

TKC UPDATE

No. 10 - September 1988

INDIANA KARST CONSERVANCY, INC.

PO Box 461, Plainfield, IN 46168

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.

* * * * * BOARD OF DIRECTORS * * * * *

President Keith Dunlap (317) 242-3845(W)/(317) 882-5420(H)
 Secretary Kathy Hornaday (317) 634-6122(W)/(317) 881-7936(H)
 Treasurer Cindy Riley (317) 634-3837(H)
 Director Mike Miessen (317) 897-1668(H)/(812) 333-5797(H)
 Director Lynn Miller (317) 632-4525(W)/(317) 784-3724(H)
 Director Ernie Payne (812) 428-2959(W)/(812) 477-7043(H)
 Director Tom Rea (317) 252-4248(W)/(317) 745-7772(H)
 Director Noel Sloan (317) 929-8961(W)/(317) 845-8821(H)

* * * * * COMMITTEES/ CHAIRMEN * * * * *

Cave Acquisition & Management/ Keith Dunlap (317) 882-5420
 Research & Science/ Kevin Strunk (317) 257-3323
 Education/ (vacant)
 Membership/ Kathy Hornaday (317) 881-7936
 Publications/ Keith Dunlap (317) 882-5420
 Fund Raising/ Cindy Riley (317) 634-3837
 Buckner Cave Renovation Project/ Mike Miessen (317) 897-1668
 Enviromental Concerns, HEC Liaison/ Kathy Hornaday (317) 881-7936
 Hoosier Forests Project/ Kathy Hornaday (317) 881-7936

* * * * * CAVE PATRONS * * * * *

Coon Cave/ Keith Dunlap (317) 291-3845
 Grotto Cave/ Mike Miessen (317) 897-1668
 Shaft Cave/ Keith Dunlap (317) 291-3845
 Shiloh Cave/ Marty Atherton (317) 783-2194
 Wayne's Cave/ Tom Rea (317) 745-7772
 Woodard Cave (TN)/ NIG - contact Gene Pelter (219) 456-3374

* * * * * GROTTO LIAISONS * * * * *

Bloomington Indiana Grotto/ Dave Everton (812) 333-5797
 Central Indiana Grotto/Mike Miessen (317) 897-1668
 Evansville Metropolitan Grotto/ Ernie Payne (812) 477-7043
 Mid-Hoosier Grotto/ Jeff Cody (317) 736-9489
 Northern Indiana Grotto/ Gene Pelter (219) 456-3374

Cover photo by Glenn Lemasters - entrance passage in an Indiana cave.

Publishing facilities courtesy of the Central Indiana Grotto; Editor and Publisher Keith Dunlap, Assistant Angie Manon.

**** QUARTERLY MEETING REMINDER ******SATURDAY, SEPTEMBER 24th, 10 AM****INDIANAPOLIS, INDIANA
INDIANA WAR MEMORIAL
MacARTHUR HALL**

The quarterly meetings are for members and other interested persons to have an open forum for discussing past, present, and future IKC projects, a place to voice opinions and make suggestions, and in general, a way to let the Directors know what are the concerns of the caving community. The meetings are informal, and everyone is encouraged to attend and participate. Remember this is *your* organization, so get and stay involved.

Agenda items: Hoosier Forest Project Committee activities; Research & Science Committee formation and proposed activities; Update of other current IKC projects; Proposed by-laws changes.

Meeting Directions: The War Memorial is located four blocks north of the circle in downtown Indianapolis. It is bound by Michigan, Pennsylvania, Vermont, and Meridian. Enter by the north doors and turn right.

EVENTS CALENDAR

- | | | |
|--------|---|--|
| 24 SEP | = | IKC QUARTERLY MEETING, Indianapolis (see above). |
| 01 OCT | = | BUCKNER RENOVATION PROJECT FALL WORK DAY, contact Mike Miessen for more details (also see page 7). |
| 08 OCT | = | HOOSIER ENVIRONMENTAL CONGRESS, Indianapolis (see article on page 8 for more details). |
| 09 OCT | = | HEC ANNUAL BUSINESS MEETING, Indianapolis. |
| ?? DEC | = | IKC QUARTERLY MEETING. |
| ?? DEC | = | WAYNE'S CAVE CLEAN-UP TRIP (tentative). |

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: *IKC Update*, PO Box 461, Plainfield, IN 46168.

RAMBLINGS FROM THE PRESIDENT...

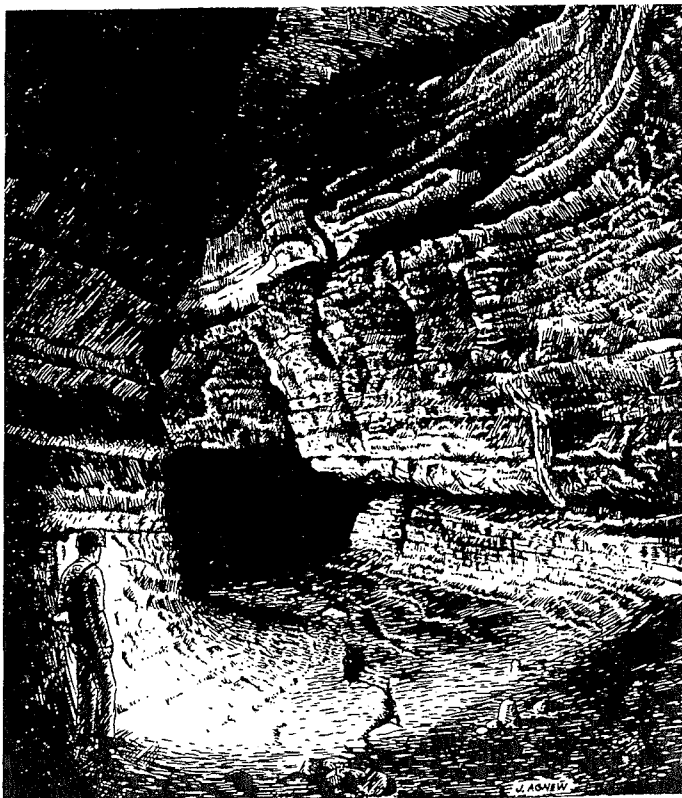
This has been a busy summer for the IKC and its members. We have sponsored several cave clean-ups, participated in a major project with the DNR, and continued our work in the Hoosier National Forest. We presented a paper at the NSS Convention, and composed a position paper pertaining to the cave on the HNF. We have generated a significant amount of correspondence to State and Federal Agencies, the caving community, and novice cavers. For those active in the IKC, it seems that there was something almost every weekend. Fortunately we are blessed with having many conservation oriented cavers that are willing to *sacrifice* some time and effort in order to make the caves of Indiana a little better.

With fall on its way, our activities should slow down somewhat, but there are still many things to be done. A Buckner Cave cleanup is scheduled for October 1st for those so inclined; there are many acres on the Hoosier to be field checked for caves; and there is renewed activity with the Research and Science Committee.

Volunteerism, whether self-gratifying, or truly altruistic, is the strength of the IKC. With everyone's support, we can accomplish many great things.

Keith

- Keith Dunlap



COG SQUEAKS
Bat Special
September 1985
Cover

NEWS BRIEFS...

- The donation box out at Buckner Cave suffered an act of vandalized in July (it first since it was installed over a year ago). Despite numerous blows with a sledge hammer, the perpetrators did not get the box open, nor any money out of it. The box has been repaired and reinforced to discourage further assaults.
- IKC member Jeff Cody (MHG) donated a dozen wire brushes to the IKC for our cave restoration efforts. The IKC arsenal of Lost Creek haul bags, wire brushes, and miscellaneous other tools has grown to readily equip a small army in the fight against cave vandalism.
- The surveying of Batwing Cave was completed on the last weekend of July. Eight cavers (Keith Dunlap, Angie Manon, Steve Reesman, Colleen Friend, George Brutchen, Steve Collins, Kenny Carrigan, and Hank Huffman) participated in the survey and three others (Ernie Payne, Tom Reynolds, and Travis Reynolds) did some photo-documentation work. The survey yielded over 1100 feet of cave passage, compared to the old map which depicted only 404 feet of cave. A map and complete description of the cave should be ready by the next issue of the *Update*.
- Thanks should go to the twenty-one cavers who helped out with the Batwing gating project completed June 20th (see detailed article starting on page 13). Expense reimbursement checks (totaling \$693 from the DNR) were distributed by the IKC to all involved. Contact Keith Dunlap if you haven't received yours yet.
- The "Interim Management Direction" of the Hoosier National Forest was issued July 26th. This document is to guide the activities on the HNF until a proper management plan can be adopted. One of the 26 planned projects listed to be accomplished was "Karst Conservancy will inventory caves on the Forest".
- A full page IKC ad was printed in the Cave Caper's guidebook this year to increase our visibility among those who cave in this area. Also three framed pictures of various Indiana caves (one of which is also on this issue's cover) were given away as door prizes. Winners of the two smaller prints (framed to 11" x 14") were Dawn Hornsby and Jeff Streba, both of the Greater Cincinnati Grotto. The larger print (16" x 20") was won by Mark Tozer of the CIG. A special thanks to Glenn Lemasters and Scott Fee for their photos.
- The IKC (Kathy Hornaday) presented a paper at the NSS Convention during the Privately Owned/Managed Caves Symposium. The purpose of the symposium was to exchange ideas and management techniques in managing cave resources. The proceedings of this meeting are to be published sometime in the future.
- Finally on a lighter side, Indiana cavers (and the IKC) were well represented during the NSS convention's Speleo-rodeo. Three "official" teams from Indiana were fielded including an IKC team (Keith Dunlap, Angie Manon, and NIG caver Don Nehring), a CIG team (Scott Fee, Noel Sloan, and Dean Myer), and a SHIT (Society of Honorable Indiana Troglodytes) team (Kathy Hornaday, Tom Rea, and Mark Wade). The CIG team took third overall with an excellent performance in the calf roping (wrestling) competition. The IKC team did not place, but did have the best time in the cow riding contest thanks to the efforts of "No cows too tough for me" Nehring.

RESEARCH AND SCIENCE COMMITTEE REACTIVATED

by Kevin Strunk, Chairman

The IKC Research and Science Committee (RSC) has been inactive since the 1986 departure of Bill Wilson for the sunny climes of Florida. At the August, 1988 IKC Directors Meeting at Cave Capers, Kevin Strunk was named to be RSC chairman. George Cesnik and Noel Sloan are the initial RSC members.

It is envisioned that the RSC will take an active role in many aspects of cave-related research and will support both IKC and external research. Ideally, the RSC will assist IKC projects by researching specific questions pertinent to a project. This could be direct research, or merely legwork in finding references or an individual with the needed expertise from the scientific community. External research will be aided by the RSC on a request basis. We will help in any way feasible. The RSC will also generate internal projects and suggest possible areas of research beyond our abilities to others.

The RSC will begin initial internal projects such as compiling a bibliography of Indiana cave-related publications, ascertaining what cave-related research is now being conducted, and compile a list of persons working on cave research in the Midwest USA. We hope to be able to make contacts with various institutions and funding sources which will enable IKC/RSC to further the IKC goals and assist others. Discussions with the Indiana Dept. of Natural Resources, and the Dept. of Environmental Management hopefully will be undertaken so that state personnel reviewing projects in cave areas, or reacting to pollution complaints will have access to cave data and cavers.

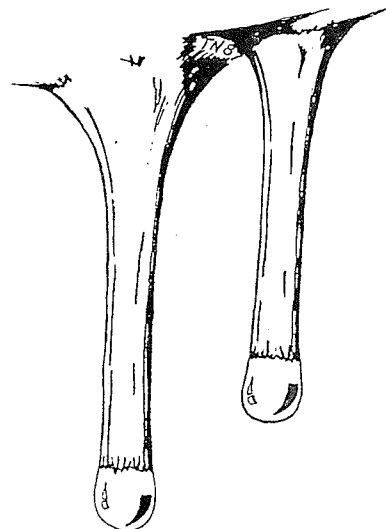
The first external project aided by the IKC and RSC is a cave sediments study of the Buckner Cave System near Bloomington. Two students from IUPUI Dept. of Geology will be collecting samples in the Volcano Room, in Trap Door Cave, and at other points in the system. Two support trips have already been made by RSC members. It is thought that more trips will be required. The investigators will run particle size analyses, lithologic tests, and will hopefully have enough funding to have some calcite dated by the Uranium-Thorium method. The IKC is supporting their effort with a \$100 grant and warm bodies to lead trips and haul dirt. Interested cavers are needed.

Membership on the RSC is open to anyone who is both an IKC and NSS member, and who possess educational or life skills which can be readily identified as being beneficial to the goals and projects of the RSC. It is not intended that all IKC members need to be RSC members.

For more information, contact:

Kevin Strunk
6160C Carvel Avenue
Indianapolis, IN 46220

or call (317) 257-3323



IKC ANNOUNCEMENT ON HIBERNACULA CLOSURES

by Keith Dunlap

As was done last year, the IKC has sent the following "press release" to each of the grottoes to promote cooperation with the hibernacula closures. It is hoped that the grottoes will read this announcement at meetings and publish it in their newsletters.

BAT HIBERNACULA CLOSURES

The summer is over and the Indiana bats are returning to *their* caves to hibernate. Caver courtesy (as well as federal and state laws) says we should not risk disturbing our furry friends by avoiding the major hibernacula until next spring (March 31st). The caves that should be considered off limits are: Twin Domes (Harrison County), Ray's Cave (Green), Batwing Cave (Crawford), Jug Hole (Harrison), Grotto Cave (Monroe), Coon Cave (Monroe), Parker's Pit (Harrison), Saltpeter (Crawford), and Clyfty (Green). Some of these caves have physical barriers to prevent entry and all have been posted by the IDNR.

The IKC has been active in promoting protection for the Indiana Bat. Arguably, caver disturbance has often been listed as the leading cause for the *Sodalis's* population decline. As efforts have been made to reduce the "caving factor", the other causes for their decline (pesticides, and loss of summer feeding habitats) are becoming more apparent. These latter causes do not have easy or short term solutions and are beyond the scope of the caving community. But we can continue to reduce the winter visitation problem through the dissemination of information about the importance of seasonal closures, and by setting examples for others to follow.

For more information, please contact Keith Dunlap, c/o Indiana Karst Conservancy, PO Box 461, Plainfield, IN 46146,

THE BUCKNER CAVE RENOVATION PROJECT
Continued Experiments in Conservation Stuff

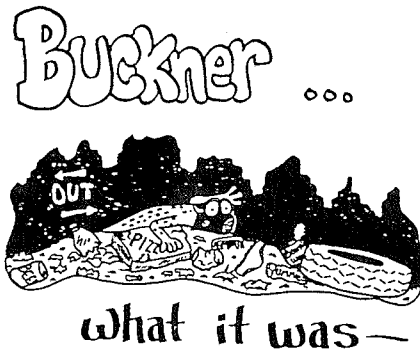
by Mike Miessen

Yes it is almost time for another Buckner Cave clean-up trip (Saturday, October 1st, starting at 9 am). You may be asking yourself what good does it do to repeatedly clean up after those individuals who seem hell bent on destroying this area? No matter what it is we do, as long as it is of a positive nature it will benefit the valley and caving in general. Anytime someone sees us picking up trash or reads our material they are made to become more aware of the situation. Hopefully, they will become more responsible, more caring of the caves they enter knowing that these features do have value.

I think that the project has done some good. The area looks much better than it did and by keeping it clean through periodic clean-up trips we discourage future destruction. So far, according to the register, more NSS affiliated cavers are making an appearance at Buckner. This is a good thing and I hope that all those who go to Buckner will do what they can to discourage vandals. Talking to all unaffiliated cavers they encounter and spreading our conservation message would help greatly. Most of all, we should set an example and make an effort to be seen picking up trash whenever we are there. [This is a good conservation practice wherever you may be.]

A lot of correspondence has been sent and I have seen some positive changes take place because of this. Many people are being informed in a clear understandable manner. In other correspondence I have been contacted by several Boy Scout troops and outing clubs as a result of our conservation efforts in the valley. In each case I have tried to organize their trips into clean-up trips. I respond with as much information as I can about the IKC and the NSS, including several pamphlets about the different organizations. On several occasions I have been successful in organizing clean-up trips by outside groups. This means that at times we are not the only ones who participate in clean-up efforts.

I know the frustration that we all feel when addressing the conditions present in the Buckner area. I too feel this anxiety. We must try not to be discouraged from doing our good work. If we allow ourselves to be beaten by our own feelings of doubt then we have defeated ourselves. Let us not dismantle our project through neglect for it is by disregarding the problem that we find ourselves in this predicament. By addressing the situation we will be influencing the outcome. The consequences of our actions could reward us with a solution. We know the results of apathy. Our predecessors taught us this lesson and we should remember it well. Let us enlighten our progenitors and lay mute our detractors through our ongoing determination to restore our environment.



1988 HEC CONGRESS and BUSINESS MEETING

(adapted from an article by Mary Wadel, Congress Chairman)

The Hoosier Environmental Congress will be held on October 8th at the Hilton on the Circle, downtown Indianapolis. We are looking forward to all members, individual and group, attending this statewide event, which will be focused on all facets of WASTE REDUCTION. This topic was overwhelmingly chosen by the statewide HEC membership on the Interest Form in the last edition of the HEC's *Monitor*.

WASTE REDUCTION, for the purposes of this congress, means solid/hazardous/toxic waste reduction, air pollution reduction, water quality enhancement, recycling implementation, citizen activism, industry co-operation, legislative action.

The Congress will attempt to educate the membership concerning the current, status of WASTE REDUCTION in Indiana, and provide members with keynote speakers and workshops to help our members understand our current crisis and find ways to bring about change personally and collectively. We will also have an opportunity to talk with industry representatives and get to know more about the individual HEC groups with this topic as their major area of concern.

A large number of speakers have expressed interest in participation in this year's Congress. Joel Hirschhorn, of the Office of Technical Assistance, Washington DC, will be a keynote speaker, as well as Larry Martin, of the Institute for Local Self-Reliance, Washington DC. Other speakers and workshop participants will include Larry Martin (Eli Lilly), Lee Botts (City of Chicago. Department of Public Works - also an experienced environmental legislative activist), and Charlotte Read (Save the Dunes Council and HEC Board Member).

In the political sphere, 1988 gubernatorial candidates, Lieutenant Governor John Mutz will be the luncheon speaker, and Secretary of State Evan Bayh will speak at the dinner.

The HEC Board of Director's Annual Business Meeting will be held on October 9th, from 9:00 am to 5:30 pm at St. Maur's Priory, 4615 North Michigan Road, Indianapolis.

The cost of the Congress and Business meeting are as follows:

Congress: Entry fee: \$15.00 per person
Luncheon: \$ 5.00 per person
Dinner: \$15.00 per person

Business meeting: Entry fee and box lunch: \$6.00 per person

Direct questions to the HEC office, (317) 636-8282.

ADDENDUM: Lynn Miller will be our delegate to the business meeting representing the IKC. Also IKC member Kevin Strunk will be a delegate representing the Central Indiana Grotto.

HOOSIER FORESTS PROJECT COMMITTEE
QUARTERLY REPORT

by Kathy Hornaday, Chairman

The work of the committee has turned primarily to the "nuts and bolts" work of checking out cave locations provided by the ICS. Several locations have been eliminated from the list, with the Tincher Hollow area the only source of productive leads.

The Forest Service has asked for specific reports on several pieces of property being considered for land exchanges. The first series of field checks is in progress, and a second request has recently been received with a deadline of November 30. The Forest Service is particularly interested in any findings of Indiana Bats or Northern Blind Cavefish.

To date, twenty-seven Volunteer Agreements have been forwarded to the Forest Service. It is hoped that more will be added as the summer caving season comes to an end, with late fall and winter more suitable for ridgewalking.

Two additional grottos have expressed an interest in participating in the committee, the Windy City Grotto and the new Harrison-Crawford Grotto. Neither group has appointed representatives as yet.



Formations in one of the caves the IKC helps to protect.

Photo by Angie Manon

NEWS FROM THE MICHIGAN KARST CONSERVANCY

by Tom Rea

On the weekend of August 6-7 the Michigan Karst Conservancy held a Board of Trustees meeting and a dedication ceremony for their Fiborn Karst Preserve. The IKC was represented at the meetings by Kathy Hornaday and Tom Rea, who is also a Trustee of the MKC.

The summer Board of Trustees meeting was held on Saturday, August 6, in the Hudson Township Hall in Rexton, Michigan. President Curl announced that a five-year, renewable Special Use Permit has been negotiated with the Department of Natural Resources which permits the MKC to manage the one entrance to Hendrie River Water Cave which is located on state land adjacent to the Fiborn Karst Preserve. The Board accepted the terms of the permit and authorized the President to sign it. This seems to be the first time where the State of Michigan has signed a permit to allow a private organization to manage state land.

The MKC's petition for tax exemption for the Fiborn Karst Preserve was denied by the Hendricks Township Board of Review. The petition has been refilled with the Michigan Tax Tribunal and is expected to be approved.

The board adopted a set of policies to be followed by Michigan Karst Conservancy preserve management committees. A fourth committee, the Internal Audit Committee, was added to the list of permanent standing committees. A logo for the MKC is still being sought. Several suggestions presented to the board were rejected.

After the Board meeting a public program about the Fiborn Karst Preserve was given by Rane Curl. Even though the program was widely advertised locally, attendance was sparse.

Saturday evening a home cooked dinner was hosted at the Township Hall by the Rexton Women's Club. The monthly meeting of the Michigan Interlakes Grotto was held in a clearing on state land adjacent to the Fiborn Karst Preserve.

On Sunday afternoon, August 7, a public dedication ceremony was held at the Fiborn Karst Preserve. The preserve is located between Rexton and Trout Lake in Mackinac County in Michigan's Upper Peninsula. The preserve consists of 460 acres which were purchased in 1987 by the MKC. It includes extensive outcrops of limestone and the longest known cave in Michigan along with its associated streams and sinks. The ghost town of Fiborn Quarry is adjacent to the preserve and the majority of the quarry, which was the reason for the existence of the town, is within the preserve.

MKC President Rane Curl opened the ceremonies with a welcome to the visitors and description of the preserve and the objectives of the MKC in managing it. Brief speeches of congratulation and encouragement were then presented by representative of the Michigan Interlakes Grotto, The Michigan Department of Natural Resources, the Explorers Club, the Rexton Women's Club, and others. A feature of the day was the introduction of a woman who had lived and worked as a teacher in the town of Fiborn Quarry when the quarry was active.

(continued ...)

After the ceremonies the guests could choose between three tours led by MKC members. One group toured the Hendrie River Water Cave entrances; another hike to the resurgence of Hendrie River Water Cave Entrances; another hiked to the resurgence of Hendrie River Water Cave, about a mile from the entrance; while a third toured the karst features in the south and west walls of the quarry.

The next meeting of the Michigan Karst Conservancy will be the annual meeting to be held November 12, 1988, at the Cranbrook Institute of Science. See Rom Rea if you would like to go.

GROTTO AND COON CAVES CLEAN-UP WEEKEND

by Keith Dunlap

The IKC held its third annual Grotto/Coon Work Weekend on August 27-28. The main purpose of the weekend was to "prepare" both caves before their seasonal closure (September 1st thru March 31st). A total of thirteen cavers helped on Saturday at Grotto and sixteen were present on Sunday at Coon.

Activities at Grotto Cave included some minor work on the fence to circumvent intuders from sliding under the fence in one spot, and touching up the routed sign where the squirrels have been gnawing. The rest of the time was spent in the cave, removing trash from some of the more distant passages, and wire brushing graffiti. Participants included Keith Dunlap, Angie Manon, Lynn Miller, Jane Miller, Dave Everton, John Vargo, Robin Fitch, Tom Crismore, Glenn Harbaugh, Chris Field, Rick Geckler, Chris Nack, and Bill Aills.

Activities at Coon Cave included constructing a dam above the entrance to divert the run-off flowing down the logging trail away from the entrance; and removing many of the larger logs from the entrance pit (with a six person haul team). Work in the cave concentrated on graffiti removal and trash removal (only a half of bag of trash could be found). There also was some experimenting with "brown-washing" (see related article on the next page) which showed some real potential. Cavers helping out were Keith Dunlap, Angie Manon, Kevin Strunk, George Cesnik, Robin Fitch, Jeff Cody, Jim Bernard, John Vargo, Chris Nack, Ray Sheldon, Bruce Trotter, Sam Thornburg, Scott Bradley, Eric Schmidt, Kevin Shively, and Loretta Spilker.

This work weekend was one of the more productive ones conducted by the IKC, mainly as a result of excellent caver participation. Our efforts directed towards these two caves are truly starting to pay off. Grotto Cave is really looking good and is approaching its former natural beauty. Coon Cave is progressing too, but still has much more graffiti that needs our attention. If you have not been in either of these caves recently, you should make an effort to do so next spring, or better yet, plan to help out on the fourth annual clean-up next August.

BROWN-WASHING: An Advanced Technique in the Fight Against Graffiti

by Keith Dunlap

Over the past three years, the IKC has dedicated considerable effort in renovating some of the caves in the Garrison Chapel Valley. Part of the renovation has consisted of the removal of graffiti from cave walls, most notably in Coon, Grotto, Wayne's, and Buckner caves. To date, our approach has been brute force with wire brushes. This method works very well on walls that had a slight mud coating before the graffiti was applied, but becomes futile if the spray paint/carbide smoke was placed directly onto the limestone, especially rough or textured surfaces. To supplement the wire brushes, we have also tried camouflaging what couldn't be erased by smearing mud over the offending "art work". This approach is usually only partially effective in hiding the graffiti, and often leaves obvious traces of an unnatural "cover-up".

Several alternative methods have been discussed among those involved in the cleanups. Suggestions have included using: non-toxic, biodegradable paint removers; mild acid etching solution; sand blasting?; brown spray paint?; and painting the walls with a "mud slurry". The last suggestion, which I will coin as "brown-washing", seemed the most practical and economically feasible. This was tried successfully during the last Coon Cave cleanup.

The materials needed are simple: a bucket (2 1/2 gallon size), a brush (a cheap 4" wall paper paste brush is ideal), water, and cave mud. Mix the water and mud in approximately equal quantities, making an opaque slurry. Apply to the walls like a white-wash (only brown). The appearance can be improved if time is spent blending the "painted" area into the surroundings such that what has occurred isn't obvious. Brown-washing on vertical walls is pretty easy and straight forward; on ceilings or under ledges it is more difficult to get a good coverage, and usually end with the "painter" camouflaged as well.

In order to make brown-washing practical, an in-cave source of water is needed. Trying to transport gallons of water into a "dry" cave could be done, but would diminish the work force needed to do the actual work. The other necessity is a good supply of in-cave dirt/mud, preferably clay based. It may seem odd in a cave not to have an abundance of mud, but in a well traveled cave (such as Coon), it can be difficult to find the "right stuff".

Brown-washing will work in most cases, but should not replace wire brushing where or when possible. One has to remember that the graffiti has not been eliminated by brown-washing, it has only been camouflaged and may become uncovered, naturally or accidentally in the future.



BATWING CAVE PROJECT REPORT

by Keith Dunlap

The DNR's gating project at Batwing Cave was completed in June with the assistance of twenty-one cavers organized by the IKC. The gates were installed to protect the large colony of Indiana bats (*Myotis Sodalis*) from disturbance/extermination during their vulnerable hibernation.

The following is a brief dairy of events for the project:

March 12th: Gate feasibility and site selection trip [Scott Johnson (DNR, Division of Fish & Wildlife, non-game biologist and organizer of the project), Brain Abrell (DNR, Division of Nature Preserves), Hank Hoffman (DNR, Division of Nature Preserves, also an IKC member), Robert Currie (US Fish & Wildlife, biologist, bat specialist), Virgil Brack (independent biologist, bat specialist, IKC member), Roy Powers (Cave Conservation Institute, bat gate specialist), Dave Dalton (CCI), Keith Dunlap (IKC), Angie Manon (IKC), Tem Hornaday (IKC)]. Three possible gate sites were proposed, with the most inward site selected. Logistics and materials were discussed.

May 12th: Site preparation [Scott Johnson, two other DNR assistants]. The site for the lower gate required the removal of many large boulders allowing for a level foundation. The first day's progress was slow due to lack of the proper equipment.

May 13th: Site preparation [Scott Johnson; Brain Abrell, and one or two others from the DNR]. Continued moving boulders with a chain hoist.

May 14th: Site preparation and entrance work [Scott Johnson, Steve ? (DNR), Keith Dunlap, Angie Manon, Ernie Payne (IKC), Glenn Lemasters (IKC), George Brutchen (IKC), Lynn Miller (IKC), Jane Miller (IKC)]. Scott, Steve, George, and Glenn continued on the site preparation. The remainder concentrated on removing mud/debris from the entrance pit to allow for easier access for manpower and materials.

June 10th: Material transport to the entrance [Scott Johnson, 16 man prison crew]. The prisoners transported 3000 pounds of 4" angle iron by foot to the entrance (approximately 1/4 mile). The 8" sill plate was too massive and was dragged in by a tractor.

June 15th: Material/equipment transport to entrance [Scott Johnson]. Approximately 2000 pounds of concrete, a 16 hp welder, a generator, 2 oxygen and 2 acetylene tanks were shuttled to the entrance by an ATC.

June 16th: Start of the "real work" [Scott Johnson, Brian Abrell, Bob Currie, Roy Powers, Frank ? (DNR), Keith Dunlap, Ernie Payne, and one or two other DNR personnel]. The morning was spent getting the pit rigged, getting equipment into the cave, electrical and welding cables run, finishing on the site preparation, and generally getting everyone organized. The sill plate was then cut to length, lowered down the entrance, drug to the lower gate site, man-handled into position, and anchored properly. With the sill plate in place, the rest of the lower gate was easily constructed with the workers each performing their tasks (Roy supervised the gate construction under ground, Bob and Brain handled most of the in cave trimming and fitting, Frank welded, Keith ran the surface torch, Scott ran errands, and the remainder hauling the steel into the cave). Starting at the east wall, a vertical column was fabricated out of 4" angle. A second column



Inside the lower gate looking towards the entrance.

photo by
Ernie Payne

was welded in place 48" over. Horizontal pieces of 4" angle were welded in place approximately 6" apart, with the points facing up (two spacer blocks were used to assure equal spacing). By the end of the day (approximately 8 PM), three of the four sections were in place.

June 17th: Continued construction [basically the same personnel as the day before, plus Glenn Lemasters, Bob Dispenza (EMG), and a couple more DNR personnel]. The rest of the lower gate was fabricated, the door was cut out, and anchoring of the columns to the ceiling and walls started. The anchoring consisted of drilling 1" holes 6" deep in the limestone (with an electric drill hammer) and driving 1" pins in place, then welding the pins to the gate structure. The door hinges were fabricated and the door was hung in place.

June 18th: Completion of lower gate, start on upper gate [Scott Johnson, Brain Abrell, Hank Hoffman, Roy Powers, Bob Currie, Keith Dunlap, Angie Manon, Glenn Lemasters, George Brutchten, Lynn Miller, Jane Miller, Mike Miessen (IKC), Kathy Hornaday (IKC), Tom Rea (IKC), Kenny Carrigan (IKC), George Cesnik (IKC), Tina Shirk (IKC), George Mundy (IKC), Jim Rieck (EMG), Mary Kausch (EMG), Jim Greer (Louisville), Brain Leavell (caver), Jerry Litaker (caver), and a couple of DNR people from Wyandotte Cave]. Fabrication of the door mechanism and fill plates along the edges of the gate took all morning with trim work being done by Keith and the welding chores being handled by Kenny. Most of the other cavers were kept busy lowering the 80 pound concrete bags and water down the pit and hauling them to the gate site. The lower gate steel work was completed by noon and the welding and torch equipment was moved to the upper gate site. Roy and Brain oversaw the construction, Keith was cutting on the surface, Kenny welded, and several others supported the hauling of materials. The remainder of the cavers, led by Lynn were busy building concrete forms, then mixing and pouring the concrete. Eight additional bags of concrete had to be bought in town and transported manually (the ATC's frame broke) from the road to the cave to complete the foundation. The upper gate's construction was slowed by numerous welder problems requiring the back-up welder to be utilized. The day ended about dusk with a "pizza party" at the cave.

(continued ...)

June 19th: Completion of the upper gate, equipment removal [Scott Johnson, Brain Abrell, Hank Hoffman, Keith Dunlap, Angie Manon, Lynn Miller, Jane Miller, Mike Miessen, Kathy Hornaday, Tom Rea, Kenny Carrigan, Brain Leavell, Jerry Litaker, George Cesnik, Jim Rieck, Mary Kausch, Tina Shirk, Holly Cooke (caver)]. Brain, Keith, and Kenny spent the morning finishing the upper gate. Others removed the concrete forms from the lower gate and started the removal of in cave equipment. Hank and others wire brushed on the lower gate to prepare for its painting. Lynn handled the concrete work on the upper gate. The remainder of the help hauled equipment and materials back to the road. The last of the equipment was out of the cave by 2 PM. Kenny did a field repair on the ATC which helped with the last of the heavy equipment transporting to the road.

June 20th: Painting of the gate [Scott Johnson, Brain Abrell, one other DNR person]. Both gates were painted with red rust-o-leum.

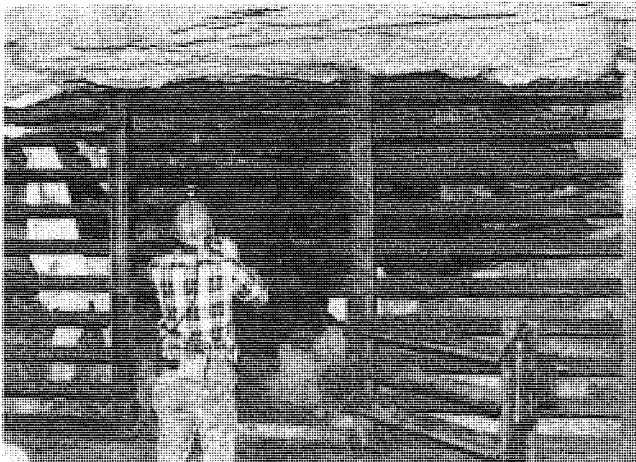
The daily description of this project was included to emphasize the magnitude of work required for such a task. While the total amount of labor is unknown by me, the IKC/cavers' contribution was estimated to be almost 400 hours. This project could have been completed without us, but I think our services and skills were greatly appreciated by the DNR.

Below is an article that appeared in the August issue of *FOCUS*, the DNR's Division of Fish and Wildlife Newsletter. On the next page is a letter received by the IKC from James Ridenour, the Director of the DNR, with copies sent to the Division Directors of Fish and Wildlife, Nature Preserves, and Forestry. While our main reason for helping with this project was to protect the bats, our secondary motivation was to receive positive exposure in the DNR. I think we accomplished both.

GATES PROTECT RARE BAT

Human disturbance during winter hibernation is a major factor contributing to the population decline of the federally endangered Indiana bat. The Non-game and Endangered Wildlife Program recently took a big step to prevent unnecessary disturbances by installing two iron gates inside an Indiana bat hibernation cave. The project completes nearly a year of evaluation of the cave and its winter Indiana bat population, one of the largest in the state.

Before constructing the gate, biologists monitored the cave using night vision scopes to observe bats flying in and out through numerous passages. It was learned that two passages would need gates to keep people from entering the cave and disturbing the hibernating bats.

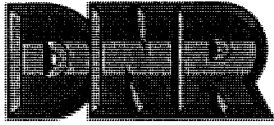


The gates were designed so that air flow in and out of the cave would not be affected. Indiana bats require very stable temperature and humidity conditions during hibernation. The gates, which measure 12 feet by 6 feet and 3 feet by 8 feet, allow free movement of the bats but do not permit people to enter. A locked door in one of the gates will allow biologists to conduct a biennial survey inside the cave.

Personnel constructing the gates were faced with the task of carrying all materials and equipment about a half mile over rough terrain to the site and lowering everything 30 feet into the cave. About 3,400 pounds of steel, 2,200 pounds of concrete, generators, welding machines and other equipment were transported to the site to build the gates.

The project was a cooperative effort requiring assistance from the DNR's divisions of Nature Preserves, Forestry and Fish and Wildlife. Also helping out were volunteers from the Indiana Karst Conservancy, a non-profit organization dedicated to cave conservation and preservation. Helping with design of the gates were members of the U.S. Fish and Wildlife Service and the Cave Conservation Institute of Virginia. The Nature Conservancy assisted by purchasing almost half of the steel needed to construct the gates.

Workers put the finishing touches on a gate designed to protect hibernating Indiana bats from human disturbance.



INDIANA DEPARTMENT OF NATURAL RESOURCES

JAMES M. RIDENOUR, DIRECTOR

July 6, 1988

R. Keith Dunlap, President
Indiana Karst Conservancy, Inc.
P.O. Box 461
Plainfield, Indiana 46168

Dear Mr. Dunlap,

The Indiana Department of Natural Resources would like to thank the Board of Directors and membership of the Indiana Karst Conservancy for their outstanding contributions in the recent gating project at Batwing Cave, one of the state's most significant hibernacula for the federally endangered Indiana bat. It is extremely gratifying to see concerned conservation organizations like the Indiana Karst Conservancy join forces with Department personnel in such a worthwhile project.

As you are well aware, unauthorized human disturbance during the winter hibernation period is a major factor known to contribute to the continued population decline of this species. It is my belief that the efforts put forth by the members of the Indiana Karst Conservancy and the staff from the Divisions of Fish & Wildlife, Nature Preserves, and Forestry will assure adequate protection for the Indiana bat winter population in Batwing Cave.

Once again, I thank you for your cooperation and assistance.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. M. Ridenour". The signature is fluid and cursive, with a large, sweeping initial "J".

James M. Ridenour, Director
Department of Natural Resources

cc: Edward L. Hansen, Director, Division of Fish and Wildlife
John A. Bacone, Director, Division of Nature Preserves
John F. Datena, Director, Division of Forestry

Endangered Species Recovery Team Reports Gains and Losses

The U.S. Fish and Wildlife Service Endangered Species Recovery Team for bats was hosted by BCI in Austin in early April. Sixteen experts discussed a wide range of conservation initiatives, status surveys and further research needs for endangered bats in the United States.

Endangered Gray bats and Ozark and Virginia big-eared bats are stable or increasing in numbers. Of the three, the Gray bat has markedly increased its numbers, apparently a direct result of reduced disturbance of cave roosts due to protective gates, signs, land owner and caver cooperation. Education appears to be playing a key role in the increase of all three of these year-round cave dwellers

million to 128,000 bats. Reports presented at the latest recovery team meeting show reestablishment of large nursery colonies in all three caves, with a combined total of 820,000 Gray bats, an overall increase of more than 80%, and up 20% just since 1985 (BATS, December 1986). Protective efforts are responsible for this dramatic success.

Unfortunately, the Indiana bat continues to decline at an alarming rate, despite efforts to date. A 55% decrease has been recorded since 1980, though losses are not geographically uniform. Populations from the Appalachian and Adirondack Mountain areas remained low but stable, while those in the Midwest, where the

The adjacent article was reprinted from the Summer 1988 issue of *BATS*, Bats Conservation International's newsletter. Of particular interest are the last two paragraphs pertaining to the status of the Indiana bat.



The Gray bat population at Nickajack Cave in central Tennessee is now recovering due to the protection offered by a fence, which keeps potential explorers out.

PHOTO BY J.R. JORDAN

after decades of steady decline. Prior to conservation efforts, Gray bats were declining at an alarming rate throughout most of their range.

Population changes in Gray bats at Hambrick, Nickajack and Blowing Wind Caves in central Tennessee and northern Alabama are prime examples of the extent of progress. When BCI's Science Director, Dr. Merlin Tuttle, gained federal protection of these heavily disturbed sites in the late 1970's, Hambrick and Nickajack Caves had lost their large nursery colonies, and the Blowing Wind colony had been reduced from a past population likely in excess of a half

largest concentrations are located, have continued to fall rapidly.

In the Midwest, Indiana bat losses generally continued in major hibernation caves even where protection had been provided, though there were notable exceptions. Pesticide poisoning and loss of summer feeding and roosting habitat were suggested as possible causes. Procedures for investigating these possibilities were discussed, and federal and state agencies will be asked to fund the needed studies. An early priority will be to compare pesticide levels in bats from stable populations with those from declining populations.

INDIANA KARST CONSERVANCY, Inc.
All Funds - Statement of Receipts, Expenditures, and
Changes in Fund Balance for the Quarter Ending 06/30/88

General Fund

Receipts		
Dues	375.00	
Donations	35.00	
Interest	<u>19.62</u>	
Total Receipts		404.62
Expenditures		
Update Postage	110.47	
Update Stencils	67.50	
Update Paper (one case)	40.74	
Update Paper (front cover)	10.45	
Update Ink	28.00	
Postage & Stationary	33.99	
Trash Haul Bags	47.71	
Lockbox Rental	12.00	
Dunbar/Woodard Lease	<u>1.00</u>	
Total Expenditures		<u>351.86</u>
Excess to Fund Balance		<u>52.76</u>
Fund Balance, 04/01/88		1297.03
Fund Balance, 06/30/88		<u>1349.79</u>

Buckner Fund

Receipts		
Donations	<u>35.00</u>	
Total Receipts		35.00
Expenditures		
Clean-up Equipment and Supplies	25.18	
Electrical Supplies & Signs	15.56	
Signs	<u>12.99</u>	
Total Expenditures		<u>53.73</u>
Excess to Fund Balance		(18.73)
Fund Balance, 04/01/88		305.32
Fund Balance, 06/30/88		<u>286.59</u>

HNF Fund

No Change		- 0 -
Fund Balance, 04/01/88		25.73
Fund Balance, 06/30/88		<u>25.73</u>

<u>Total Balance - All Funds, 06/30/88</u>	<u>1662.11</u>
--	----------------

RECOMMENDATIONS FOR AMENDMENTS TO THE BY-LAWS OF THE
INDIANA KARST CONSERVANCY, INC.

ARTICLE IV: MANAGEMENT OF THE CONSERVANCY

- A) Line 4, change the word "members" to read "Directors"
- B) Delete last two words of section, or change "loses" to read "leases".
- C) Line 3, change the word "meeting" to "meetings".

ARTICLE V: OFFICERS

- E) Treasurer.
 - 3) Change the word "our" to read "out".
- F) Succession of Officers.

Insert the word "temporary" before the phrase "absence, ill health, or incapacity".

- G) Officers shall be elected at the annual meeting of the membership for one year terms. The remaining Directors shall be elected for terms of two (2) years. Exceptions will be one year Director terms for an initial election and occasionally as necessary to provide two approximately equal classes with staggered terms.

ARTICLE VI: ELECTIONS

Election of Directors shall be by ballot. The Board of Directors shall select a preliminary slate of Directors and a ballot shall be distributed at least thirty (30) days in advance of the annual organizational meeting. No nominee may be included on the ballot without his or her express acceptance of nomination to the Board. Members wishing to vote by absentee ballot must return the ballot to the designated Teller prior to the meeting. All members eligible to vote must register (sign in) prior to the start of balloting. Final nominations and election of Directors shall be the first order of business of the annual organizational meeting.

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

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

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

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

ABSENTEE BALLOTS: Absentee ballots (distributed as described above) shall be assigned a numeric identification code at random. The Secretary (or other Director as appointed by the President) shall maintain a confidential record of this code. At the annual organizational meeting the designated Teller will advise the Secretary (or other Director as appointed by the President) of the numbers of the absentee ballots received for inclusion in the voting process. The Secretary (or other Director as appointed by the President) shall then compare the registration (sign in) list with the absentee ballots. Any absentee ballot received from an individual in attendance at the organizational meeting will be disregarded. The Secretary (or other Director as appointed by the President) shall notify the Teller of any ballots to be disallowed by code number. The Teller shall not be made aware of the identity of the member whose ballot is being disallowed, nor will the Secretary have reason to see or learn of the votes cast on the disallowed ballot. This procedure will insure the integrity of the secret ballot process.

ARTICLE VII: OFFICE VACANCIES AND REMOVAL FROM OFFICE

Should a vacancy occur on the Board of Directors, the remaining Directors shall appoint a Conservancy member to fill said vacancy. The person so appointed shall serve only until the next annual meeting, but shall be eligible for nomination and election to complete the unexpired term he was appointed to fill.

In the event of a vacancy among the Officers, said vacancy shall be filled by the appointment of the Directors. The person appointed by the Board shall be eligible for nomination and election to that (or another) office at the next annual meeting.

Should an Officer or Director fail to satisfactorily perform his duty, the Board may declare the position vacant by a two-thirds favorable vote.

ARTICLE X: NON-PROFIT

- C) No individuals or participants in a group visiting caves or property owned or managed by the Indiana Karst Conservancy may be expected or required to pay any fees or costs in excess of the actual shared trip expenses. Groups requesting permission to visit IKC properties must agree in writing to this policy. Violation of this policy will be sufficient reason for denying any group permission to visit said properties.

ARTICLE XI: EXCEPTION TO THE BYLAWS

Annual dues will be required for membership in the Indiana Karst Conservancy. Amount of annual dues shall be determined by the Board of Directors.

Respectfully submitted,
BY-LAWS COMMITTEE: Lynn C. Miller, Jane E. Miller

INDIANA KARST CONSERVANCY
MINUTES OF THE QUARTERLY MEETING

Indiana University Memorial Union
Bloomington, Indiana
June 17, 1988

Directors attending: Keith Dunlap
Lynn Miller
Mike Miessen
Tom Rea
Ernie Payne
Kathy Hornaday

Directors absent: Noel Sloan
Cindy Riley

Keith Dunlap called the meeting to order at 7:50 p.m.

Directors and guests introduced themselves.

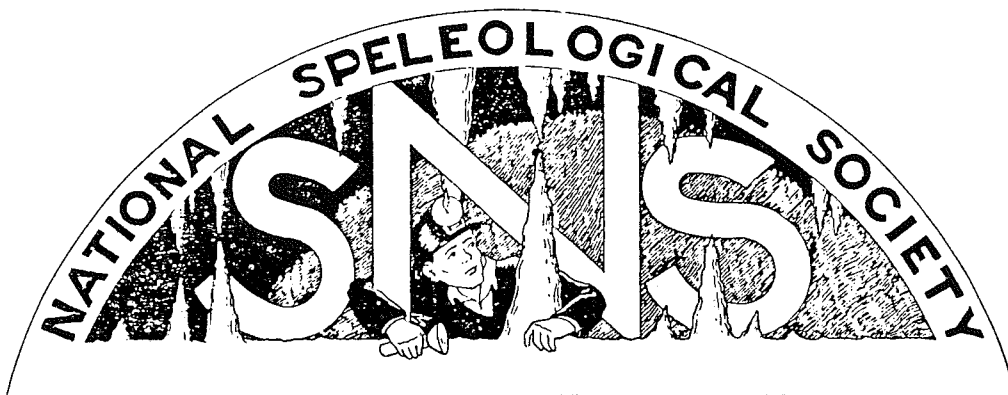
- 1) Keith reported on the progress at Batwing Cave. Work started on 6/15, and is progressing on or perhaps slightly ahead of schedule. Welding was begun today, and will be completed tomorrow. Concrete will be poured tomorrow. Volunteers are camping at Wyandotte Woods; Scott Johnson is at site 122 in the "B" reserved area.

We have been given permission to survey and map the cave. This is scheduled for July 23/24. The permit will allow up to 10 people on the trip.

- 2) Kathy reported on the Hoosier Forest Project. She and Tom met with Forest Service personnel, and have established procedures for identifying volunteers, and processing reports. Waivers are to be signed and kept by the IKC. Volunteer Agreements are to be signed and returned to committee members to be forwarded to the Forest Service. Reports are to be on the ICS forms, and are also turned in to the committee to be forwarded to the ICS and the Forest Service.
- 3) Mike reported that the next Buckner's cleanup is scheduled for Oct. 1. Members of the Mid Hoosier Grotto show up regularly. Mike continues to stop by on weekends to talk with visitors, giving information on the IKC, and procedures for getting access to IKC caves. A large packet of information was sent to the leader of a Boy Scout Troop in Dayton, Ohio.
- 4) Dave Everton volunteered to correct the information being given out by Jim's Cave Shop, indicating that the IKC can give permission to enter Salamander Cave. Dave will emphasize that this is incorrect, and that the IKC can only grant access to the caves we lease.
- 5) It was agreed that the IKC will purchase an ad for the Cave Capers Guidebook. We will also donate pictures for door prizes: 1 large (11 x 14) and 2 small (8 x 10).

- 6) Tom suggested that the IKC also donate one large picture for a door prizes at Convention. This was approved.
- 7) The next Directors meeting will be at Cave Capers, on Sunday morning, Aug. 14.
- 8) The next quarterly meeting will be in Indianapolis, at the War Memorial, on September 24.
- 9) Tom announced that the Michigan Karst Conservancy will be dedicating the Fiborn Karst Preserve on the weekend of August 6-7. He encouraged IKC Directors and members to attend.
- 10) Plans for the NSS Convention were discussed. It was confirmed that Kathy will present a paper at the Symposium on Privately Owned Caves. Keith suggested that IKC members might also want to attend the meeting of the Conservation and Management Section. There was some discussion about putting together a team for the Speleo Rodeo.
- 11) General announcements included:
 - Scheduling the Coon's/Grotto cleanup for Aug. 27-28
 - A Devil's Graveyard weekend scheduled for sometime in September
 - Hank Huffman appears on the cover of Outdoor Indiana. Mike Miessen confirmed that he is using his Indianapolis address for mail.
 - Mid-Hoosier Grotto has donated a dozen wire brushes. Kathy will woodburn IKC initials on several to be given away at Cave Capers.
 - There will be an ICS meeting on June 20, at 7:30 p.m., in the Geology Building.
 - Bill Baus is selling floppy disks for .50 each.

The meeting was adjourned at 10 p.m., with many members going South to work on the Batwing Project.



INDIANA KARST CONSERVANCY
MINUTES OF THE BOARD OF DIRECTORS MEETING

Delaney Creek Park
Salem, Indiana
August 14, 1988

Directors attending: Keith Dunlap
Mike Miessen
Lynn Miller
Ernie Payne
Tom Rea
Noel Sloan
Kathy Hornaday

Directors absent: Cindy Riley

Keith Dunlap called the meeting to order at 8:30 a.m.

- 1) August 27 and 28 will be the annual clean-up week-end at Coon's and Grotto caves. Keith urged all Directors to attend. Alternative techniques may be used for removal of graffiti, to see if there are methods which work better than wire brushes. Suggestions include "painting" with a mud slurry, or use of a non-toxic paint remover. The sign may be ready to install at the road, and a permanent cable may be installed across the end of the road.
- 2) Keith will send out a notice to grottoes, reminding them of the closure dates.
- 3) Kevin Strunk submitted his proposal for the position of Scientific and Research Committee chairman. Lynn Miller moved, and Noel Sloan seconded, that Kevin be approved as chairman of the Scientific and Research Committee. This was unanimously approved. There was a brief discussion of the details of the proposal, and whether or not a specific budget existed. There is no specific budget at this time.
- 4) Kevin has been working with two IUPUI students on a sediment research project. They have requested a research grant of \$100.00 to cover gas/mileage expenses and laboratory equipment. Tom Rea moved, and Lynn Miller seconded, that we approve a research grant of \$100.00, but with the stipulation that it not be used for gas/mileage. Appropriate credit, and copies of their reports, are to be given to the IKC. The motion passed, with Sloan opposed, Dunlap abstaining, and all the rest in favor.
- 5) It was agreed to enter into a memorandum of agreement with the new Harrison-Crawford Grotto, similar to the ones with other Indiana grottoes. Keys will be available, if requested.
- 6) Gross Cave near Bloomington has a new owner. Options to complete closure were discussed. The cave is a 54' pit, with a diameter similar to or smaller than Shaft Cave. A gate was the suggested option, but in view of the nature of the cave and other funding options available (NSS, RASS, etc.) it was decided not to approve any IKC funds.

- 7) Northern Indiana Grotto may be scheduling work at Devil's Graveyard in September or October.
- 8) Keith received a thank you letter and reimbursement check from the DNR for our help on the Batwing Project. Keith will work with Cindy Riley to send individual checks and a cover letter to all participants. A return addressed envelope will be provided for those who wish to contribute their reimbursement to the IKC.
- 9) Mike Miessen reported that the Buckner's clean-up is scheduled for October 1, with a party in the evening.
- 10) Mike Miessen and Dave Everton reported some activity at Wayne's Cave. Another clean-up will probably be scheduled this winter.
- 11) The by-laws revisions recommended by Lynn and Jane Miller were reviewed and discussed. Several changes were made to the recommendations. The final revision will be published in the *Update*, and a formal vote will be taken at the September meeting.
- 12) Kathy Hornaday reported briefly on the work of the Hoosier Forests Project. A written report will be published in the September *Update*. Late fall and winter will hopefully see an increase in field checks on cave locations, possibly as Grotto trips and/or an IKC trip.
- 13) Noel Sloan discussed the response from Doug Love's attorney. Since the only acceptable solution is for the book to be pulled from the market, which is unlikely, Tom Rea moved, and Mike Miessen seconded, that we not respond to this letter. The motion passed with Dunlap opposed, Sloan abstaining, and all the rest in favor.
- 14) The Hoosier Environmental Council will hold their Annual Meeting on October 8 and 9. The IKC is entitled to send one delegate. Lynn Miller was unanimously chosen as our delegate, with his registration fee paid by the IKC. We will have pamphlets available for distribution at the meeting.
- 15) The next quarterly meeting will be September 24, in the War Memorial, at 10 a.m. Keith will send reminder postcards.
- 16) The deadline for the *Update* #10 is September 7.

The meeting was adjourned at 10:45 a.m.

*** NEW ORGANIZATIONAL MEMBER ***

Boy Scouts of America, Troop 101
St. Paul's Episcopal Church
PO Box 173
Dayton, OH 45420

MAIL BAG...

The IKC receives much correspondence each month, usually directed towards one of the officers or cave patrons. Most often are requests for visiting one of the caves we manage. Usually permission is granted and arrangements made. We also often receive follow-up letters after their trip. Occasionally (when the *Update* ends up being an odd number of pages and we need a one page filler item), we like to share some of this correspondence with the members.



Indiana State
University

Department of Geography and Geology

Keith Dunlap
573D Paradise Way East
Greenwood, Indiana 46143

April 23, 1988

Dear Mr. Dunlap,

I wish to thank you and the Indiana Karst Conservancy for your efforts in maintaining access to Shaft Cave and the surrounding area. In our recent visit, I found the local pit, cave, and karst features and setting to be quite instructive for my groundwater hydrology class. I am sure they are more appreciative now of the fragility and importance of water resources in this type of environment.

Please express our thanks to the landowner for his own appreciation and support of such visits to his property.

Sincerely,

Dr. Thomas Miller
Assistant Professor

NEW SIGN INSTALLED ON THE HANCOCK PROPERTY

On Saturday, August 27th, a large "DNR type" sign was installed out at the Shaft/Grotto/Salamander parking area on Spicer Lane. The sign is to further reduce the traffic across the Hancock property, particularly going to Salamander Cave (this was at the request of Mr. Hancock). The sign was routed and painted by Dave Everton, and installed by Lynn Miller, Jane Miller, Angie Manon, and Keith Dunlap.



INDIANA KARST CONSERVANCY, INC: PO Box 461, Plainfield, IN 46168

I would like to help the IKC conserve Indiana's unique cave and other karst features.

Enclosed is:

\$_____ for IKC membership at \$15 per year (dues expire March 31st each year, you may pro-rate @ \$1.25/month, if you wish).

\$_____ donation to the general IKC fund.

\$_____ donation restricted to a specific IKC project. Please specify: _____

_____ I know an area worthy of protection. Please contact me.

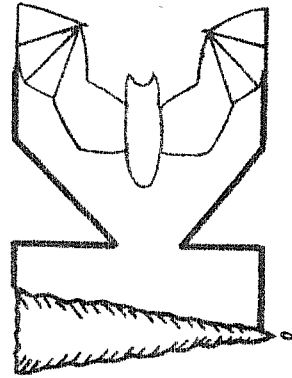
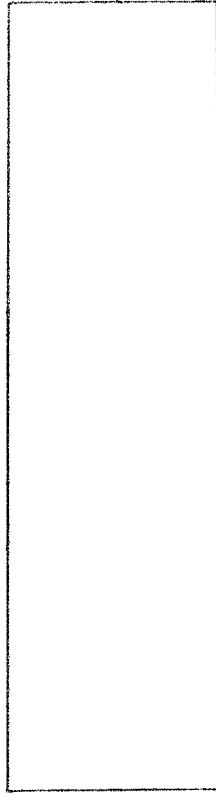
_____ I would like to volunteer to help.

Name _____
 Address _____
 City/state/zip _____

Make checks payable to the INDIANA KARST CONSERVANCY and mail to the IKC TREASURER, PO Box 461, Plainfield, IN 46168. The IKC is an IRS recognized 501(c)(3) non-profit organization with membership dues and donations tax deductible. A cancelled check is considered an acceptable receipt, but if you wish a separate receipt, check here ☐

Suggestions for other interested persons (names and addresses please):

Indiana Karst Conservancy
PO Box 461
Plainfield, IN 46168



PROTECTING CAVES THROUGH ACTIVE CONSERVATION