IKC Update



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 - Tony Bennet in Gargantua Cave by Linda Heslop (from photo by Dave Thomson).

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



QUARTERLY MEETING/COOKOUT REMINDER

SATURDAY, SEPTEMBER 12th, 5:00 PM

INDIANAPOLIS, INDIANA MILLER'S ACRES, 4020 SOUTH RURAL

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.

Following the meeting (approximately 6:30), the Officers will host a cookout. This will allow members and their families to become better acquainted with others interested in cave/karst conservation. The cookout will be held rain or shine; please bring lawn chairs. The IKC will supply the burgers, bratwursts, and hot dogs. Salads, vegetables, or desserts would be appreciated, but are strictly optional. <u>PLEASE RSVP</u> by noon on Saturday.

Preliminary Agenda Items: brief recaps of last quarter's activities; SR 37 4-laning project; IKC's Letter of Intent; SR 145 Extension (Lost River Highway); cave management signs; Ray's Cave; upcoming conferences; and more...

Meeting directions: See inside back cover - NOTE special instructions due to I-465 & I-65 road construction!!!

EVENTS CALENDAR-

12 SEP = IKC QUARTERLY MEETING/COOKOUT, Indianapolis (see above)

19 SEP = MKC FIBORN KARST PRESERVE WORK WEEKEND, Michigan (contact Tom Rea)

10 OCT = HOOSIER ENVIRONMENTAL CONGRESS, Indianapolis (see page 11)

27-30 OCT = NATIONAL NATURAL AREAS CONFERENCE, Bloomington (see page 14)

05 DEC = IKC QUARTERLY MEETING, Bloomington (tentative date)

06 DEC = ANNUAL WAYNE'S CLEANUP TRIP, Bloomington

09-10 JAN = MARENGO CAVE RESTORATION WEEKEND (contact Gary Roberson)

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 informed, and to document past, report on current, and announce future IKC activities and business. Submission of articles for publication pertaining to the IKC or any other related conservation subjects are encouraged. Forward material to the *IKC Update*, PO Box 2401, Indianapolis, IN 46206.



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RAMBLINGS FROM THE PRESIDENT...

In this column in the last issue I described the highway project to four-lane SR 37 between US 50 and Mitchell in which our Department of Transportation is seriously impacting the habitat of the Northern cavefish, a State listed endangered species. Well, three months have passed, and unfortunately INDOT for the most part has plowed straight ahead with their construction. Despite noble attempts by the Department of Natural Resources and the US Fish and Wildlife Service, INDOT continued opening sinkholes (18 in all) and installing drain chimneys, with the plans to route highway runoff into the underground karst system. Besides INDOT's total disregard of their environmental responsibilities, our main concerns are water quality (road oil, winter salt, and other toxic pollutants) and altered flow characteristics (volume, velocity, and nutrient content) entering the karst system.

INDOT has pacified some by proposing drain traps that are to collect sediment and supposedly remove contaminant prior to the runoff entering the sinkhole drains. However, the effectiveness of their proposals is unproven and untested, and you can bet if they don't work, INDOT isn't going to rip them out and replace them with something else. Furthermore, the drain traps all will have overflow pipes which bypass the filtering system during heavy rains; exactly when filtering is needed the most!

Throughout this ordeal, INDOT has continued to complain that environmentalists had ample opportunities to comment on the project years ago, and they shouldn't have to modify their plans now. But the facts are, INDOT totally ignored the concerns raised by the USFWS in 1984 and didn't even involve their own environmental consultant during the design phase.

Now that INDOT has been caught with their proverbial pants down, they are trying to put on the facade of being cooperative with the other agencies by implementing uproven technology with significant constrants because construction is underway. They have made a big deal out of all the extra time and costs involved, but have neglected to mention that had they done what they should have done in the first place, it would have been a lot less expensive and disruptive.

The other big complaint that has been made over and over and over again to INDOT is their failure to maintain erosion control during construction. They were very quick to dig up every sinkhole possible, but they took their sweet time in doing anything after that. In the mean time, all the heavy rains in June and July literally flushed tons of sediment into the underground habitat. Even with the DNR and USFWS watching and warning, and the IKC writing letters and calling Commissioner Dillon personally, they just couldn't understand why effective erosion control was important, so it was never a priority to them.

So where does this project stand? Well INDOT is pretty well finished raping the sinkholes, but have yet to start on the promised filter traps. They have also managed to destroy a cave or two along the path of destruction (see page 15).

In the meantime, environmentalists have alerted the media and have been successful in getting several well written articles published, two of which are reprinted on the following pages.

Also, the IKC, along with the Hoosier Environmental Council, Protect Our Woods, and Lost River activist Bob Armstrong, have filed a joint notice of intent to sue INDOT using the Indiana Suit Statute (IC 13-6). INDOT now has ninety days to respond to our charges of failure to protect the state-endangered Northern cavefish.

By the meeting on September 12th, we should have more information on where we go from here. It is such a shame that some of our public agencies are the worst offenders against our environment.

- Keith Dunlap

Opposite page photos -- Sinkhole #10 after excavation with natural drain exposed (left). INDOT installing drainage chimney and horizontal conduits into sinkhole (right).

Road project raises worries about endangered cavefish

by Steven Higgs

BEDFORD -- Widening of Ind 37 from Bedford to Mitchell has hit a snag: concerns about its impact on blind cavefish, a state endangered species.

State highway work crews on May 21 cracked through the bottom of a dry sinkhole south of Bedford which then filled with water containing three of the blind cavefish, said Dave Turner from the Indiana Department of Natural Resources fish and wildlife division.

The fish, which is listed as a state endangered species and is a candidate for the federal list, lives in the underground Bluesprings cave system over which the highway project is passing.

Department of Natural Resources biologists transferred the fish to nearby Bluesprings Caverns Park ``with success, asfar as we know,'' Turner said, adding that there is concern about the highway's potential impact on the fish and the cave system's sensitive ecology.

"We don't knowthat there's any great amount of damage that's been done," he said. "But the potential is there."

DNR and Indiana Department of Transportation officials met to discuss the situation on May 27, Turner said. And while ``nothing was settled," the highway people agreed to seek advice from experts on the area's ecology before pro-

ceeding with work over the eight or nine other sinkholes along the route, he said.

Larry Ruben, a lawyer with the department of transportation's Indianapolis office, said he could not confirm whether work had been stopped. No one with knowledge of the project's status has been in the office for the past two days, he said.

Department of transportation projects manager Don Smelser in Bedford referred calls to Indianapolis.

"We areconscious of the problem," Ruben said. "It's an issue we take seriously."

Environmentalists, however, take issue with the statement.

"This is just businessas usual for INDOT," said Tim Maloney from the Hoosier Environmental Council. "They werewell-aware of the environmental concerns and went ahead anyway."

The highway project, which involves four-laning Ind 37 along the six-mile stretch between Bedford and Mitchell, passes over the Bluesprings system. The cave system is thought to cover about 15 square miles before draining into the East Fork of the White River. It has a two-mile long main channel which is fed by more than 50 tributaries.

The system is an example of karst topography, regions with porous limestone deposits laced with underground streams and caves. Dave Hudak, supervisor of the US Fish and Wildlife office in Bloomington, warned engineers working on the project about the area's sensitive environmental nature in a 1983 letter.

"Construction of the new highway across a portion of the cave system and its water feeding sinkholes could have significant adverse impacts on the unique geological features and fauna of the area," Hudak wrote.

He warned about surface pollution from highway construction that could filter through the ground into the cave system and area wells, as well as potential for petroleum and chemical spills that could occur in the future.

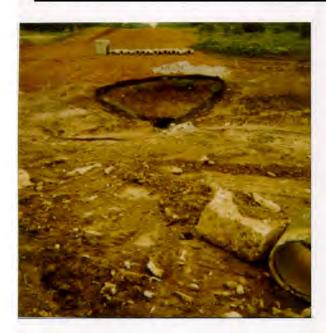
"We are particularly concerned about potential impacts the proposed project may have on the blind cavefish," he continued.

The Bluesprings system likely contains the largest concentration of blind cavefish in Indiana, Hudak said.

Among Hudak's recommendations for protecting the fish and the environment was, "New roadway construction over individual sinkholes be avoided wherever possible."

Maloney says the department's environmental assessment of the project also listed all of the concerns about the cavefish and the area in general.

Reprinted from the Bloomington Herald-Tribune, July ??.





photos by Keith Dunlap

Big fuss being made over a little fish

by Kyle Niederpruem

Three blind cavefish in southwest Indiana have new digs; the trio were delicately moved by a state biologist from a sinkhole to a connected underground cave system in Lawrence County.

But the presence of the white, eyeless fish -- protected by the state's endangered species act and awaiting federal protection -- has pitted environmentalists against the state.

Three groups have put the Indiana Department of Transportation on notice for a lawsuit. They believe the state could harm the species by expanding a four-mile stretch of Ind 37 between Mitchell and Bedford.

Despite the state's moving the fish earlier this summer, environmentalists still worry that other blind fish may be affected by highway drainage of metals, sediment, oils and salt into 16 sinkholes along the path of the \$10.2 million project.

Members of the Hoosier Environmental Council, Protect Our Woods and the Indiana Karst Conservancy say a lawsuit may be necessary because they believe the state isn't doing enough.

"We're not trying to stop the construction," said Bob Klawitter, president of Protect Our Woods.
"They're setting construction precedent here. We think these precedents have to be established very carefully."

The November election, advocates say, may give them an edge to establish such a precedent. They believe there could be more negotiating leverage with the administration of Democratic Gov. Evan Bayh, who is seeking a second term.

Transportation officials counter that legally, philosophically and practically they are doing all they can to make the project as environmentally sensitive as possible -- and stress that politics has little to do with building needed roads.

But environmental advocates point out that state officials were alerted to the cavefish population in the state's own environmental review, completed in 1984, yet failed to plan for that presence.

In that document, several pages were dedicated to discussing the largest underground cave system in Indiana, known as Bluesprings Caverns. As many as 3,000 cavefish were estimated to be living in the cave in 1976.

"Leaks and spills of harmful materials due to highway accidents could be a major threat," the report indicated. "In Spring Mill State Park, blind cavefish with "broken back syndrome" were discovered and the occurrence of the syndrome was tentatively linked with pesticide pollution."

The report also warned that highway construction sediment flushed into the Bowden National Fish Hatchery in West Virginia through a fissure had killed 150,000 trout by asphyxiation.

TAKING CARE UNDER PRESSURE

"Building highways in karst topography is clearly very tricky and something we have to take seriously," said Kathy Davis, tranportation's deputy commissioner for development. Karst regions are made up of porous limestone marked by sinkholes, underground streams and caverns.

"Doing this while under pressure of construction is certainly not the way we wanted to do this," she said. But that is exactly how the first phase of this multi-million-dollar project is progressing.

State officials say they began taking extra steps shortly after the fish were found this summer, and following meetings with Indiana Department of Natural Resources and U.S. Fish and Wildlife officials.



Planned changes have included:

☐ Purchasing a soybean farmer's 22-acre crop across from the sinkhole where the cavefish were discovered. That prevented any pesticide runoff.

Steepening side slopes and adding guardrails to make more room for retention basins around the sinkholes.

☐ Adding tailor-made drainage systems to cover some sinkholes. Those systems are designed to catch sediment or any other possible runoff.

The cost for those changes is estimated at \$115,000, and could run as high as \$150,000, officials said, before the project is completed in October 1993.

"We think we're OK," said Larry Reuben, the department's general counsel. "All we can do is plan our projects according to the science of today. We don't know what's going to happen 20 years from now. We can't prevent wrongs that no one will say are likely to happen."

Bob Buskirk, a supervisor in transportation's environmental section, said the state is in an unusual situation, crossing the habitat of this endangered spe-

Other species, such as river mussels, the Indiana bat, and the peregrine falcon have had their habitats studied in the path of other road projects.

But Buskirk said none has been touched so directly as the cavefish.

"It's their prerogative to do this," Buskirk said of the possibility of a lawsuit from concerned environmentalists. "They're there to keep us on our toes."

ROAD COULD ENDANGER CAVES

Environmentalists previously have attacked state officials for considering an 18-mile highway linking Mitchell and French Lick. The two-lane road would cut through delicate caves and underground springs. For that project, the department has hired a Missouri-based firm that specializes in karst topography.

Citizens groups have also pres-

sured the transportation department to reconsider its environmental review of a new highway corridor potentially linking Indianapolis to Evansville.

But instead of three separate segment reviews, groups such as the Hoosier Environmental Council had asked that the entire project be reconsidered for environmental impacts.

The suggestion made sense to Transportation Commissioner John J. Dillon.

But it came after a draft environmental report was readied on the first segment of that project. Another group -- Citizens for Appropriate Rural Roads -demanded the report be released.

The group threatened legal action under the state's public records law when Dillon delayed releasing the draft for several weeks in June. Departing from transportation policy, the draft was released.

"We felt it was the right thing to do anyway, but we weren't going to be pressured into making a snap decision," Dillon said.

With other major highway projects planned in southwest Indiana, advocates feel now is the time to make their presence known.

"In the past 20 or 30 years, we've seen a lot of abuse of caves; either by human vandalism or by public and private projects," complained Keith Dunlap, president of the Indiana Karst Conservancy.

Cavers often refer to the loss of Pless Cave, just north of the nearly 20-mile subterranean system which is home to the cavefish. Numerous underground gasoline tank leaks have made that cave, at time, unsafe.

PROTECTED SINCE 1978

The northern blind cavefish has been on the state's protected species list since 1978, according to state natural resources staff.

According to U.S. Fish and Wildlife reports, the population in the Bluesprings Caverns system -- which is where the three fish were moved -- is the largest in exist-

Dunlap said the state cannot prove that its measures are actually protecting the fish, while state officials say environmentalists are not able to prove actual harm.

And there is the rub. If there is any damage, both environmentalists and state officials agree that it might not become evident for years.

Oddly enough, environmentalists were not in attendance at numerous public hearings - held as long ago as 1984 - that the department conducted in the area during the roadway's planning stages.

Most residents, instead, welcomed the expansion, noting concerns for safety and crowded traffic conditions. They also worried about the state's purchase of their properties, according to transcripts of those hearings.

The lone voice of concern for the underground system was Jim Richards, president and general manager of Bluesprings Caverns in Lawrence County.

In 1984, he wrote officials worried about erosion, the influx of sediments and possible petroleum spills connected to the highway.

But Richards is critical of the environmentalists who have suddenly chimed a chorus of dire warnings.

"Given the sinkhole treatments, the underground water quality and life in the cave will be much better protected," Richards said, who has owned the caverns for 19 years. "Before (this highway project), there was nothing."

"I think their real interest is intimidating the highway department not to build in karst areas."

But balancing the needs of environmental advocates and other demands for safe highways is not a simple task for state officials.

A plan is under way to draft a Memorandum of Understanding between the various agencies that would give highway builders general guidelines for construction in karst areas.

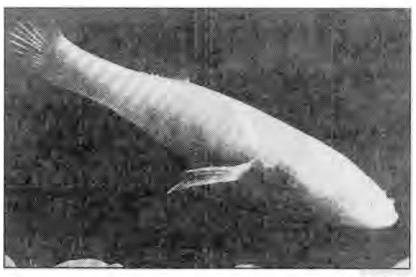
Though not legally binding, the document would stand as a letter of "good faith" that the transportation department would abide by certain rules.

That memo, however, won't be drafted until the Ind. 37 expansion is completed.

In the meantime, environmentalists - with or without a lawsuit - won't back down, said Tim Maloney, with the Hoosier Environmental Council.

"Now, people don't automatically accept highways. They're willing to fight back," he said.

Reprinted from the Indianapolis Star, Sunday August 23, 1992.



FILE PHOTO

Four miles of Lawrence County highway construction may threaten survival of endangered blind cavefish.



MORE PHOTOS...

To prepare the sinkholes as highway drains, they are first excavated 10' to 30' down to the bedrock, exposing the crevices that allow the water to be funneled into the natural karst drainage. A concrete pad is then poured in the bottom of the sinkhole (see left photo). On top of the pad is constructed a perforated vertical "chimney" that is built up to the existing ground level, filled inside with large rock. The sinkhole is backfilled on the outside with rock, starting with large rock on bottom, graduating to finer rock towards the surface, then covered with filter cloth and finally clay (see lower photo). On top of this structure is placed a round vertical connection tile (see right photo on page 4) that joins one or more 36" or larger horizontal feeder tiles (see tile already installed in the background of photo to left, another one is visible in right photo on page 4). Connected to the upstream end of the feeder tiles are supposed to be sediment traps to filter out silt and contaminates, although their effectiveness are unproven. The traps will also include an overflow by-pass to circumvent the filters during heavy rains.



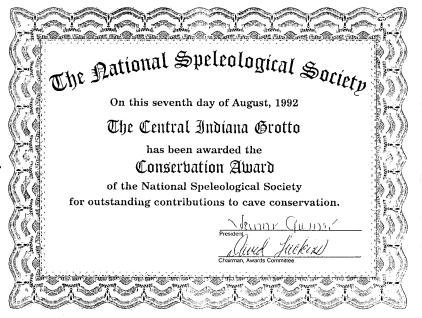
photos by Jim Adams

NEWS BRIEFS...

•	
	The meeting at Hemlocks Cliff between cavers and Hoosier National Forest staff on June
	27th was attended by approximately twenty participants. The HNF biologists expressed
	their concerns and desires to protect certain plants unique to that area. The cavers
	expressed their desires to maintain access to the cliffs for rappelling and other recrea-
	tional activities. While no decisions were made that day, both sides left better informed
	about the other's concerns. At least two letters (one from the IKC and one from the CIG)
	were sent to the HNF following the meeting to reiterate our conclusions that the plants
	could be protected with minimal effort, while allowing vertical recreation to occur.
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- □ Scott Fee, Keith Dunlap, and several others met with the new owner of Suicide Cave (Washington Co) on June 21st and took him through the cave for the first time. He appears to be appreciative of the resources and has a desire to protect the cave. Various management alternatives were discussed, but gating was discouraged. Our suggestion was to monitor visitation and impact, and work with organized cavers to remove vandalism occasionally. Proper posting of signs was also suggested (possibly to be done by the IKC or CIG). Limited access to this cave will probably be available.
- ☐ The three men responsible for new graffiti in Suicide Cave (see *Update* #25, p 11) were formally arrested in July and charged under the Indiana Cave Protection Law. Their court appearance date is unknown, but the arresting officer (also a caver) is confident justice will be served.
- Unfortunately, it appears that the three men identified as trespassing in Grotto Cave and violating the Indiana Endangered Species Act by visiting the cave during the hibernacula closure period will not have any formal action taken against them. This case has been very frustrating because of the lack of attention given by the Monroe County Prosecutor's Office.
- ☐ The large wooden sign at Sullivan Cave was finally repaired after three unsuccessful attempts. The "self-inflicted" damage was a result of the wood expanding and contracting with the weather, stripping the screws that held the sign together. The sign was reinstalled in late July.
- ☐ The 1992 NSS convention saw several Indiana organizations receiving special recognition. The Central Indiana Grotto was selected for the annual Conservation Award for

their continued dedication to conservation activities. many in conjunction with the IKC. The Spring Mill Project, lead by Stephen Collins, received a Certificate of Merit Award for its advancement of speleology including mapping all the caves in the park, the training of many new surveyors, and the strengthening of relations with state agencies. Finally (and for the second time in a row), the IKC Update won the Medal in the Graphics Art Solon; this time in the Photographic Category with cover #21 (photo provided by Scott Fee of Ray Sira).



110 01 27 112 110: 20	171320	021 12WB211 1002
☐ The IKC organized the recycli Recycling in Salem, several hus be reused rather than become pounds, however, illustrating t strongly conservation-oriented g	ndred pounds of aluminum ing refuse. This should ha the "environmental educati	ı, steel, glass, and plastic will ave been several thousands
☐ The IKC also promoted the It consignment sales. Approxima game Fund. Special thanks to a and to IKC member Penny Hibb	itely \$150 was raised whicl artist Christine Gerace for p	h will be donated to the Non- personally signing the posters,
As part of the "protest" against INDOT and the irresponsible actions on their current SR 37 project (see Ramblings), the IKC organized a postcard campaign. Approximately 300 postcards were signed and mailed to Governor Bayh from Cave Capers. The Central Indiana Grotto sponsored another 100 postcards at the July meeting While the effectiveness of individual campaigns like this are hard to quantify, constant environmental grassroots activities let the Governor, legislators, and government agencies know they are being watched and that they will be held accountable for their actions.	Dear Governor Bayh, Please help stop the environmental of ecosystems by the Indiana Departmental of the sinkholes as their primary drainage is 50 will seriously impact many unique protected Northern Blind cavefish. Endangered Species Act and they have IDNR, the US Fish & Wildlife Service well as environmentally concerned of impact, but INDOT doesn't seem to visually as a serious presentally intervene to immediately by you will insist that INDOT reevaluated phies so that future projects do not result and the service pro	ressed the need to protect the environment and you to demonstrate your leadership and to halt this needless devastation. I also hope that ate their environmental policies and philoso-
The Summer issue of the Protective Governor over the current State of the SR 145 Extension project. Their grassroots activities have be	SR 37 project and a second The POW newsletter has a	card to INDOT pertaining to a substantial circulation and
The Hoosier National Forest h Hobbs III) to perform biologic biological conditions will allow increase or decrease. This is all karst as a valuable resource.	cal inventories in HNF ca v comparisons to be made i	ves. Documenting existing in the future as populations
Several landowners near English against the town of English for lagoons. The area is underlain pollute the karst and groundwa Administrative Judge hearing the	trying to condemn their lar n with karst, so leaks in th ter. A letter expressing our	nd to build sewage treatment he lagoons could potentially
☐ Bat Conservation Internationa International Bat Research and		

☐ The final two Lost River tours for the year will be led by Bob Armstrong on September 26th and October 10th. Tours leave the SW corner of the Orleans town square at 8 AM, rain or shine. For more information, call Bob at (317) 353-7049 (days) or 926-4266.

foundations and will require matching funds from other sources.

University, the goal of the Center will be to solve serious bat conservation, management, and education problems. Approximately half of the money has been pledged by two

- ☐ The Indiana Department of Natural Resources has officially listed the timber rattlesnake as an endangered species within Indiana. Primarily found in the southern third of the state, this snake is not likely to bother you unless you bother it.
- □ During the NSS Convention, the NSS, the Hoosier National Forest, and the IKC cosponsored a workshop pertaining to the Federal Cave Resource Protection Act (FCRPA). Approximately 15 agency people and 35 cavers participated with informal presentations in the morning, a slide show by Horton Hobbs during lunch, and a field trip to Dillon Cave (Orange Co) in the afternoon. The workshop was originally intended to discuss specifics of the final regulations, but unfortunately the regulations have not been released. General discussions on the history and intent of the Act and the proposed implementation plans were presented.
- □ While on the subject of the FCRPA, it was interesting to note that of the 73 comments received on the draft regulations, 14 of those comments were from cavers associated with the IKC, representing approximately one-third of the total caver comments. Had the entire NSS responded proportionally to the IKC membership, there would have been over 1800 comments. Thanks for your participation.
- ☐ The June 13th workday at the Hancock property went well with twelve cavers participating. The trails were walked for trash pickup and the signs were all The checked. fence at Grotto had some minor repairs performed and the barbed wire strands were tightened. Some minor graffiti was removed from within the cave. three inch downpour ended



the day, providing for interesting observations at Grotto's entrance. The volunteers included Bruce Bowman, Keith Dunlap, Mike Lennis, Dan Lucas, Carl Nelson, Josh Patterson, Ernie Payne, Dave Schneider, Eric Schneider, Eric Schmidt, Tom Sollman, and Grant Van Hamert.

- ☐ The IDNR Nongame and Endangered Wildlife Program is soliciting proposals for a researcher to work to identify reptile and amphibian distributions and habitats within the Fish Creek watershed (NE Indiana). Funding for the project will be cost shared between the USFWS and the IDNR. Interested persons should contact Robert Anderson, Nongame Biologist, by October 31st. His phone is (317) 232-4085.
- ☐ The Hoosier Environmental Council (HEC) has openings for two policy positions on its paid staff. The first is for a Director of Water Policy (formerly entitled Director of Pollution Prevention). The other position is for Director of Air and Energy Policy. Contact the HEC at (317) 685-8800 for further details.
- ☐ The IKC would like to welcome four new members: Jim Griggs, Dr. Glenn Kotnik, Scott Webb, and Bob Wright.

THE TENTH ANNUAL HOOSIER ENVIRONMENTAL CONGRESS

Becoming a force to be reckoned with: Learning the ropes and fighting for justice

Editor's note: Each year the Hoosier Environmental Council (HEC) sponsors a one day workshop presenting a topical subject to improve the environment. This year's theme is political action, which couldn't be more timely for the IKC considering some of our recent and upcoming battles with state agencies and the political system. The date of the Congress is October 10th at Post Park (1313 South Post Road). The following text was excerpted from a much longer article submitted by Marie Zeller, HEC's Grass Roots Director.

Those who would harm Indiana's environment for financial gain know the ropes of environmental regulations in this state. They know who calls the shots and how to influence those people. They understand the processes -- legislative, regulatory, and judicial -- inside and out and stand ready to use that knowledge should any of their schemes for capitalizing on environmental degradation be brought to light. They maintain constant contact with the state's decision makers, ensuring that they know full well what their agendas are on environmental issues. They are well-organized, willing, and able to call upon their colleagues and cohorts to assist them in stifling meaningful environmental policies.

In this way they keep the doors of Indiana government open wide to them and effectively set the stage for defending any progressive environmental agenda that dares to surface. They can be stopped, but the environmental community must be equipped with the same knowledge and effectiveness that they possess regarding environmental politics and regulations in Indiana.

This year's Congress seeks to do just that -- present the environmental community with experienced advice and definite strategies for wading its way through the electoral, legislative, and regulatory processes with a full understanding of how best to influence the decisions being made by our officials. Those attending can learn from the veterans, share experiences, ask questions and develop new strategies for age-old challenges. This Congress could be the greatest organizing and educating event ever held for the environmental community in Indiana. All workshops will be conducted in front of the entire Congress so that everyone will leave having obtained the same information and level of training on the issues and can benefit from discussion of each other's experiences.

TENTATIVE AGENDA

The Congress will be held at Post Park, 1313 S. Post Road in Indianapolis, on Saturday, October 10.

CONGRESS

Registration: 9 a.m.-9:45

Welcome: Jack Gay, HECAF President; 9:45-9:55

Morning Keynote: Demanding Environmental Justice by Cleaning House by Jeff Stant, HECAF Executive Director, 9:55-10:15

Morning Session Part One: Who's Calling the Shots at the Statehouse? by Rep. Mark Kruzan; 10:15-10:45

Break: 10:45-11:00

Morning Session Part Two: Preventive Maintenance: Electoral Tools and Strategies by Tom Dustin, HECAF GreenPAC Organizer; and Making Democracy Work for the Environment by Sarah Jane Knoy, Greenpeace Grass Roots Director, and Marie Zellar, HEC Grass Roots Director, 11:00-12:00

Lunch: 12:00-1:00

Speaker: David Brower, Earth Island Institute: "The Power of the People: Organizing for Change," 1:00-1:30

Tool Box Assembly: 1993 Legislative Session Action Packet; 1:30-2:00

Afternoon Session Part One: The Politics and Process of Regulation in Indiana by Jane Dustin; 2:00-3:00

Break: 3:00-3:15

Afternoon Session Part Two: The Administrative Adjudication Act and Indiana Citizen Suit Act by Jane Dustin and Max Goodwin

Happy Time: 4:15-5:00 Awards: 5:00-6:00

Dinner: 6:00-7:00

Gubernatorial Candidate Debate:

7:00-8:30

The timing could not be better. In a crucial election year, with the legislative session looming large, and with current rulemaking efforts on water quality and groundwater in desperate need of grass roots support, Indiana needs this Congress. Indiana needs its citizens to understand enough about the state government puzzle to be able to fight for what is right. The polluters understand state government and have used it to their advantage for far too long. Now it is our turn.

Government is supposed to be for, by, and of the people. We comprise a broad cross-section of "the people." We are constantly growing more informed. The environmental movement in Indiana continues to evolve and mature, most recently with the establishment of the

Hoosier Environmental Council Action Fund's political action committee, HECAF Voters, which allows environmentalists to voice definite positions about political candidates and endorse those politicians who are stalwart defenders of the environment. But our evolution cannot stop here. It is time to train the troops and fight for justice. It is time to reclaim our rightful place in Indiana state government. Let the greening of Indiana government begin!

A registration insert has been provided for your convenience and must be mailed by September 25th. If you are an IKC member and would like to attend, but the registration fee is a problem, contact Keith Dunlap.

BAT JEWELRY

by Scott Johnson

Unlike bird banding, the marking of bats with bands for research purposes is not regulated or coordinated by any government agency or private organization. This causes two problems. First, different researchers will use similar bands causing confusion with other projects (to make matters worse, many banded bats outlive the research projects, allowing generations of confusing and conflicting bands). The second problem is that there is no central clearinghouse for observers to report band information, making it extremely difficult (but not impossible) for observations of banded bats to be reported back to the original researcher.

Despite these shortcomings, cavers can assist in reporting banded bats in caves which can greatly contribute to the management and conservation of all bat species found in Indiana. If a banded bat is spotted in a cave, please note the following information, if possible:

- 1) Cave name (include county if the cave is not well known).
- 2) Date.
- 3) Band material (plastic, metal, etc...).
- 4) Color(s) of band. It may have stripes.

- 5) Numbers or letters on the band; include the color of the numbers/letters.
- 6) How the numbers/letters are affixed on the band (handwritten, embossed, machined stamped, etc...)
- 7) Specify whether the band is on the left or right wing (this often indicates the sex of the bat: right=male, left=female).
- 8) Species of the bat. If unknown, give general description of the bat and if it is hanging singularly, in a loose cluster, or in a tight cluster.
- 9) Name, address, and phone number of observer. If available, information on the history of the banded bat will be sent to the observer.

NOTE: Please minimize the disturbance of the banded bat and do not handle the bat unless you have been specifically trained to do so.

Send, phone, or FAX information to:
Scott Johnson
Nongame Wildlife Biologist
Indiana Division of Fish & Wildlife
300 West First Street
Bloomington, IN 47403
(812) 334-1137 / 339-4807 (FAX)

MITCHELL TO FRENCH LICK HIGHWAY

by Keith Dunlap

On July 14th, the Indiana Department of Transportation unveiled their five proposals to connect Mitchell to French Lick with a "super-two" lane highway. The project, known as the SR 145 Extension, is of interest to cavers because it crosses the Lost River drainage system and could significantly impact this classic karst region.

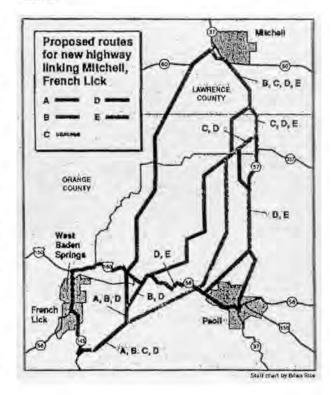
Three of the proposed alignments cut new paths across the landscape; a fourth follows most of the existing SR 37 & 56 with by-passes around Orleans and Paoli; while the final proposal utilizes the existing routes without the by-passes.

Environmentally speaking, the final two proposals are much desirable over the new alignments, but even following the existing routes will be devastating because significant new right-of-ways (up to 500' wide) will be required to include passing lanes, grade minimization, and alignment straightening. In light of INDOT's handling of its current project to the north, environmentalists have considerable concerns. However, INDOT does seem to be sensitized to these concerns and have hired a respected karst consultant (Tom Aley) to help them with minimizing impact.

The IKC submitted comments that will be included in the official transcripts for the initial comment solicitation. Included in these comments were our general concerns such as the impact on the state-endangered Northern cavefish; along with examples of specific concerns (one proposed route crossed over the top of historic Hudleson Cave, one route crosses over the top of 250' by 70' by 30' room in a new cave, one route would destroy the caves of the "Gorge", one route comes within 200' of the only Indiana bat hibernacula in Orange Co, etc...). Our

recommendation was to <u>not</u> build a supertwo highway, but to upgrade the existing highway minimizing new disturbances in the most sensitive areas (this is also much less costly than the \$5 million/mile estimated for the super-two version).

INDOT will take the comments received on their five proposed alignments and narrow the selection down to two or three. They will then start specific environmental and cost studies. The IKC expects to be involved as the project progresses and will work with their consultant to assure that all know caves/karst features are identified and all our other concerns are addressed. This will not be a quick process, if all goes as planned, construction will not begin until 1998.



WANTED: A volunteer to replace outdated and weathered caver oriented flyers and posters in the kiosk at Buckner Cave. This task should take only a few hours of your time to collect brochures and other information on area grottos/caving organization for posting. The kiosk was originally constructed by the IKC to educate non-affiliated cavers about cave conservation and inform them of organized groups. Contact Keith Dunlap if you are interested in this project.

THE 19th ANNUAL NATURAL AREAS CONFERENCE

Rediscovering America: Natural areas in the 1990's

Five hundred years go, the Americas were virtually one large natural area. In the intervening years, the landscape has been radically altered, so that today natural areas are the exception. At this conference, we hope to "rediscover America", discussing the inventory, protection, and management of remaining natural areas, and planning for the future -- discussing cooperative efforts and partnerships to rebuild and restore natural preserves and reintroduce lost species. We hope the conference will allow us to look back at the changes, learn from our mistakes and successes, and look ahead to the challenges of the future.

Since 1973, this national conference has provided an opportunity for biologists, ecologists, natural resource managers, naturalists, and volunteers to come together and exchange ideas on protecting, preserving, and managing rare species and significant habitats. Participants will have a chance to interact with others through presented papers, posters, field trips, and workshops.

This year's conference is being held at the Indiana Memorial Union on the campus of IU in Bloomington. The conference starts at noon on Tuesday, October 27, and runs until Friday noon. The Tuesday opening session consists of presentations by some of the nation's leading environmentalists. Wednesday has a full schedule of seven concurrent sessions

presenting over eighty papers on a variety of topics. Attendees on Thursday have the choice of twelve field trips. Friday morning's session continues with concurrent presentations and five workshops.

Of interest to cavers is an entire session entitled "Cave Biology and Conservation" moderated by Horton Hobbs III. Papers in this session include: Protection of Water Quality in Cave Ecosystems (Tom Aley); Endangered Species and Endangered Communities in Karst (David Culver); Caves, Karst, and America's Schools -- An Education Need (David Foster); Management Obstacles in Karst Regions (Horton Hobbs III); Caves and the National Park Service (Ron Kerbo); To Pee or not to Pee: Impact of Urine on Cave Life (Kathleen Lavoie); Bat Protection in Caves (John McGregor); Cave Management by Prescription (Larry Mullins); Federal Resource Protection Act (Jim Nieland); Biological Resources of Lechuguilla Cave (Diana Northup); and Detecting Anthropogenic Pollution in Aquatic Cave Communities (Thomas Poulson). Also four of the field trips are cave related including trips to the Lost River area, Bluesprings Caverns, Wyandotte Cave, and Sullivan Cave.

The registration fee for the conference is \$70, plus \$25 membership dues for NAA (also a \$25 late registration fee after Oct 9th). For more information write to: NAC Registration, IU Conference Bureau, IMU Room 677, Bloomington, IN 47405.

HIBERNACULA CLOSURES

Cavers are reminded that the caves designated as significant habitats for the Indiana bat (Myotis sodalis) are closed starting September 1st and will not reopen until May 1st. The closure period has been extended one additional month because observations over the past several years have shown considerable usage of the caves by bats during the month of April, especially in the northern hibernacula in Monroe and Greene counties. New orange IDNR/USFWS signs will replace the current yellow ones at the affected caves.

Significant 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). Note that some of these caves are closed year-round at the owners request.

DILLON'S DOZER CAVE (NO MORE)

by Keith Dunlap

As part of the on going road construction on SR 37 south of US 50 in Lawrence County, the Indiana Department of Transportation (INDOT) blasted into a small cave due east of the Dry Entrance to Bluesprings Caverns. Approximately twenty feet of overburden had been removed along the west side of the existing roadbed when the top of a dome was intersected, providing a one-foot diameter hole into a void below. The entrance was located about twenty-five feet from the existing shoulder which placed it at the edge of the new south-bound lane being added. A major cave would be bad news for this already troubling highway project.

INDOT quickly solicited the assistance of Jim Richards from Bluesprings to check the cave out. Luckily for them, it consisted of only two small rooms. INDOT also contacted Scott Johnson from the DNR so he could verify that no cavefish were present, allowing them to "stabilize" the void and continue construction. Scott contacted me about the situation, and I invited myself along to see the cave before it was destroyed. Because of the "notice of intent" letter filed by the IKC, Scott was uncertain whether it was appropriate for me to accompany him on this "official" visit with INDOT. However, he checked with his powers-above and they thought it was reasonable for him to request assistance from an experienced caver. Thus on August 3rd, Scott, Scott Pruitt (USFWS) and I met with Jim Keith (a biologist consultant for INDOT) and Don Smelser (INDOT's project manager) at the cave entrance.

The cave was entered only by Scott Johnson and myself. The entrance consisted of a body size tube that quickly belled out to eight feet in diameter, but plenty of footholds allowing descent without a rope. After climbing down about twelve feet to a talus ledge, one could see the rest of the main room, approximately eighteen feet long by five feet wide. At the far (east) end of the room was another cylindrical pit, dropping a few more feet to a small drain. Back under the ledge was another hole two foot wide by one foot high that allowed entry into a second room, ten foot long, by two foot wide, by five foot high. Another drain was observed at the east end. No biota was noted. I quickly sketched the cave to document its existence for the Indiana Cave Survey.

Upon exiting, the project engineer quizzed Scott and was glad to hear nothing endangered was found. He quickly discussed INDOT's plans to fill the cave with riprap which I suspect occurred that afternoon. I felt it was only fitting to name the former cave in honor of INDOT's Commissioner, John Dillon.

As an interesting side note, Don Smelser joked that they were lucky that one of their backhoes or bull dozers hadn't fallen into the cave. When questioned about locating underground voids, he stated that their typical method of detection was to core drill, usually to a depth of twenty feet, and then only every fifty or seventy-five feet along the centerline of the alignment. They could definitely be

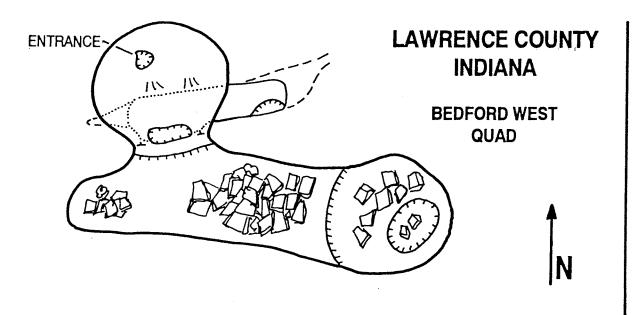
missing a lot of caves, which is good for the caves, but bad for whoever is lucky enough to discover one accidentally, either during construction or years after the highway is completed. Other states are using ground penetrating radar to "map" alignments in karst regions; unfortunately, INDOT is still using 1950's technologies to match their 1950's environmental philosophies.



INDOT's Cave Detection System.

photo by Jim Adams

DILLON'S DOZER CAVE (NO MORE)



10 FEET 11 111 LEDGE - DRAINS 27

blasted into and destroyed by



sketched by K. Dunlap 03AUG92 EXISTING SR 37 SHOULDER

AMERICAN MUSEUM OF CAVES AND KARSTLANDS Karst Center's Museum Readies For Fall Opening!

After five years of planning, energetic fund raising, and construction, the long awaited American Museum of Caves and Karstlands is now open. The \$1.5 million museum is part of a larger project, the American Cave and Karst Center, which is being built by the American Cave Conservation Association (ACCA), Hart County, and the City of Horse Cave, Kentucky. The Museum/Center is dedicated to educating the public about caves and karst resources.

A formal open house was held on August 1st. Since many of the exhibits are still under construction, the museum is operating under a *soft* opening until the end of the year, just to let people see what has been accomplished thus far (hours will be 2-7PM, Tuesday-Friday; 10AM-8PM Saturday). A full scale Grand Opening will be planned for next summer when more of the exhibits are complete.

A number of high quality exhibits are available now for viewing. These include exhibits illustrating the historic uses of caves for water, food storage and processing, mining, and tourism. Two additional exhibits will present the topics of cave exploration and cave safety.

This fall an exhibit entitled "Groundwater in America" will be finished. Integral to this exhibit, visitors will be able to exit the museum and hike down to the entrance of Hidden River Cave where they see an active underground river and the remains of a turn of the century water pumping and electrical generating system.

The possibility of eventually reopening the cave is also on the agenda. This has been made possible by the remarkable recovery of Hidden River Cave from industrial and domestic sewage pollution due to the installation of a regional sewage system. The cave still has a long way to go, but the smell of sewage no longer permeates the city and underlying cave passages. What could be more fitting than a 1993 Grand Opening, exactly 50 years from the date the cave originally closed due to pollution.

Excerpted from American Caves (newsletter of the ACCA), Spring/Summer 1992

MARENGO CAVE IN THE NEWS

A significant discovery in Marengo Cave (Crawford Co) on June 14 made big news in several Midwest papers (including a front page story and photo in the Indianapolis News). While usually a discovery such as this would be kept quite, the owners of the commercial section of the cave promoted its publicity with such descriptions as it "is believed to be the biggest passage in Indiana." Because this new passage can be protected by the commercial operation, the publicity can be helpful to educate the general public about cave and karst resources without fear of impacting the cave.

Unrelated to the big discovery, John Benton sent in a couple of small newspaper clippings from the Louisville Courier Journal that makes for interesting reading: Tuesday, June 9th

MARENGO CAVE HAS SECOND FIRE IN 2 DAYS AS SHAVING BURN

A fire that started Sunday evening in Marengo Cave flared up again last night.

Fire departments from English and Marengo were called about 10 PM to the cave, where wood shavings were burning, said Joyce Rogers of the Crawford County Sheriff's Department. The shavings were there because workers are building a railroad line through the cave, she said.

Volunteers firefighters from Floyd County were also called to help.

Firefighters had been to the caves Sunday to put out burning shavings, said Cordellia Satterfield, a Crawford County dispatcher.

She didn't know whether Sunday's fire had been completely doused.

No one was in the cave during the fires and no one was injured, Rogers said.

Satterfield said fire department officials suspect that someone set the fires.

Wednesday, June 10th

CORRECTIONS AND CLAFIFICATIONS

A story yesterday gave an incorrect location for a fire in Crawford County. The blaze was in a rock quarry in Marengo, not in Marengo Cave...

INDIANA KARST CONSERVANCY, INC.

Statement of Receipts, Expenditures, and Changes in Fund Balance for the Quarter Ending 06/30/92

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GENERAL F	UND				
RECEIPT	S				
	DUES	522.50			
	DONATIONS	92.00			
	INTEREST	0.00			
TOTAL R	ECEIPTS		614.50		
EXPENDI	TURES				
	UPDATE	248.32			
	POSTAGE, GENERAL	181.12			
	BROCHURES	32.68			
	CAPERS' DOORPRIZE	25.00			
	CAVE MAINTENANCE	65.04			
	OFFICE SUPPLIES	54.55			
	SEC. STATE FILING	10.00			
	EARTH DAY BOOTH	35.00			
	HEC DUES	25.00			
	S. R. 37 PHOTOS	29.50			
	FCRPA COPYING	54.30			
	MAILING TUBES	66.24			
	BANK SERVICE CHAR	3.06			
TOTAL EX	KPENDITURES		829.81		
EXCESS :	TO FUND BALANCE			-215.31	
FUND BAI	LANCE 3/31/92				2944.46
FUND BAI	LANCE 6/30/92				2729.15
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	GROTTO FENCE	2.98			
	SIGNAGE	6.32			
TOTAL EX	(PENDITURES		9.30		
EXCESS 1	TO FUND BALANCE			-9.30	
יגם חוווק	LANCE 3/31/92				335.52
FUAD BAL					333.54

PUBLISHER'S NOTE: You may have noticed some cosmetic changes to this issue of the *Update* including greater use of multi-column formats and the use of a serif typeface for body text. Both of these changes will hopefully improve readability. All comments, good or bad, on these changes or anything else about the *Update* would be appreciated.

326.22

3055.37

FUND BALANCE 6/30/92

TOTAL BALANCE - ALL FUNDS 06/30/92

IKC QUARTERLY MEETING MINUTES

Saturday, June 13, 1992 Bloomington, Indiana

BOARD MEMBERS PRESENT:

James Adams Keith Dunlap Jane Miller Lynn Miller Ernie Payne Eric Schmidt

Bill Tozer

BOARD MEMBERS ABSENT:

Jeff Cody Glenn Lemasters Tom Rea

The meeting was called to order at 7:10 P.M. by IKC President, Keith Dunlap. Introductions were made.

Keith reported on the work which took place at the Hancock property earlier in the day. Some trash was picked-up, trails were inspected, and Grotto Cave was visited.

Coon Cave clean-up will be on August 29th. There will not be a clean-up of Grotto Cave this year.

Keith reported on the construction work on State Road 37 South of Bedford. Sinkholes are being dug open, stabilized and plans are to use them for storm water drainage of the new road. Scott Johnson reported on last Thursday's meeting (6/11) with INDOT, Jim Keith, and others to discuss options. A motion was made to print 300 post cards to be distributed at Cave Capers and to Indiana grottos to be mailed to the Governor's office. Keith will also produce a fact sheet. MOTION PASSED: 7-0.

Hemlock Cliffs has been closed to cavers for vertical work. A workshop will be held on June 27, 1992 to explain the closing. Anyone interested should attend.

The IKC has an ad in the Cave Capers Guidebook in exchange for some door prizes. A motion was made to provide a copy of "America's Neighborhood Bats" by Merlin Tuttle, "Caving Basics" edited by Tom Rea, and a \$25.00 gift certificate for BCI merchandise as door prizes. There was some discussion. MOTION PASSED: 7-0.

The IKC is sponsoring a recycling program at Cave Capers. Most of the details have already been worked out. Jim Adams will follow-up at the site on Sunday afternoon (6/21).

The IKC has made arrangements for recycling at the 1992 NSS Convention at Delaney Park near Salem, IN. There will be no profits for the IKC, but a local Salem company will do all the work.

The IKC may have a display at the convention, depending on the location that has been allocated for displays.

Remaining copies of the Blatchley book (IKC Special Publication #4) will be sold at the convention along with bat posters. The poster sale money will go to the DNR non-game fund.

At this point, the meeting was moved to the lobby of the building which was much cooler.

FCRPA - Larry Mullins reported that seventythree letters were received during the comment period. All but three or four were favorable to cavers. Letters from Indiana were about 20% of the total.

The IKC is still looking for a Cave Patron for Grotto Cave. A motion was made to confirm Jim Adams as Cave Patron for Shiloh Cave. MOTION PASSED: 7-0.

Suicide Cave has changed owners. The new owner will get a tour of his cave next Saturday (6/20) by Scott Fee and Keith Dunlap. The cave will be open during the NSS Convention in August.

Keith asked for feedback on the "IKC Update". Many comments-most were good.

The next IKC meeting will be the home of Jane & Lynn Miller on September 12, 1992 at 5:00 PM with a cookout to follow. The Miller's request that everyone RSVP.

Submitted by James Adams, IKC Secretary

DIRECTIONS TO THE IKC QUARTERLY MEETING / COOKOUT

SATURDAY SEPTEMBER 12th, 5:00 PM

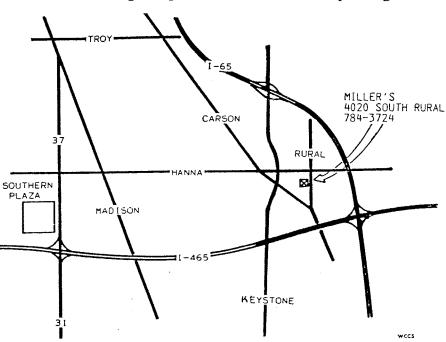
LYNN & JANE MILLER'S 4020 SOUTH RURAL, INDIANAPOLIS (317) 784-3724



NOTE: I-465 to I-65 ramps on the southside are closed as is the I-65 northbound exit to Keystone.

From the north, east, or west: take I-70 or I-65 to downtown Indianapolis, then I-65 south to the Keystone exit. Take Keystone south (right) to Hanna (the first light). Take Hanna east (left) one block to Rural. Take Rural south (right) 1/2 block to second driveway on right.

From the south: use US 31 to Hanna. Take Hanna east (right) beyond Keystone, then follow the above directions.



	INDIANA KARST CONSERVANCY, PO BOX 2401, INDIANAPOLIS, IN 46206-2401		
I would like to	help the IKC protect Indiana's unique caves and other karst features. Enclosed is:		
\$	for IKC membership dues at \$15 per year (dues expire March 31st of each year, please pro-rate @\$1.25/month).		
\$	donation to the general IKC fund.		
\$	donation restricted to a specific IKC project. Please specify:		
	I know of an area worthy of protection. Please contact me.		
	I would like to volunteer to help. Please contact me.		
NAME	Make checks payable to the Indiana Karst Conservancy, Inc. and mail to the		
ADDRESS	IKC Treasurer, c/o Indiana Karst Conservancy, PO Box 2401, Indianapolis, IN 46206-2401. The IKC is an IRS recognized 501(c)(3) non-profit organiza-		
CITY/STATE/	ZIP tion with membership dues and donations fully tax deductible. A canceled		
PHONE #	check is considered an an acceptable receipt, but if you wish a separate receipt, please check here		

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

FORWARD & ADDRESS CORRECTION

NONPROFIT ORG. U.S. POSTAGE PAID INDIANAPOLIS, IN PERMIT NO 8781

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PROTECTING CAVES THROUGH ACTIVE CONSERVATION