20 - 21. This popular annual event is limited to 40 participants and the spots fill up quickly. This year Marengo provided sleeping space at an old church building in Milltown for those who wished to come down on Friday evening and/or stay over Saturday night. The church building contained mattresses and toilets and was much nicer than the unheated, no-toilet bunkhouse that was used a few years ago. The church proved to be a popular place on Friday evening with about 25 or so people spending the night after watching a slide show on a Mexican caving trip.

This year's clean-up was concentrated on an area close to the Dripstone Trail entrance. During trail construction many years ago, the dirt and rocks that were removed to form the trail path were piled on the side of the passage on top of a flowstone shelf about four feet above the final trail height. The project was to remove this debris and clean the flowstone to return it to a more natural state.

Based on a process used in the Caverns of Sonora the material was removed in baskets and buckets. Rocks were placed on a piece of chain link fencing about three or four feet square that had rope handles tied to each corner. With 50 to 100 pounds of rock on the

fencing four people each took a corner of the wire and carried the rocks out of the cave to a hillside dump area. Dirt was removed from the project area and placed in five gallon buckets, filling them about two-thirds full. Three of these buckets were loaded on a two wheeled hand cart and taken out of the cave to the dump site. With several hand carts and quite a few buckets, the work went fairly quickly. Participants had the chance to rotate through several different tasks such as filling buckets, hand carrying them up a short series of steps, loading hand trucks, pushing hand trucks out of the cave, and emptying buckets.

As usual a fine box lunch was provided by Marengo's staff as well as a commemorative (limited edition) T-shirt. After lunch and some more debris removal, it was time to start cleaning the uncovered flowstone. This was accomplished by using the pressurized water spraying method that has proven to be very successful in other areas of Marengo in the past.

An additional smaller group of participants spent the day in the Crystal Palace area cleaning rimstone dams and doing other clean-up tasks in that area.

A trip to the New Discovery area on Sunday as a reward for Saturday's work was the highlight of the day for those on this trip.

Removing trail dirt and debris from the flowstone shelves in the "Flowstone Forest" area of Marengo Cave during the 1996 restoration workday.

photo by Larry Reece



INDIANA KARST CONSERVANCY TREASURY REPORT
Income Statement
From October 01, 1995 to December 31, 1995

INCOME:

Dues Apportionment and Residuals	577.50	
Donations	71.00	
Interest	104.55	
		\$753.05

EXPENSES:

IKC Update (Printing/Production/Mailing):	138.09	
Membership Correspondence/Expenses	72.36	
Misc Correspondence/Info Request/Conservation	154.34	
Property Management Expenses	33.75	
Other misc expenses (PO Box, HEC meeting)	83.00	
Special Reprint #7	67.35	
		(\$548.89)

NET OPERATING EXCESS (DEFICIT) THIS PERIOD \$204.16

Balance Sheet
December 31, 1995

ASSETS:

Cash in Bank	13071.49	
Total Assets		<u><u>\$13,071.49</u></u>

LIABILITIES & OPERATING EXCESS:

1995 National Cave Management Symposium	6866.19
Indiana Cave Symposium Fund	303.82
Hancock Property Maintenance Fund	205.81
DNR Non-Game Fund	270.00
Deferred Dues Fund: 148 members - 1995 25%	555.00
2 members - 1996 100%	30.00

Previous Operating Excess	4636.51
Net Excess (Deficit) This Period	<u>204.16</u>

Current Operating Excess	4840.67	
Total Liabilities & Operating Excess		<u><u>\$13,071.49</u></u>

Actual IKC Assets (Total assets minus NCMS & ICSym accounts) \$5,901.48

Participation on this trip was also limited and preference given to those who had not seen the area before. Participation this year represented several grottoes, states and organizations with the IKC well represented by many of it's members present. As in the past, the management and staff of

Marengo Cave went out of their way to provide a great weekend for the participants. They accomplished one of their clean-up objectives with the help of the cavers. The cavers did a little work, had fun, and generally went home feeling good about what was accomplished.

BYLAWS OF THE INDIANA KARST CONSERVANCY, INC.

(as amended December 2, 1995)

ARTICLE I: NAME

The name of this not-for-profit corporation is the Indiana Karst Conservancy, Inc. (the Conservancy).

ARTICLE II: PURPOSES

The purposes of the Conservancy shall be to carry on programs of:

- A) Protection, management, and acquisition of karst features and their environs, with emphasis on Indiana.
- B) Scientific study and conservation education of and about karst features and their environs, with emphasis on Indiana.

ARTICLE III: MEMBERSHIP

3.1 CLASSES

There shall be the following Classes of Membership in the Conservancy:

3.1.1 Individual Membership

Individual members are natural persons who have paid membership dues. Individual members shall have the right to vote for the Executive Board, vote for bylaw changes, hold office provided they meet all requirements as outlined in Article IV, be appointed to committees, and chair committees.

3.1.2 Organizational Membership

Organizational members are organizations whose principal goals and objectives are consistent with the goals and objectives of the Conservancy and whose governing organizations wish to support the Conservancy and receive the benefits of membership. Organizational members shall have election-only voting privileges consisting of one vote per organization.

Members shall have all privileges and benefits of membership which may be established and approved by the Executive Board. The Executive Board of the Conservancy may establish other classes of membership which may or may not have voting rights.

3.2 Membership Acceptance

Upon application for individual membership and payment of the appropriate annual dues, the applicant is accepted as a member of the Conservancy.

Upon application for organizational membership and payment of the appropriate annual dues, the Executive Board shall decide to accept an applicant for membership.

3.3 Member's Declaration of Membership

Upon membership acceptance, an individual or organization may declare itself a member of the Conservancy, subject to annual renewal through payment of dues. Organizational members may designate themselves "a member of" or "affiliated with" the Indiana Karst Conservancy.

3.4 Revocation of Membership

Individual or organizational membership in the Conservancy may be revoked by the Executive Board by a 2/3 positive vote. Prior notification of the pending vote will be given to the member in question. Grounds for revocation of membership shall include evidence of action(s) by the member which are inconsistent with and in conflict with the purposes of the Conservancy.

ARTICLE IV: MANAGEMENT OF THE CONSERVANCY

4.1 Executive Board

4.1.1 Numbers

The Management of the Conservancy shall consist of an Executive Board composed of: a President, a Secretary, a Treasurer, and not less than four (4) nor more than twelve (12) Directors. The actual size of the Board, within the limits just described, shall be ten (10) percent (rounding any fraction up) of the total voting membership on the day of the Annual Business meeting.

Each Executive Board member shall be a member of the National Speleological Society, or agree to become a member upon being elected.

4.1.2 Terms of Office

4.1.2.1 Officers

The three (3) Officers (President, Secretary, and Treasurer) will be elected annually for one year terms.

4.1.2.2 Directors

Directors will be elected for two year terms, except as required to comply with the following election rule: No more than one half (1/2), or a fraction thereof, of the total number of Directors may be elected to two (2) year terms in any given annual election. Additional Director positions, if any, shall be elected for one year terms. This election rule will provide for two approximately equal contingents of Directors.

4.2 Responsibilities

The Executive Board shall determine the policies of the Conservancy, set annual membership dues, attend meetings, and authorize acquisition and disposal of properties and leases.

4.3 Executive Board Meetings

4.3.1 Schedule and Frequency

The Board shall meet publicly no less than quarterly with the first such meeting designated as the Annual Business Meeting. The date of the next quarterly business meeting shall be set by the Executive Board before the adjournment of each meeting. Meeting dates shall be published in the minutes of the meeting at which they were set and shall be mailed to all Executive Board members.

Except for meetings of the Executive Board specially called for the purpose of amending the Bylaws, notice of which must be given in writing thirty (30) days in advance, additional meetings of the Executive Board may be held at any time.

4.3.2 Quorum

A quorum of the Executive Board shall be necessary to conduct the formal business of the Conservancy and to adopt policies and positions. Two-thirds of the Executive Board shall constitute a quorum.

4.3.3 Proxies

When a Board Member can not attend a meeting, a proxy can be appointed by the Board Member to attend the meeting and vote in his/her absence. In order to appoint a proxy, the Board Member must notify the President prior to the meeting or send a signed letter with the proxy to the meeting. The proxy must be a Conservancy member. A Board Member or proxy can not represent more than one vote.

4.3.4 Telephone Votes

The President may determine that a decision of the Executive Board is required prior to the next scheduled Board meeting and therefore may institute a telephone poll of the Executive Board. An attempt shall be made to contact all Board members for their vote. Two-thirds of the Executive Board must approve the measure before it may be considered a positive vote by the Board. A vote taken in this manner shall be recorded in the minutes of the next Executive Board meeting.

4.4 Establishment of Committees

The Board has the authority to create and dissolve standing committees and/or ad hoc committees and to determine the organizational structure of each. The President has the authority to create and dissolve ad hoc committees.

ARTICLE V: OFFICERS' RESPONSIBILITIES

The Officers shall have the usual powers of Officers in the administration of the affairs of the Conservancy.

5.1 President.

The President's duties shall consist of the following:

- 1) Serve as the Chief Executive Officer.
- 2) Serve as Chair of the Executive Board.
- 3) Represent the Conservancy and act as the spokesperson in public affairs, on the councils of scientific organizations, and in business affairs.
- 4) Coordinate the explorations, scientific research, educational efforts, and land management responsibilities of the Conservancy.
- 5) Serve as an ex officio member of any special advisory committees that may be established by the Executive Board.

5.2 Secretary.

The Secretary's duties shall include the following:

- 1) Assist the President in carrying out his/her duties.
- 2) Give notice of the Annual Business Meeting, other public meetings, meetings of the Board, and other specially called meetings of the Conservancy.
- 3) Maintain the office of the Conservancy and handle its correspondence.
- 4) Prepare records and reports required of the Conservancy.
- 5) Record and distribute the minutes of all meetings of the Executive Board.
- 6) Serve as Membership Committee Chair.
- 7) Distribute ballots in accordance with Election Rules.

5.3 Treasurer.

The Treasurer's duties shall include the following:

- 1) Record, and maintain the receipts of the Conservancy and disburse monies for expenditures in accordance with the policies adopted by the Board.
- 2) Maintain adequate books and records showing disbursements and income, and issue quarterly financial statements.
- 3) Assist the Secretary in completing reports required of the Conservancy.

5.4 Succession of Officers.

In the event of the temporary absence, ill health, or incapacity of the President, the Secretary, and in his/her temporary absence or incapacity, the Treasurer shall carry out the duties of the President.

ARTICLE VI: ELECTIONS

Election to the Executive Board shall be by ballot. The Executive Board shall select a preliminary list of candidates and a ballot shall be distributed at least thirty (30) days in advance of the Annual Business Meeting. No nominee's name may be included on the ballot without his/her express acceptance of nomination to a specific position on the Board. Final nominations and election of Executive Board members shall be the first order of business of the Annual Business Meeting. The newly elected Board will be seated immediately upon completion of the election. Individual members must register (sign in) prior to the start of balloting. Members wishing to vote by absentee ballot must return the ballot to the designated Teller prior to the meeting. Organizational members must present written documentation of their authority to vote on behalf of the organization they represent.

Each position shall be filled individually (one ballot per office). Individuals elected shall be determined by the candidate receiving the most votes and will proceed as follows: President, Secretary, Treasurer, and Directors. All Board vacancies will be filled on a single ballot with those individuals receiving the most votes being seated, up to the number of Board vacancies. Absentee ballots shall be valid for the first vote only.

6.1 Election Tie

In the event of a tie the following rules shall apply:

In the election of an Officer, when first place candidates tie, a second vote shall be taken; however, only those candidates who tied on the initial ballot will be eligible to receive votes on the second ballot.

In the election of Directors, a tie within the group receiving the most votes shall be discounted except in the event of the tie occurring for the final position(s) to be filled or for the determination of two year and one year terms (per 4.1.2.2). A second vote shall be taken with only those candidates who tied on the initial ballot eligible to receive votes for the remaining position(s).

6.2 Absentee Ballots

To insure the integrity of the secret ballot process, absentee ballots shall be assigned a numeric identification code at random prior to distribution through the mail. The Secretary or his/her designee shall maintain a confidential record of this code. At the Annual Business Meeting the designated Teller will advise the Secretary or designee of the code numbers of the absentee ballots received for inclusion in the voting process. The Secretary or designee shall then compare the registration (sign in) list with the absentee ballot codes. Any absentee ballot(s) received from individual(s) in attendance at the meeting will be disallowed. The Secretary or designee shall notify the Teller of any ballot(s) to be disallowed by code number. The Teller shall not be made aware of the identity of the member(s) by code number, nor will the Secretary have reason to see or learn of the individual votes cast by the Teller.

ARTICLE VII: REPLACEMENT OF EXECUTIVE BOARD MEMBERS

Should an Officer or Director fail to satisfactorily perform his/her duty, the Board may declare the position vacant by a two-thirds favorable vote. Missing more than two consecutive meetings will be considered grounds for removal.

Should a vacancy occur on the Board, the remaining Board members shall appoint a replacement to fill said vacancy. The person so appointed shall serve only until the next Annual Business Meeting.

ARTICLE VIII: ANNUAL BUSINESS MEETINGS

The Conservancy shall hold an Annual Business Meeting each March, notice of which shall be given in writing to the membership at least thirty days (30) in advance. The purposes of the meeting shall be to 1) elect the Officers and Directors, 2) review matters of policy and finance, and 3) update members on the business of the Conservancy.

ARTICLE IX: AMENDMENT OF BYLAWS

Amendments to these Bylaws may be proposed by a member of the Executive Board or by petition of the lessor of twenty-five (25) members of the Conservancy or one-fifth of the total membership.

These Bylaws may be amended by a 2/3 favorable vote of the individual members in attendance of a meeting where proper notification has been given to the membership as outlined in section 4.3.1.

ARTICLE X: NON PROFIT STATUS; POWERS AND LIMITATIONS

10.1 Authority

The Conservancy is a non-profit corporation. Except as otherwise limited by the provisions of the Articles of Incorporation, the Conservancy shall have all the general rights and privileges and powers that may be conferred upon organizations under the Indiana Not-For-Profit Corporation Act of 1971.

10.2 Payments

No part of the net earnings of the Conservancy shall accrue to the benefit of or be distributed to its members, Officers and Directors, or any other private person, except that the Conservancy shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes of this organization as set forth in the Articles of Incorporation granted by the State of Indiana.

10.3 Prohibition on Influencing Legislation

No substantial part of the activities of the organization shall be to carry on propaganda, or otherwise to attempt to influence legislation and the Conservancy shall not participate in or intervene in (including the publishing of statements) any political statements on behalf of any candidate for public office.

10.4 Restrictions to Preserve Not-For-Profit Status

Notwithstanding any other provisions of these Bylaws, the Conservancy shall not carry on any other activities that are not permitted:

- A) by a corporation exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future Internal Revenue Code), or
- B) by a corporation, contributions to which are deductible under Section 170(c)(2) of the Internal Revenue Code of 1954 (or the corresponding provision of any future Internal Revenue Code).

10.5 Member Liability

No individual or participant in a group visiting a cave or property owned or managed by the Conservancy may be expected or required to pay any fees or costs in excess of the actual shared trip expenses. Groups requesting permission to visit Conservancy properties must agree in writing to this policy. Violation of this policy will be sufficient reason for denying any group permission to visit said properties.

ARTICLE XI: DISSOLUTION

In order to dissolve the Conservancy it shall be necessary to receive the unanimous vote of the membership or their written proxies attending the Annual Business Meeting or a meeting specially called for the purpose, notice of which shall be in writing at least thirty (30) days in advance of such meeting.

Upon dissolution, the assets of the Conservancy remaining after payment of just debts or debts ordered paid by law, are to be turned over to the town, city, or county, respectively, where the particular assets are located, provided said unit is willing to accept same and carry on the purposes of this Conservancy for said assets; otherwise to some similar non-profit organization whose intents and purposes encompass those of this Conservancy such as the National Speleological Society or The Nature Conservancy, providing said organization is willing to accept same and carry on the purposes of this Conservancy for said assets; otherwise, said assets are to be turned over to the State of Indiana. It shall be the duty of the President upon dissolution to make arrangements for the transfer of assets. Under all circumstances, the transfer of assets must be consistent with Article IX of the Articles of Incorporation.

IKC QUARTERLY MEETING MINUTES

Saturday, December 2, 1995

Bloomington, Indiana

BOARD MEMBERS PRESENT:

Joshua Abdulla	James Adams
Bruce Bowman	Bruce DeVore
Keith Dunlap	Hank Huffman
Larry Mullins	Tom Rea
Eric Schmidt	Tom Sollman
Bill Tozer	

BOARD MEMBERS ABSENT:

Larry Bundy	Dave Haun
Bob Sergesketter	Betty Watson

The meeting was called to order at 7:01 PM by IKC President, Bruce Bowman at the IU Geology Building in Bloomington, Indiana. Introductions were made and the September 1995 meeting minutes were approved as published with one amendment. Paragraph five, sentence two will be revised to read "After consultation with the IKC attorney for this matter, Bill Baus, it is felt that no current funds should be allocated at this time."

Treasurer Keith Dunlap reported a balance of almost \$12,691 minus funds for the National Cave Management Symposium and minus funds for the Indiana Cave Symposium. IKC funds total \$5,961.

Bill Baus and Kevin Enright (Protect Our Woods) took the floor to report on developments at Mayfields Cave and the Northwest Industrial Park. Baus reported that of the \$500 that has been earmarked for this project, approximately \$300 has been spent, mostly for research.

The property contains about 270 acres and about half of that has a conservation easement. While visiting the site near Bloomington, Baus has found and mapped a new cave on the property. The cave is 335 feet in length. Baus wants to discuss the possibility of deeding the conservation easement to the IKC. He feels that the owners are being cooperative because of the good reputation of the IKC.

The design of the industrial park currently exceeds Monroe County requirements for run-off control. Water from the site drains into Mayfields Cave and then into Jacks Defeat Creek.

Nearby landowners are finding odors in their water supplies which may be traced to the industrial park. Many are having their water tested which will yield some baseline information for future use.

Biologist Jerry Lewis recently did a quick biological survey of Mayfields Cave with Directors Tom Sollman and Hank Huffman. Huffman said that there seemed to be less water in the cave and no beetles compared to the survey done at the turn of the century.

Also on hand for the meeting was Bob Klawitter of Protect Our Woods. He discussed a plan for a United Way-type agency for environmental groups. He invited the IKC to join the effort as a Partner. The IKC would have to pitch in \$2,000 and 40 hours of volunteer fund raising work from the membership. The \$2,000 would, however, come out of money that the members raised for the fund. No IKC money would actually change hands except that the IKC could receive money if the project was successful. Currently, there are eleven Partner organizations.

The National Cave Management Symposium was held in October at Spring Mill State Park. Keith had reported on this event in the recent *IKC Update*. The response has been very positive for the IKC. Forty people attended from various Indiana state agencies. Many relationships have been strengthened through the symposium.

Several changes to the IKC Bylaws were voted in. Keith Dunlap moved on five changes. Change #1, concerning proxies, was seconded by Tom Rea and also modified by Rea via an amendment to the motion.

ARTICLE IV: Management of the Conservancy

4.3 Executive Board Meetings

4.3.3 Proxies

When a Board Member can not attend a meeting, a proxy can be appointed by the Board Member to attend the meeting and vote in his/her absence. In order to appoint a proxy, the Board Member must notify the President prior to the meeting or send a signed letter with the proxy to the meeting. The proxy must be a Conservancy member. A Board Member or proxy can not represent more than one vote.

4.3.4 Telephone Votes

Motion passed 10-0.

Change #2 concerned the importance of regular attendance of Officers and Directors at meetings. This motion was seconded by Jim Adams and slightly modified by Keith after some discussion.

ARTICLE VII: VACANCIES ON OR AND REMOVAL FROM THE BOARD **REPLACEMENT OF EXECUTIVE BOARD MEMBERS**

Should an Officer or Director fail to satisfactorily perform his/her duty, the Board may declare the position vacant by a two-thirds favorable vote. ***Missing more than two consecutive meetings will be considered grounds for removal.***

Should a vacancy occur on the Board, the remaining Board members shall appoint a replacement to fill said vacancy. The person so appointed shall serve only until the next Annual Business Meeting.

Motion passed 8-2.

Bylaws change #3 was again seconded by Jim Adams and addressed who could vote on Bylaws changes.

ARTICLE III: MEMBERSHIP

3.1 Classes

3.1.1 Individual Membership

Individual members are natural persons who have paid membership dues. Individual members shall have the right to vote for the Executive Board, ***vote for bylaw changes***, hold office provided they meet all requirements as outlined in Article IV, be appointed to committees, and chair committees.

3.1.2 Organizational Membership

Organizational members are organizations whose principal goals and objectives are consistent with the goals and objectives of the Conservancy and whose ***governing organizations*** wish to support the Conservancy and receive the benefits of membership. Organizational members shall have ***election-only*** voting privileges ***consisting*** of one vote per organization.

ARTICLE IX: AMENDMENTS OF BYLAWS

Amendments to these Bylaws may be proposed by a member of the Executive Board of Directors or by petition of the lesser of twenty-five (25) members of the Conservancy or one-fifth (1/5) of the total membership. These Bylaws may be amended by a 2/3 favorable vote after notification to the membership at least 30 days prior to voting that a Bylaw change is being proposed ***of the individual members in attendance of a meeting where proper notification has been given to the membership as outlined in section 4.3.1.***

Motion passed 7-1-2 after much discussion and two amendments proposed by Tom Rea and seconded by Bruce DeVore.

Change #4 addressed several issues and was seconded by Jim Adams.

ARTICLE III: MEMBERSHIP

3.2 Membership Acceptance

Upon application of organizational membership and payment of the appropriate annual dues, the ***Executive*** Board shall decide to accept an application for membership.

ARTICLE IV: MANAGEMENT OF THE CONSERVANCY

4.1 Executive Board

4.1.1 Numbers

Each Director ***Executive Board member*** shall be a member of the National Speleological Society, or agree to become one ***a member*** upon being elected.

ARTICLE V: OFFICERS' RESPONSIBILITIES

5.2 Secretary

5) Record ***and distribute*** the minutes of the Annual Business Meeting, quarterly meetings, meetings of the Board ***all meetings of the Executive Board.***

6) Inform Directors of all Board actions. [renumber duties 7 & 8]

ARTICLE VI: ELECTIONS

Elections to the Executive Board shall be by ballot. The Executive Board shall select a preliminary slate ***list of candidates*** and a ballot shall be distributed at least thirty (30) days in advance of the Annual Business Meeting...

This change was approved 10-0.

It was decided that the IKC Constitution and amended Bylaws will be published in their entirety in the next ***IKC Update.***

Bruce Bowman announced that the IKC received the Hoosier Environmental Council's ***Organization Of The Year*** award for 1995. Bruce has also been voted in as a Board member of HEC. In general the HEC is solvent and had a very good year.

Jim Adams brought up a brochure circulated by the Indiana Memorial Union at Indiana University in Bloomington which features an apparent cave-for-pay group leading trips to at least two caves in Monroe County. There was discussion concerning the group and possible problems especially concerning landowner relations. Bruce Bowman will contact the Indiana Memorial Union.

An organization has asked for membership in the IKC. It is unclear if they are seeking Individual or Organizational membership. More information is needed. Jim Adams will contact them.

A member recently suggested to Jim Adams that carbide lamps be banned from IKC-managed caves. There was little discussion and no motion.

Tom Sollman reported on recent dye tracing efforts at Shiloh Cave. Members were reminded

that a nearby landowner has sunk a pipe into the cave to drain a sinkhole in his front yard. Dye was placed in the sinkhole and in the landowner's toilet with his permission. Tom got a positive reading from the dye in the toilet. The sample has been sent to the IU Geology Department for further testing.

The annual Wayne's Cave clean-up with the Central Indiana Grotto will be held on Sunday, December 10th. Dave Haun will lead the work force.

No action has taken place concerning an inventory at Binkley's Cave.

The TNC and IKC were looking at a possible purchase of Indian Sinks. However, the property was recently sold to a developer. We will continue to monitor the situation.

Eric Schmidt reported that the Porter's Cave property has been sold. Apparently the new landowner does not want the cave. Eric will seek further information.

The Indiana Department Of Environmental Management has received a report that an auto dealership of SR 37 is leaking a black substance into Donnehue Cave. The problem has already been taken care of.

At the September IKC meeting, the membership was made aware of some landowner problems at Buddha Cave in Lawrence County. The owner may feel that cavers are imposing on their hospitality. They mentioned that they haven't been given any photos of their cave. Bill Tozer has not spoken to the landowner. Bruce passed along some photos for Bill to deliver.

At the recent National Cave Management Symposium, Keith Dunlap was contacted by a landowner who is concerned for the safety of children who play near a pit on their property. They would like the pit gated. Keith passed the information on to Dave Black who is near the property. The IKC will probably help with whatever may need to be done. Perhaps a fence would be just as effective as a gate.

Larry Mullins provided an update on various Hoosier National Forest activities. The HNF is still working on the acquisition of the Wesley Chapel Gulf and other properties. This effort may take another six months. At Gory Hole the materials for the fence have been ordered. Finally, the Tinch Hollow Special Area Plan is coming along.

Tom Rea reported absolutely no activity on the Indiana Department of Natural Resources Cave Resource Management Plan.

A new Memorandum of Understanding needs to be executed between Spring Mill State Park and the IKC. Keith has spoken to Steve Collins,

who will need to work on the project. Bruce Bowman reported no other action.

Bruce questioned if we needed to create a committee to solicit candidates for Officer and Director positions for the March 1996 election. No committee was formed. All members should seriously evaluate the contribution that they could make by serving in a position with the IKC and also be on the lookout for other possible candidates.

The owner of the property next to Salamander Cave in Monroe County has asked the IKC to please do everything possible to stop trespassing across his property. Salamander has always been a closed cave, however many people are being told that it is "OK" to visit the property and to violate the No Trespassing signs that have been posted. There was lots of discussions about possible solutions. Keith Dunlap has created a sign and the owner of Bent Arrow has agreed to display the sign in his shop.

Bruce Bowman displayed two books that are being auctioned off to the highest bidder. Bruce will receive bids for *Trapped* and the proceedings from the Carlsbad, NM National Cave Management Symposium until December 31, 1995.

Jim Adams suggested that it might be appropriate for Tom Sollman to take over as Cave Patron of Shiloh Cave since he spends a lot of time there. Tom was not interested.

There will be a Directors' Meeting on Saturday, February 3rd at Keith's at 7:00 PM.

The next Quarterly Members Meeting will be on March 16th at 10 AM. The site may be the Indiana World War Memorial in Indianapolis.

Meeting adjourned at 9:47 PM.

Submitted by James Adams, Secretary.



IKC DIRECTOR'S MEETING MINUTES

Saturday, February 3, 1996

Greenwood, Indiana

BOARD MEMBERS PRESENT:

Joshua Abdulla	Bruce Bowman
Bruce DeVore	Keith Dunlap
Dave Haun	Larry Mullins
Tom Rea	Eric Schmidt
Bob Sergesketter	Tom Sollman
Bill Tozer	

BOARD MEMBERS ABSENT:

James Adams	Larry Bundy
Hank Huffman	Betty Watson

The meeting was called to order at 7:09 PM by IKC President, Bruce Bowman at the home of Treasurer Keith Dunlap in Greenwood, Indiana. Secretary James Adams was absent. Member Kim Kohal was accepted as Proxy. Kim also took the minutes of the meeting in Jim's absence.

Treasurer Keith Dunlap reported a balance of almost \$13,000 minus funds for the National Cave Management Symposium and minus funds for the Indiana Cave Symposium. IKC funds total about \$5,900. Keith has changed our account to earn a higher interest rate. He also suggested that we combine our funds with the Indiana Cave Survey to take advantage of the investment potential. No motion.

(At this point, Board Member Joshua Abdulla arrived) Nominations were accepted for candidates for 1996 Officer and Board positions. Bruce Bowman, James Adams, and Keith Dunlap accepted nominations for their current positions. Confirmed Board Member candidates include Tom Rea, Bob Sergesketter, Bill Tozer and Jan Pursley.

According to the IKC Bylaws, Officers and Board Members are required to be members of the National Speleological Society (the IKC is a Conservancy of the NSS). One Board Member's NSS membership has lapsed. Bruce will speak to the individual.

There was general discussion concerning the IKC's proposed membership in the Environmental Fund of Indiana. This proposal was first brought before the membership at the December Quarterly Meeting. There was discussion both for and against the IKC's participation. No motion.

There was a motion by Keith Dunlap to accept, if offered, a Conservation Easement on approximately 30 acres of the property containing the Indian Creek Sinks. Bob Sergesketter and Bruce DeVore both seconded the motion.

According to Tom Rea, the IKC would not pay taxes on this property. The IKC will be charged with enforcement of the easement. The Nature Conservancy (Alan Purcell) is negotiating this settlement for the IKC and we must let them know of our interest. Motion passed, 12-0. (After the vote, Board Member Joshua Abdulla departed)

The IKC would like to help with maintenance at Wesley Chapel Gulf pending transfer of the property to the Hoosier National Forest. The area is overgrown and needs to be cleaned up to help prevent vandalism. A tentative workday has been planned for March 17th at 10:00 AM. Bruce will finalize the details with the current owner.

A quarry has been reported to be going in near Squire Boone Caverns. Bulldozers have appeared but there was no further news on the development.

Bruce Bowman has written to and received a reply from the Indiana Memorial Union about our concerns for landowner relations in the Garrison Chapel area. IMU advertises guided trips to a couple of caves in the area for a fee. Bruce has written a second letter expressing the IKC's concerns, but has not received a second reply. Bruce has no further plans to pursue this matter.

Bruce met with the developers of the industrial park near Mayfields Cave in December. He had hoped that they would allow dye tracing and karst inventory, however, they will not permit us to do this. He was encouraged that they have addressed many conservation concerns in their plan.

Earth Day is scheduled for April 20 in Indianapolis. Bruce moved to fund a display for up to \$50.00. Bob Sergesketter seconded the motion. Motion Passed, 10-1.

There were several issues from the floor: There has been talk of cavers constructing a privacy fence at the Bedford Boat Club to be used by cavers. Bruce DeVore suggested that Northern Indiana Grotto could help out. Larry Mullins will contact the Boat Club.

Also, Larry Mullins has set March 30 and 31 for fence construction at Gory Hole. He needs labor to help. Chili will be available. Work will start at 9:00 AM.

Larry has also scheduled four karst field days this year. He will make the information available via the internet.

Bruce Bowman indicated that the Nature Conservancy is interested in purchasing property near Cave River Valley.

Bruce has also received information that it may be possible for the IKC to take over ownership of the Orangeville Rise. Everyone seemed to agree that we should take it, if offered. Bruce will follow up.

Tom Sollman has not received any further word on the dye trace sample in Shiloh Cave. It is currently at IU.

The next meeting will be on March 16 at the Indiana War Memorial beginning at 10:00 AM. Bruce suggested that we not continue meeting at the World War Memorial in 1997.

Meeting adjourned at 9:04 PM.

Submitted by Kim Kohal

Transcribed by James Adams, IKC Secretary

Continued from page 13...

access. It also goes without saying that a gate works only as well as the person holding the key.

Kentucky's Crystal Cave, for instance, was protected by a cave gate. Two management problems led to the destruction of this federally protected cave. The first problem was the gate's poor construction which allowed vandals to dig underneath it. Secondly, the cave was monitored so infrequently that the vandals had plenty of time to breach it without being discovered.

Both of these problems are being addressed at Mammoth Cave National Park. Since the June discovery of the break-in, the National Park Service has increased monitoring of the site and has installed a concrete rebar enforced footer to discourage future digging underneath the cave gate.

Restoration

Although it is always preferable to prevent cave vandalism, restoration efforts can, in some cases, repair the damage from vandalism. Ecologist Olson noted that an effort will be made to repair some of the speleothems in Crystal Cave. "As for broken helictites, the technology does exist. It's a matter of putting the jigsaw puzzle back with what we've got. It's difficult to match pieces that are no longer intact with fractured surfaces. We may be able to put back together pieces that are lying on the trail."

Olson added, "As for the gypsum, it's pretty heavily broken." Although perhaps not impossible, it is not known what type of success rate would be achieved because gypsum wall crust has never been repaired.

Dave Foster acknowledged that restoration efforts can sometimes repair damage but cautioned that restorationists can do more harm than good if they are not careful and properly trained. "While it is theoretically possible to build new cave formations out of concrete, glue and wire mesh," Foster said, "it is nearly impossible to restore extremely delicate formations. Restoration should not be substituted for doing what should have been done in the first place, protecting the resource."

Education -- The Key

The uses of management techniques, cave gates, modern scientific methodology, high-tech security measures and legislation to protect and to restore caves are all part of the cave conservation story in the 1990's. Despite these measures, cave managers and conservationists agree that more needs to be done to protect America's irreplaceable cave resources.

According to Foster, "cave vandalism is a national crisis. Public impacts and pressures on caves are increasing. As the impacts increase, the fact remains that the number of caves is finite and, of all the natural areas on the planet, caves have perhaps the lowest carrying capacity. One individual can easily commit irreparable damage on a single cave visit."

"We need to make people aware that cave formations, from the perspective of the human life span, are nonrenewable. What takes thousands of years to grow can be ruined in seconds. We need to teach the public to think of caves as sacred places and as natural museums."

Foster has committed the resources of the American Cave Conservation Association to promoting these concepts. The educational programs at the newly developed American Cave and Karst Center are reaching thousands of visitors and students each year. Unfortunately, the successes are frequently punctuated by the failures, such as the loss of Crystal Cave.

When reflecting on the vandalism of Crystal Cave, park superintendent Switzer concluded, "We haven't addressed the problem of vandalism as well as we should have... It's a process of education. We've got to convince people that what they have at home is something that's worth saving at any cost. The cave is part of our heritage. It's worth protecting. If we don't protect it, it won't be here tomorrow... (we have) to convince people that caves have intrinsic value, a sense of worth; this will result in a change of attitude."

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----- Individual Members -----

Joshua	Abdulla	Willkie - South, Room #0511	Bloomington	IN	47406	(812)	875-4886	9503	281
James	Adams	620 Jackson Road	Greenwood	IN	46142	(317)	882-3724	9103	140
Mark	Adler	520 W Mill Creek Lane, Apt 612	Jasper	IN	47546			9501	275
John	Ahlberg	19054 Sherman Street	Lansing	IL	60438	(312)	895-0514	8804	082
Tom	Ahlers	3018 North 400 West	West Lafayette	IN	47906	(317)	497-9553	8703	042
Bruce	Barnes	2712 Torrey Avenue	Ann Arbor	MI	48108	(313)	434-9162	8906	103
John	Benton	2006 Leland Drive	Huntingburg	IN	47542	(812)	683-2733	9005	123
Ted	Bice	20260 Maple Road	Argo	IN	46501			9508	287
David	Black	RR 3, Box 545	Georgetown	IN	47122	(812)	951-3886	8803	073
The	Boehler Family	503 West Street	Genoa	OH	43430	(419)	855-8474	9303	207
Jim	Bowden	551 N Dearborn Street	Indianapolis	IN	46201			9412	274
Bruce	Bowman	8364 S State Road 39	Clayton	IN	46118	(317)	539-2753	9003	112
Jeff	Bray	945 Ellenberger Pkwy E Drive	Indianapolis	IN	46219	(317)	353-9327	9003	118
Larry	Brewster	723 Riverview Drive	Kokomo	IN	46901	(317)	868-9506	9502	280
Gerald	Brickley	251 Cartersburg Road	Danville	IN	46122			8907	105
George W	Brutchen	306 West South Street	Winchester	IN	47394	(317)	584-1562	8604	010
Larry R	Bundy	499 Young Street	Franklin	IN	46131	(317)	736-8841	9003	113
Linda C	Bundy	499 Young Street	Franklin	IN	46131	(317)	736-8841	9003	114
DA	Burden	3410 South Rural Street	Indianapolis	IN	46237	(317)	781-0701	9303	228
Ronnie	Burns	511 N Main Street	Salem	IN	47167	(812)	883-6252	9509	289
Kenneth	Byrd	3253 Brisbane Road	Indianapolis	IN	46208	(317)	293-4551	9112	160
Stephen T	Cahill	4528 Candeltree Circle, Apt #20	Indianapolis	IN	46254	(317)	297-8492	9011	135
Keith	Calkins	610 N Main Street	Berrien Springs	MI	49103	(616)	473-2572	9003	099
The	Cannaley Family	4253 Senour Road	Indianapolis	IN	46239			8709	066
Barb	Capocy	4628 Seeley Avenue	Downers Grove	IL	60515	(708)	620-3350	9303	196
Christopher	Carpenter	3221 Georgetown Road	Indianapolis	IN	46224	(317)	291-7085	8907	106
Kenny	Carrigan	6647 West Loretta Drive	Indianapolis	IN	46122			8804	083
George	Cesnik	4331 Clifford Road	Brownsburg	IN	46112	(317)	293-9247	8603	007
The	Church Family	9156 E BC Avenue	Richland	MI	49083	(616)	629-5348	9303	198
Terry	Clark	7124 Cairo Dixie Road	Corydon	KY	42406	(502)	533-6115	9505	284
Allen	Clawson	9007 E 200 S	Lafayette	IN	47905	(317)	296-4914	9106	151
Jeff	Cody	7818 Venetian Way	Indianapolis	IN	46217	(317)	888-9898	8604	014
Stephen J	Collins	2401 Double Branch Road	Columbia	TN	38401	(615)	380-0210	8603	011
Terry	Crayden	767 Lynette Road	Corydon	IN	47112	(812)	738-4611	9502	278
Rane	Curl	2805 Gladstone	Ann Arbor	MI	48104			8703	043
John	Danovich	5111 Heathwood Drive	Indianapolis	IN	46237	(317)	571-2856	9303	226
The	DeVore Family	15001 Mill Road, Lot #32	Fort Wayne	IN	46816	(219)	639-7249	9009	129
The	DeWitt Family	1505 Peck Street	Greenwood	IN	46143	(317)	882-7662	9311	259
Robert	Decker	3401 E Loretta Drive	Indianapolis	IN	46227	(317)	783-9744	9302	186
Ralph	Doerzbacher	3133 Kiser Lake Road	St Paris	OH	43072	(513)	663-4671	9305	247
Keith	Dunlap	32 Troon Court	Greenwood	IN	46143	(317)	882-5420	8601	001
Cheryl L	Early	70 E Kelso Road	Columbus	OH	43202	(614)	261-0876	9303	216
Lorlie	Esterly	RR 2 Box 262	Pekin	IN	47165			9303	179
Jeffrey P	Farr	2100 Kitchen Drive	Anderson	IN	46017	(317)	378-7773	9303	200
Scott	Fee	2501 Gable Blvd	Birmingham	AL	35215			8706	026
John Jay	Fichter	20313 A NE Halsey	Troutdale	OR	97060			9501	276
Jeffrey	Frazier	2520 Edgelea Dr	Lafayette	IN	47905	(317)	474-7224	9501	277
Dawn	Fuller	7352 Palmer Road SW	Pataskala	OH	43062	(614)	927-2882	9302	180
Joseph	Gasperi	6271 Apache Drive	Indianapolis	IN	46254	(317)	297-5467	9412	273
Harold	Geick	0N660 Prince Crossing Road	West Chicago	IL	60185	(708)	231-9296	9602	296
Allen J	Goodcase	8940 Shields Avenue	Brookfield	IL	60513	(708)	485-7113	9003	109
Jim	Griggs	24060 Flanders Street	Dowagiac	MI	49047	(616)	782-7890	9206	167
David E	Haun	PO Box 47961	Indianapolis	IN	46247	(317)	781-1996	8601	012
Timothy	Heppner	377 Herrick Road	Riverside	IL	60546			8810	092
Mike	Hood	23 Wells Drive	Dayton	OH	45431	(513)	252-2978	9302	181
Duke	Hopper	1858 Marlboro Drive	Lexington	KY	40505	(606)	299-4054	9211	173
Tem	Hornaday	706 W Dodds Street	Bloomington	IN	47403	(812)	333-6811	9005	065
Henry	Huffman	8358 N Mt Tabor Road	Ellettsville	IN	47429	(812)	876-9645	8701	071
Donald	Ingle	1118 Greenleaf Court	Terre Haute	IN	47802	(812)	299-8579	9405	268
Kate L	Johnson	1705 Safari Drive	St Joseph	MO	64506	(816)	233-5494	9303	233
Scott	Johnson	IDNR F&W, 553 East Miller Dr	Bloomington	IN	47401			9003	111
Louie	Kitcoff	4427 Clifford Road	Brownsburg	IN	46112	(317)	297-7030	9303	211
Jonathan E	Knott	2227 Lucas Street	Muscataine	IA	52761			9104	144
John R	Koch	623 Kennedy Drive	Bloomfield	IN	47424			9304	238
Kim	Kohal	4845 Covered Bridge Rd, Apt B	Indianapolis	IN	46268	(317)	293-5346	9407	272
Kevin	Komisarcik	405 N Johnson Avenue	Bloomington	IN	47404	(812)	339-2394	9003	115
Tom	Kopp	6500 Brown Road	Oxford	OH	45056	(513)	726-6607	9303	203
Glenn A	Kotnik, MD	4085 Country Place	Zionsville	IN	46077	(317)	873-4395	9203	166
David	Landess	1404 Williamsburg Drive	Champaign	IL	61821	(217)	234-9881	9305	246
Steve	Lanning	105 Vann Avenue	Evansville	IN	47714	(812)	476-0850	9304	237
Brian	Leavell	1627 South M Street	Elwood	IN	46036	(317)	552-7619	8810	090

Glenn	Lemasters	40 W Waterbury Road, Apt A	Indianapolis	IN	46217	(317)	888-1662	8601	003
Robert M	Letsinger	7261 Sacramento Drive	Greenfield	IN	46140	(317)	894-3792	9303	215
Tom	Liddle	2316 Lafayette Avenue	Columbus	IN	47201			9401	260
Stephen D	Lockwood	RR 1 Box 107	Mitchell	IN	47446			9303	197
Roy	Logan	1004 S Keystone	Indianapolis	IN	46203	(317)	261-1129	9310	254
Daniel C	Lucas	11234 Lantern Road	Fishers	IN	46038	(317)	849-2784	9104	145
David	Luckins	3683 Oakleaf Drive	West Bloomfield	MI	48324			8803	077
Bob	Masta	2247 Prairie	Ann Arbor	MI	48105	(313)	662-2284	9303	221
Richard	Maxey	173 W Kanawha Avenue	Columbus	OH	43214	(614)	888-2285	9302	185
Angie	May	2422 Cedar Crest Drive	Columbus	IN	47203	(812)	376-6753	8701	055
Steve	McKenzie	PO Box 11101	Ft Wayne	IN	46855	(219)	426-2522	9111	159
Susan	McLoud	1500 Pennington Road	Mooresville	IN	46158			9505	285
Jane	Miller	4020 S Rural Street	Indianapolis	IN	46227	(317)	784-3724	8703	040
Jon	Miller	PO Box 65	Celina	OH	45822	(419)	363-2969	9305	243
Lynn	Miller	4020 S Rural Street	Indianapolis	IN	46227	(317)	784-3724	8603	015
Tony	Mulbrecht	432 Barker, NW	Grand Rapids	MI	49504			9310	257
Lawrence H	Mullins	Route 1 Box 465	Heltonville	IN	47436	(812)	834-5313	8903	088
Mary Ellen	Murphy	City Hall, 401 W Morton	Bloomington	IN	47404	(812)	33493423	9602	294
Carl	Nelson	6163 Ralston Avenue	Indianapolis	IN	46220	(317)	254-5633	9509	290
Richard L	Newton	9611 S County Road 425 E	Marengo	IN	47140	(812)	365-2495	9005	124
Nicholas	Noe	534 E Edwards Avenue	Indianapolis	IN	46227	(317)	782-3442	9506	286
Scott	Nordhoff	5839 Ralston Avenue	Indianapolis	IN	46220			9401	261
Paula	Oliver	20313 NE Halsey Street, Apt A	Troutdale	OR	97060			9502	279
Richard	Orr	334 S Marguerite	Ferguson	MO	63135	(314)	521-0355	9510	291
Ernest B	Payne	6131 Holly Berry Drive	Evansville	IN	47715	(812)	477-7043	8703	032
Gene A	Pelter	720 Poplar Street	Fort Wayne	IN	46802			9003	116
Donald L	Peters	508 Jefferson Avenue	LaPorte	IN	46350	(219)	362-9987	8703	041
Joe	Petersen	RR1 Box 429E	Paragon	IN	46166	(317)	537-9847	9403	271
Rosemary	Petersen	RR1 Box 429E	Paragon	IN	46166	(317)	537-9847	9403	270
Jan	Pursley	13175 Fairwood Drive	McCordsville	IN	46055	(317)	335-2228	9504	283
Steve	Ragsdale	5460 Shawkoto Trail	Belmont	MI	49306	(616)	874-7599	9010	134
Kevin	Rasmus	203 S State Street	Bloomington	IL	61701	(309)	828-0316	8701	059
Tom	Rea	8677 South State Road 243	Cloverdale	IN	46120	(317)	653-4423	8601	008
Larry	Reece	2929 E Southport Road	Southport	IN	46227	(317)	787-3619	9105	148
Charles	Rex	4926 N Mavmova	Chicago	IL	60630	(312)	283-6097	9303	214
Ronald L	Richards	8141 Pickford Drive	Indianapolis	IN	46227	(317)	888-6749	9003	117
Gary	Roberson	c/o Marengo Cave, PO Box 217	Marengo	IN	47140			9210	171
Robert	Roundy	5668 Bergan Drive	Dayton	OH	45424	(513)	233-0328	9303	202
Jay	Savage	1991 W Dunmore	Hoffman Estates	IL	60195	(708)	885-1165	9303	204
Eric C	Schmidt	101 S Tennessee Street	Danville	IN	46122	(317)	745-6739	8909	107
Diana	Schuh	3175 - 3 Watergate Place	Indianapolis	IN	46224	(317)	329-7643	9404	267
Stephen	Schuh	3175 - 3 Watergate Place	Indianapolis	IN	46224	(317)	329-7643	9308	252
Bill	Schulze	3015 Grove Road	Corbin	KY	40701	(606)	526-0695	9306	249
Robert	Sergesketter	1090 Hopf Avenue	Jasper	IN	47546	(812)	482-5517	8701	070
Mark C	Sheehan	1115 Longwood Drive	Bloomington	IN	47401	(812)	339-0828	9211	174
Ray	Sheldon	16175 East CR 300 South	Elizabethtown	IN	47232	(812)	579-6481	9105	149
Don	Shofstall	5004 Bassett Avenue	Evansville	IN	47715	(812)	867-2510	8906	104
Clyde	Simerman	1121 Sinclair Street	Fort Wayne	IN	46808	(219)	422-3030	9503	282
Noel	Sloan	8715 Garden Rock Court	Indianapolis	IN	46256	(317)	845-8821	8701	033
Gordon L	Smith	9850 N Skyline Drive	Floyds Knobs	IN	47119	(812)	945-5721	9005	126
Thomas P	Sollman	RR 2, Box 23A	Fort Branch	IN	47648	(812)	753-4953	9105	150
Phillip	Springer	5704 S Harrison Street	Fort Wayne	IN	46807	(219)	744-1973	9303	231
Gregory L	Stamp	5551 Lesourdsville, W Chester Rd	Hamilton	OH	45011	(513)	777-7488	9303	205
Susan K	Strickland	1701 E 58th Street	Indianapolis	IN	46220	(317)	253-5395	8701	046
Kevin	Strunk	6068 Riverview Drive	Indianapolis	IN	46208	(317)	257-3323	8701	027
Bob	Thompson	7351 Cayman Way, Apt 6	Maineville	OH	45039	(513)	459-9275	1295	293
Dan	Thornton	3845 Fairview	St Louis	MO	63116	(314)	776-6367	9602	295
Bill	Tozer	9698 South 150 West	Pendleton	IN	46064	(317)	778-3259	8604	017
Bruce A	Trotter	5580 E Baseline Road	Columbus	IN	47203	(812)	379-1348	9307	060
Charles	Tubbs	1418 W Lexington Avenue	Elkhart	IN	46514	(219)	522-5701	9101	137
Nancy	Tubbs	1418 W Lexington Avenue	Elkhart	IN	46514	(219)	522-5701	9101	138
Charles R	Vandeventer	525 Lawndale Drive	Greenwood	IN	46142	(317)	888-4501	9303	217
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The	Waldrop Family	3001 Tuscaloosa Lane	Lexington	KY	40515	(606)	263-7493	9303	232
Betty L	Watson	7645 W 350 N	Greenfield	IN	46140	(317)	891-7008	9306	250
Stephen A	Watson	7645 W 350 N	Greenfield	IN	46140			9306	251
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Evansville Metro Grotto c/o E Payne	6131 Holly Berry Dr	Evansville	IN	47715	9108	152
Harrison-Crawford Grotto c/o D Black	6917 Dalby Road	Georgetown	IN	47122	9103	141
Mid-Hoosier Grotto	PO Box 632	Franklin	IN	46131	8701	075
Northern Indiana Grotto	PO Box 10297	Ft Wayne	IN	46851	9104	146
Stygian Grotto c/o D Huebler	2784 Brandenburg Ln	St Louis	MO	63129	9602	297
Windy City Grotto c/o G Gibula	810 North Center St	Naperville	IL	60563 (708) 778-6747	9003	052
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Bluespring Caverns, Inc	RR 11, Box 988	Bedford	IN	47421	1195	292
T.E.A.M.S., Inc	PO Box 211	Huntingburg	IN	47541	9602	298

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John Cole	OVN Conservation Chair	PO Box 555, Univ Station	Lexington	KY	40506
Bob Klawitter	Protect Our Woods	11663 E 475N	Dubois	IN	47527
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Greater Cincinnati Grotto	c/o John Wisner	7427 Thompson	Cincinnati	OH	45239
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NSS Exchange	c/o Ray Hardcastle	701 Hillside Terrace #4	Vista	CA	92084
NSS Grant Committee	c/o John Tichenor	PO Box 8234	Richmond	VA	23226
NSS Library		2813 Cave Avenue	Huntsville	AL	35810
NSS SpeleoDigest	c/o Pat Kambesis	2466 Drew Valley Rd NE	Atlanta	GA	30319
Ohio Valley Caver	c/o Jay Kessel	426 N Park Place	Yellow Springs	OH	45387
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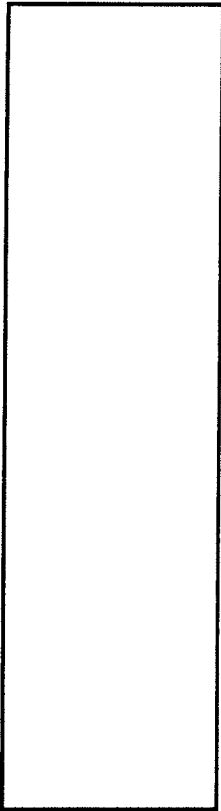
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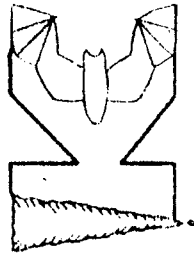
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