# IKC Update

Number 34

SEPTEMBER 1994



Indiana Karst Conservancy

## 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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Evansville Metropolitan Grotto/ Ernie Payne	Eastern Indiana Grotto/ Brian Leavell
Mid-Hoosier Grotto/ Jeff Cody	Evansville Metropolitan Grotto/ Ernie Pavne (812) 477_7043
Northern Indiana Grotto/ Leslie Cunningham (219) 327-3259	Mid-Hoosier Grotto/ Jeff Cody (317) 888-9898
Windy City Grotto/ Gary Gibula (708) 778-6747	Northern Indiana Grotto/ Leslie Cunningham (219) 327-3259

**Cover** - Several hundred Indiana bats (*Myotis sodalis*) hibernating in Coon Cave (Monroe, Indiana). Photo taken by Jim Adams.

Myotis Press

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

## QUARTERLY MEETING REMINDER SATURDAY, SEPTEMBER 10th, 6:00 PM CLAYTON, INDIANA

Home of Cissy & Bruce Bowman, 8364 South SR 39

The quarterly meetings are 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 meetings are informal, and everyone is encouraged to attend and participate.

Preliminary Agenda Items: brief recaps of last quarter's activities; Big Spring Nature Preserve workday summary; Coon Cave restoration summary; Wayne's Cave restoration trip; Land Acquistion Committee report; Jefferson Proving Grounds Alert; Endless Cave pollution problems; cave temperature monitoring project; Shiloh Cave crayfish monitoring; Shiloh Cave gate report; Shiloh Cave Management Plan discussion; Suicide Cave status; Suicide Cave Management Plan discussion; Special Publications Committee report; NCMS activities; IDNR activities; HNF activities; and more....

Following the meeting (approximately 7:30), the IKC President will host a cookout. This will allow members and their families to become better acquainted with others who are interested in cave/karst conservation. The cookout will be held rain or shine; please bring lawn chairs. The IKC will supply the burgers, hot dogs, and brats/kielbasa cooked over wood (not charcoal). Please bring a covered dish, salad, or desserts to share. PLEASE RSVP by noon on Saturday (317-539-6935) so we will have ample supplies.

Meeting directions: see the inside back cover for directions and a map.

[Editor's note: As part of the after-meeting activities, there will be the second annual "best brownies" contest. Your editor has been working on a new recipe guaranteed to win.]

## **EVENTS CALENDAR**-

10 SEP = IKC QUARTERLY MEETING/COOK OUT/BROWNIE CONTEST (see above)

24 SEP = LOST RIVER TOUR, Orleans (see page 7)

08 OCT = LOST RIVER TOUR, Orleans (see page 7)

03 DEC = IKC QUARTERLY MEETING, Bloomington (tentative)

04 DEC = IKC/CIG WAYNE'S CAVE RESTORATION TRIP (see page 7)

04-07 DEC = 56th MIDWEST FISH & WILDLIFE CONFERENCE, Indianpolis (see page 7)

Membership to the IKC is open to anyone interested in cave and karst conservation. Annual dues are \$15. Please see inside back cover for the membership application form or to make a 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...

[Editor's note: The following is a portion of the speech, "Your Personal Commitment to the Environment" given by Bruce Bowman at the 1994 Earth Day festivities.]

"...It's kind of ironic; throughout human history we've fought a battle against Nature. We've tried our best to overcome it. From the beginnings of Man, it's been a battle against Nature, and I believe that this is the first generation, on a worldwide scale, when Mankind has probably had the upper hand. Someway or another, through Divine intervention or a freak of evolution or whatever, we have found ourselves in a position where we, as the human race, have stewardship over this planet.

"That's a pretty damn big responsibility. What are we going to do with it? How are

we going to treat our Mother?

"I have a lot of obsessions -- when I get involved in something I tend to get really serious about it. Another of my obsessions is Astronomy... a rather low-impact activity in which you point a piece of silvered glass at the sky and look at all kinds of things... and you have a lot of time to think because most of the time the Indiana skies are cloudy anyway. And I believe that over time, you gain a perspective on how small and fragile our planet is. And when I talk about stewardship of the Earth, I think we need to recognize that.

"What will be the legacy of Mankind? Perhaps some day we will develop the technology to travel to other worlds, and populate them too. Perhaps it will be necessary because of what we've done to this Earth, and raped our own planet, and put ourselves in a position where we cannot live here anymore. What kind of stewards are we then... are we to be a cancer on the universe, destroying everything we come into contact

with?

"The seeds of our own destruction are being sown in this generation. However, we can plant the proper seeds -- grow, develop an awareness, and set a path for ourselves.

that takes us in the right direction and gets us back into harmony with [the environment]....

"...individually, we do make a difference. And I hope you all will each take the message home with you, spread it, and witness for Mother Earth."

- Bruce Bowman



Keith Dunlap overlooking the rise pool at Big Spring Nature Preserve. This photo was taken in March when the lack of foliage allows for better viewing of the collapsed valley above the spring. See page 12 for an article on the July 9th workday.

## **NEWS BRIEFS...**

	After almost a year of planning and then another of waiting for dry weather, the gate replacement on the Quarry Entrance to Shiloh Cave was finally completed on August 6th. The old gate was in disrepair and had been breached by vandals. It was also environmentally restrictive, blocking both air and water flow. The new gate should protect this Lawrence County cave from unauthorized visitation while providing limited access for conservation-minded cavers. The owner is very pleased with our efforts despite the extended schedule to get the gate installed. The project was funded by the IKC and cost less than \$200 in material. Hundreds of dollars in rental expenses were avoided thanks to our well-equipped membership (or their employers). A complete report with photos is being planned for in the December <i>Update</i> .
	On a related issue, the Management Plan for Shiloh Cave will be discussed and presumably voted on at the September meeting. Because of the cave's location (it is in an active quarry) and extensive biota, the access policy for recreational trips will be more restrictive than on some of our other managed caves. Various members have already voiced concerns of too many or too few trips allocated per year, and the maximum group size to be allowed. The goal is to protect the resources and minimize landowner concerns and liabilities while providing for recreational and education experiences. Each Director will have a copy of the draft plan prior to the meeting. You may also contact Jim Adams for further details and to express your thoughts on the matter. As always, your input would be appreciated at the meeting.
	The IKC, and Bruce Bowman in particular, has been negotiating with the owner of Suicide Cave in Washington County. While previous discussions over the past year had not made much progress, more recent communications have been a little more promising and may allow the IKC to offer protection for this cave while also providing legal access. It is too soon to tell what, if anything, will come of this effort, but at least discussions are moving forward and the owner wants to see the cave protected. Bruce will give a status report of any recent developments at the September meeting.
	As reported in the March <i>Update</i> , two vandals plead guilty to violating the Indiana Cave Law (IC 35-43-1-3) for spray painting their names in Suicide Cave. A third participant at that time plead not-guilty with his trial set for a later date. Although this news update is a little late, apparently the third vandal, Larry Myers, changed his plea several weeks later and like the other two, was fined \$173 in court costs and was required to perform several days of community service for the county.
<b>Q</b>	As a result of the convictions related to the above news item, IKC member Jim Adams and Central Indiana Grotto member Eric Higbie received a reward of \$450 for their involvement in the successful prosecution. The reward came from the National Speleological Society's Cave Vandalism Deterrence Reward Commission to encourage cavers to pursue legal actions against cave vandals. Also instrumental in the conviction was Sergeant Ronnie Burns of the Indiana State Police who also happens to be a caver. While Ronnie can not share in the reward because of his position, Jim and Eric have decided to donate a portion of their reward to the Harrison-Crawford Grotto of which Ronnie is a member.
<b>-</b>	Seventeen IKC volunteers helped with the June 4th workday at the Hancock Property. Shaft Cave's pit was checked for trash, all the trails were walked to pick up litter, Turtle Cave was visited and minor trash removed, the fence around Grotto was checked, and the ditches along Spicer Lane were walked for litter. The rest of the day was spent at Coon Cave removing new and old logs in the entrance pit. Everything removed was sawed into shorter pieces so they could not be re-used as climbing poles. Participants included: Jim Adams, Bruce Bowman, Gary Conners, Bruce Devore, Keith Dunlap, Kim Kohal, Jeff, Kelly, and Zack McCammon, Karl Nelson, Scott Nordhoff, Gene Pelter Jr, Joe and Rosemary Peterson, Tom Sollman, and Floyd Waldrop.

B

☐ Fourteen cavers from the Au Area, Northern Indiana, Mid-Hoosier, and Great Cincinnati grottos participated in a graffiti removal project in Salts Cave (Lawrence County) on July 2nd. The offending vandalism was primarily some new spray painted arrows and several names. Historic graffiti was left undisturbed. Volunteers included: Larry and Linda Bundy, Bruce and Deb Devore, Arron Howell, James and Mary Gregory, David and Penny Hibbard, Angie and Dave McClerc, Debbie Miller, Angie and Floyd Waldrop. Three IKC members (Keith Dunlap, Cheryl Early, and Dick Maxie) volunteered their time and labor to help construct a bat gate on Cave Hollow Cave in the Daniel Boone National Forest (east-central Kentucky). The 30' wide by 18' high gate took four days to build with approximately a dozen workers needed each day. The cave is a winter hibernaculum for approximately 5,000 Indiana bats (Myotis sodalis), the largest population on that Forest and one of the largest hibernacula in Kentucky. ☐ Tom Sollman is continuing his crayfish censusing in Shiloh Cave to compare the population with those documented in the 1960s and 70s as well as to serve as a baseline to monitor possible impacts from renewed visitation allowed under the cave's Management Plan. Over the past nine months, Tom has made scheduled trips every three weeks to count the crayfish and document other observations. Each census takes about eight hours to complete and covers most of the cave. This project will continue indefinitely at a reduced schedule. In the near future he plans to publish some of his preliminary observations. ☐ The Indiana Department of Natural Resources, Non-game Section has approved a \$1250 grant to Keith Dunlap for purchasing additional temperature monitoring equipment to expand his monitoring of winter in-cave temperatures in Indiana bat hibernacula (see Update #33 for his initial results at Ray's Cave). A total of twelve miniature data recorders will be placed in Ray's, Coon, and Grotto caves, plus two outside data loggers to capture comparative temperature. A number of objectives will hopefully be met with this investigation including information related to why the populations of Ray's and Coon are increasing while Grotto continues to decrease. The IDNR grant calls for monitoring over the next two years, but the project will likely continue beyond that period of time and may be expanded to additional caves as appropriate. ☐ As part of the IKC's educational outreach program, IKC Secretary, Jim Adams made a presentation on cave/karst conservation to approximately two dozen Scout Masters at a district roundtable meeting in Noblesville on July 18th. Jim gave a particularly strong conservation message that extended into dumping in sinkholes and other water quality and land use issues. The audience was very interested and asked a lot of questions. □ Not to be out done, IKC President, Bruce Bowman made a presentation about the IKC and cave conservation to approximately twenty members of the IU Spelunking Club at their July meeting. Bruce used the IKC prepared slide show followed by a lengthy interactive discussion on cave/karst conservation topics. He distributed numerous IKC, NSS, and BCI brochures. He also plans to give another presentation this fall when IU is in full session and the majority of the students have returned. ☐ The IKC once again collected aluminum and steel cans for recycling at Cave Capers. Six large (39 gallon) bags were diverted away from the landfill and converted into a little cash. Thanks to everyone who took the effort to separate out their recyclables for proper □ No new progress to report on our attempts to adopt-a-highway. The Department of Transportation still has not re-implemented their program to have volunteer organiza-

tions pick up litter and trash along assigned sections of Indiana highways. The program was temporary put on hold to revise the training and safety aspects for the volunteers,



but now is being held up while they prepare new application guidelines and forms.

Leave it to a government agency to not be able to figure out the paperwork on how to utilize free labor to perform a needed task. ☐ The final two Lost River tours of 1994 are scheduled for Saturday, September 24th and Saturday, October 8th. The tours are free and are an excellent way to gain a better appreciation for this unique karst area situated in Orange County. While the itinerary for each tour varies slightly depending upon flow conditions and weather, stops generally include most of the classic features such as Wesley Chapel Gulf, Tolliver Swallowhole, the "dry bed" at numerous locations, and the Orangeville Rise. Several historic/cultural sites are also visited. The tours leave the SE corner of the square in Orleans at 8 AM sharp. The host/guide for the tours is Bob Armstrong and you may call him for additional information (317-926-4266 H / 353-7049 W). ☐ Mark December 4th on your calender for the 9th annual restoration trip into Wayne's Cave (Monroe County). The IKC and CIG will once again jointly sponsor the trip to this very challenging cave. Most of the passages beyond Camp I are in good shape, but efforts are still needed to remove graffiti in the crawlway and in old Wayne's. This trip is not for novices and you must have the proper equipment (e.g., helmet and helmet mounted light) to participate. More information on the trip and the trip leaders will be provided in the December *Update*. ☐ The Indiana DNR, Fish and Wildlife Division is hosting the 56th Midwest Fish and Wildlife Conference on December 4-7th in Indianapolis. The conference provides an opportunity for resource managers and professionals from the central United States to communicate research findings, success stories, and new management strategies. For further information regarding the conference, contact Ed Theroff at (812) 849-4586. The Ohio Valley Region has appointed a new Conservation Chair. He is John Cole of the Miami Valley Grotto. His address is PO Box 555, University Station, Lexington, KY 40506-0025 and phone number is (606) 272-1343. ☐ The IKC Update was once again honored in the annual NSS Graphics Art Salon for artistic newsletter covers. All four 1993 covers were accepted for display, with the #30 (photo by Scott Fee) and #31 (artwork by Christine Gerace) covers receiving honorable mention ribbons and our #29 (artwork by Linda Heslop) cover receiving a merit award ribbon. The editor is always looking for quality artwork and high contrast photos (preferably of Indiana caves) for the cover. As members have already realized, the Publications Committee has been busy producing another educational reprint distributed with this newsletter. Special Publication #5 is entitled Hudelson Cavern, A Stormwater Route of Underground Lost River, Orange County, Indiana authored by Clyde A. Malott in 1948. This classic cave description of one of the more notable features in the Lost River drainage basin was originally published in the Proceedings of the Indiana Academy of Science, Volume 58, pages 236-243. The Committee hopes to have another reprint ready for distribution in March. ☐ All members and volunteers should remember that the IKC is an IRS 501(c)(3) tax exempt organization and as such, certain out-of-pocket expenses while working on IKC sponsored activities may be deductible from your federal income taxes (assuming you itemize). Specifically, you are allowed a deduction of 12¢ per mile while driving to and from IKC work projects. Directors can also deduct mileage to and from IKC meetings. Other expense deductions may also be allowed, but are much less clearly defined. And of course, dues and any cash donations to the IKC are fully deductible. ☐ Five new members have joined the IKC in the past three months. Welcome Donald In-

gle, Kim Kohal, Joe, Joseph, and Rosemary Peterson. We would also like to thank John

Danovich and Dave Haun for donations.

## JEFFERSON PROVING GROUND

## RECLAIMING A PIECE OF WILD INDIANA: A CITIZENS CALL TO ACTION

(adapted from an environmental alert supplied by Tim Maloney)

Indiana citizens can seize a once in a lifetime opportunity by supporting the campaign to create a new 53,000 acre national wildlife refuge at the Jefferson Proving Ground in southeast Indiana. Scheduled to close in 1995, JPG has been a US Army weapons testing facility since World War II.

Why protect an area that the Army has bombed, shelled, and shot at for the last fifty years? It's these activities that have limited the permanent human presence to just a small part of this ninety square mile proving ground. The most severe impacts of the weapons testing have occurred on only a few thousand acres. The result is a heavily wooded, unbroken landscape crossed by several rugged and wild stream valleys that is host to splendid richness of plant and animal life.

The Jefferson Proving Ground is a biological treasure that has:

- the largest remaining till-plain flatwoods in Indiana (flatwoods are poorly drained forests containing pin oak, sweetgum, red maple, and other hardwood trees);
- over 3000 acres of forested and shrubby wetlands;
- unusual limestone cliff plant communities occurring along JPG's many deep cut streams;
- over 100 breeding bird species, including deep forest songbirds such as the wood thrush, scarlet tanager, and worm-eating warbler;
- habitat for the federally-endangered Indiana bat and state endangered Kirtland's snake;
- numerous caves, karst features, and sinkholes with an extensive variety of subterranean biota (see editor's note at the end of this article).

Along with the ecological variety of the JPG comes the environmental hazards of unexploded shells, bombs, and mines and a number of hazardous waste dumps.

Even with expensive and conscientious cleanup efforts, very little of JPG would be suitable for redevelopment by private interests. Without a doubt, its best reuse both environmentally and economically is preservation as a national wildlife refuge. Additionally, the refuge plan does recognize the desire for some potential development to offset civilian jobs lost from the JPG closing and thus, the plan includes provisions for approximately 2,000 acres at the JPG's southern end (where the current Army buildings are located) to be available for public and/or private development.

Unfortunately, a local reuse committee, known as the JPG Regional Development Board, has prepared its own alternative reuse plan which is highly development oriented. This plan calls for carving thousands of acres out of the pristine and undeveloped northern end of the proving grounds for two agri-business parks which would introduce refuge-incompatible developments such as egg-producing farms operated by Rose Acres into this critically important wildlife habitat. The Board's plan also calls for a 1,000 acre regional solid waste landfill somewhere in middle of the JPG and their plan calls for continued munitions testing by a private contractor. Many local residents are opposed to this development-oriented proposal and need your help to stop it.

In the near future, a Draft Environmental Impact Statement will be prepared for each competing reuse plan. The final reuse decision for the JPG will then be up to the Army. Public input is critical.

This unique preservation opportunity is at hand. You can help make the national wildlife refuge proposal a reality by writing to the US Army, Congressman Lee Hamilton, Senator Richard Lugar, and Senator Dan Coats. ASK THEM TO ENDORSE THE NATIONAL WILDLIFE REFUGE ALTERNATIVE AND OPPOSE UNACCEPTABLE DEVELOPMENT NORTH OF THE FIRING LINE. Your input now will make a difference.

Points that you may wish to include in your letters:

- preservation of JPG is a once in a lifetime opportunity for Indiana because no other contiguous land area of this magnitude is likely to ever become available for protection;
- □ large, unbroken forest tracts are essential for protecting the migratory songbirds threatened by habitat destruction and disturbance;
- the development plans for JPG north of the firing line are unrealistic given the presence of unexploded ordinance, while the wildlife refuge will provide immediate environmental and economic benefits;
- the JPG contains extensively developed karst topography and thus incompatible with the proposed solid waste landfill;
- development of the northern end of the proving ground will destroy the heart of the wildlife refuge, disturbing invaluable habitat in exchange for inappropriate speculative land use that would benefit only a few;
- there is no reason to develop and destroy the pristine natural areas of the JPG when there is an over abundance of private land outside the proving ground that could support the same type of activities with much less impact;
- many local residents oppose the agribusiness park proposal which in addition to the egg farms, could include hog and cattle farms, all causing significant environmental problems such as reduced groundwater quality and unpleasant odors.

Address your letters to:

Robert Jameson US Army Material Command ATTN: AMCSO 5001 Eisenhower Ave Alexandria, VA 22333-001

Representative Lee Hamilton House of Representatives 2187 Rayburn Building Washington, DC 20515 Senator Richard Lugar US Senate 306 Hart Building Washington, DC 20510

Senator Can Coats US Senate 404 Russell Building Washington, DC 20510

Also send a copy to:

Dave Daghir JPG Regional Development Board 337 Clifty Drive Madison, IN 47250

For more information, contact:

Tim Maloney Hoosier Environmental Council 1002 East Washington Street Suite 300 Indianapolis, IN 46202 317-685-8800

[Editor's note: Over the past six months, IKC member Ray Sheldon has been working with the Natural Resource Manager of JPG and has been able to initiate an extensive systematic karst inventory project. He along with IKC members Bruce Trotter, Kevin Wools, Keith Dunlap; Jake Trotter, and Jerry Walker (the JPG escort) have so far mapped 15 caves on the two southern most streams. As the project works its way north to the other four major streams, it is anticipated that the caves will become more numerous and better developed. The caves thus far have been mostly low and wet, but this appears to have helped support the abundant biota observed in the caves. Undoubtedly, most of these caves are virgin or at a minimum have not been disturbed for nearly half a century. Speaking from first hand experience of having had the pleasure of visiting the JPG, it is completely ludicrous that anyone would want to destroy this natural area to build a chicken farm or landfill. Please write a letter to support the wildlife refuge and stop the Regional Development Board's proposal.]

## Illegal dumping is passing into local caves

by Greg White

When the Delaware and Piankeshaw Indians roamed north of Campbellsburg more than 200 years ago, they respected the land, which provided them with food, clothing, and shelter.

Indian religion is tied closely to the Earth -- they took only what they needed and then returned the materials to replenish

nature's supply.

Two centuries later, those who inhabit that area may not be as conscious of the environment.

According to Cathy Engler, coowner of Cave River Valley Park, trash is being dumped into surrounding sinkholes, which, in turn, is being swept by rainwater into the caves.

She has no idea who or how many people in the area are con-

tributing to the problem.

"We've found diapers, pie pans, beer cans, glass, bedsprings, and all kinds of things,' she said last Friday afternoon. "We've even heard rumors that some farmers dump dead cows in sinkholes and they've washed into the cave before."

According to IC 35-43-1-3.3(3), polluting a natural cave is a Class A misdemeanor and punishable by state law. Open dumping is also prohibited under state law.

"We think the majority of the trash goes on through the caves and down Clifty Creek to White River," she said. "The heavier things, like a water-soaked diaper and cans, remain in the cave. That's pretty serious."

These items can pollute the stream, which contributes to groundwater people in that area eventually drink through their

Engler said a sinkhole developed upstream where people, over the years, have deposited old refrigerators, tires, and other trash.

Leah Foutty, a representative from the solid waste division of the Indiana Department of Environmental Management said Friday, "Indiana has strict rules on open dumping. It happens a lot and our field inspectors spend a lot of their time investigating it."

Foutty said the problem also involves the Department of Natural Resources because the dumping is occurring in a waterway.

Teresa Palek, county environmentalist, said the dirty diapers clearly pose a health problem. She indicated she will investigate the situation.

Campbellsburg town marshal Claude Combs and Conservation Officer Dan White have been looking for those involved in the illegal dumping since earlier this

"We have been waiting for the leaves to fall before we can really see that area. We will do a flyover to find where the open dumping is occurring," White said.

Cathy and her partner, Burt Engler, purchased the 298-acre park four years ago from the Victor Green family and are trying to make renovations to the area.

"We'd like to get it back into

shape to have people come out and camp. But it's embarrassing to have people go into the caves and find this stuff."

The cave system was formed millions of years ago when sediment layers around what is now Campbellsburg sank from the action of a north-south fault, which lowered the layers by 100 feet. Groundwater flowed through these layers of limestone over the years and created the karst system.

Clifty Creek, which originates somewhere under the town of Campbellsburg, emerges from the ground at River Cave, or Wet Clif-

In "History of Campbellsburg," there is a story about the youth of the time experimenting with sinkholes and the cave system:

"Located just to the north of town was a large sinkhole into which school children once used to throw bottles, and then go to Clifty to watch them emerge from the 'wet' cave. Over the years, it was also frequently reported that some livestock, after falling into sinkholes, had later emerged from the same cave," the story relates.

Engler said she was concerned that even though she has reported the problem, no organization has come to her aid.

"It seems like they're ignoring the problem," she said. "Or else, I haven't contacted the right peo-

[Reprinted with permission from The Salem Democrat, August 11, 1994]

## INDIANA BAT HIBERNACULA CLOSURES REMINDER

Cavers are reminded that caves designated by the Indiana Department of Natural Resources as significant habitats for the federally endangered Indiana bat (Myotis sodalis) are closed September 1st through May 1st. These hibernacula include: Twin Domes (Harrison), Ray's (Greene), Batwing (Crawford), Jug Hole (Harrison), Coon (Monroe), Grotto (Monroe), Parker's Pit (Harrison), Saltpeter (Crawford), Robinson Ladder (Crawford), Clyfty Cave (Greene), Saltpeter (Monroe), Leonard Springs (Monroe), and Wildcat (Crawford). Each of these caves has been posted with signs by the IDNR. Other small hibernacula that are not posted, but should be also avoided to protect the bats would include: Endless Cave (Washington), Sexton Spring Cave (Greene), and King Blair (Monroe). Note that some of the mentioned caves are closed year round by their owners. Your cooperation is appreciated. Questions about the closures may be directed to biologist Scott Johnson (812) 334-1137.

## Sinkholes, Solid Waste, and a Farmers Perspective

Editorial by Bill Moran, Harrison County Soil and Water Conservation District and Member of the Citizens Advisory Committee

Harrison County, Indiana: Sinkholes are prevalent in the area covered by the Harrison County Solid Waste Management District. Sinkholes are those funnel shaped depressions that dot the landscape of the area. The problem lies in the fact that there is something down there and that we have been dumping something in there.

Carlton Miles is a local farmer and a retired soil conservationist from Harrison County. He has dealt with sinkhole problems and is very familiar with the affects that we humans can have on our environment when it comes to sinkholes. "Something is down there under every sinkhole. A stream or passageway is there. If you dump garbage in sinkholes you will pollute the stream," stated Carlton Miles in a recent interview.

Miles owns a farm along Indian Creek. It is just upstream from the reservoir that provided the water supply to Corydon prior to this year. A large spring issues from a rock ledge on the farm. The spring was an asset to the Miles family for years. It was a source of water and refrigeration at a large spring house. The Miles have left the sinkholes that feed the underground stream in their natural condition. Instead of filling them with debris, to keep livestock from being injured, the Miles have constructed fences around the openings. Carlton Miles is protective of his sinkholes and said, "The wildlife have formed a trail from a brushy area to drink from the stream flow at the bottom of the sinkholes. Leaving the sinkholes open benefits the wildlife.

Miles also expressed the danger of leaving sinkholes open and said, "I build a fence around my sinkholes while they are caving in. Once they quit caving in and no longer a threat to livestock and people, the fence can be removed. I would never fill a sinkhole up with trash; that pollutes."

Miles discussed some options on what materials could be used to help stabilize sinkholes. Mr. Miles said: "The placement of large rock in the sinkhole would not pollute the groundwater." He also said that; "Broken pieces of concrete and some brush would not cause environmental problems. Although the brush may cause some problems by rotting down over time and leaving voids." He added, "Letting sinkholes alone to stabilize naturally is probably the best idea; dumping trash into sinkholes should not be done under any circumstance. That is what we have landfills for."

There has been a lot of sinkhole dumping in the past and the waste management district believes that some continues today. Carlton Miles was asked to explain why he thought so much dumping had occurred in the past. "It was partially due to the fact that people didn't know any better. But most of all, there was no place to go with the trash. Now there is a place for trash." He also added that "Trash was dumped along highway bridges, over creeks; this was particularly disturbing."

From a soil conservation and runoff standpoint, Carlton had other concerns about the sealing off of sinkhole openings with trash, soil, and other debris. He explained, "We have always had sinkholes and the water has to go somewhere. If you plug them up, the water has to go somewhere else. By filling up sinkholes you can cause serious erosion problems as the water flows from the filled sinkholes to other areas." Mr. Miles also spoke of areas in the county where he has seen massive gullies form as a result of filling sinkholes.

Carlton Miles, the Soil and Water Conservation District, and the Solid Waste Management District all feel that we need to work with the sinkholes to keep them stable, clean, and able to drain. By doing this, our soil, water, wildlife, and human resources will be protected.

[Reprinted from The Corydon Democrat, Earth Day Supplement, April 1994. Submitted by IKC member John Benton.]



## **BIG SPRING NATURE PRESERVE WORKDAY**

by Hank Huffman

The volunteer workday sponsored by the Ohio Valley Region of the NSS and hosted by the Indiana Karst Conservancy was held at Big Spring Nature Preserve on Saturday, July 9th. Sixteen hard working volunteers showed up to help as well as several other cavers who stopped by throughout the day to just see how things were going. The day was a great success; virtually all the tasks of a rather ambitious schedule were completed. Concrete property boundary monuments were set at property corners, Nature Preserve property signs were placed along the road frontage, a large routed wooden sign was erected at the trail head, a small primitive foot trail was cleared leading down to the spring, an old wire fence was removed from around the spring, a large dead overhanging tree trunk was removed from the spring pool, and a rustic split rail fence was constructed.

Big Spring is a large alluviated spring which flows into the South Fork of the Blue River in a karst area noted for a number of caves and related features. This nine acre property containing the spring and old growth woods was given to the Division of Nature Preserves by Bill and Peggy Smith in 1991. Besides its at-

tractive natural features, the area is of historical interest with remains of the old homestead adjacent to the spring. The Preserve is open for low-impact public visitation and is located in southern Washington County. To reach the Preserve, take State Highway 135 south from Salem for about 71/2 miles to Grandview Road and follow the signs to Big Spring Christian Church (the church and spring are labeled on the USGS Palmyra Quadrangle). Park in the gravel area along the south side of the church and look for the foot trail leading down to the spring. The wooden sign confirming that you are at the right location can be seen set back twenty feet or so into the woods. Please be courteous and avoid visiting the property on Sunday mornings and evenings when church services are being held.

The Indiana Department of Natural Resources would like to thank the NSS, the Ohio Valley Region, the Indiana Karst Conservancy, and especially the participants: Katie Backe, Bruce Bowman, John Cole, Bruce Devore, Keith Dunlap, Dave Haun, Tem Hornaday, Brian Leavell, Joe, Rosemany, and Joseph Peterson, Tom Rea, Tom and Travis Reynolds, Kent Wilson, and Theresa Harley-Wilson.



Volunteers putting up the split rail fence at the Big Spring Nature Preserve (the spring is 50' to the right).

## Bayh reinstates Ind. 37/145 project

by Lori Beshears

The recently canceled extension of Ind. 145 from French Lick to Mitchell was restored to Indiana Department of Transportation construction schedule Monday under orders from Gov. Evan Bayh.

"This is a project that I endorsed when I ran for governor and that I still support," Bayh said. "When it was called to my attention that it had been deleted from INDOT's plan, I called the commissioner and the result is that it has been reinstated."

At a regional planning meeting in Jasper on July 28, INDOT officials announced the cancellation of plans to build an improved four-lane/super two-lane highway running north-south from Mitchell down the Ind. 145 corridor to I-64 at St. Croix. Agency officials cited environmental concerns and cost factors in announcing the project would not be completed.

Bayh said he became aware of the action last week.

"I was not aware of the decision that they were announcing on that date," he said yesterday in a teleconference. "The department did not view them as being that significant. When brought to my attention, I clearly felt otherwise."

Bayh said INDOT made a routine decision in canceling the project. The agency continually adjusts the timing of hundreds of road construction projects across the state in order to qualify for federal dollars, he said.

"In fairness to the department, they have to make these adjustments all the time and they certainly didn't realize that to my mind these projects are of a particular significance...I'd say lack of a better term it was probably a breakdown in communications here at the state level."

The governor's order reinstating the Ind. 37/Ind. 145 project was good news to State Rep. Jerry Denbo, D-French Lick, who had discussed the matter with Bayh on Friday.

"I was extremely pleased, not only that it's on schedule but that the decision was made so quickly," Denbo said. "I don't think INDOT had looked into the matter enough to know how important it was to people of this area. I think they understand that now, though."

Denbo said he considers IN-DOT's initial decision to cancel the project a blessing in disguise.

"I think they (INDOT) will be very reluctant to delay this any longer," he said. "By the governor taking such a strong stand on the issue, I think they're going to realize that this is a top priority now."

The Ind. 37/145 Association, which has been pushing to get the highway built, had quickly scheduled a meeting for Wednesday after hearing the project was canceled.

Bayh's announcement changes the focus of Wednesday's meeting, said Al Walker, who heads the association.

"We're going to be facing it as if it's going to happen rather than not going to happen," he said.

"I'm very happy, obviously," Walker said. "This does not mean that we're going to quit doing things, but it certainly is a step in the right direction."

Members of the group have been promoting a second petition drive in favor of building the extension. The petitions show a picture of Bayh signing the original petition in favor of the project. He signed the petition in 1988, when he initially ran for governor.

The petition drive will definitely continue, Walker said.

Returning the project to IN-DOT's schedule does not mean it has been postponed, Bayh said. It has been returned to INDOT's plan as previously scheduled.

"This means that the engineering and design work, the scoping for these projects will go forward as previously intended," Bayh said. "It will mean that the groundwork for future construction will continue to be laid."

The agency will complete scoping on the section from Paoli to French Lick in 18 months, said INDOT spokesperson Maria Kalnbach. Scoping on the section from Eckerty to I-64 should be completed in nine months.

"From there, we'll be able to build a development schedule," Kalnbach said.

So far the state has spent more than \$15 million on the project. Buying land along Ind. 37 corridor cost \$3.2 million; building four-lane Ind. 37 from Bedford to just north of Mitchell cost \$12 million; and conducting a location study for Ind. 145 cost \$50,000.

Next year, travel lanes are scheduled to be added to 2.8 miles of Ind. 37, making the road a four-lane through Mitchell. And additional engineering work on Ind. 37/Ind. 145 will soon add several hundred thousand dollars to the price tag.

Bayh said the improved connection with I-64 will bring economic growth and new jobs to south central Indiana.

"We're going to move forward and we're spending additional money," he said. "They (INDOT) know in the future that when it comes to making any adjustments on the project, they need to contact me personally.

[Reprinted from The Times-Mail (Bedford), August 9, 1994]

[Editor's note: This project, which cuts across the Lost River watershed, was originally dropped from INDOT's schedule after it became apparent to them that it would be very expensive and difficult to construct an environmentally-friendly highway in this area. INDOT made their decision based on sound business criteria balancing the needs of the communities that the road would serve versus their responsibilities to all Indiana taxpayers for spending their limited budget on projects which will get the most return. Obviously politics can overrule these decisions even if they don't



## 1994 MAMMOTH CAVE RESTORATION FIELD CAMP

by Larry Reese

The sixth annual Mammoth Cave Restoration Field Camp was held this year from July 31st to August 6th at Mammoth Cave National Park. There were thirty-three participants representing seven states in attendance. Projects for this year included trail work, graffiti removal, speleo-feces removal, gate removal and replacement, and wood removal.

Trail work consisted of repairs to the tourist trails from the Rotunda to Little Bat Avenue and from the Rotunda to the Giant's Coffin as well as some trail work in the area of the Dead Sea. In past years, uneven areas of the tourist trails have been filled by removing material from an area of the cave near the tourist trail and using this material to even out the trails. While this was effective, it was felt that it was not in the best interests of maintaining the cave in as natural a state as possible. The Park Service decided to repair the trails by redistributing the existing trail materials in the area to be repaired. In other words, where you have a hole or

uneven spot, break up the dirt around the hole, chop it up as fine as possible, add water to make thick mud and then smooth out the hole or uneven area. This worked well for small areas but for one sloping area of about five by ten feet it was quite a task. The dirt (mainly clay) becomes quite nasty and hard to spread when you have that large an area to work on. It also takes several days to dry sufficiently to allow tourist traffic to use the area again.

Graffiti removal was done in the men's restroom in Great Relief Hall. The ceiling in the restroom had a lot of names and marks scratched on the exposed rocks. Testing done earlier this year had shown that this could be minimized by misting a small area with household vinegar, then using a sponge and lightly dabbing the area, the material surrounding the scratches could be moved into the scratched area. This process worked quite well. A previous experiment using vinegar and brushes seemed to work well at minimizing the appearance of the graffiti but also



Larry Matiz using a vinegar solution to remove scratches from the ceiling in Great Relief Hall, Mammoth Cave, Kentucky.

photo by Larry Reese

The concrete proved to

be of exceptionally high

home in the woods and

was reluctant to leave.

quality. It really liked its

removed the natural patina of the rock and left the test area looking much lighter than the surrounding rock that was neither scratched or brushed.

Other cleaning was done in the Welcome Way area of Silliman Avenue, a previous location that was used around the turn of the century as a toilet (maybe even later). The cleaning consisted of removing unidentified objects (as well as some you could identify) with a trowel and placing the removed material into plastic bags for removal from the cave. The Park Service likes to call this a carbide dump clean up because the practice in the past was to

spread lime on these unidentified objects shortly after they were deposited (essentially this is the same practice you would use in the little house with the half moon on the door if you get the drift). Well, used carbide is slaked lime but I don't real-

ly think all the white stuff was used carbide and I know the brown stuff wasn't. Wood was also removed from Cascade Hall and taken out past this area and eventually up the elevator near the Snowball Dining room by another crew working in the El Ghor - Silliman group.

The gate removal and replacement was done at the Bedquilt entrance. During the 1960's a gate was installed at Bedquilt by constructing a reinforced concrete structure around the natural entrance with a steel gate in the top. This structure was several feet above grade and restricted the natural water flow into the entrance as well as diminishing the organic material that washed in with the water. Over time, the area around the structure filled up with soil and the gate was now at grade level. The size and position of the gate allowed it to become easily clogged with debris. It was determined that the current gate should be removed as well as the concrete structure it was mounted on, allowing the cave to return to its former state. A new gate was built and installed inside

the cave at a point in a dry area above the water flow where it would prevent access, but allow water and organic material to again enter the cave. The installation of the new gate went pretty much as planned. The removal of the old gate and its structure was a different story. An electric generator was hauled down an old road to the top of the hill above the entrance and from there carried by hand down the hill. The generator was used to power electric hammers to break up the concrete. Well, that was the plan anyway. The concrete proved to be of exceptionally high quality. It really liked its home in

> the woods and was quite reluctant to leave. Two electric hammers were used, one large and a smaller one. The large one burned up and was repaired and I think burned up again. The smaller hammer didn't do a very good

> didn't fail but it also

job of breaking the concrete. Four days of working on this project with a crew of four accomplished the removal of the gate and a portion of the concrete sufficient (we hope) to allow the proper flow of water and organic material to return to the cave. On the last day all thirty-plus people gathered to chain-gang the broken concrete up the hill to a small trailer at the top so it could be removed from the area.

Finally, wood removal was done along the Echo River Trail where old rotten waterlogged wood was removed and hauled out of the cave via the fire tower at Mammoth Dome and out the Historic entrance.

All in all it was a pretty successful week. We accomplished most of the projects we started out to do and had some fun along the way. On Saturday we had a choice of three areas to visit just for fun. The easy trip was the former tourist trail in Colossal Cave, number two was Colossal Cave tourist trail and a trip out the J survey, and the third was a trip to Stevenson Avenue in Mammoth to see the Hurdle Race, Neptunes Cups, and more.

## SR 37 HIGHWAY UPDATE

by Keith Dunlap

Well the construction of "Section One" is finally complete and all but the final legal paperwork is yet to be completed. It seems hard to believe that it has been almost  $2^{1/2}$  years since the IKC first became intimately involved with the SR 37 highway construction between Bedford and Mitchell. Most of the environmental problems, subsequent litigation, and agreed upon mitigation changes have been detailed in previous issues so I will not repeat them here. However, I did want to elaborate on the central concern throughout this whole ordeal -- degraded water quality entering the karst system due to highway and right-of-way run-off.

INDOT along with the IDNR, USFWS, and two different environmental consultants came up with several alternative methods of addressing the water quality issues. First INDOT constructed numerous catch basins and stone dams in the ditches. These were designed primarily to trap liquids that might be spilled during an accident or tanker transport leak before they could flow to the sinkhole drains.

The second approach used by INDOT to improve water quality were "filters" which are meant to remove the water transported contaminants. Obviously some contaminants are easier to remove than others. The easiest materials to remove are soil particles which can be effectively trapped by running the water through beds of gravel or crushed rock and geotextile filter cloth. Thus most of the sinkholes received these low-tech and inexpensive "stone" filters.

More difficult to remove are dissolved metal such as lead, zinc, copper, and cadmium that are the by-products from automobiles and can be found in high concentration in the initial road surface wash-off during rains. To remove this kind of pollutants, INDOT designed four experimental filters with the primary media being fibrous peat. The advantages of peat are that it can trap much finer suspended particles and it contains charged ions which can attach the metal ions to the peat fibers, removing them from the water.

The largest of the four peat filters is located 2.0 miles south of SR 50 in the east right-ofway ditch, draining approximately 70 acres. The filter bed measures approximately 200' long by 12' wide. A cross-section and plan view of this filter is shown on the next page. Its basic operation is for road runoff to pass horizontally through the perimeter stone berm to pre-filter out larger soil particles, organic materials (grass, sticks, etc.), and trash. The water then passes vertically through a finer grade of stone and then the fibrous peat. The water is drained out of the bottom of the filter system via three perforated tile, collected in a concrete drop structure, and passed under the highway to the opposite side and into the sinkhole structure.

The hardest contaminants to remove from road run-off are dissolved chlorides, primarily from winter salting during snow and ice. Since a removal system would be very expensive, the only practical way to deal with these pollutants are to not introduce them in the first place by using alternative snow removal methods. While the environmental groups pushed for a "no-salt" policy, INDOT would agree to only a "low-salt" approach which is yet to be completely defined.

Finally, in recognition of the sensitivity of the karst topography, INDOT has installed road signage as part of their low-pollution/prevention strategy to remind traveler and highway crews of their responsibilities to protect this section of highway.

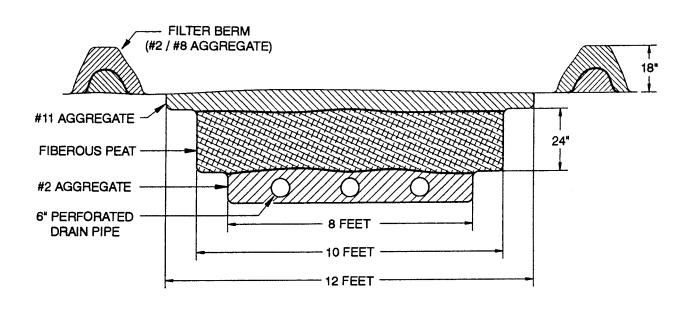


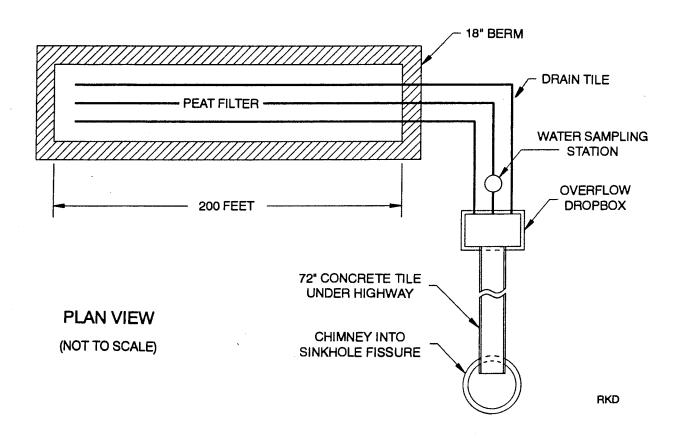


photos by Bruce Bowman

## **CANADIAN FIBEROUS SPHAGNUM PEAT FILTER**

SINKHOLE WATER QUALITY IMPROVEMENT STRUCTURE (CROSS SECTION DETAIL)





INDIANA MARCT CONCERNANCY TREACH						
INDIANA KARST CONSERVANCY TREASURY REPORT Income Statement						
From April 01, 1994 to June 31, 1994						
INCOME						
INCOME:	E20 E0					
Dues Apportionment Donations	532.50					
Interest	25.00 38.52					
NCMS Fund Adjustment	13.40					
Uncashed Check Adjustment	1.00	<b>#C40.40</b>				
EXPENSES:		\$610.42				
IKC Update (Printing/Production/Mailing):	164.76					
Membership Correspondence	60.70					
Other Correspondence / Info Request	9.02					
Property Management Supplies (lock & keys)	16.58					
Restoration Supplies (trash bags, brushes)	35.19					
Bat Census Report Reprints (12 copies)	19.00					
Treasurer's Expenses	6.45					
CIG Bulk Mailing Permit Usage	15.00					
HEC Membership Renewal	34.00					
Earth Day Booth	30.00					
Laith Day Booth	30.00	(\$390.70)				
NET OPERATING EXCESS (DEFICIT) THIS PERIOD	=	\$219.72				
Balance Sheet						
June 30, 1994						
ASSETS:						
Prepaid Exp: 1995 Cave Management Syposium	747.40					
Cash in Bank	5759.37	000200200000000000000000000000000000000				
<b>-</b>	2000	\$6,506.77				
Total Assets	<u></u>					
	<u></u>					
LIABILITIES & OPERATING EXCESS:	217 18					
LIABILITIES & OPERATING EXCESS: Hancock Property Maintenance Fund	217.18 270.00					
LIABILITIES & OPERATING EXCESS: Hancock Property Maintenance Fund DNR Non-Game Fund	270.00					
LIABILITIES & OPERATING EXCESS: Hancock Property Maintenance Fund DNR Non-Game Fund Indiana Cave Syposium Fund	270.00 508.29					
LIABILITIES & OPERATING EXCESS: Hancock Property Maintenance Fund DNR Non-Game Fund	270.00					
LIABILITIES & OPERATING EXCESS: Hancock Property Maintenance Fund DNR Non-Game Fund Indiana Cave Syposium Fund Deferred Dues Fund: 142 members - 1994 3Q 1 member - 1995 4Q	270.00 508.29 1597.50					
LIABILITIES & OPERATING EXCESS: Hancock Property Maintenance Fund DNR Non-Game Fund Indiana Cave Syposium Fund Deferred Dues Fund: 142 members - 1994 3Q 1 member - 1995 4Q  Previous Operating Excess 3679.08	270.00 508.29 1597.50					
LIABILITIES & OPERATING EXCESS: Hancock Property Maintenance Fund DNR Non-Game Fund Indiana Cave Syposium Fund Deferred Dues Fund: 142 members - 1994 3Q 1 member - 1995 4Q	270.00 508.29 1597.50					
LIABILITIES & OPERATING EXCESS: Hancock Property Maintenance Fund DNR Non-Game Fund Indiana Cave Syposium Fund Deferred Dues Fund: 142 members - 1994 3Q 1 member - 1995 4Q  Previous Operating Excess 3679.08 Net Excess (Deficit) This Period 219.72	270.00 508.29 1597.50 15.00					
LIABILITIES & OPERATING EXCESS: Hancock Property Maintenance Fund DNR Non-Game Fund Indiana Cave Syposium Fund Deferred Dues Fund: 142 members - 1994 3Q 1 member - 1995 4Q  Previous Operating Excess 3679.08	270.00 508.29 1597.50	\$6,506.77				

## IKC QUARTERLY MEMBER'S MEETING MINUTES

Saturday, June 4, 1994 Bloomington, Indiana

## BOARD MEMBERS PRESENT:

James Adams
Larry Bundy
Keith Dunlap
Hank Huffman
Eric Schmidt
Bruce Bowman
Bruce B

Tom Sollman Bill Tozer

## BOARD MEMBERS ABSENT:

Mike Hood

Larry Mullins

Tom Rea

The meeting was called to order at 7:08 PM by IKC President, Bruce Bowman at the IU Geology Building. Introductions were made and the March 1994 meeting minutes were approved as published.

Bruce thanked everyone who helped out earlier in the day at the Hancock property clean-up.

Treasurer Keith Dunlap reported a balance of \$5,894 plus \$500 that the IKC is holding for the Indiana Cave Symposium.

An attempt will again be made on July 2nd to work on the gate installation of Shiloh Cave. The members were reminded that wet conditions frustrated our efforts last summer. There was discussion of some alternative gating ideas if things do not work out well again this year. Anyone wishing to help on July 2nd should be at the cave about 10:00 AM. We will try to get a heavy duty water pump for this trip.

Larry Bundy moved to fund the rental of equipment to do the construction. It was pointed out that the quarry might have what we need. No second.

Bill Tozer moved that we increase the gate expenditure allowance to \$350. Motion passed.

Tom Sollman continues his crayfish study in Shiloh Cave. Tom was asked if there are crayfish in the area of the dam where we are working that might be impacted. Tom confirmed that there are crayfish in this area.

Tom has also been looking at graffiti in the cave. He has made notes of all the names and the dates.

Bruce updated the membership on the status of Suicide Cave. The landowner has contacted us through his lawyer. He is interested in entering into a lease and/or management agreement. We have sent him information but are still waiting for a reply. In the meantime, we should all stay away from the property.

Keith talked about his cave temperature monitoring project. He anticipates receiving some funding from the Department of Natural Resources to expand the monitoring of Jim Rays, Coon and Grotto caves. Keith stressed that this is his project and not an IKC project, however, he asked for formal permission to conduct his studies in Coon and Grotto caves. Jim Adams moved to grant permission for the project. Motion passed.

Scott Johnson has recently removed the speloggers in several caves at the conclusion of the bat closure period. Of the three that were placed this year, two failed due to a bad batch of batteries or, perhaps, operator error. The functioning spelogger indicated that there were no closure violations in Grotto Cave this year.

On May 26th, there was an on-site inspection of the construction area of State Road 37. There appeared to be many sinkholes that INDOT has not followed through with in their promises to undertake specific conservation-oriented construction details such as filter traps. The administrative judge in this case is pushing INDOT to wrap things up. The IKC, HEC and others are not necessarily concerned with time. Bruce noted that there have been good results reported in the use of similar filter traps used in other areas.

The IKC plans to participate in the Adopt-A-Highway program on a two mile stretch of SR 37 South of SR 50. No new information on the program has been received. Bruce plans to follow up again if he doesn't hear anything soon. The Central Indiana Grotto also plans to take a section of highway.

Gene Pelter, Jr. reported that he has recently been in contact with INDOT concerning a section of road for the Northern Indiana Grotto to monitor. It seems the person who originally set up the program has left INDOT and the new person in charge is not as enthusiastic about the program.

Thanks to Hank Huffman for supplying a lot of articles for the reprint program. Keith would like to have an on-going program of two reprints per year. It was pointed out that this supports our 501(c)(3) application claim that we are (in part) an educational organization.

Hank noted that the Academy Of Science has given tentative permission to reprint their material. We must still request formal approval for each specific reprint.

Bill Tozer moved to fund the first reprint up to \$100. Motion passed.

There was a Land Acquisition Committee article published in the recent IKC Update. We need to identify individuals who might have good cave-owner relationships. We need to contact the owners of significant caves and let them know that we might be interested in their property.

This year's Ohio Valley Region conservation project is a work weekend at Big Springs, a new DNR property in Washington County. Saturday, July 9th has been set as the first day of the project. The property boundary needs to be marked, signs put up, trails made and an electric fence needs to be moved. A new splitrail fence will be constructed. Keith mentioned that although this is an OVR project, it is mostly an Indiana caver project. The grottos around the state need to promote the event.

Our Hoosier Environmental Council dues are due. Robert Sergesketter moved to renew our membership. Motion passed.

August 28th has been set for the annual Coon Cave clean-up.

The IKC has earmarked \$270 for the purchase of equipment to benefit the DNR Non-Game fund. Scott Johnson has need of a Bat Detector similar to a unit that Bat Conservation International sells through it's catalog. Keith Dunlap moved to make the purchase. Motion passed.

Thanks again to everyone who helped at the Hancock property this afternoon. Lots of trash was picked up and "speleo-logs" were removed from Coon Cave. Tom Sollman pointed out that we might want to leave some of the logs at the bottom of the entrance pit as a food source.

Jim Adams suggested that we send a postcard to landowners near the Hancock property to explain who we are and what we are doing at the site. This might be done a week or so before our next work day. The idea was generally well received. Bruce DeVore moved that we make an effort to make ourselves known to nearby landowners. The motion was discussed but tabled. The Secretary and the Cave Patron (Jim Adams & Keith Dunlap) will work on putting a plan into action.

Larry Bundy moved to contact each landowner on Spicer Lane that border the Hancock property before the next IKC event on the property. Motion passed.

Bruce summarized our Earth Day activities. The IKC had a booth again this year. Bruce pointed out that he really needs help next year in working at the booth.

Bruce went on to recap the Under Earth Day activities at Sullivan Cave. Fifty-eight people turned out for the clean-up. There was a problem with three visitors who failed to exit the cave on time. The landowner became very concerned.

Dave Black announced that the Second Annual Indiana Cave Symposium was great! There was a cookout that everyone enjoyed followed by many excellent presentations. There will probably be another event next year. A summary was published in the most recent *IKC Update*.

Concerning Hoosier National Forest activities: Don't follow the schedule that was published and distributed by the HNF earlier this year. This schedule will be revised.

"Take Pride In America" Day, sponsored by the HNF went very well. A good time was had by all. Also, Bob Armstrong gave a Lost River tour at the recent *Buffalo Riders* program which was well-received despite a problem with the buses.

Scott Johnson of the DNR will be counting woodrats again this year.

The next IKC meeting will be the annual Fall cookout at Bruce Bowman's house on September 10th. There may be a repeat of last year's brownie bake off.

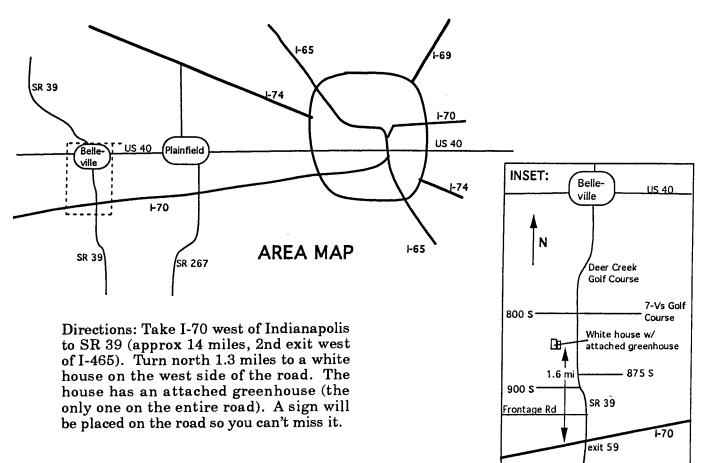
There was one issue from the floor: A Southern Indiana cave rescue call out list produced by Larry Bundy has been made available through the efforts of Bambi Erwin.

Meeting adjourned at 9:24 PM.

Submitted by James Adams, IKC Secretary

## DIRECTIONS TO THE IKC QUARTERLY MEETING / COOKOUT

## SATURDAY SEPTEMBER 10th, 6:00 PM



Please RSVP. Bring your lawn chairs and a covered dish, salad or dessert.

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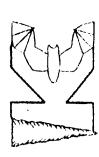
	INDIANA KARST CONSERVANCY, PO BO	X 2401, INDIANAPOLIS, IN 46206-2401
I would like	to help the IKC protect Indiana's unique caves and other ka	arst features. Enclosed is:
\$ for IKC membership dues at \$15 per year (dues donation to the general IKC fund.		rch 31st of each year, please pro-rate @ \$1.25/month).
\$	donation restricted to a specific IKC project. Please spe	ecify:
	I know of an area worthy of protection. Please contact:	me.
•	I would like to volunteer to help. Please contact me.	
NAME	Mak	e checks payable to the Indiana Karst Conservancy, Inc. and mail to th
ADDRESS		<ul> <li>IKC Treasurer, c/o Indiana Karst Conservancy, PO Box 2401, Indiana</li> <li>IN 46206-2401. The IKC is an IRS recognized 501(c)(3) non-profit orga</li> </ul>
CITY/STATE/ZIP		with membership dues and donations fully tax deductible.
PHONE #		

# Indiana Karst Conservancy PO Box 2401 Indianapolis, IN 46206-2401

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# PROTECTING CAVES THROUGH ACTIVE CONSERVATION