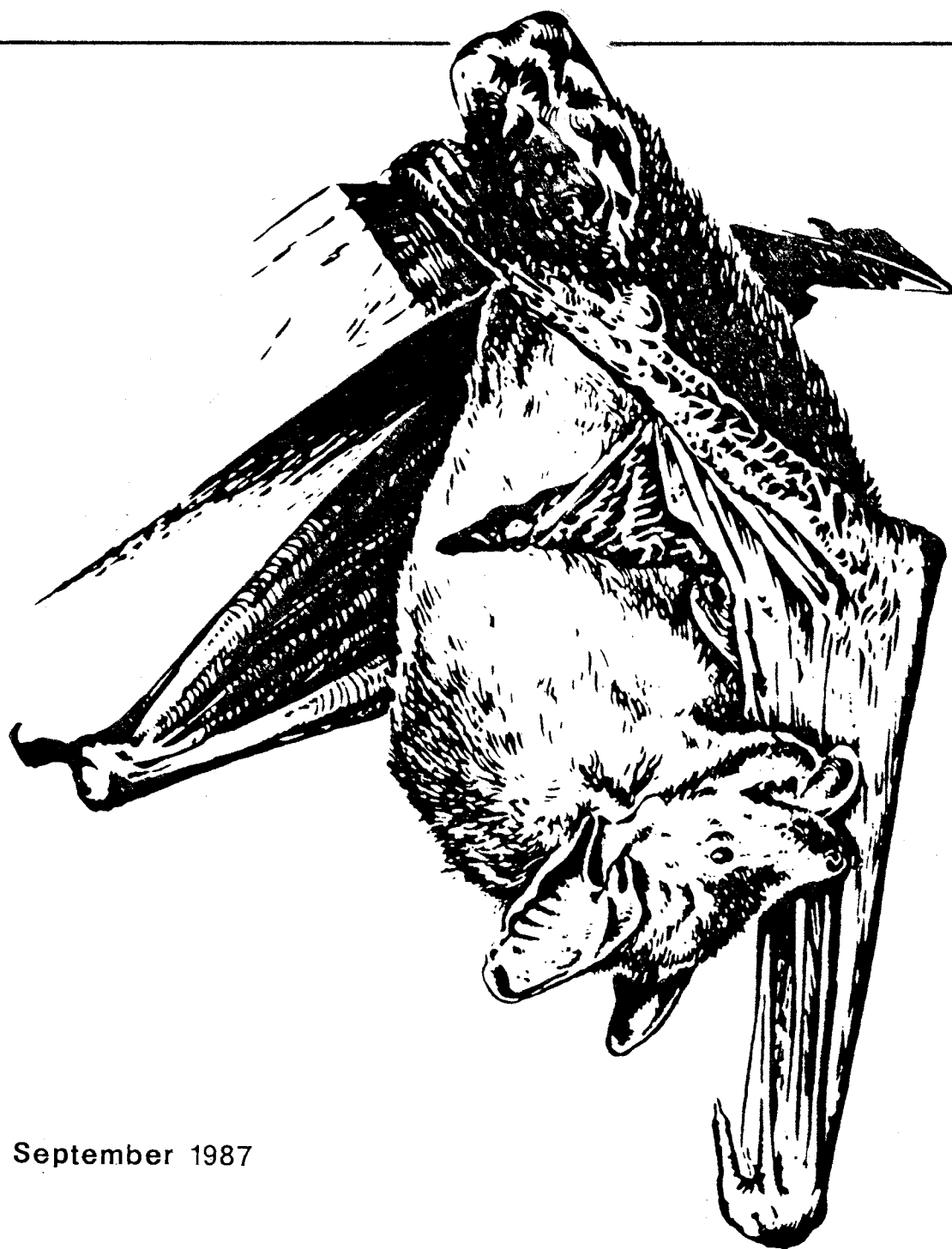


TKC UPDATE #6



September 1987

INDIANA KARST CONSERVANCY, INC.
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) 291-3845(H)
 Secretary Kathy Hornaday (317) 634-6122(W)/(317) 881-7936(H)
 Treasurer Cindy Riley (317) 634-3837(H)
 Director Mike Miessen (812) 333-5797(H)
 Director Lynn Miller (317) 632-4525(W)/(317) 784-3724(H)
 Director Tom Rea (317) 252-4248(W)/(317) 839-2100(H)
 Director Noel Sloan (317) 929-8961(W)/(317) 845-8821(H)

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

Cave Acquisition & Management/ Keith Dunlap (317) 291-3845
 Education vacant
 Scientific & Research vacant
 Resource Inventories/ Jim Wolford (317) 259-1088
 Membership/ Cindy Riley (317) 634-3837
 Public Relations & Publications/ Dave Haun (317) 784-2573
 Fund Raising/ Cindy Riley (317) 634-3837
 Spring Mill Park Project/ Noel Sloan (317) 845-8821
 Buckner Cave Renovation Project/ Mike Miessen (317) 333-5797
 Enviromental Concerns, HEC Liaison/ Kathy Hornaday (317) 881-7936

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

Coon Cave/ Keith Dunlap (317) 291-3845
 Grotto Cave/ Mike Miessen (812) 333-5797
 Shaft Cave/ Scott Fee (317) 882-7963
 Shiloh Cave/ Marty Atherton (317) 783-2194
 Wayne's Cave/ Tom Rea (317) 839-2100
 Woodard Cave (TN)/ NIG - contact Gene Pelter (219) 456-3374

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

Bloomington Indiana Grotto/ Mike Miessen (812) 333-5797
 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: Big Brown Bat (*Eptesicus Fuscus*), artwork from the *POTOMAC CAVER*, November 1986

Publishing courtesy the Central Indiana Grotto

***** ANNOUNCING THE IKC *****
QUARTERLY INFORMATIONAL MEETING

TUESDAY, SEPTEMBER 22th
7:30 PM

INDIANAPOLIS, INDIANA
INDIANA WAR MEMORIAL
PATTON 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.

Special Topic: the announcement and discussion of a proposed DNR cooperative bat project. Come and hear the details.

For directions or more information, please contact one of the Directors.

EVENTS CALENDAR

- 18-20 SEPT = KARST ENCOUNTERS, Milltown
- 22 SEPT = IKC QUARTERY MEETING (see above announcement)
- 25-27 SEPT = POW-WOW IN THE WOOD, Lazy Black Bear Farm, Paoli
- 11 OCT = CIG GROTTA TRIP/ WAYNE'S CAVE CLEAN-UP, contact Keith Dunlap or Ray Sheldon for more details
- 24 OCT = NEXT BUCKNER CAVE RENOVATION PROJECT WORK DAY, contact Mike Miessen for specific details and planned activities
- 07-08 NOV = HOOSIER ENVIRONMENTAL COUNCIL CONGRESS, Indianapolis
- 05/06 DEC = IKC QUARTERY MEETING, Bloomington (tentative)
- 05/06 DEC = WAYNE'S CAVE CLEAN-UP (tentative), contact Tom Rea for more details and the specific date

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...

Again for this issue, I am serving as the principle editor of the *UPDATE*, and again, it has turned out to be a larger issue than planned. It seems like the intervals between issues of the *UPDATE* are much too short to ever have enough material to compile for a newsletter. That is until the deadline approaches (and passes) and the solicited articles are received and I look over the notes that I have scribbled down for the last few months on possible items to include. Yes, there should be the reports on cave cleanup projects that were organized to illustrate that we are accomplishing something (examples in this issue: Buckner, Coon, & Grotto workdays). And yes, the minutes to each meeting should be printed for those so inclined to read them and want to keep abreast of what is going on (in this issue there are seven and one half pages of minutes from the two marathon meeting held since the last issue). Add in a few other administrative items (updated membership lists, treasurer's report, calendar of events, etc...). Then of course, there should be an article or two on current conservation issues that pertain to us (the FCRPA and Hoosier National Forest for this issue). And there is always a lot of correspondence to and from the IKC that may or may not be of interest, but some examples are included to get a flavor for the amount of paperwork that is conducted by the Directors and others. I also feel compelled to write a few brief (some people say I do not know the definition of the word) articles and summaries on miscellaneous items and items that may have been covered in the minutes, but I feel deserve more attention or recognition. Finally, to add variety, throw in a few pertinent conservation oriented re-prints from other sources (e.g., the BCI's articles this time). This yields a newsletter about twice as big as originally intended.

Now comes the part that I have trouble with, removing items to make the *UPDATE* reasonable to publish, mail, and read. This leads to throwing out or postponing a few articles and letters, summarize others, and photo-reducing still others to squeeze them here and there. I heard some criticism about the last issue in that it was pretty dry, and perhaps it was. But for the most part, my philosophy still is to include as much as possible and allow the members to read what they want and skip the rest (perhaps as a supporting excuse, I rationalize to myself that the IKC has a dispersed membership and the *UPDATE* is perhaps the only way some have of keeping informed, thus there is more danger in not including as much as possible).

One final comment about the *UPDATE*. Hopefully it is a pretty good representation of what the IKC is doing and what it has accomplished. Perhaps, just perhaps, the *UPDATE* is the size it is because we are an organization that is getting projects accomplished and actively pursuing others.

- Keith Dunlap

BUCKNER PROJECT UPDATE

by Keith Dunlap

JULY 19th CLEANUP WORKDAY - Summer is a busy time for most cavers so it was encouraging to see a good turn out of participants. There were many that went into the cave, hauling out trash and removing graffiti. For the light lovers, the above ground activities included installing twenty-six 4-by-4 posts along the parking area to keep the vehicles off the "grass" (hand digging each hole 30" deep in the hot sun is no fun!), trimming of some of the weeds, and transferring dirt into the mud holes in the back campground area (thanks to Mike for arranging for the backhoe). A partial list of participants include: Mike & Sheri Miessen, Angie Manon, Keith Dunlap, Tom Rea, Kathy Hornaday, Bon Vandeventer, Bambi Erwin, Mark Webb, Jeff Cody, Steve Strum, Sandy Roads, Dave Haun, Carry Coker, Kenny Carrigan, Craig Williams, Ernie Payne, Drew Packman, Sandy Nudo, Jeff & Nancy Butler.

NEXT CLEANUP WORKDAY - The next Buckner cleanup is scheduled for Saturday, October 24th, starting at 9 AM. Emphasis will be on working in the cave, but we have at least a couple of above-ground projects for those so inclined. Contact Mike Miessen or Keith Dunlap for more details.

NSS GRANT - As reported in the last issue, the IKC submitted a grant to the NSS for the Buckner Project. The grant was approved and we have received \$150 for conservation related work. The Buckner Project has gotten national attention and now funding from the NSS to show their support of what we are trying to accomplish. Part of the money has been spent on the materials to construct signs and an additional information bulletin board (the register booth display area is already full with educational material and other announcements). We have also purchased several wire brushes for removing graffiti.

T-SHIRTS - As a fund raiser, and more importantly, to generate publicity for the project, the IKC sponsored a "Buckner Project" T-shirt sale at Cave Capers. The original 48 shirts were sold, yielding approximately \$165 profit. We have since ordered 24 more which are available through Mike Miessen. *Show your support by buying a T-shirt and wear it with pride.*

DONATIONS - Besides the T-shirt sales, NSS grant, and IKC funding, the Buckner Project has received a considerable amount of donations from visitors out on the property. Since early-June, when the donation box was installed in the register booth (see photo on page 30), we have received approximately \$300. The weekly intake has varied greatly ranging from a low of \$2 to a high of \$65. The money received via the donation box will be ear marked for property improvements such as funding of the shelter.


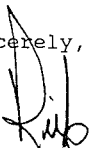
SPECIAL THANKS - Again a special thanks needs to go to Mike & Sheri Miessen for the amount of extra effort that the two of them have put into this project. Both have spent many weekends out on the property making personal contacts with novice cavers, giving the soft-sale approach to cave conservation, and just generally being visible. They also have spent many extra hour in the cave hauling trash and wire brushing the graffiti. *Mike & Sheri, KEEP UP THE GOOD WORK!!*

FEDERAL CAVE RESOURCES PROTECTION ACT: A Status Report

by Kathy Hornaday

The IKC received replies from both Congressman Boucher and Senator Daschle (see below and adjacent page) in response to our support for the Federal Cave Resources Protection Act, (see *UPDATE* #5 for our letter to Boucher). Janet Thorne, Chair of the NSS Conservation Committee also responded to our letters.

At this point, the National Parks and Public Land Subcommittee of the House Committee on Interior and Insular Affairs has held a hearing, on July 23. The bill was passed *favorably* out of the Subcommittee. It is now waiting for Congress to reconvene after the summer recess, to go through the mark-up process, after which it will proceed through the House, and on to the Senate. There does not appear to be any opposition to the bill, so the biggest hurdle at this point is to keep it from getting lost in the shuffle. IKC members who want to be kept informed of developments as they happen should contact Kathy Hornaday. You can be put on a special mailing list, or call-up list, or some such, if you want to know when things are happening.

<p>RICK BOUCHER 9TH DISTRICT, VIRGINIA</p> <p>COMMITTEES</p> <p>ENERGY AND COMMERCE</p> <p>JUDICIARY</p> <p>SCIENCE, SPACE, AND TECHNOLOGY</p> <p>SELECT COMMITTEE ON AGING</p> <p>ASSISTANT MAJORITY WHIP</p>		<p>WASHINGTON OFFICE 428 CANNON HOUSE OFFICE BUILDING WASHINGTON, DC 20515 (202) 225-3861</p> <p>CONSTITUENT SERVICE OFFICES</p> <p>188 EAST MAIN STREET ABINGDON, VA 24210 (703) 628-1145</p> <p>321 SHAWNEE AVENUE, EAST BIG STONE GAP, VA 24219 (703) 523-5450</p> <p>112 NORTH WASHINGTON AVENUE P.O. BOX 1268 PULASKI, VA 24301 (703) 980-4310</p>
<p>Congress of the United States</p> <p>House of Representatives</p> <p>Washington, DC 20515</p> <p>June 30, 1987</p>		
<p>Ms. Kathleen D. Hornaday Indiana Karst Conservancy P. O. Box 461 Plainfield, Indiana 46168</p> <p>Dear Kathleen:</p> <p>Thank you for your recent letter expressing the endorsement by the Indiana Karst Conservancy of H.R. 1975, the Federal Cave Resources Protection Act.</p> <p>I share your view that present management of caves on federal lands is inconsistent and inadequate. H.R. 1975 responds to this concern by strengthening protection of these unique and fragile resources when they are located on federal lands.</p> <p>The House Interior Subcommittee on National Parks and Public Lands will hold a hearing on the Federal Cave Resources Protection Act later this summer. The support of organizations such as yours enhances efforts to enact H.R. 1975, and I appreciate your assistance.</p> <p>Thanking you again for writing, I remain with kind regards and best wishes</p> <p>Sincerely,</p>  <p>Rick Boucher Member of Congress</p> <p>RB/lg</p>		

United States Senate

WASHINGTON, D.C. 20510

July 6, 1987

Kathleen Hornaday
Indiana Karst Conservancy
P.O. Box 461
Plainfield, Indiana 46168

Dear Kathleen:

Thank you for taking the time to advise me of your support for the Federal Cave Resources Preservation Act (S. 927). I sincerely appreciate your endorsement.

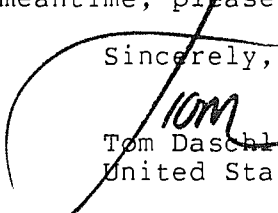
As you know, ample evidence exists indicating the urgent need to initiate and improve federal land management plans to protect the 4,200 federal caves on National Forest and Bureau of Land Management (BLM) lands. Every year we fail to enact legislation to protect caves, we run the risk of having fragile cave resources destroyed forever.

My proposed legislation is an effort to ensure that 1) the values of cave resources are recognized by the federal government; 2) land management plans are enacted to protect valuable cave resources; and 3) exceptionally pristine and sensitive caves receive a special level of protection. The bill is in no way an effort to prevent responsible people from enjoying recreational caving, rather it is an effort to preserve these national treasures for future generations of Americans to enjoy.

I am pleased to note that S. 927 has garnered the endorsements of such distinguished national organizations as the National Wildlife Federation, the National Audubon Society, and the National Speleological Society. Senators Pressler (SD) and Heinz (PA) have co-sponsored my bill in the Senate and twenty congressman -- including Rep. Morris Udall, Chairman of the House Interior Committee -- have joined as cosponsors in the House of Representatives. I am hopeful that other state and national organizations and members of Congress will lend their support to this effort prior to the beginning of hearings on the bill.

Thanks again for writing. I will be sure to keep you up-to-date on the progress of the Federal Cave Resources Protection Act. If you have any questions or comments in the meantime, please feel free to contact me.

Sincerely,



Tom Daschle
United States Senate

TAD/jdl

COON & GROTTA CAVES WORK WEEKEND

by Keith Dunlap

The IKC's conservation project for August was to work in and around Coon and Grotto Caves. Both of these caves are of particular interest to the IKC and other interested conservationist in that they serve as significant hibernacula for the Indiana Bat. The caves are closed from September 1 thru March 31 each year, so the work weekend was a good excuse to see the caves and clean them up one last time before closure. Neither cave sees the traffic of Buckner or Salamander so the amount of trash does not accumulate very fast, making our task that much easier. Our goals were to clean the caves, erect two large "DNR-like" informational signs (see facing page), post two DNR Indiana Bat hibernacula warning signs (see related article on page 13) , and perform maintenance on the fence around Grotto.

SATURDAY, AUGUST 22 - The first day was dedicated to Coon cave. There were basically four work groups. The first team arrived early and was in the cave by 9 AM, and consisted of Ray Sheldon, Sam Thornburg, Bruce Trotter, Kevin Wools, and Steve Stum. They concentrated in the back part of the cave and removed trash and graffiti. The second group, headed by Kathy Hornaday, entered the cave about 10 AM and included Bob Lemasters, Frank Swarts, Mike Alexander, Gene Pelter, and Tom Crismore. They worked more towards the front of the cave. The third group consisted of Brain Leavell and Jerry Litaker, entering around noon, and working near the back. The fourth group consisted of George Brutchen, Angie Manon, and Keith Dunlap (and for a short time Jackie Allen and Scott Fee). They worked above ground installing the big Coon Cave sign at the end of Spicer Lane and the smaller warning sign at the cave entrance. Later that evening, George, Angie, Keith, and Kathy made a final trip into the cave to wire brush graffiti before calling it a day.

SUNDAY, AUGUST 23 - This day was spent over at Grotto Cave. Most of the participants were present by 10 AM, consisting of Kathy Hornaday, Keith Dunlap, Angie Manon, Dave Haun, Tom Rea, Noel Sloan, Kevin Strunk, George Cesnik, Gorden 'Fishman' Lindamood, Steve Weinzapfel, Ernie Payne, Tom Floyd, Carol Latowski, Bruce Houghtby, Jeff Cody, and Mike & Sheri Miessen. Repairs on the fence were the first order of business. This weekend marked the first anniversary of the fence and surprisingly it has sustained very little vandalism. Most of the attention was spent on re-tensioning the barb wire and replacing one of the support arms. Next on the agenda was digging post holes just above the entrance for the other large sign (just like Coon's, but obviously with Grotto Cave at the top). Lots of limestone was encountered, but the task was accomplished. At that point, many of the work crew entered the cave on trash and graffiti removal duty, while the remainder helped to transport the concrete, water, posts, and sign (total of about 500 pounds) to the entrance. The sign was assembled and set in place. The smaller DNR warning sign was then mounted to its frame which was attached to a tree inside the fence. The report from the exiting cavers was that the majority of the trash had been collected and hauled out.

SUMMARIZING - The weekend was very productive, ridding both caves of trash and at least making a dent in the graffiti removal, erecting four signs that make it virtually inexcusable for anyone to enter these caves during hibernation season, and readying the fence the for seasonal

closure. Approximately 300 hours of direct labor was expended these two days, fortunately there was a good turn out so no one had to work too hard and everyone had a good time.

FINAL COMMENTS - First, it was encouraging to see support come from all over the state. *All five Indiana Grottoes had representatives there to share in this conservation project.* Secondly, it was interesting to note that there was a good mixture of "new comers" and "old timer" in attendance. Finally, I would like to thank everyone for helping out and we plan on making this an annual event at these two caves.



This five foot by six foot sign was placed at the end of Spicer Lane at the trailhead to Coon Cave. A similar sign was installed inside the fence at Grotto Cave. Both signs were routed, then painted brown with yellow lettering to resemble the familiar DNR signs. Each cost about \$50 and required approximately forty hours of labor to complete. Keith Dunlap, assisted by Angie Manon constructed the Coon sign, while Dave Everton fabricated the sign for Grotto Cave.

HOOSIER NATIONAL FOREST: Update and Projection

by Kathy Hornaday

The proposed management plan for the Hoosier National Forest has been under appeal since 1985. Several conservation organizations, and groups or individual concerned citizens were upset by the proposed plan, primarily the amount of the forest which was included in the timber base (81%) and the proposed harvesting methods - largely clearcutting. There was also concern about use by all-terrain vehicles. These groups were negotiating with the Forest Service until December 1986, at which time the Forest Service cut off discussion.

After Congressional oversight hearings which sharply questioned the management plan, and the response to the appeal, the Regional Forester decided to meet with the various groups. This is the point at which the IKC became involved, as a result of our contacts through the Hoosier Environmental Council.

I attended the meeting with members of the Forest Preservation Group, the Indianapolis Hiking Club, the CIG, the Sierra Club, and the Audubon Society, among others. At the meeting, it was explained that the proposed plan would be revised, based on the Forest Services draft response to the appeal. This is a document of 300+ pages, which was to be placed in the library for review. The revision process is expected to last for eighteen to twenty-four months, and during that time the proposed plan will be in effect. The attorneys for the appellants are evaluating legal options to take in response to this rather exceptional procedure. Three major projects under the new plan have been appealed on an individual basis.

The IKC involvement, beyond the meeting, has been to send letters to Senator Lugar, Governor Orr, and the Chief of the Forest Service. Senator Lugar's letter (reprinted on page 11) is representative of what was sent. We received responses from all three. Senator Lugar's was one page, Dale Robertsons's was two pages, and Governor Orr's was three pages. Only Senator Lugar's response was reprinted (see page 12), due to space considerations. Anyone interested can contact Kathy Hornaday for further information. The IKC Board of Directors has voted to share our mailing list with the Forest Preservation Group, and to request permission from the NSS Executive Committee to show the Indiana NSS membership list. Kathy Hornaday has been appointed as the official liaison.

The Ohio Valley Region of the NSS, having successfully negotiated a Memorandum of Understanding regarding the Daniel Boone National Forest in Kentucky, is looking at the possibility of doing the same here, with the HNF. The IKC will have one or more representatives at Karst Encounters (September 18-20) to discuss this issue. One of the flaws in the current HNF Plan is the failure to identify caves and karst features necessary to endangered or "special concern" species on the federal and state lists. The decision on whether or not to volunteer to help the Forest identify cave location and wildlife must be evaluated in

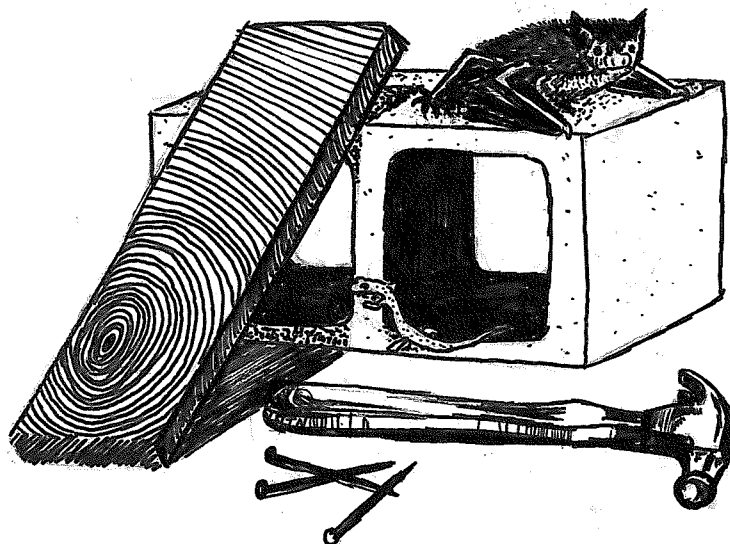
terms of benefits to the caves. If this assistance will in fact insure development of the buffer zones recommended by the wildlife biologist, it may be the best, or perhaps the only sure way to protect the caves from clearcutting and the general pollution associated with timber harvesting. The biologist recommended one hundred foot radius buffers around cave entrances and drainage sinkholes, and one hundred foot wide corridors along perennial streams and between cave entrances and nearest wooded areas.

On a larger front, there will be a gathering of several organizations from across the country concerned with clearcutting and forest management on a national level, at the POW WOW in the Woods on September 26 & 27. For further details, contact Keith Dunlap or Kathy Hornaday.

Finally, in a newsletter to his constituents discussing various environmental issues, Senator Lugar has indicated that there will be Senate oversight hearings during this session of Congress on the issues of below cost timber sales and forest management plans.

The Federal Cave Resources Protection Act, discussed elsewhere in this issue (see page 5), may also become an important factor in influencing the forest management planning process.

This is an important opportunity for different groups to come together from varied prospective to impart on the federal policy regarding caves and the interface between this policy and forest management policy.



INDIANA KARST CONSERVANCY
P.O. Box 461
Plainfield, IN 46168

July 4, 1987

Senator Richard Lugar
United States Senate
Washington, D.C. 20510

Dear Senator Lugar,

I am writing on behalf of the Indiana Karst Conservancy, a not-for-profit corporation established for the study and preservation of caves and karst features. We are alarmed by the proposed management plan for the Hoosier National Forest, and even more alarmed at learning that the Forest Service has abruptly withdrawn from negotiations in the appeal of that plan.

The majority of Indiana caves are located in the southern part of the state, many of them within the bounds of the Hoosier. The delicate balance of the cave environment will be significantly altered by the proposed clearcutting of timber - both by the timbering activities themselves, and by the resulting erosion which will follow on clear cut land. Several endangered species, such as the Indiana bat, Gray bat, and blind cavefish, require the cave environment for survival.

The practice of clearcutting is almost diametrically opposed to the purposes of the Karst Conservancy, especially when it is taking place on karst features. It would also appear to be in conflict with the stated purposes of the Federal Cave Resources Protection Act (S.927), introduced by Senator Daschle, and supported by the IKC and other caving organizations.

We would appreciate any assistance you can give us, to get the Forest Service to negotiate in good faith, and to develop a management plan for the Hoosier National Forest which will adequately protect the wildlife, water resources, and karst features found there. The present plan concentrates primarily on timber production, and seems to ignore the other aspects of forest management required by the National Forest Management Act.

For your information, I am enclosing a copy of the resolution passed by the Board of Directors in support of the Federal Cave Resources Protection Act, and a copy of our membership brochure, which explains a little more about who we are and what we do.

Thank you for your attention and assistance.

Sincerely,

Kathleen D. Hornaday
Secretary

RICHARD G. LUGAR
INDIANA

SH 306 SENATE OFFICE BUILDING
WASHINGTON, D.C. 20510
202-224-4814

COMMITTEES:
FOREIGN RELATIONS
AGRICULTURE, NUTRITION AND FORESTRY

United States Senate

WASHINGTON, D.C. 20510

July 30, 1987

Ms. Kathleen D. Hornaday
Indiana Karst Conservatory
P. O. Box 461
Plainfield, Indiana 46168

Dear Ms. Hornaday:

Thank you for your recent correspondence.

I appreciate your concern about extensive clearcutting in the Hoosier National Forest. Since the draft report of the Hoosier Plan was released over two years ago, I have advised the Forest Service to devise a more environmentally protective plan.

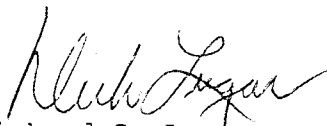
The Regional Forester has now decided to make certain changes in the Hoosier Forest plan and has decided to consult more broadly with citizens in Indiana over the current plan.

I hope that the Regional Forester will devise a more environmentally protective plan. The 190,000 acre Hoosier National Forest is a great natural resource which is large enough to accommodate different concepts of timber management. The Forest Service must devise a plan which meets the needs of all legitimate users and of future generations.

A decision on how to manage the Hoosier National Forest is long overdue. I share your concerns and I shall continue to monitor this important issue very closely.

Again, thank you for taking the time to communicate your views. I look forward to your future correspondence.

Sincerely,



Richard G. Lugar
United States Senator

RGL/ps

INDIANA BAT HIBERNACULA ANNOUNCEMENT

by Keith Dunlap

Fall is upon us which means it is time for the Indiana Bat to return to their caves until spring. Most of the organized caving community has some knowledge of bats and knows why it is important to not disturb them during their period of inactiveness, so I won't go into details here. But I think a reminder as to the importance of avoiding the few caves in Indiana that serve as hibernacula for the Indiana Bat can not be over-emphasized. The IKC has made it a point to disseminate information about the Indiana Bat via the re-publishing and distribution of last winter's bat census report, and by reprinting articles pertaining to bats (see the two articles following this one; the article by Richard Clawson, starting on page 15, is perhaps the best to sum up the plight of the Indiana Bat). Now, in cooperation with the DNR, we would like to enlist the whole caving community in publicizing the closure of certain caves. As such, the IKC has mailed the announcement on the following page, along with a cover letter and supplemental materials to sixteen area grottoes and caving clubs. It is hoped that the announcement will be read and discussed at meetings, and also publicized in the various newsletters. It is further hoped that this awareness among organized cavers will eventually trickle down to the unaffiliated cavers.

As the announcement states, the DNR has placed signs (facsimile below) at each of the nine caves listed. The sign, measuring 22" high by 14" wide, has a yellow background with black letters. It and the various locations have been registered with the various law enforcement agencies such that the stated laws can be considered for enforcement.

WARNING

INDIANA BAT HIBERNATING COLONY



Indiana bats hibernate in this cave and are protected under provisions of the Federal Endangered Species Act (Public Law 93-205), the Indiana Non-game and Endangered Species Conservation Act (IC 14-2-8.5-7) and the State Cave Law (IC 35-43-1-3). Entering this cave when bats are present from Sept. 1 to March 30 is a violation of these acts and punishable by arrest, fine and possible imprisonment.

Hibernating bats must survive through the winter on a limited supply of stored fat. Any disturbance that may arouse the bats will deplete this finite food supply and could result in death.

U.S. Department of the Interior
Fish and Wildlife Service

Indiana Department of Natural Resources
Division of Fish and Wildlife



INDIANA BAT HIBERNACULA PUBLIC ANNOUNCEMENT

The Indiana Karst Conservancy, in cooperation with the Indiana Department of Natural Resources, would like to ask the organized caving community to participate by honoring and supporting the seasonal closing (September 1 thru March 31) of certain Indiana caves that serve as important winter hibernacula for the endangered Indiana Bat (*Myotis sodalis*). These caves (in order of significant populations) are Twin Domes (Harrison Co.), Ray's (Green), Batwing (Crawford), Jug Hole (Harrison), Grotto (Monroe), Coon (Monroe), Parker's Pit (Harrison), Saltpeter (Crawford), and Clyfty (Green).

Each of the nine above caves have had large warning signs placed near their entrances. Four of the caves, Twin Domes, Batwing, Jughole, and Saltpeter are located on State Forest properties and the seasonal closures are mandated by the IDNR (Twin Domes and Batwing are federally classified as Priority I hibernacula and thus are closed year around). The remaining five caves are on private properties with all the owners directly or indirectly supporting the seasonal closure policy.

The population decrease for the Indiana Bat has been significant and does not indicate a very bright future for this species' long term survival. While an exact picture of this declining trend is unknown because of a lack of long term census data, it has been documented that the total population in seven (of the eight nationally known) Priority I caves has dropped to approximately one half of what it was twenty-five years ago. The only positive signs of hope are the recent 'discovery' of several additional significant hibernacula, and the population increases reported in several Priority II and III caves in Indiana and Kentucky (although it is too soon to tell if this is a true trend reversal or just a short term anomaly).

This species is very discriminating in their hibernacula sites, relying exclusively on a select few caves for their winter survival. And it is the opinion of most bat experts that the major reason for this species' decline has been human disturbance in these caves. This perception depicts a very poor image for cavers (or "spelunkers" as we are labeled by most). The organized, conservation minded caving community needs to reverse this conception by acting responsibly in honoring this seasonal closure policy and by publicly supporting it. Furthermore, as organized cavers, we need to do everything we can to educate the less informed cavers and discouraging them from visiting these caves during the hibernation season.

Indiana Bats: Down for the Count

by Richard L. Clawson

Standing above the entrance to a cave in southern Indiana, I prepared to descend, rigging to a rope my team and I had dropped into the 30 foot pit. I had come to conduct my biannual census of the endangered Indiana Bats (*Myotis sodalis*) that hibernate there each winter. Listening to the roar of trucks and cars on the nearby interstate highway, I was struck by the thought that thousands of people drove past that cave every winter, oblivious to the bats or their plight. Few people know about endangered bats and fewer still care. And yet I was about to witness one of the most spectacular sights of my career in biology: a living tapestry of irregular shape, 20 feet long and 10 feet across, composed of animals so tiny that I could cup one entirely within my closed hand. The bats were arrayed on the ceiling of a ledge so cramped that I had to take great care not to dislodge them as I crawled beneath to measure their cluster and census them.

Usually, about one fourth of the Indiana Bats that hibernate in this cave form the same cluster in the ledge

area. The rest are nearby, their clusters extending into a large room. I have been in awe of this particular cluster since I began censusing the cave four years ago, and I always come away a bit humbled. Despite our ability to count them, to weigh and measure them, to record the temperature at their roost site, or whatever other physical parameters we care to examine, we still do not know

"Few people know about endangered bats and fewer still care. And yet I was about to witness one of the most spectacular sights of my career . . ."

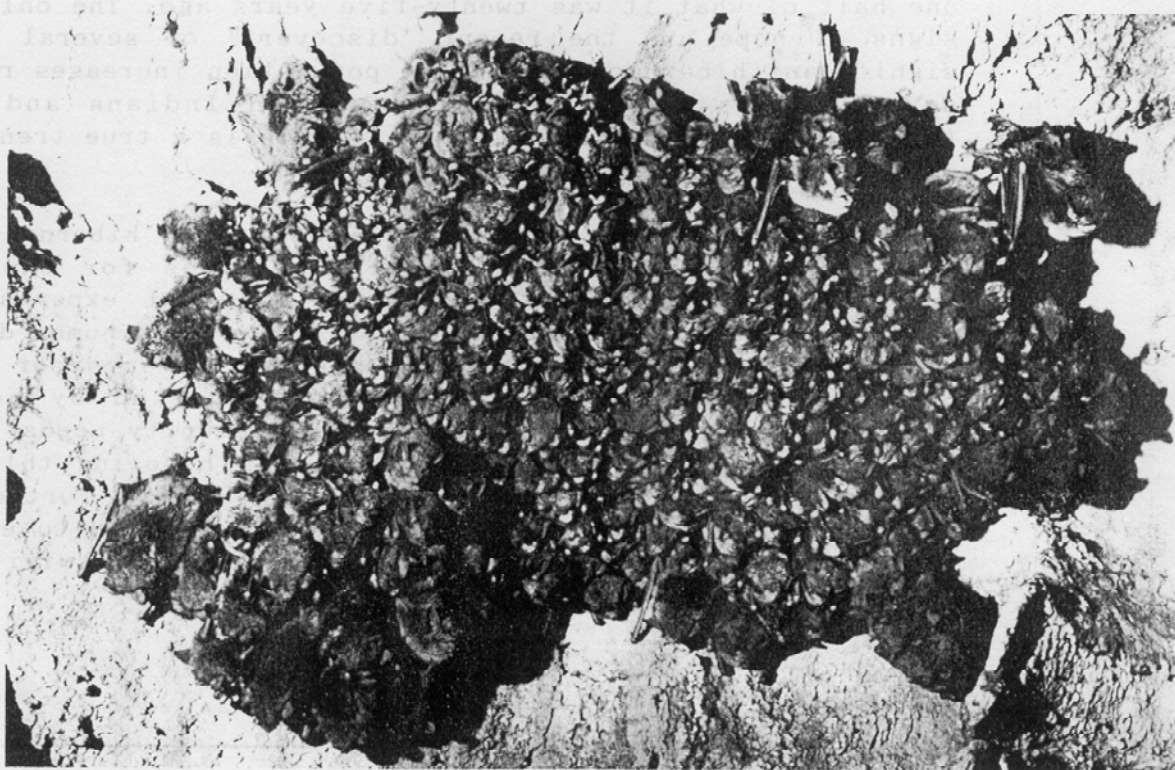
some of the most fundamental things about them. How far did they come, where did they spend the summer, what habitats do they use and need and what threatens them there, how did they find this particular cave, what would they do if it became unavailable to them, and an entire host of other questions concerning their biology and behavior remain to be

answered.

I was on my way down to count these endangered bats, but it is they who are on the way down. Even with our best efforts to date, I still counted fewer Indiana Bats rangewide than I did two years before. I have conducted this census three times now, and each time, despite individual fluctuations among the caves, gains at one have been more than offset by losses at another; the result has been continued decline.

Causes of decline

The Indiana Bat is a medium-sized member of its genus and weighs less than a third of an ounce (6 to 9 grams). No subspecies are recognized. They are found throughout much of the eastern half of the United States, with the largest hibernating populations found in Indiana, Missouri and Kentucky. The species is extremely vulnerable due to its penchant for aggregation; fully 85% of the entire known population winters in only seven caves.



A cluster of hibernating Indiana Bats forms an irregular shape against the ceiling of their cave roost, approximately 300 in a square foot.

PHOTO BY
MERLIN D. TUTTLE

Indiana Bats have been little studied and, until very recently, poorly known even in terms of their distribution, abundance and status. The work of early investigators was limited to the hibernation caves used by the species, and only since the mid-70's has anything been learned about their summer distribution and ecology.

One of the first species in the United States to be recognized as endangered, the Indiana Bat has received legal protection as such since the passage of the Endangered Species Act of 1973. It is endangered primarily due to the direct and indirect actions of man. The most serious known cause of decline is human disturbance of hibernating bats. Once in hibernation, bats must conserve their body fat supplies until spring or face starvation. When aroused from hibernation, they can expend 10 to 30 days of these limited reserves.

Vandalism and direct destruction of roosting bats have been documented as well. Improper gating of cave entrances and construction for cave commercialization have altered cave microclimates, rendering some caves unsuitable for Indiana Bat hibernation.

Other human-related factors that have been implicated in the decline of the species include habitat changes such as stream channelization and bank modification, forest clearing and alteration, agricultural development and indiscriminate collecting. Although pesticide poisoning of Indiana Bats has not been documented, other North American bats in agricultural habitats have declined due to the effects of pesticides, and it is likely that the species suffers at least some level of contamination. Natural phenomena associated with Indiana Bat declines include flooding of hibernacula, freezing during severe winter weather, and collapse of mines occupied for hibernation.

Habitat

Indiana Bats hibernate in large, densely packed clusters of about 300 bats per square foot in caves or mines that have stable winter temperatures below 50°F, with the preferred temperature being 39° to 46°F. Specific roost sites that provide this climate are selected and used from year to year. Usually the majority of bats will be found just beyond the twilight



Indiana Bats are so small that one can fit within a closed hand.

PHOTO BY MERLIN D. TUTTLE

zone of the hibernation cave, but this varies with time of season and configuration of the cave. Only a small percentage of the available caves provide for the Indiana Bat's specialized requirements. For example, only 24 of Missouri's more than 4,700 known caves ever have contained hibernating colonies larger than 100 Indiana Bats.

Recent studies indicate that Indiana Bat maternity colonies are formed mostly in riparian and floodplain forest near small to medium-sized streams, although bats also have been found along tree-lined drainage ditches and in upland sites. It may be that this apparent pattern is more a function of habitat availability than of the species' actual preference. Clearing for agriculture has restricted forest habitats largely to riparian zones in their summer range. To date, few maternity roosts have been studied. Of these, three have been in riparian habitat and one was in an open, pastured woodlot. Roosts also have been found in the hollow of a tree and behind loose, exfoliating bark of both dead and living trees.

Optimum summer habitat must include mature trees, both to provide roost sites and because Indiana Bats forage around the crowns of large trees. Preferred stream habitat appears to consist of streams lined on both banks with mature trees that overhang the water by at least ten feet. Streams without riparian vegetation do not appear to be suitable. Upland forest with a well-developed canopy but poorly developed subcanopy layer also appears to provide summer habitat.

Ecology and behavior

Indiana Bats are insectivorous. More than eight orders of insects have been identified in studies of their habits. Moths (order Lepidoptera), beetles (Coleoptera), and flies and midges (Diptera), are preferred prey.

Indiana Bats are active from April through October, migrating seasonally between their summer roosts and hibernation caves. Summer colonies begin to disperse in August, and migrants return to their hibernacula in the months from August through October. The females enter hibernation first, followed by the males. It is during this time that mating takes place. Females store the sperm until spring, when ovulation and fertilization occurs.

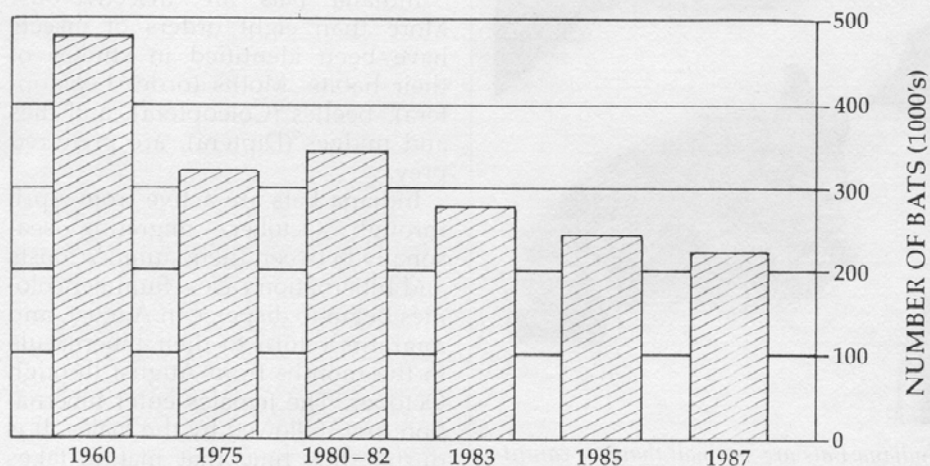
In the yearly cycle, females leave the hibernacula first, in late March or early April. Males follow, but their exit is spread over a longer period, and some remain near their hibernation caves throughout the summer. Pregnant females migrate to their maternity roosts, arriving in early to mid-May where they form colonies of 50 to 100 individuals. The young, one per female, are born in June or early July. Males may migrate as well, but like most other species of bats, generally do not roost with the females and young during the nursing period.

Preservation efforts

An Indiana Bat/Gray Bat Recovery Team was assembled in the 1970's. The Recovery Team's responsibilities include advising the U.S. Fish and Wildlife Service (USFWS) of actions deemed necessary to preserve these endangered bats. Among these are monitoring the populations, cave protection, public education, and others. Actions for the Indiana Bat to date have centered on the hibernation caves.

The Team separated caves known to harbor Indiana Bats into several classes based on population sizes. The most important (Priority 1) caves, of which there are eight, recorded populations of 30,000 or more bats each. The second category (Priority 2) contained populations above 1,000 but less than 30,000. All of the Priority 1 caves are or soon will be in public ownership, and of these six are gated or fenced and the other two will be protected in the near future. Many of the Priority 2 caves are pro-

INDIANA BAT POPULATIONS AT 7 PRIORITY 1 HIBERNACULA-1960-1987



tected as well.

Since 1983, I have censused seven of the eight Priority 1 caves on behalf of the USFWS (one is an extremely dangerous abandoned mine that cannot be censused). We elected to have only one person census these caves in order to reduce observer bias, thus attempting to ensure that population trends noted in the census were real. Regular censusing did not begin until the 1980's and was not standardized until 1983. Over that time span, the Indiana Bat has declined by 55% in these caves. The situation in the Priority 2 caves in several states is similar, with notable exceptions in Indiana and Kentucky. Despite efforts to protect this species during hibernation, the population has continued to decline.

The future

Overall, the prognosis for the Indiana Bat is not good. We must gain a better understanding of the rest of its life cycle, learn what factors besides the known hibernation-associated ones are contributing to the species'

decline, and correct them. A radio telemetry study of a maternity colony is getting underway in Illinois and may help provide answers. Research is needed throughout the principle summer range of the Indiana Bat to determine its habitat preferences, whether or not summer habitat is a limiting factor, and what threats there are to its existence during the non-hibernation period (particularly from pesticides).

I hope that in the future when I go down to census Indiana Bat populations, the trend is reversed and I can chronicle the rebound of this endangered bat. There still is time, and the mechanism (the Endangered Species Act) is in place to accomplish it, but if the Indiana Bat continues to be "down for the count," the species could be knocked out completely.

Richard L. Clawson has been a Wildlife Research Biologist for the Missouri Department of Conservation since 1977. He has been a member of the Indiana Bat/Gray Bat Recovery Team since 1980 and team leader since 1984.

Indiana Bats Gain Sanctuary in Missouri

Pilot Knob Mine is about to be turned over to the U.S. Fish and Wildlife Service for management. With a winter population of over 100,000 Indiana Bats, the mine is the largest known Indiana Bat hibernating site in the world.

In the fall of last year, two teenagers went exploring in the abandoned mine and one became trapped and nearly died. During

a difficult rescue attempt, the rescue workers also came close to losing their lives. Since Pilot Knob had not been actively mined since 1912, the owners decided to turn the parcel over to the USFWS, including the mine entrances. It now will be protected as an Indiana Bat sanctuary as part of the National Wildlife Refuge system.

Vandals Destroy Hibernating Indiana Bats

Only a few survivors were left after an act of apparently deliberate vandalism in Thornhill Cave, Kentucky this past winter. A small colony of five endangered Indiana Bats and a few *Pipistrelles* were all that remained of what was recently a population of up to 1,000 bats of various species that used the cave for their winter hibernation. Nearly 4,000 bats hibernated in Thornhill Cave in 1963 when a flood destroyed them. The bats had begun to recolonize the cave by the 1980's, and the last state census in Thornhill Cave included only 80 Indiana Bats.

Discovered in early January, heaps of dead bats were strewn across the cave floor, apparent victims of an intruder with a shotgun. No shells were found, but a number of downed bats were riddled with pellet holes; others were crushed. Nearby on a mud bank was an empty whiskey bottle.

A count of dead bats at the time revealed a tally of 255, but a little over a week later when officials from the Kentucky Fish and Wildlife Department went to investigate the incident, only 188 remained, indicating probable predator removal. The bats unaccounted for from the original known population may have fallen to a similar fate or possibly were chased from their hibernaculum to take their chances in the winter's cold.

Counts in the 1960's showed five Kentucky caves sheltering hibernating populations of 30,000 or more Indiana Bats with a statewide total of at least 330,000. Today, these same five caves harbor a total of only about 49,000 Indiana Bats.

In the early 1960's just one Kentucky cave, Coach Cave (or Hundred Dome) was winter home for at least 100,000 hibernating Indiana Bats, in all likelihood a remnant of an even larger past population. A February 1987 census conducted by Richard Clawson revealed only 250 of that population remaining. In a classic case of human intervention, the cave had been mined for saltpeter begin-

(continued on back cover)

ning in 1812, with portions of it shown commercially since 1860. During the 1960's, a resort and gift shop was built over one entrance to the cave and a heavy steel fence erected over the second entrance. The combination altered the cave's air flow, warming the temperature and making it largely unsuitable for Indiana Bat hibernation.

When the bats attempted to return to their traditional roost in the autumn they were unable to gain access to the cave entrance. With nowhere else to go and the homing instinct strong, they instead clung to the

walls of the new building where they reportedly were scraped from their perches. Carted out by the thousands in wheelbarrow loads, Indiana Bats had not yet been declared endangered.

There is a lesson in this, one that cannot be overstressed: bats are extremely vulnerable. Entire populations can be destroyed in single incidents, emphasizing the need for public education and why critical sites must be protected. The vandalism at Thornhill Cave and other deliberate acts of destruction might have been prevented if protective mea-

sures had been undertaken sooner. The Louisville Grotto of The National Speleological Society has now established a committee to gate the cave and has begun to appropriate funds.

Bats are extremely loyal to their chosen hibernation sites, returning to the same ones each autumn. They pass on the information from generation to generation. With only five left of the already small colony of Indiana Bats at Thornhill Cave, it is difficult to assess whether this tiny remnant will be enough to rebuild a viable colony.

COON CAVE ACCIDENT

by Keith Dunlap

On August 1st there was an accident in the entrance to Coon Cave resulting in a rescue callout. The victim sustained a broken back but fortunately no apparent permanent neurological damaged was inflicted. The details of the story are as follows:

That Saturday morning Mike Miessen was out at Buckner when a group of ten novice cavers pulled into the parking lot. Mike conversed with the group and they stated that they were tired of Buckner and were going to go to Coon Cave (at least one of the individuals had been there before). Mike explained the IKC's access policy and equipment requirements. They did not have the vertical equipment necessary for the entrance drop, so Mike denied them permission. He did give them one copy of the Coon Cave Release Waiver for their reference, his phone number, and other cave related information and literature. Since the group seemed competent and horizontally well equipped, Mike suggested Brinegar. When Mike left, they gave every indication that Brinegar was their destination for the day.

At approximately 10:30 PM, Mike received a call from one of that group's members explaining that they had decided to go to Coon anyway and one of them had fallen at the entrance while trying to free-climb a log that had been placed there. Mike initiated a callout and the injured party was evacuated without incident by 3 AM.

The group's unauthorized visit constitutes trespassing, and in fact, a more severe degree of trespassing because they did so knowingly after being denied permission. The Board of Directors deliberated on whether or not to press charges, finally deciding on filing a complaint with the Prosecutor plus sending our own letter to each of the party members. Our rational in this decision was that their fearful experience was probably enough punishment and that any further legal action was unwarranted. Our intent to prosecute offenders is to set examples, however, we did not think this group should be one of them.

NEWS BRIEFS

The following items are newsworthy but too short for separate articles:

- The IKC's membership continues to grow with thirteen new members since the printing of the last *UPDATE* (see list on page 29). Lower membership dues and better recognition are probably the two biggest factors. We now have a membership base of sixty members, plus an additional twenty individuals and organizations on our mailing list.
- And while on the subject of membership, all members and most others on our mailing list should have by now received the 1986-87 Winter Indiana Bat Census Publication. If you have not, please contact Keith Dunlap. Supplies are limited, but non-members that would like to obtain a copy should also contact Keith for details.
- And on the subject of the Bat Census Report, the IKC has received a couple of letters regarding it. The first was from the Andrews University Area Grotto expressing their appreciation and stating, "...We will use it for education, particularly in conservation...". The second letter was from Janet Thorne, NSS Conservation Committee Chair. Her complementary letter started with "Thanks for sending me a copy of the excellent report on Indiana bat hibernacula which was prepared for the Indiana Department of Natural Resources. It certainly is refreshing to see such positive contributions being made to our understanding of the status of this endangered species...".
- The IKC also received "recognition" on another of our bat related project, the fencing of Grotto Cave, in the form of being mentioned in a newspaper article (*Indianapolis News*, July 3, 1987, page 13). The article was in the human interest category, based around a troop of Girl Scouts building bat houses for the Indiana Bat. It was interesting and factually accurate other than having our name misspelled and misquoting on our plans for future projects. The paragraph pertaining to us read as "...The Girl Scouts aren't the only ones concerned about bats. Indiana Carst Conservancy, a group that preserve caves, helped fund the erection of a fence around one cave last year with the help (of) the National Speleological Society, another cave organization. The group plans to fence another cave soon...".
- The IKC this past summer assisted the IDNR on two other bat projects. In late July, Keith Dunlap helped Scott Johnson (DNR's non-game biologist) and others with the removal of mud and debris from the entrance of Batwing Cave. This was done per recommendation of Richard Clawson (the federal biologist responsible for censusing Priority I Caves), as the entrance was slowly filling up and restricting air flow. Noel Sloan had also volunteered to help, but the scheduled third day of work was deemed unnecessary. And in late August, Keith Dunlap again assisted Scott Johnson in posting the Indiana Bat hibernacula warning signs at the entrances to four caves in the Harrison-Crawford area. The IKC furnished materials and constructed the mounting frames for the signs, which will hopefully add to their durability.
- The IKC Board of Directors had an unofficial Board Meeting on Sunday Morning at Cave Capers. The purpose was to confront the infamous "Vic Tron and the Lost Patron". If you have been caving in Indiana, then you have probably seen his group's "art work". Cindy Riley had

recognized "Vic" from an encounter in Wayne's several years ago. Mike Miessen was selected as our spokesman, who tactfully expressed our concerns in such a way that hopefully we will not have any more acts of vandalism from them.

- The latest word from the American Cave Conservation Association is that Jer Thornton has resigned, and David Foster has been appointed their new Executive Director. The ACCA has fallen upon financial hardships in the last year by being too ambitious and having too much overhead without a large supporting membership base. Hopefully they can recover under their new leadership and gain back some of the support they alienated in the past.
- The IKC received a letter addressed to various conservation groups from the Indiana Trial Lawyers Association, asking *for support* for among other things, to fight Insurance Companies that want to limit their liabilities. The ITLA is barking up the wrong tree as far as we are concerned. Trail lawyers have done more to damage landowner/caver relationship than perhaps any other group. They promote a sue-happy attitude because most of them work on commissions, eroding the willingness of landowners to grant permission to visit their caves, fearful of possible liabilities should they do so. This same group was also the only opposition to the Indiana Cave Law when it was proceeding through the Legislator, again because it clearly stated that landowner's could not be held liable should an injury occur after granting permission to someone to visit their cave. As you can guess, the IKC responded (via Tom Rea) with a very pointed letter expressing our opposition.

INDIANA KARST CONSERVANCY

Statement of Receipts, Expenditures and Changes
in Fund Balance for the Quarter Ended June 30, 1987

Receipts	
Dues	\$287.50
Donations-General	40.00
Donations-Buckners	135.00
Donations-Update Exp.	30.00
Interest	9.05
Total Receipts	\$ 501.55
Expenditures	
Buckners Grant	200.00
T-shirts	172.80
Buckners Donations	53.00
State Filing Fee	14.00
Lockbox Rental	12.00
Total Expenditures	<u>451.80</u>
Excess to Fund Balance	49.75
Fund Balance, 4/1/87	1170.20
Fund Balance, 6/30/87	<u>\$1219.95</u>

PUBLICATION REMOVAL

Much discussion has been given at various IKC meetings pertaining to trying to devise a method of removing several 'damaging' publication from general sales. While legally there is very little that can be done to stop their re-publishing, we can try and dry up their distribution system. One such 'retailer', and perhaps the biggest statewide, are the concessions at state parks and historic landmarks. Books offered through this system are generally approved and purchased via a central office which we have contacted. The person that oversee this operation seems sympathetic to our request and hopefully will take the appropriate action. The following letter was sent to her.

INDIANA KARST CONSERVANCY

Noel E. Sloan, MD
Director, I.K.C. Inc.
8715 Garden Rock Court
Indianapolis, Indiana
46256

August 26, 1987

Dear Ms. Robb,

I am writing on behalf of the Indiana Karst Conservancy's Board of Directors. We are a non-profit organization dedicated to the preservation and conservation of Indiana's caves and cave adapted wildlife. Enclosed you will find a brochure explaining our activities. We are finding that information in several publications is creating a number of serious problems. These problems include implied or stated open access and cave locations inviting criminal trespass, increasing cave vandalism, destruction of protected hibernacula of Indiana bats- a Federally endangered species, and increasing accidents in caves involving untrained and improperly equipped young people.

The publications include The Spelunker's Guide to the Caves of Garrison Chapel Valley, A Spelunker's Guide to the Caves North of Campbellsburg - by Douglas Love and The Caves of Indiana, a geological survey publication by Richard Powell. A number of caves listed in these publications are currently leased and managed by the I.K.C. In several cases of illegal trespass and suspected vandalism, and a recent accident in our protected caves, these publications were the basic information source for those involved.

We are hoping to curb the problem by asking for a voluntary removal of these publications from the shelves. The Caves of Indiana is out of print. We hope to assist in replacing it with a more appropriate and educational cave publication. Your help in this matter at the various book concessions would be greatly appreciated.

Sincerely,



Noel E. Sloan, I.K.C., Director

INDIANA KARST CONSERVANCY
MINUTES OF THE QUARTERLY PUBLIC MEETING
OF THE
BOARD OF DIRECTORS

Bloomington, Indiana
Indiana University Memorial Union
June 26, 1987

Directors attending: Keith Dunlap
Noel Sloan
Mike Miessen
Lynn Miller
Cindy Riley
Kathy Hornaday
Tom Rea

Directors absent: none

The meeting was called to order at 7:50 p.m. by Keith Dunlap, who explained that the purpose was to have a quarterly public meeting to gain input from the caving community.

1. Members and visitors introduced themselves and a sign-up sheet was passed around. Twenty people were in attendance, in addition to the Directors.

2. Current Projects Update:

A. Buckner Renovation Project - Mike Miessen

Bookkeeping problems have been rectified, and Mike is now tracking donations and expenses.

An average of 150 people/week are at the site. The donation box is bringing in about \$15.00/week.

Needs: more gravel
barrier at end of driveway
permanent fire rings
picnic shelter plans
additional educational material

B. Security - Mike Miessen

Folders are being developed, for use by approved volunteers. Materials will include:

Warning notice about status of property
log sheets for recording license numbers
protocols and procedures
phone numbers
authority from Mr. Hancock to enforce
restricted access under lease

C. T-shirts for Buckner's fund raising

Soozy Sweeney's design was approved. There will be an effort made to have the shirts ready for sale at Cave Capers.

D. Educational materials/programs

There was considerable discussion about the problems being caused by the continued publication of The Spelunker's Guide to Caves of the Garrison Chapel Valley, and possible solutions. It was ultimately decided to investigate the possibility of taking legal action, such as seeking an injunction to prevent further publication. Noel Sloan and Kevin Strunk agreed to look into this.

The possibility of using the Barn site for educational programs was also discussed. Options included monthly or quarterly programs put on by IKC members, or by the various Grottos, on a rotating basis. This may be discussed further, as the Barn site is improved.

E. Spring Mill - Noel Sloan

After giving a brief synopsis of the development of the project, Noel announced that IDNR had decided to open the caves on an experimental permit basis, effective May 1. The caves will only be open Monday through Friday during working hours, to reduce visibility. There may be an educational program in the future, but visibility is again a concern. The primary thrust seems to be liability for injuries, rather than environmental impact. The State is still interested in getting a Radon study and/or a histoplasmosis study, probably in the fall when the heavy tourist season is over. We may be able to get surveying and biological/geological impact studies as part of the package, with IKC sponsored survey trips. There may even be some funding from the State for some of this.

Hank Huffman at DNR/Nature Preserves is seeking IKC input on how to handle closing of the Doghill-Donahue culvert entrance. The recommendation is to use large rocks, which will not block water flow, and which could be removed if necessary for a rescue.

F. Shaft Cave

The fence is still not in place at Shaft. There was further discussion of the fence vs. gate question, with those present voting in favor of replacing the gate. It was decided to work on getting the fence up for short term, minimal protection, with the Board of Directors to make the final decision on the gate issue.

G. Wayne's Cave

The gate on Wayne's is still intact. There have been some minor hassles with the locks. There needs to be a cleanup scheduled, possibly this fall or early winter.

H. Grotto & Coon's Caves

The signs need to be improved at these sites, and some upkeep maybe needed at the fence before the "closed" season begins. A cleanup weekend is scheduled for August 22-23. Keith is looking into state funded signs for these caves, regarding the hibernating bat populations. The IKC will definitely prosecute anyone found violating the closed status of these caves during hibernation.

I. Shiloh Cave

There has been very little traffic at Shiloh since it has been closed.

3. The Board will be developing guidelines for prosecution on a case-by-case basis, i.e., how bad does it have to be? The Board will also be reviewing the security package and guidelines, and will have final review and approval of security volunteers.
4. Publicity/visibility at Cave Capers will include a poster about the IKC and Buckner's Project. T-shirts will be sold for \$7.50. A T-Shirt and a copy of the Bat report will be donated for door prizes.
5. The Bat Report will be mailed free to members, may be sold to others for \$2.00.
6. The Update will continue to be published as it has been, by general consensus.
7. Cindy Riley reported a balance in the treasury of \$1,167.24.
8. There was brief discussion of the Federal Cave Resources Protection Act, and the action taken by the Board at the April 30 meeting. The reservations expressed by the Directors were echoed by several other members and visitors.
9. The next quarterly public meeting will be in Indianapolis, probably at the War Memorial. It was tentatively scheduled for Tuesday, September 22, but this will be confirmed later.
10. The meeting was adjourned at 10:35 p.m.

INDIANA KARST CONSERVANCY
MINUTES OF THE BOARD OF DIRECTORS MEETING
INDIANAPOLIS, INDIANA

August 19, 1987

Directors attending:	Keith Dunlap Tom Rea Lynn Miller Mike Miessen Kathy Hornaday Cindy Riley Noel Sloan
Directors absent:	none
Others attending:	Kevin Strunk Sherri Miessen Angie Manon Dave Haun Jane Miller Glenn Lemasters

The meeting was called to order at 7:40 p.m. by Keith Dunlap.

1. FCRPA

Kathy gave a brief report on the status of the Federal Cave Resources Protection Act: NSS testimony at the hearings on July 23, no further progress at this time. A more complete report will be ready for publication in the Update on September 17.

2. HOOSIER NATIONAL FOREST

The Hoosier Environmental Council/Forest Preservation Group is still working on the Hoosier National Forest Plan. They have asked for use of the IKC mailing list, and the Indiana NSS membership list. After some discussion, it was decided to give them a copy of the IKC list, and to write to the NSS Executive Committee to ask for permission to share the NSS Indiana list. Kathy will send out the letters. A status report on the Hoosier Plan will be included in the Update.

3. VOTING POLICY AT OPEN MEETINGS

Kathy asked for clarification of voting policy at the open quarterly meetings. After discussion, it was confirmed that all present at the open meetings are encouraged to voice their opinions, but straw votes should be members only voting.

4. TREASURERS REPORT

Cindy reported a Treasury balance of \$1,564.28. No major expenses or income details were identified at this time.

5. BATS

a) Keith reported that the publication of the Bat report cost approximately \$75. Limited sales will be pursued, at a price of \$2 per copy, to help recoup these costs.

b) Scott Johnson had asked for help with working on the entrance to Batwing Cave. Keith helped devise a more efficient way to move the mud, and then found another entrance. The Feds are pushing for a gate on Batwing, but there is no clear evidence of a need, since the cave is not well known, and a gate might well cause more harm to the bat colony than the cavers do. The decision on whether or not the IKC would help with the gate, if it is installed, was tabled.

c) Scott Johnson is also working on getting permission from the owner of Ray's Cave to control access, or to sell to the State. She does not live nearby, and doesn't believe anyone goes in the cave. She is not interested in selling, at this time. Scott will keep on working on this. If the State did get control, the IKC might be able to get a small Nongame Grant to install a gate.

d) There was discussion of the need for a Public Policy statement by the IKC on traffic in known hibernacula during the winter. In the absence of any scientific study as to level of tolerance of hibernating bats, it was decided to publish a list of significant hibernacula in the state, with a statement that these caves should have little or no traffic during the hibernation period. Caves identified included Ray's, Batwing, Twin Domes, Coon's, Grotto, Jug Hole, and Parker's.

e) Scott Johnson needs help with posting signs regarding hibernating bats, especially at Parker's and Jug Hole. The IKC will install signs at Coon's and Grotto during the clean-up weekend.

6. COON'S INCIDENT

After considerable discussion, it was decided that Noel would draft a letter from the IKC to the people involved, reiterating the access policy, and inviting them to attend grotto meetings, IKC meetings, and to join the organized cavers. Mike will file a complaint with the Prosecutor's office. It is likely that there will be a warning letter, rather than aggressive prosecution, but the ultimate decision is up to the Monroe County prosecutor.

7. COON'S/GROTTO CLEAN UP

The plan is to work on Coon's on Saturday, 8/22, beginning at 9 a.m. Primary objectives are to remove trash and graffiti from the cave. The same schedule will be followed for Grotto on Sunday, with the addition of fence repair. Signs are ready for placement at both caves. It was decided to apply for a grant from the NSS for the cost of the signs, about \$100. Keith will write it up and submit it.

8. HANCOCK PROPERTY IN GENERAL

a) A sign or signs are needed at the parking area. There is also a need for cable to run through the I-beams, with space for a gate. Tom will try to get the cable. There also needs to be contact with the new tenant, so that he knows who we are.

b) The fence and signs at Shaft are still on the drawing board. BIG has confirmed their willingness to help with labor and funding for this. The sign may be revised to more clearly indicate the hazards associated with the cave.

c) Mike is reworking the warning letter for security patrols to use with unauthorized cars.

d) Kathy will work on drafting a Power of Attorney from Mr. Hancock to the IKC, authorizing us to prosecute trespassers, including authority to have them arrested, and/or their cars towed.

9. BUCKNER PROJECT

a) Mike provided a brief recap of recent income and expenses. Approximately \$225 has been received in the donation box so far. After T-shirt sales, and the contributions from the IKC, there is \$399.83 in the account at this point.

b) Discussion of Buckner's income vs. NSS grants/IKC income resulted in the decision to use NSS/IKC money on identifiable conservation items, while donations at Buckners could be used toward construction of a shelter on the concrete pad from the old Barn. Further discussion led to a decision to approach Kevin Bruno for help in drawing up working plans and getting estimates as to actual cost, so we know where we stand.

c) Buckner's T-shirts cost \$172.80 for 48 shirts. Three were given away, and all the rest have been sold, at a price of \$7.50 each. All profits will be given to the Buckner's Project. It was decided to order another 2 dozen shirts, since there have been several requests that could not be filled. There was discussion of designing a more generally marketable T-shirt, for those who cave at Buckner's without the commitment to the Project. This will be pursued, with further discussion in the future as to appropriate marketing strategy.

10. STATE POLICY/DNR PROBLEMS

Kevin Strunk raised the point that an ongoing problem in making headway with the State DNR people is the variety of departments within DNR which might have input into a particular issue, compounded by a lack of information about available resources (i.e., IKC, grottos, etc.), and further compounded by a lack of any clear State policy on caves, cave management, and cave protection. There does seem to be a better understanding of potential liability issues. Noel agreed to continue working on this issue, including drafting a letter listing concerns, such as pollution, communication, process, negative impact of publications such as Powell's and Love's books in increased usage and resulting liability exposure, etc.

11. UPCOMING EVENTS

a) Fall public meeting will be September 22 at the War Memorial.

b) Next Buckner's clean-up is tentatively scheduled for October 24.

c) Wayne's clean-up is tentatively scheduled for December 5 or 6.

d) IKC winter public meeting will be in Bloomington. Angie raised the point that members from farther north have a hard time making the meetings if they are held on weeknights. In response, it was decided to hold the winter meeting on Saturday, December 5 or Sunday, December 6, in tandem with the Wayne's clean-up.

12. UPDATE

Issue #6 is due out September 17. Articles need to be to Keith no later than September 10, preferably by the 4th.

13. TRIAL LAWYERS ASSOCIATION

We were requested to support the Trial Lawyers Association in their fight against limitations on liability. Since this is exactly opposite to our position, we will not support them. Tom will write and tell Jim Borman our perspectives on this issue.

14. OTHER TOPICS

a) The Hoosier Environmental Council will hold their annual meeting and Congress on the weekend of November 7 and 8. Since the IKC is a member organization, we need to select someone who will agree to represent us at the Congress, and cast our vote. If possible, the representative should be a Director. Kathy was nominated, but may have scheduling conflicts.

b) Lynn suggested Kathy as official liaison with the Forest Preservation Group, in the ongoing fight over the Hoosier Forest Plan. She would be responsible for maintaining contact with the FPG, and keeping IKC Directors and members alerted and informed as to upcoming meetings, hearings, etc. Kathy accepted, since she and Tem were planning to continue their involvement as individuals, anyway.

The meeting was adjourned at 11:10 p.m.



NEW IKC MEMBERS (SINCE JUNE 4, 1987)
AS OF SEPTEMBER 9, 1987

Adventurer Club of Terre Haute
South Vigo High School
% Paul Mason
3737 S. &th
Terre Haute, IN 47802

Douglas Alderman
700 S. Oak
Durand, MI 48429

Michael B. Alexander
503 W. Main St.
Greensburg, IN 47240
H-812-663-6808, W-812-372-7222

Andrews University Area Grotto
610 N. Main St.
Berrien Springs, MI 49103

Bill Baus
1210 W. 8th St.
Bloomington, IN 47401

Angie Manon
3528 Cardinal Lane
Columbus, IN 47203

Sandra Nudo
1600 N. Willis, #185
Bloomington, IN 47401

Norm Pace
1009 S. High St.
Bloomington, IN 47401
H-812-336-1891

Mariann Quinn
WAPORA, Inc.
5700 Hillside Ave.
Cincinnati, OH 45233

Kevin Rasmus
203 S. State St.
Bloomington, IL 61701

Bruce Trotter
5580 E. Baseline Rd.
Columbus, IN 47203

John George Vargo, Jr.
21212 Locust St.
Matteson, IL 60443

Kent Wilson
7880W. Rice Rd.
Bloomington, IN 47401

Address Changes Since June 4, 1987

George W. Brutchin
5021 Fletcher
Anderson, IN 46014
H-317-642-4649

Kathy Hornaday
(phone number correction)
H-317-881-7936

Tom Rea
32 Ginseng Trail
Danville, IN 46122
H-317-745-7772

Mark Webb
P.O. Box 194
Franklin, IN 46131

William L. Wilson
3543 Norwich Court
Casselberry, FL 32707



photo by A. Manon

During the June workday at Buckner, a donation box was installed (the steel box mounted on a pipe secured in concrete) in the registration kiosk. To date, approximately \$300 has been received.

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):



BATS NEED FRIENDS



THE INDIANA KARST CONSERVANCY, INC.
PO BOX 461
PLAINFIELD, INDIANA 46168