

December 1991

Intercom, Volume 27, No. 6, November-December 1991

Lowell Burkhead

Follow this and additional works at: <https://digitalcommons.usf.edu/intercom>

Recommended Citation

Burkhead, Lowell, "Intercom, Volume 27, No. 6, November-December 1991" (1991). *Intercom*. 91.
<https://digitalcommons.usf.edu/intercom/91>

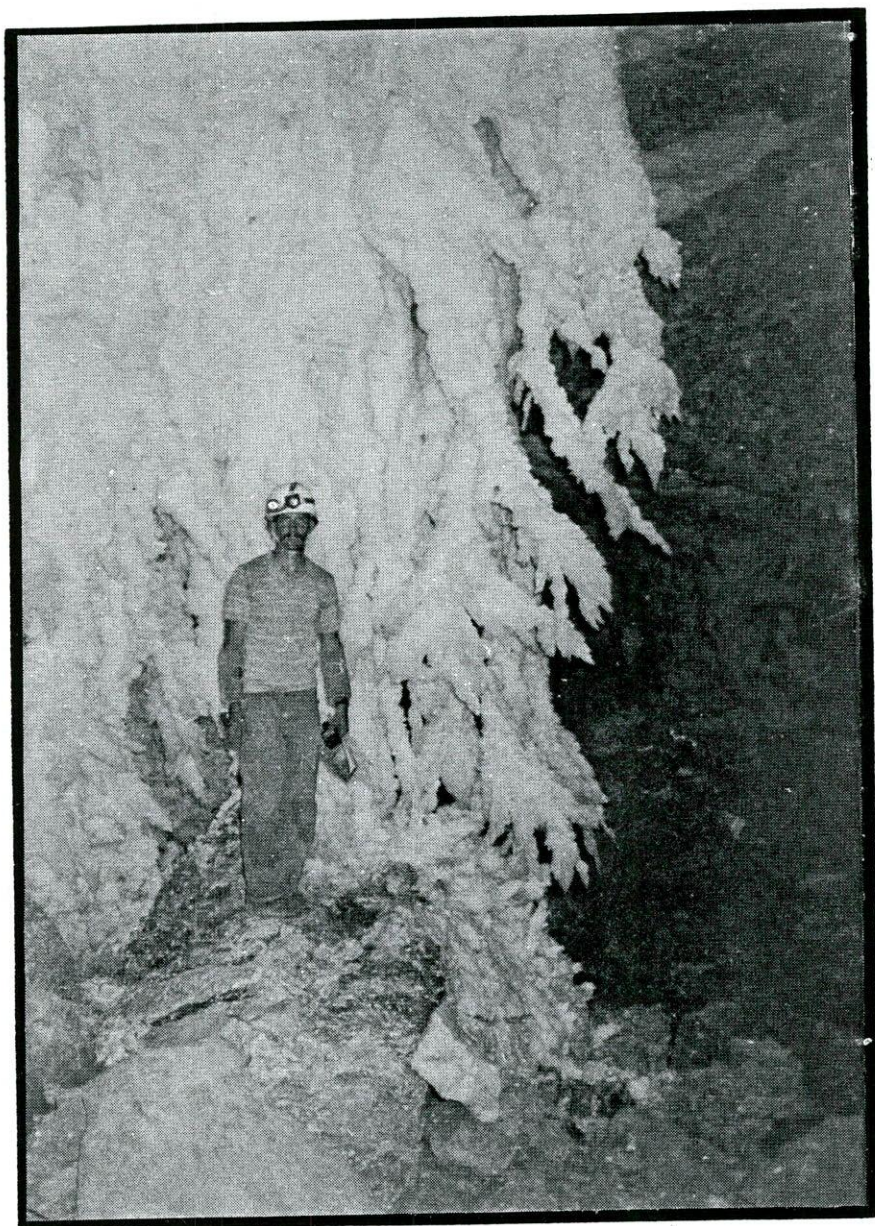
This Book is brought to you for free and open access by the Newsletters and Periodicals at Digital Commons @ University of South Florida. It has been accepted for inclusion in Intercom by an authorized administrator of Digital Commons @ University of South Florida. For more information, please contact digitalcommons@usf.edu.

I N T E R C O M

Published Semi-spasmodically By

THE IOWA GROTTO

National Speleological Society



Volume XXVII Issue 6

November - December 1991

November - December 1991

Volume 27 No 6

The INTERCOM is published semi-spasmodically by the Iowa Grotto, P.O. Box 228, Iowa City, Iowa 52240. The Iowa Grotto is affiliated with the National Speleological Society, Cave Avenue, Huntsville, AL 35810, and is dedicated to the exploration and study of caves. We will exchange publications with other organizations with the same dedication. Membership to the Iowa Grotto is \$12.00 per year and INTERCOM subscriptions only, are \$10.00 per year. Reproduction of material appearing in the INTERCOM by other caving organizations is encouraged as long as credit is given the author and the INTERCOM and a copy of the publication is sent to the Iowa Grotto.

Material for the next issue of the INTERCOM is due in the hands of the Editor by March 14, 1992 and should include material covering January and February, 1992. Send articles, trip reports, photograph negatives, prints or slides, artwork, cartoons, etc. for publication to:

Editor and Typist: Lowell Burkhead 319-854-6650
2611 Alderman Rd.
Springville, IA 52336

INTERCOM Staff: Logistics and Legwork: Mike Lace
Photo Processing: Jim Hannon

The Iowa Grotto meets at 7:30 p.m. on the fourth Wednesday of each month (Third Wed. in Dec.) in room 125 of Trowbridge Hall on the campus of the University of Iowa.

Air Force Rescue Coordination Center

NCRC

1-800-851-3051

Iowa County Emergency Management

1-319-642-3151

This number calls out Iowa Grotto rescue personnel

Cover: Chris Beck in the Chandelier Ballroom, Lechuguilla Cave, Carlsbad Cave National Park, Eddy County, New Mexico
photo by Chris Beck



IOWA GROTTO
National Speleological Society
P. O. Box 228
Iowa City, Iowa 52240

Chairman - - - - - Mike Lace
Vice Chairman - - - - - Marc Ohms
Secretary Treasurer - - Jay Wells

Volume Twenty-Seven

Issue Six

C O N T E N T S

Iowa Grotto Meeting Minutes	101
Letters to the Editor	101
Reply: By the Editor	102
Hypothermia Prevention Study	103
Trip Reports:	
But It's November 2	105
Mammoth Cave C.R.F. Thanksgiving Field Trip	106
Caving in Jackson County	107
The End of a Project	108
Number Thirty	109
Preston's Mine	110
Christmas at Grandma's	110
Bluff Caving	110
The Right Foot	111
Photo Album	112
Maps:	
Preston's Mine	114
Backfill Banzai Cave	115
Open Cut Cave	115
Timmen's Cave	116
Ewing Diggings Cave	117

IOWA GROTTO MEETING MINUTES

Regular meeting November 27, 1991

The meeting was called to order at 7:47 p.m. by Chairman Mike Lace with 11 members present. The minutes of the October meeting were read and approved. TRIP REPORTS: Doug Schmuecker reported on a trip with Nathan Schmuecker to Worden's Cave. Doug also reported on a prearranged tourist trip into Coldwater Cave. Jay Wells reported on a Coldwater trip with Stacey Cyphert, Chris Beck, and Reno Lippold to a dig lead in the Pete's Pipe area. Jay Wells also reported on a trip with Larry Welch to the Frog Junction area where approximately 400 feet was surveyed. Mike Lace reported on a Clayton County trip with Jay Wells. Three new caves were discovered. Mike also reported on a trip to Jackson County. Wiggin's Cave, Falling Rock Cave, Sullivan's Cave, and Cliff Cave were checked. FUTURE TRIPS: A surveying trip to Jackson County was proposed. There will be a Floyd County trip January 4, 1992, and Maze Cave and the NCRC December 6 to 8. OLD BUSINESS: January 14 is the deadline for turning in INTERCOM material. The following nominations were made for the grotto elections. Jay Wells, Stacey Cyphert, and Al Jagnow were nominated for Secretary-Treasurer. Marc Ohms, Chris Beck, and Lowell Burkhead were nominated for Vice-Chairman. Mike Lace was nominated for Chairman. Mike Lace has contacted the Geological Survey about the possibility of getting another stream level recorder for the Coldwater Project. He also contacted Bill Green at the State Archeology center about some recent finds. The old map of Knockel Cave is on loan from Ken Christiansen. The first round of Cave Index sheets have been updated. The meeting adjourned at 8:43 p.m.

Regular meeting December 18, 1991

The meeting was called to order at 7:43 p.m. by Chairman Mike Lace. There was no minutes or Treasurer's report. TRIP REPORTS: Greg McCarty reported on a trip with John Fuhrman to Rimstone River Cave. They also checked a couple of springs on some state land in the area. Marc Ohms reported on a trip with Scott Dankof and Brian Bain in Kentucky. He reported on going to Sloan's Valley Cave. They also visited Wyandot Cave in Indiana. Mike Lace reported on a lead checking trip in the Timber Ridge area. He reported on finding a couple of steam holes that appear to be vertical shafts. Mike also reported on a lead checking trip with Marc Ohms to the East Dubuque area. Stewart Cave, Wheatley Cave and an as yet unnamed cave were visited. They tried to find Kane Mine but were unable to. A trip to Fault Cave with Mike Lace, Marc Ohms, Stacey Cyphert, Chris Beck, and Eric Winch was also reported by Mike Lace. Chris Beck reported on his trip into Lechuguilla Cave (to the envy of all). Mike Lace reported on a trip to McNamara's Cave in Johnson County. A trip to Barrier Cave in New York was also reported on. FUTURE TRIPS: There will be a trip to Floyd County on January 4. A survey trip into Maze Cave is planned. A surveying trip to Jackson County later this winter will be announced. OLD BUSINESS: The grotto election results will be announced at the January meeting. Ken Christiansen will give a presentation at the February grotto meeting. NEW BUSINESS: Stacey Cyphert is going to take the deepest and most dangerous trip of all. He is going to get married this summer. The meeting adjourned at 8:43 p.m.

@#@

@#@

@#@

@#@

@#@

@#@

LETTERS TO THE EDITOR

by Marc Ohms

First I want to clear some confusion about the long cave article. Wild Well Cave was measured, not surveyed. The second sentence of the article says that "a cave must be surveyed to be included". There is a big difference between surveying and measuring a cave.

Now a few comments on "Speculation: Iowa Caves, the Cosmic Connection" by Lowell Burkhead. It is true that the Driftless Area was not directly covered by glaciers, but the area was greatly influenced by them. Much of the Driftless Area was covered by glacial outwash and has had massive drainage alterations. Continental glaciation did not occur until the Pleistocene. The dinosaurs were extinct by the end of the

Cretaceous, placing millions of years in between the two events.

It is true that the bedrock in Iowa is well-jointed. According to Prior (1991), the joints were induced by regional warping of the paleozoic Strata. Iowa's crevice caves predominantly occur within the Niagara Escarpment. These crevices as explained by Hansel (1975) are the result of mechanical slippage of massive blocks of dolomite on shale and aided by the movement of groundwater along the impermeable shale contact.

As far as deep drilling is concerned, in 1987 the Pan American Petroleum Company drilled a well 17,851 feet deep, the deepest in the in the north midcontinent. No corrosive liquids destroyed the equipment. (Anderson 1990)

Breakdown occurs in caves for many reasons, but I have never heard of an asteroid impact being the cause. For information on cave breakdown, read William White's "Processes of Cavern Breakdown", 1969.

Sulfuric acid water did not create the majority of the caves in North America. In fact, sulfuric acid is responsible for less than 10% of the known caves.

No expert has claimed the Dubuque caves to be the result of hot springs. Springs do not form caves. Evidence is present, however, that the Dubuque caves are inactive hypogenic caves having formed by rising thermal water.

REPLY: BY EDITOR AND AUTHOR OF "SPECULATION: IOWA CAVES, THE COSMIC CONNECTION"
Lowell Burkhead.

I would like to respond to Marc's letter paragraph by paragraph and point by point. In the long cave article, four caves were listed as having no map. At least two of them have not been surveyed but merely measured. Even a surveyed cave with no map has merely been measured. My point is that if four such caves are included in spite of the ground rule that they be surveyed, why not include one more, Wild Well.

In my article, The Cosmic Connection, I was explaining that the Driftless Area is the only part of the state that still retains the same landscape that it had at the time of the dinosaurs and the time of the Manson impact. Many of what were hillsides then are still hillsides and what were river valleys are still drainage. The rest of the state has had all of its ancient landscapes completely redone by ice and water and wind. I certainly didn't say that the dinosaurs were around to see the glaciers. I said that they were around 65 million years ago which was the end of the Cretaceous.

On the well-jointed Iowa bedrock, might it not occur to Marc that Prior may not be completely correct. Regional warping might cause regional cracks but we have them every 10 feet. That would have to be some pretty severe warping for it to all have leveled back out since and left no signs except cracks. One word that comes to mind is "unlikely".

On Iowa's crevice caves, Hansel is no doubt on the right track but failed to complete his theory. There are crevice caves everywhere there is exposed rock to have them, but the Niagara Escarpment has the conditions favorable for their formation. But conditions alone don't form the crevice caves, it requires power. The massive shaking associated with the Manson impact would have provided that power. If Hansel's conditions alone form crevice caves, then why do we not see modern, freshly formed ones. After all, the conditions still exist

On deep drilling, Marc's example barely qualifies. All the deep drilling has in recent years been done by the Soviets, the Europeans, and the Japanese. Let's talk 10+ kilometers deep. Let's talk about deep drilling research wells. There are none in the U.S.A. that are of a world class. Those drilled elsewhere have been in the news and were stopped by corrosive liquids. They are trying to find areas that don't have them in order to be able to drill deeper than their present 14+ kilometers.

On cave breakdown, the purpose of the article was so that people like Mr. Ohms might broaden their horizons and consider new possibilities. Even White acknowledged that if you shake the hell out of a cave, the loose stuff will fall down. It seems like a simple enough concept that we could all universally accept it, even if we haven't heard of it before. At least, we have all now heard of it, even Marc.

On sulfuric acid formed caves, I possibly misused the word great to mean large. Marc is correct except that the volume of cave formed by sulfuric acid may be as high as 30% of all U.S. caves. I know of no data on that however.

On springs, apparently in Marc's mind, hot springs and rising thermal water are two completely separate and different things. What I did was to propose a catalyst that might cause rising thermal water for a time period that might form caves. As a person who has been in Coldwater and April Caves, I don't think I would go as far out into left field as to say that springs don't form caves!

Although Marc and I don't agree on much it seems, I would like to thank him for his letter and the work he went to. His input gives us all more to think about. Several people responded that they liked the article but didn't elaborate.

HYPOTHERMIA PREVENTION STUDY

Coldwater Cave, Winneshiek County, Iowa

by Stacey T. Cyphert

A study was conducted in Coldwater Cave to learn more about the efficacy of various simple methods to combat the onset of hypothermia in a wet cave setting. It was undertaken to learn how to keep cavers warm, since, with the increasing frequency of long trips being taken, if assistance from a remote section of the cave is required, numerous cavers will need to be staged and kept warm along the route. IT WAS NOT THE INTENTION OF THE STUDY TO UNNECESSARILY SUBJECT PARTICIPANTS TO THE DANGERS OF HYPOTHERMIA OR TO INVESTIGATE METHODS OF RECOVERY AFTER THE ONSET OF HYPOTHERMIA.

The hypothermia prevention study was initially developed by Stacey Cyphert, Mike Lace, Doug Schmuecker, and Jay Wells. Wanda Flatland was also involved early in the process. Feedback from several physicians was sought and obtained during the development of the study, including several at the University of Iowa and the Grotto's Doc Lewis and Charlie Winterwood.

After the basic protocol was developed, a pilot test was conducted to determine the feasibility of the study. The pilot test took place on September 21, 1991 in Coldwater Cave. Coldwater Cave is a stream cave with average air and water temperatures of 47 and 48 degrees respectively. Chris Beck, Bert Jagnow, Mike Lace, Marc Ohms, Pat Schenck, and Larry Welch volunteered as participants. Stacey Cyphert, Doug Schmuecker, and Jay Wells served as monitors, the latter two individuals having emergency medical service training. Al Jagnow also assisted.

As a result of the pilot test, several things were learned. First, we learned that the participants needed to chill down more before beginning the measurement part of the study and that the study needs to last longer than an hour and a half so that differences could start to appear. We also learned that wearing a garbage bag without doing anything else was not a viable method to use to keep warm, that mental alertness was not well measured by the ability of the participant to solve math problems (or that most of our participants did not have a very high level of mental alertness - even on the surface when they were warm), and that more monitors were needed.

Revisions to the protocols were made as a result of the pilot study and plans were made to try a real test. A presentation by Stacey Cyphert and Jay Wells at the Winneshiek County Memorial Hospital, along with a substantial amount of behind-the-scenes assistance from Wanda Flatland, elicited the participation of local medical personnel and the use of medical equipment. October 5, 1991 was selected as the study date.

Each person involved in the study was provided with a copy of these protocols. The risks of participation were explained in a waiver of liability release which anyone who desired to be part of the study was required to sign. ALL participation was voluntary, including that of the study participants and that of the monitors.

Safety was the number one concern of the study. The entire study was conducted within close proximity to the cave entrance shaft, except for the initial trip by the

study participants. Those participating in the study were monitored closely. Even individuals assigned monitoring responsibilities were monitored by an underground coordinator, Doug Schmucker. This was done to protect the monitors and assure that they would be alert to identify early any adverse consequences being experienced by a study participant. The trained medical personnel recruited at the Winneshiek County Memorial Hospital meeting (Lawrence Benda, Wanda Flatland, Cindy Leonhart, James Ryan, Jodi Sisson, and Brett Willey) served as monitors or were present on the surface in case treatment was necessary. An ambulance was also on-site, as was a physician, Doc Lewis. Elizabeth Robinson also assisted with the study.

To protect the safety of participants, the participation of an individual in the study was to be discontinued if any of the following conditions occurred:

- The individual asked to drop out of the study.
- The individual's body temperature dropped to 95 degrees or below.
- The individual became sick or injured.
- A monitor determined, for any reason, that the individual should no longer participate.

The study began with the participants, Stacey Cyphert, Chris Beck, Mike Lace, Marc Ohms, and Jay Wells eating a hearty breakfast together. They then donned wetsuits without underclothing. After having baseline measurements taken, the participants took a short trip upstream to near Pete's Pipe. No one wore hoods or balaclavas under his helmet. This trip allowed all of the participants the opportunity to get wet, work up some heat, and expend some energy. Each participant traveled the same route in the cave at the same time.

The monitors entered the cave while the participants were on their journey and readied the study site. This site was approximately 50 feet upstream of the shaft entrance. Propane lanterns were lit, gear arranged for the study, and a warming station with a heat source established for the monitors.

Upon their return to the study site, the participants sat in the water for five minutes to chill down. Measurements were then taken and the participant was asked to begin to employ one of the hypothermia prevention methods being tested. Several methods of combating the onset of hypothermia were studied. Those which would be difficult to implement in the cave, such as the inhalation of warm gases, were not considered. Participants were assigned to a method by picking a name out of a hat. Each participant remained in his wetsuit during the course of the study. The methods studied included:

- (1) Exercising for 2 minutes every 15 minutes.
- (2) Drinking warm liquids (tea).
- (3) Sitting near a heat source (a lit can of sterno) while wearing a garbage bag to trap the heat.
- (4) Placing heat packs inside of the wetsuit.
- (5) Sitting in a tent with a heat source (a lit can of sterno).

Multiple indicators were used to assess the effectiveness of the prevention methods. Measurement of these indicators was recorded regularly every fifteen minutes for the next several hours. The indicators included:

- (1) Oral body temperature
- (2) Blood pressure
- (3) Oxygen saturation level
- (4) Hand strength
- (5) Self-reported body temperature comfort level
- (6) Monitor opinion

Oral body temperature and oxygen saturation were measured using an electronic instrument. Blood pressure was measured using a standard cuff. Hand strength was

assessed using a grip strength meter. A four-point scale to the question "How comfortable are you at your current body temperature" was used for the self-report indicator. NOTE: Scale points included (1) no discomfort (not cold at all), (2) mild discomfort (peripheral coolness), and (4) experiencing chills. The monitor used this same rating scale.

Several things were learned during the course of the study. First, while a lit sterno in a tent warms it nicely, proper ventilation was a problem, even though the top of the tent was a screen. Monitors requested this method be discontinued shortly after the study began. One could also question how realistic this method would be if the tent had to be carried a long distance in the cave. Second, because of a slightly elevated CO₂ level in the cave, the heat packs did not function properly. Lukewarm heat packs were reported by the "frozen" participant as ineffective. Third, while the warm tea kept the participant warm, a caffeine buzz resulted after multiple cups were consumed. The other two participants, however, appeared to be reasonably comfortable and without problems during the course of the study. (Exercising and sitting with sterno)

The fourth thing learned during the study was regardless of the method employed, participants chilled down very quickly whenever the method was stopped. Movement, the method currently used by cavers wearing wetsuits to remain warm, quickly became necessary. It may be that drysuits will prove more effective in keeping people warm, particularly if a person is forced to remain still for a long period of time, such as an accident victim. Changing out of the wetsuit may also be an option for people who must be staged, although carrying enough dry clothes may not be easy (and putting a wet, cold, wetsuit back on is certainly not a lot of fun).

The small number of participants relative to the number of methods being tested presents problems in determining which method is superior. Individual differences among the participants certainly contribute to problems of determining superiority. Identifying the extent to which any of these methods differs from doing nothing at all is also difficult to assess since ethical reasons prevented asking a participant to sit idly and risk becoming hypothermic.

Comparing the extent to which a particular method was able to maintain the baseline readings of a participant or the rates at which the readings declined, however, are reasonable ways of trying to assess these methods. This analysis is currently being done. Preliminary indications, based on conversations with the participants, are that the sterno can and garbage bag combination are effective.

This study would not have been possible without the input, cooperation, and support of Ken and Wanda Flatland. The assistance of local emergency service personnel is also sincerely appreciated. While not offering definitive conclusions, it is hoped that the work here will stimulate additional research into simple methods of combating the onset of hypothermia in wet caves. This hope, however, is tempered with the warning that extreme care should be exercised to assure the safety of all those who participate in a study.

BUT IT'S NOVEMBER 2

Smoking Ridge Cave and Hollow Hill Hole, Clayton County, Iowa
November 2, 1991
Mike Lace and Jay Wells

by Jay Wells

It was a very cold Saturday; it can't be winter yet! The only good thing about it was it was a near perfect day to look for steam holes. After talking to the landowner we drove to a long ridge. Mike and I geared up and stared up the ridge. Mike had seen the first hole before from previous trips along the area. The hole was putting out

large amounts of steam. We rigged two sets of ropes for safety and then started the drop. The first part of the drop was 35 to 40 feet down where it met a cross joint. We both got to the bottom of the first drop and discussed how to route the ropes for the second part of the drop. We took the left route first. It took a gradual slope about 10 feet down then another 15 to 20 foot pit. We then rerouted the ropes for the right-hand route. Mike went down a 15 to 20 foot crevice that turned a corner. He continued to climb another 10 to 15 feet. Not a bad start of a very prosperous day.

We derigged the ropes to look for some more steam holes. We found several non-enterable holes before finding another large hole. We again rigged both ropes. Mike went in first to clear some of the brush at the entrance. He climbed out saying it looked very good. I rigged in; the first part was a set of three ledges. The final drop was a 40 foot free drop into a six foot wide crevice. Upon reaching the bottom I could walk ~~about 50 feet either~~ way to two separate cross joints.

After derigging the crevice, we continued to walk around the ridge. We found one more very large hole. After discussing it, we decided to leave this drop until we survey the others making it a lot more enticing to come back.

MAMMOTH CAVE C.R.F. THANKSGIVING FIELD TRIP

Mammoth Cave, Kentucky
November 21-23, 1991

by Mike Nelson

We took this time off, the first since Labor Day, mainly to visit the Ecklunds. Now that they live in South Carolina, it's kinda hard to get together very often. But as long as we were paying to use CRF facilities and eat CRF food, we had to do some CRF work. This year's Thanksgiving field trip seemed to consist entirely of mop up operations. So we got to get into some of the smallest, yickiest, most passed up passage in the world's longest known cave.

Day one: Dave Ecklund, Rick Olson and I dropped a 60 foot shaft similar to Cold-water Cave's entrance minus the ladder. This was the Doyle Valley entrance, which gave us access to Logston River Passage. Here we surveyed and dug and pushed up into a "breakout" dome. We surveyed the dome and pushed its edges for leads. None. Delores and Sue Ecklund (with Dave and Sue's kids, Cathi and Jon) and others did some surface survey work.

Day two: I went with Joe Kaffl and Ken Evans (both from Maryland) to the Austin Entrance, to Phol Avenue to a crawling lead, to a belly crawl (reminiscent of Cold-water Cave fringe areas, but no wetsuit), to a dome. The dome had a steep mud slope to its floor with a high inflowing lead on one side and a drain on the other. We rigged a webbing handline and surveyed down. I checked the upper lead and saw that it went, but we concentrated on the lower, as they had an idea of where the upper went but the base level has never been accessed in this area. We dug at the drain passage, pushed some "Brian Bain Special" virgin cave which shortly pinched. Then we surveyed the entire sloppy mess.

Delores got in with a party checking small caves on the National Park property. They were the Jones Caves, each of them numbered but not all well checked. Delores and one of the party pushed some small virgin cave.

Day three: Delores and I went with Joe Kaffl again, and a fellow named Don Glasco to a service elevator to the Snowball Dining Room. We walked for two or three miles along the old Echo River commercial tour route to Stevenson's Avenue, then down a side lead to flat-out belly crawl in a sandy passage. There were a few areas with enough room to get comfortable before we reached a small room at the end of the survey. The

last survey group, which supposedly consisted of small (diminutive, not petty) people, had noted in the books, "Should go with a little digging". Without digging, we went, and pushed this tighhht passage to connect to an observed but never climbed lead above the Roaring River. We set a station within sight from below, threw a marker down and across the river, and surveyed to it, estimating the distance. We then back-tracked to the Roaring River, found a previously set station, and reversed the process, surveying to our thrown marker then back up to our high lead.

It was good to see our friends, the caving was challenging, and new friends were made. But all in all, I would only do it again to see friends. There's a lot of cave there, but most of it isn't that interesting.

CAVING IN JACKSON COUNTY

Wiggin's Cave, Falling Rock Cave, Sullivan's Cave, Cliff Cave and other nearby caves
November 24, 1991
Marc Ohms and Mike Lace

by Mike Lace

We set out to do some field checking for the Iowa Grotto Cave Files in an infrequently visited portion of Jackson County. The first stop was Wiggin's Cave, reputed to have been a mined crevice up to 400 feet long. The entrance was more than obvious with a gaping opening in the rock face and along with a large pile of excavated debris at its mouth. We walked into the entrance, strapped on the helmets and stooped into the cave's single passage.

The passage was basically featureless, a little popcorn but little more to distinguish it from many other caves in the lead mining district. A 15 to 20 foot pit had to be bridged in order to continue to the latter half of the cave. The pit is wide enough that it would be a challenge to get out of it if you found yourself at the bottom. There were numerous spiders, some of them pretty big too, and clumps of crickets so thick that the walls and ceiling seemed alive. We found that the cave is really only 200 feet in length.

On our way back to the car, we checked several places along the exposed rock face but only found one obscure-looking hole that did lead to yet another mined crevice. The entrance is very difficult to spot as the tailing pile shields it from sight. An eight foot entry pit led to a mostly stooping to hands-and-knees crawlway that stretches about 300 feet to a fork at the cave's end. There was no mention of this one in the files or the old trip reports and we struggled to give it an appropriate name until Marc dislodged a large rock on his climb out the entry pit, sending it almost over my toes. Of course, that was the best foothold to use in the climb out of the cave so it made for some awkward scrambling on my part. We named it "Falling Rock Cave".

A short drive brought us to another poorly described cave in the county. Sullivan's Cave was described as 200 feet long and that was it for a description. We found a large shelter entrance with a quick duck-under leading to the first of three dome rooms. The standing height room was covered with dry flowstone. The other two rooms were connected by short crawls over rubble. These back rooms were also standing height but they had plenty of active formations on the floor, walls and ceiling. This cave is approximately 200 feet long.

The sheltered valley holds at least six more caves, mostly small but interesting. Cliff Cave is found on the other side of the valley with the walk-in entrance reached by a 15 foot free climb up the rock face. Marc found plenty of coon dung inside the cave and an almost overwhelming odor to go along with it. He followed the stoopway 60 feet to where it became a low crawlway. The cave is at least 100 feet in length.

Many of the caves in this valley have maps that were done in the late 1950's but these are of generally poor quality. Sullivan's Cave does not have an available map so a return trip to this area should include not only the survey of Sullivan's but a resurvey of the other caves here.

THE END OF A PROJECT

Lechuguilla Cave, Carlsbad Caverns National Park, Eddy County, New Mexico
November 23 - December 1, 1991

by Chris Beck

After a bumpy flight, I arrived in Albuquerque one hour late to a warm welcome from the trip organizer, Fritzi Hardy. We then met two more cavers on the next two flights and then went to Fritzi's home for the night.

The next morning we packed four people's gear into their car and all the food for the week plus the survey gear in the VW van and headed for Carlsbad only to have the van break down at the edge of town. We then returned to town and rented a new one and were off again for the six hour trip. We arrived about 7:30 p.m. and quickly stowed our gear. After a short introduction and orientation we got down to the business of training on tripod setup and leveling till about 10:30 p.m.

Sunday was a clear, cool day and immediately after breakfast, we got back to training on data recorder and theodolite. Unfortunately, I awoke with little or no voice so I could only point and whisper to help with training. We received a safety and conservation lecture from the park's assistant cave specialist Dave Ek at lunch. We finished our training about 9:30 p.m.

Monday we were up early and left for the cave at 7:30 a.m. Chris Watson was to lead the first team of eight into the cave to begin the survey. I was to bring my team of six to the top of Boulder Falls to help haul survey equipment. When I arrived at Boulder, Chris had become sick and could not proceed. I then became the leader of the first team. Unfortunately, I did not have my overnight gear so I took one person and sent the others with one experienced person on to the survey area. We then went back to the cabin to get my things. We rejoined the rest of the team about 4:30 p.m.

We started on the last points left by the team on the last trip at the top of the Great White Way. We had good data on those stations so we were able to move to the next set. There we had trouble keeping our numbers down and decided we were getting tired so we stopped for the night. It was 9:00 p.m. and I sent two people out of the cave with our data to be checked and went to sleep.

We awoke about 8:30 a.m. and got back to surveying at 9:00. We reshot the second set of points and decided our problem was with the cave walls and not our eyes. We finished these about noon just as the other team arrived with Chris Watson feeling fine. I then led the team out of the cave, arriving at the cabin about 6:30 p.m. for hot food and showers. About 11:30 p.m. two people arrived from the cave with the survey data for the last 4 points to be set for the project at the top of Apricot Pit.

Wednesday, two strong people from team one were sent back into the cave to tell the team their data was good and to start bringing out the survey gear and then stay until we all returned on Thursday. I took the short public tour of Carlsbad with one of my team so we could go out to the cave in the afternoon to meet the team coming out at Boulder Falls and help with the gear. We all returned to the cabin about 9:00.

Thursday, we got an early start at 7:30 a.m. and all arrived at EF Junction about noon with a total of 15 people. We then broke into two groups and started down F survey toward The Chandelier Ballroom to do a hair-lint (human impact) study.

We did four study areas on our way with several stops for pictures along the way. We arrived at the Chandelier Ballroom about 8:00 p.m. We spent several hours there. Many pictures were taken and we were the last group leaving about 11:30 p.m. and returning to EF Junction at 2:00 a.m. where we all quickly went to sleep.

Friday, we awoke about 9:00 a.m. and had a social breakfast with many jokes and stories before doing one more hair-lint study and heading out of the cave. We started sending people out in pairs every 10 minutes with the 14 tripods. I took the cleanup job and was the last to leave at 11:00 a.m. I arrived at the bottom of Boulder Falls at 12:30 p.m. with only three people up top and three more new people to help carry gear. A Z-rig was set up to pull gear up the drop. Four loads of tripods and packs were hauled up the drop. Before it was divided up, it was taking too long so we had everyone else carry their own pack. I was the last one up the rope at 7:00 p.m. We then rerigged with a new rope on the drop because of a badly worn spot and headed out of the cave locking the gate behind us and arriving at the cabin by 9:30 p.m.

The Lechuguilla Precision Survey Project has now completed its contract of surveying a new base line from the entrance to the top of Apricot Pit. All survey equipment is out of the cave and no more survey is currently being considered. This has been a long, sometimes difficult, project and without a great team of organizers and many hard-working cavers (of which I am proud to be one of) it would not have been possible. It is also very important to note that without the generosity of the PENTAX CORP. we would not have had the equipment to do the project in the first place!

Participants of this weeks project were Stuart Halliday, Walt Olenick, Jim and Fritz Hardy, Thomas Rohrer, Kathy Schwehr, Steve Untch, Chris Watson, Patrick French, Chip Hoffman, Tom Howell, Travis Kinchen, Sean Thompson, Randy Winans, Tomas Andreason, Christopher Krafft, Leif Sigvardsson, John Patterson and Chris Beck.

NUMBER THIRTY

Preston's Mine, Dubuque County, Iowa
December 8, 1991
Marc Ohms, Mike Lace, and Gerda Hartman

by Marc Ohms

We started the morning by surveying our 30th cave of the year (an all time high?) Preston's Mine is located on Gerda's parents farm. It is entered via a 15 foot vertical shaft which was quite slippery due to all the melting snow. Once inside, the cave is quite pleasant, being only slightly muddy and easy crawling passage. It is fairly well decorated with small stalactites, flowstone, and small helectites. The total length is 136 feet.

Our next stop was the location of the Kane Mine near Key West. According to the old mining records, it was a very large cave. After tromping around a few back yards we determined that the entrance shafts were filled when they did landscaping or is under a parking lot.

Gerda has been quite busy locating leads and talking to landowners. Our next stop was one of these leads; it was the Waller farm. Mr. Waller showed us around. The first spot was the location of an old mine shaft that is now filled. He said it led to a large mine. The hillsides throughout the valley were dotted with shallow pit mines. He then took us to an open adit. We had three cavers and not one light! Kinda pitiful. Mike peered in and said that it indeed went, but of course, we would need lights. Imagine that.

We then walked further into the valley which is very picturesque. We never did have time to return to the open cave but plan on doing so soon.

PRESTON'S MINE

by Iowa Grotto member, Gerda Preston Hartman

Mining took place in Preston Mine #1 during the winter of 1944/45. Donald G and Vineta Preston decided to pursue a clue from David Preston, Donald's father, that a sinkhole on the family farm would be a likely spot to start digging if lead mining was to be considered someday. The price of lead was higher during the war years and due to this fact many people opened up and redug on existing crevices.

Preston Mine never produced any lead in its approximate 120 foot long underground crawl that was worked. Donald went on another 100 feet to explore beyond their working area to see what lay ahead. The crevice continued but Donald would not crawl beyond the 100 foot rope that was attached to his leg. He said "It was tight going and looked tight in his view ahead of him". Had he been a caver, who knows what he might have found.

In 1944/45, a windless allowed for the removal of the rock and dirt. Three gentlemen, Donald, John Lubbers, and Joe Arthoffer, worked each weekday when the winter weather permitted them to come out from Dubuque. Donald was the only one living next to the work area. After ending their mining operation that winter, they placed a cover over the hole, but due to time, all of this covering has dropped into the shaft. Nevertheless, access is still easily achieved. Silting from above is coming into the shaft but does not change a lot from year to year, so say members of the grotto. When the mine was first reexamined by Hartman and Prusko in 1981 after 36 years, they found the Eastward crevice to be too narrow to explore. The crevice was still open to view but not to get through.

(See Preston's Mine map, this issue)

CHRISTMAS AT GRANDMA'S

Hole In One Cave, Mitchell County, Iowa
December 25, 1991
Alyssa and Jay Wells

by Jay Wells

Christmas morning I promised my daughter we would go to a cave we had noticed earlier last summer. It looked about 30 feet long, possibly an old Indian shelter. It was going to be the first cave she was going to survey; she was very excited.

After going to the back of the cave to check for coons, I started sketching and looked around then called for her. She answered "Dad are you coming?" I went back to the back of the cave. She had found another side lead and was waiting for me about 25 feet ahead. The cave ended up about 70 feet long with a small digging lead at the end. We didn't end up surveying it as planned but it was a rather nice way to spend a Christmas morning.

BLUFF CAVING

Lead checking, Dubuque County, Iowa
Stewart's Cave, Wheatley Cave, unnamed cave, Jo Davies County, Illinois
December 22, 1991

by Mike Lace

We intended to stay inside the city limits to avoid catching a 12 gauge slug during the opening of deer season that weekend. Some of the leads on our list drew us to the area around Cleveland Circle Cave. We were unsuccessful, however, in locating Cleveland Park Cave (this is different from Cleveland Circle Cave) but found a small crevice in the bluff face that barely stretched 15 feet. Several shallow depressions

in the hillside attested to the degree of mining activity in the area but no access to the mines was found.

We checked a couple more fruitless leads before heading across the river to the Illinois side to visit a few caves we had heard about. All three had a large entrance high in the rock face. The first cave, however, did not match any of the cave names or descriptions we had, ending after 100 feet of partially mined passage. Wheatley Cave was the second in the set and led 75 feet to a quick end. Stewart's Cave was the last but the most interesting. Behind the entrance, the passage appears less like a mine and more like a natural cave. Thick beds of calcite were seen on either side as well as numerous small soda straws and flowstone ribbons. The cave is about 150 feet long and unmapped as far as we know, but Hey! it's Illinois! There's enough for us to do right here in Iowa.

THE RIGHT FOOT

Minnesota Springs, Filmore County, Minnesota New Galena Mines, Allamakee Co., Iowa
January 1, 1992 by Mike Nelson
Mike Nelson, Delores Nelson, and Heath, Jared, and Nicholas Byrns

History has shown me that the best way to have a good year of caving is to get off on the right foot and start first thing on January 1. So here's hoping for a rebound after caving very little in 1991. (Included in this issue to help Mike's 1991 count. Ed.) As long as we were in their vicinity, we had to drop in and visit the Flatlands at CWC, whom we had hardly seen at all in the last year. We visited about family and caving and work and the recent demise of one Vitus McCabe, who's life has intertwined with Coldwater since the disclosure of its discovery.

We then ventured on up to a spring, clearly marked on the Harmony, Minn. topo map. I had happened by this spring in the past but failed to realize its significance as the rise of the south fork of the Root River. At first glance, the flow appears to rise through talus but closer scrutiny showed some joint aligned voids. If one ever gets hard up for a dig to a cave dive, this would be a viable candidate. Next we wandered on up to another spring I had wanted to inspect. Well, actually, the lie of the spring wasn't inspiring, but the valley of its location with 420 feet of elevation between creek bottom and bluff top in less than 1/8 mile, seemed like it might be. It was. The spring was so small it was froze up in this mild weather we've had of late. My curiosity about these features satisfied, we headed off for our main objective. The lead to the New Galena Lead Mines had been given to me by another area landowner I had dealt with. He also gave me a phone number which lead to another. A little lead checking on the phone saved a lot of time and gas cash. A short conversation and a little referencing to the topo map and we were able to drive directly to the site.

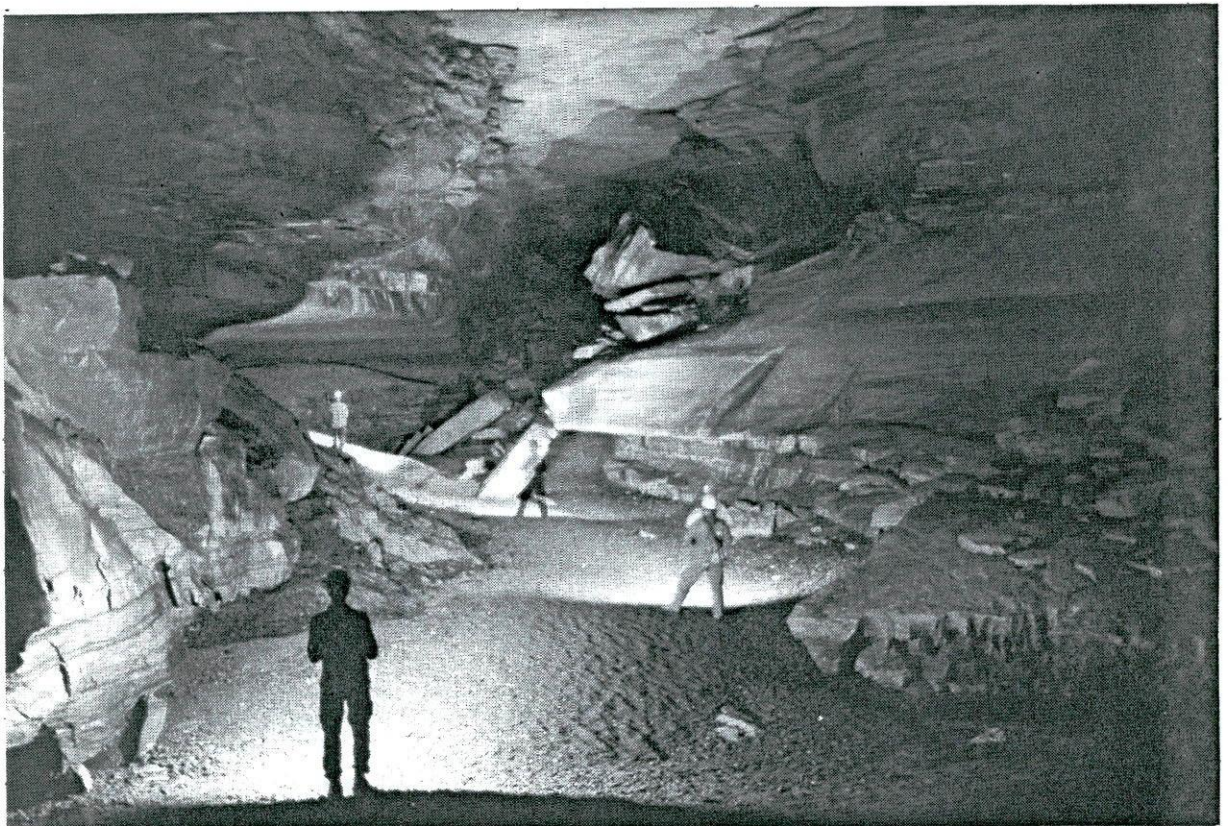
Though there is no mention of them in the club's cave files, the New Galena Mines were known to some of the membership. It was speculated that they may already have been mapped. If anyone knows, please let me know. I'll gladly assist anyone wishing to undertake a mapping effort. As for the mines themselves, I'll take no great pains to describe them. I had expected miniatures of the Dubuque area mines. However, they were not extensive or elaborate, although they were intricate and varied enough to be of more than passing interest to any cave fancier. One had an upper level that was a raccoon holiday inn. A second had two hibernating little brown bats and some fine dogtooth spar. The third had evidence of the mining and many ice formations in the entrance. They all had enough breadth and relief to prove interesting and entertaining and good map fodder.

There was precious little history to be dug up on such a short trip, other than that the excavating was believed to have been done in the 1840's or 50's. The ore was taken to the Upper Iowa River and washed. When there was enough collected, it was floated down the river to the Mississippi then to Dubuque or Galena, Ill. to be sold. The folks I talked to are fairly certain that the three comprise the total of the New Galena Mines.

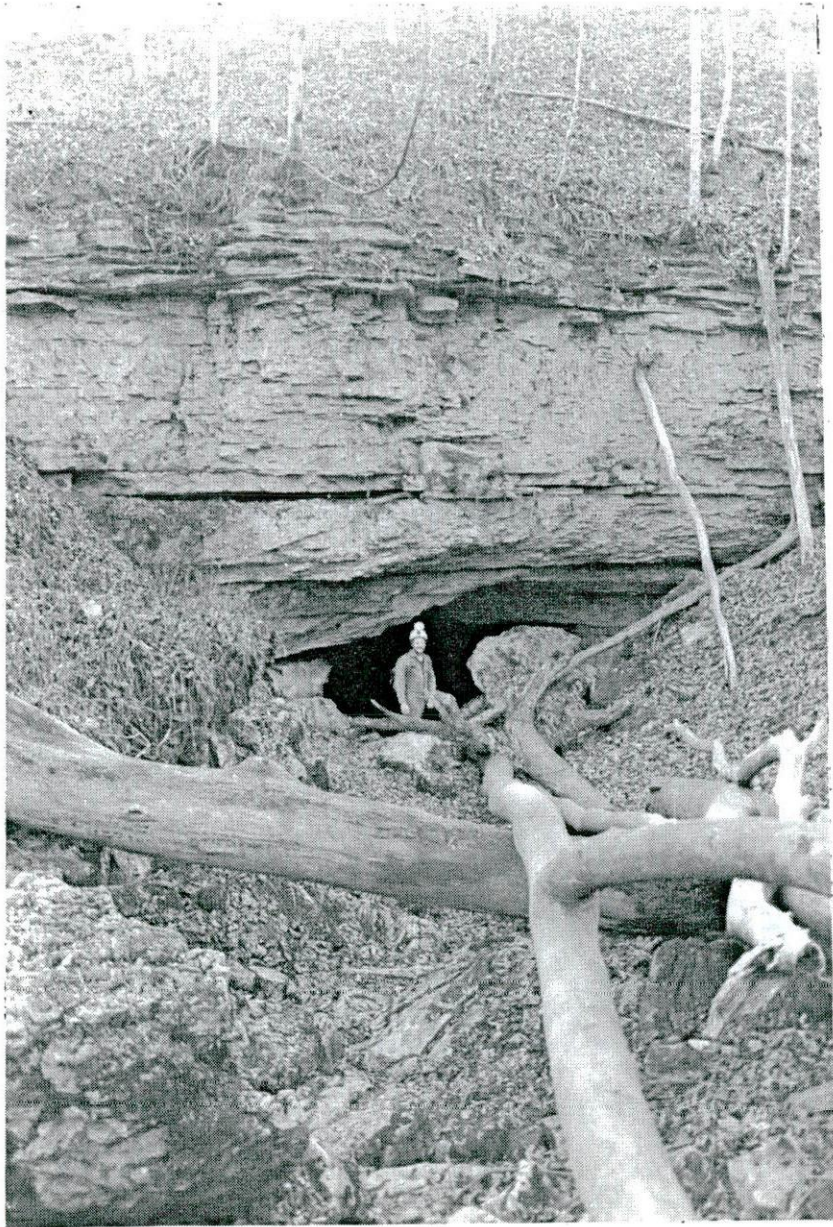
The other November Kentucky trip. No trip report from Bryan Bain



Marc Ohms and Bryan Bain in the beginning of the Mitton Hollow Big Passage
Photo by Scott Dankof



A multiple exposure photo of Marc Ohms and Bryan Bain in the Mitton Hollow
Big Passage of Slone's Valley Cave, Kentucky photo by Scott Dankof

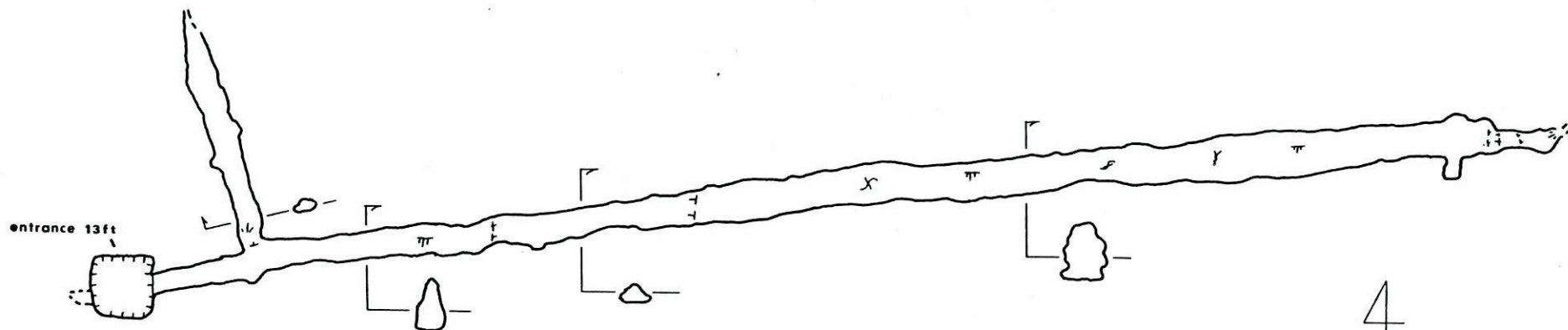


Bryan Bain at the Mitton Hollow entrance of Slone's Valley Cave, Kentucky photo by Scott Dankof



Formations in James Cave, Kentucky. Photo by Scott Dankof

Marc Ohms



PRESTON'S MINE

DUBUQUE COUNTY, IOWA

0 5
meters

0 15
feet

T.H.L. = 136 ft



COMPASS AND TAPE SURVEY BY

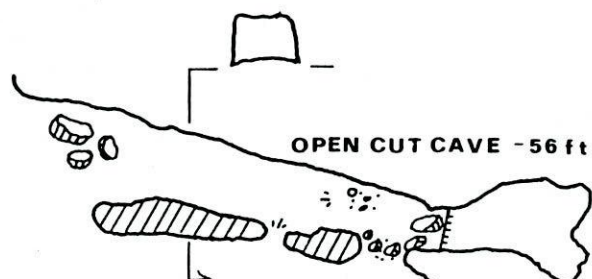
Marc Ohms

Mike Lace

Gerda Hartman

BACKFILL BANZAI CAVE & OPEN CUT CAVE

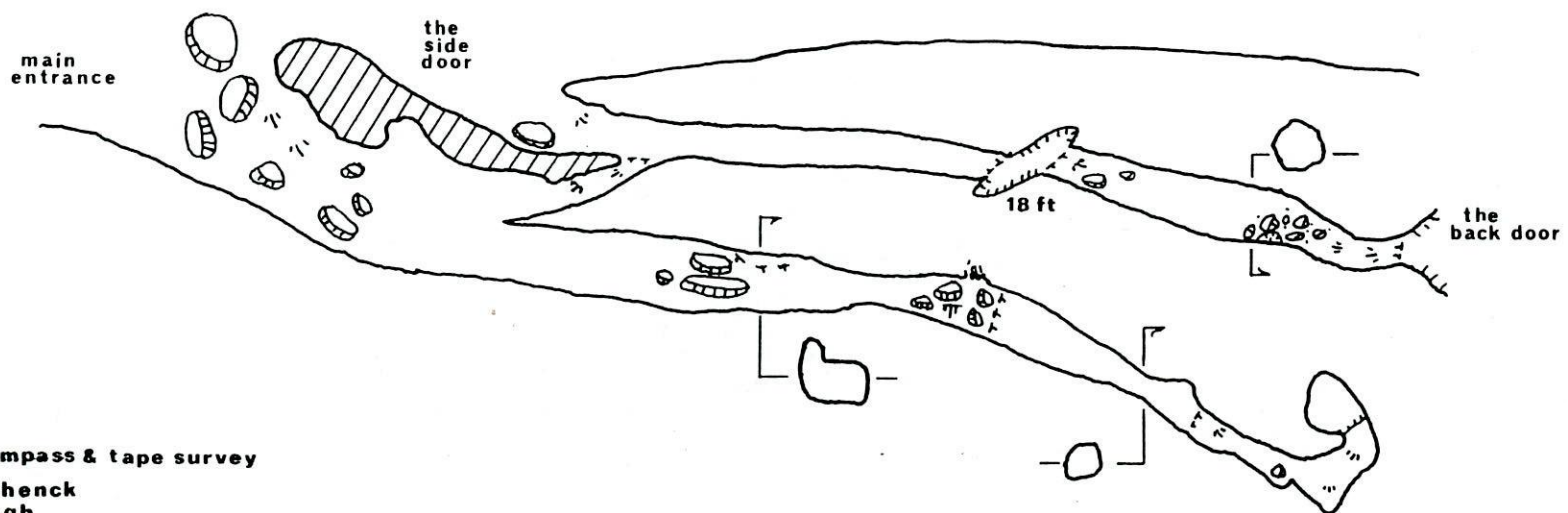
DUBUQUE COUNTY, IOWA



0 meters 10



BACKFILL BANZAI CAVE - 252 ft



compass & tape survey

Schenck
Engh
Ohms
Lace

MARC OHMS

TIMMEN'S CAVE

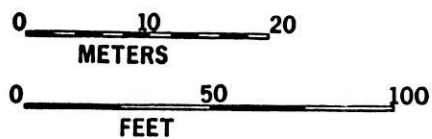
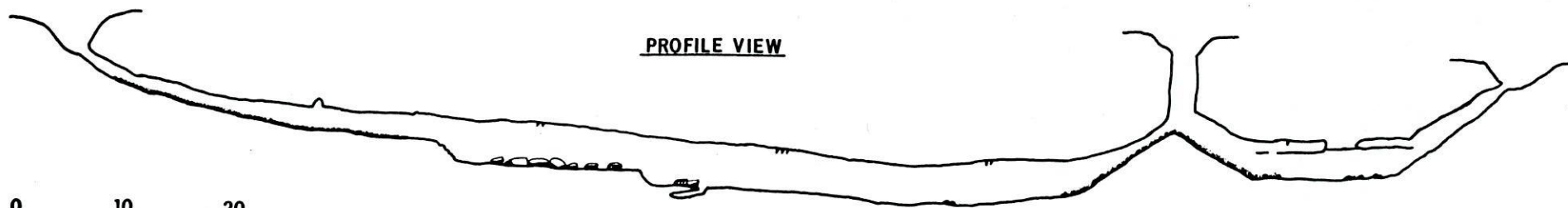
DUBUQUE COUNTY, IOWA

NSS MAP SYMBOLS 1979

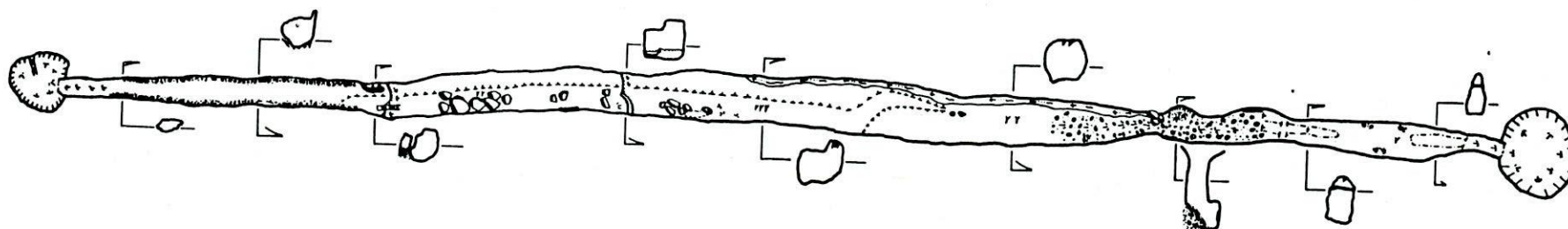
SURVEYED LENGTH - 149.23 METERS
489.59 FEET

COMPASS & TAPE SURVEY

STACEY CYPHERT
AL & BERT JAGNOW
MIKE LACE
MARC OHMS
LARRY WELCH



PLAN VIEW



MARC OHMS

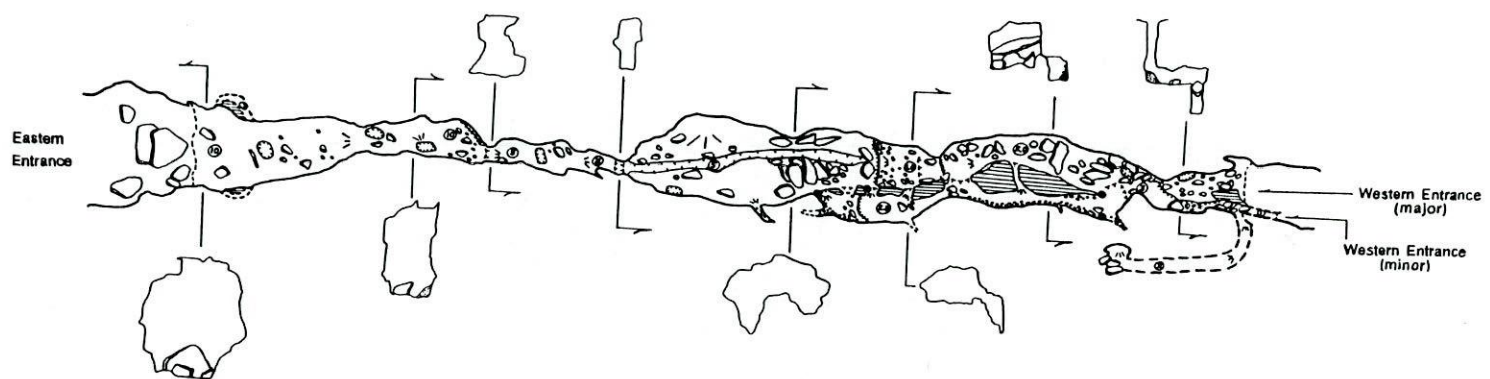
Ewing Diggings Cave

Dubuque County, Iowa

Surveyed Length = 168.86 meters (553.86 feet)



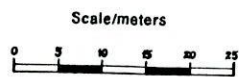
Plan View



Profile View

Surveyed by:

Stacey Cyphert
Michael Lace
Marc Ohms
Doug Schmucke
Jay Wells



Cartography by Michael Lace
May, 1991



N.S.S. Standard Map Symbols

Supplementary Symbols:

Old Mining Timber ●
Ceiling Shaft ○
Mining Backfill

