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Lowell Burkhead

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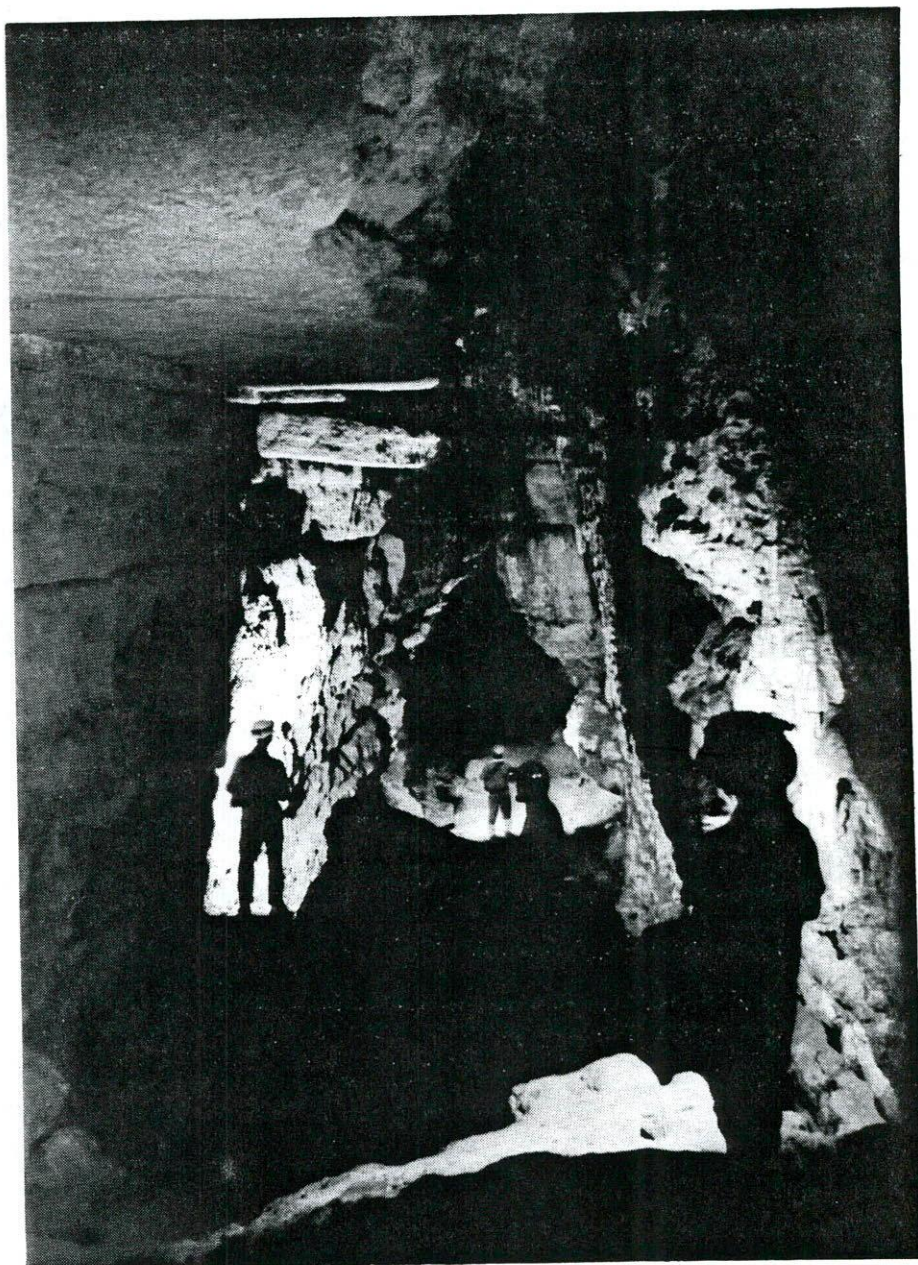
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I N T E R C O M

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THE IOWA GROTTO

National Speleological Society



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Material for the next issue of the INTERCOM is due in the hands of the Editor by November 14, 1991 and should include material covering September and October, 1991. Send articles, trip reports, photograph negatives, prints, or slides, artwork, cartoons, etc. for publication to:

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The Iowa Grotto meets at 7:30 p.m. on the fourth Wednesday of each month in room 125 of Trowbridge Hall on the campus of the University of Iowa in Iowa City, Iowa.

Air Force Rescue Coordination Center
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This number calls out Iowa Grotto rescue personnel

Cover: Stephanie Dankof, Marc Ohms, Stacey Cyphert, and Loren Schutt in the main passage of Timmen's Cave, Dubuque County, Iowa. (Picnic trip)
Photo by Scott Dankof



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

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LETTERS

Dear grotto members:

To Mike Lace and the entire cadre of our hosts and guides at the Iowa Grotto Picnic, 1991, our salute and thanks for a great time. We enjoyed the company, the food and the weather, even though there was a touch of rain. The caving was better, according to my friends, than that at some more lavish caver get-togethers. I particularly appreciated your willingness to adapt the trips to our speed and ability.

Thanks again for a grand week-end.

Good caving,
Warren C. Lewis, M.D.

TRIP REPORTS

THE LATE REPORT

Florida - Full cave diving certification
January 6-12, 1991

by Mike Nelson

Doug Schmuecker and I drove the marathon to Florida's Big Springs area through some of the worst ice storms imaginable. 200 miles of Illinois freeway were certifiable "chilly willy" country. The "glass" coated trees and power lines were things of beauty to behold where there was a backdrop of light behind them on that dark night. But one was reluctant to peel their eyes off the road to enjoy them for fear of losing control at 35 MPH and becoming one of the many autos that decorated the ditches. Sunday morning though, it was shorts, tee shirts and tennis shoes in January. Even though it was never really warm during our week here, I never varied from this garb.

Doug and I headed out to Manatee Springs State Park to hone up on our cave diving basic skills. Due to the high rate of flow through its restricted entrance, we never got into the cave. Later we learned that most folks enter one of the upstream sinks and swim "through" downstream. Later that day, we met up with Dave and Sue Ecklund and practiced our sidemount systems in Telford Spring, a nice, rather forgiving and shallow system, also with several sinkhole entrances.

Monday, we started our class and, as there was a limit of three students per teacher, Doug started a solo class. This was a little expensive for him, but it also allowed him to do some diving totally unrestricted by the limits of another student's skills and experience.

Dave, Sue, and I and our teacher, Lamar Hires, and Bob Janowski, a tag along caver friend of Lamar's, started our classes by preparing to dive a circuit in the Peacock I system. Lamar had loaned the Ecklunds equipment set up for Florida style cave diving. I was making do with a poorly set up borrowed gear. We did not complete our circuit in the two dives it would normally take as I just couldn't keep up. Swimming hard against my sloppy gear gave me a tremendous CO₂ headache. Lamar found me an extra set of Florida gear and it made all the difference. Subsequent dives went much smoother.

Tuesday we dived in Madison Blue Spring for "orientating and referencing" class. We set personalized marks on the permanent line, swam a side loop and returned to the original line very near our marker. On the way out we did a lights out buddy breathing exercise. (Bob Janowski was along again and was my buddy for this) This turned out to be quite interesting, as when I handed him my backup regulator on the long hose, the mouthpiece stuck in the retainer and he had to make do, breathing directly from the regulator. I was leading, following the line and Bob was following holding onto my calf so he could communicate with me via a system of prearranged

signals. Pushing meant go, squeeze - stop/hold, pull - back up. I wasn't aware of Bob's problem with my regulator and didn't understand our frequent stops. After one stop he gave me the go signal but when I tried to move, I found that he was laying solidly on one of my flippers. He pushed and I shook and after several attempts, he freed my and we were on our way.

Wednesday, Doug joined the three of us and we laid out a survey line in Telford and did our "mapping" class on our own. Thursday, we broke up into our individual groups again and ours headed to Rock Bluff for sidemount experience, Florida style. Lamar did complement me on how well my system worked, but noting the simplicity and ease of his system gave me pause to contemplate some minor reworking of mine. Dave and Sue opted to drastically modify their systems.

Lamar had to respond to what turned out to be a false call, his wife was considering going into labor. (A condition, not a field of employment.) Our second dive of the day was cancelled.

Friday, we went to Little River for our "deep" dive. It was my most enjoyable dive and a beautiful place. During decompression, I noticed some weights and, what the hell, a telephone bobbing just below the surface. Suddenly, the whole works dropped to the bottom on a line with a slate attached. I pointed this out to Lamar, who was decompressing on a computer as opposed to our tables. Noting he was clear on the computer, he dashed out, read the slate, and got out of the water. 30 seconds later, when our tables said we were clear, we followed. The slate, attached to the phone said, "Lamar, call LeAnne (his wife) as soon as you're done decompressing."

Shortly he was on his way to the hospital and the birth of their first child, a boy, Jarod Michael. We students all went back to Telford to try our reconfigured sidemounts and practice numerous other little skills we had seen Lamar utilizing. We were coming up short of our dives for certification as our week was running out, but hey, stuff happens.

Saturday morning brought the beaming new daddy out to squeeze in the last class we needed for certification. Cow Spring was a little crowded that morning, what with it being on the weekend. We got some odd looks with our sidemount gear. The main dive is typical back mount on the downstream (syphon) side of the sink. The upstream section was sidemounts only through three entrance restrictions. After that it was large, wide open cave, but that entrance had kept this one of the most pristine caves I had ever seen. It was a glorious finale to a demanding but fun week of learning.

Because of our unavoidable delays, we had to bust our butts back home again, into the cold and the snow.

(MORE OF) THE LATE REPORT Other Odds & Ends

On the weekend of April 13&14, Deloras and I did some minor lead checking in the Northfork Hollow (Allamakee County) near Singing Spring. Not finding anything of interest on the particular property we were on, the landowner assured us there was no problem with overlapping onto the next. The first and only sinkhole we looked had a lot of exposed bedrock. We will have to go back someday and finish checking the others in that series. We then headed down to Clayton County to recheck Henkes Lost Creek, a swallet. However, we found out when we got there that they did not have any of the dramatic rains that fell all around them late last summer and nothing had changed.

On April 21, Mike Bounk and I with Steve Moon's company, finished up our geological overview of the Siewer Spring area. When Mike can plat out the information, we will be able to speculate on the recharge basin and begin to search for dye input sites.

May 25&26 saw us, Me, Delares, Brett Swanson, and Reno Lippold, mapping in Gouldsberg Cave. We learned a lot from our efforts, but should probably start from scratch again next time. I'm glad to help anyone survey, but I find that my heart belongs to other aspects of caving and I don't seem to possess, or care to possess, the qualities it takes to lead this kind of cave job. Anyone wanna take the bull by the horns? I'll still be glad to help. We also checked the spring cave in the quarry to the south of Gouldsberg - good possible dig. See me for details if interested.

June 17-20 found Delores, our son Aaron, and myself at Carlsbad for our (Delores' and my) third restoration field camp. It was typical of past camps with a lot of heavy hauling, nit picking cleaning, and laughs. Delores and I took an off-trail trip to the Mystery Room. The mystery is a gurgling sound of bubbles rising through water, like a screwed up toilet. But no one had ever witnessed bubbles rising in the Mystery Pool. It is considered fortunate, though, to hear the mystery noise, so I was somewhat let down that it wasn't doing it on our trip. As we were fixing to leave, however, I not only heard it, but solved the mystery. I was climbing a small incline prior to a steeper climb when I heard it. I stopped in my tracks and listened with all my being. Nothing. Resuming my climb, I swore I heard it again. I stopped. Nothing. Then I realized that the sound had emanated from the half empty canteen in my pack. Mystery solved.

Aaron and I took our second off-trail trip with a group going to the New Mexico Room. On our way up to the balcony, we passed bat bones being covered by flowstone, and beaded helectites at the entrance to the Refrigerator and had to walk through the Refrigerator itself. It was stunning. Imagine a giant meat locker in desperate need of defrosting. Someone turns it off, but a few hours later, someone turns it back on. There are pure white and translucent icicle stalactites, stalagmites, soda straws, and soda straw columns everywhere around you as you creep through the small trail, hunched over. The place glistens and sparkles everywhere.

Sitting on the balcony, our lights cannot breach the room out in front of and below us. John Corcoran III, an oldtimer in Carlsbad, tells us of how odd it was that this area was so late in being discovered and how it holds much promise of being the threshold to the vast caverns that have been seismically verified to exist to the west, but no way ever found into them. Ron Kerbo, the cave specialist who was just leaving that position for another in the N.P.S. had predicted at his farewell dinner, that Carlsbad would double in size in the next ten years. I wanted to trash every shred of responsibility on my life, move to Carlsbad, and cave forever.

The night before we left for Carlsbad, June 14, N.E. Iowa had experienced devastating rains, as much as 10 inches in some areas in Clayton and Fayette Counties. Upon returning, I tried periodically to reach some landowners in the affected area. On July 28, I talked to the landowners of Wild Well. 44 days after the event, it was still flowing. We had to see it.

On the way over we stopped at Livinggood Spring to check our dig. The renter there said they had been very dry lately and the spring and dig were unaffected by that rain. Anytime previous to that day we might have gotten our peek into water filled conduit at the base of our dig, but as it was rainy this day, we didn't bother to check things out personally.

Next, we checked out A.J. Spring Cave and found that last winter's frost shatter rocks had been purged from the rise pool. Very little work will need to be done to

reenter it. Hickory Creek, seven miles as a crow flies from Livinggood Spring, had raged out of its banks, flattening corn and redefined its bed but not its course. Places the owners used to drive across it are now holes where trout might soon congregate.

Wild Well, another seven miles further, darned near straight down the line the crow was flying, was a different place. The dry run from the plateau to the Well was cut down ten feet deeper in some spots, and had dangerously narrowed the lane in others. The Well itself had a nice trout stream flowing from it, being at least six feet deeper in the entrance area than when any diving went on there. From there on down to the bottomland, nothing was the same. The run had abandoned old paths and carved new ones. The entire watercourse was paved with fresh-cut limestone, from flakes to slabs. There used to be a five to six foot drop down on the bottoms next to where we would turn our cars around when diving the Well. It was entirely filled to mounded up slightly with a huge delta of rock here where the water had lost its impetus. Just beyond the delta was a huge pile of wood, not just branches, but even old dead trees, piled up several feet higher than the delta. The fossil hunting was fantastic through the whole of the new run.

A visit with Henkes' told of a 15-20 acre lake that filled their swallet's dead end valley to overflowing, destroying a 20 foot swath of corn down the other side. It took two days to drain. Time to look again.

There must be a ton of stories like these across the deluged karst of Clayton and Fayette Counties. Everything that is affected by flow should be looked at again like its never been seen before.

AN OINKER OF A LEAD

Coldwater Cave, Winneshiek County, Iowa
March 16, 1991
Larry Welch and Jay Wells

by Larry Welch

As might be expected during March, snowmelt had rendered Coldwater Cave a very cold and wet experience. We decided to survey some leads out near the end of Cascade Mike Lace, Marc Ohms, and Stacey Cyphert also had plans to survey in the vicinity, so we joined forces. They have reported on their trip separately.

Our objective was to reopen the Baby Pig Dig and to survey through. The Baby Pig Dig sits at the very end of the current Cascade survey. Dave and Sue Ecklund initiated the dig in April of 1985 with Gary Engh. In June of that year, a group led by Gwenne Hayes and John Moses surveyed up to the dig, opened it, and discovered a seemingly virgin river passage beyond. A Minnesota group later claimed to have opened the dig in 1975. They had proceeded to a terminal room where they found the initials DJ, which they presumed were left by Dave Jagnow some years earlier yet.

Sometime after 1985, enough mud had been redeposited to call for additional digging. Jay and I each took a couple of turns with the trowel, scooping some mud to the side and pushing the rest down the slope ahead of us. Jay finally broke through into an awkward mud tube that led 20 feet to the river passage. Moses had named this the Piglet Passage. Downstream, the passage was less than a foot high, but upstream was fairly roomy. We located the rock cairn that marked the end of the previous survey, then unreeled the tape and went to work. As we headed upstream in the Piglet Passage, it got nastier and nastier. Eventually, we were lying flat-out in the stream, damming up the flow with our bodies. We quickly chilled in the 40 degree water. At a tiny alcove, the Brief Respite Room, we tied off the survey to a chip buried in the mud. The passage continued upstream as a sleazy wallow.

We packed up and headed out, meeting the other group not far down Cascade. We'd surveyed over 300 feet with no sign of a terminal room. As well, the sleazy nature of the passage made me question whether the Minnesota cavers might not have confused this dig with another. When the data was plotted, our tie-off point plotted up only 120 feet away from Frog Junction. The next trip ought to sort things out once and for all, but it is pretty safe to say that we are close to either a connection or a terminal room.

A WALLOW-UP TO THE MARCH TRIP

Coldwater Cave, Winneshiek County, Iowa
April 20, 1991
Larry Welch, Jay Wells, and Stacey Cyphert

by Larry Welch

After plotting up the data from the March trip, I was ready to go back at the next opportunity. However, it seemed as if the weather was conducive to a Grappling Falls trip Saturday morning, so we geared up and headed into the cave. It didn't take long to see that the water level was way too high for such things, so we ditched some unneeded gear and headed out to survey the rest of the Piglet Passage. Mike and Marc were also headed in that direction, so we combined groups for a while. We eventually split not far from Rolling Hills Dome, where the other duo was going to survey some small side leads. We cut our gear back to the essentials at our dig from the previous month. Jay started putting on a hood, noting the extremely wet end to our previous survey. Neither Stacey nor I was very excited about putting on a hood, but it did seem sensible when I recalled our previous endpoint.

Once we got to the Brief Respit Room, we all crowded in like hogs in a trough trying to stay out of the water. Jay took lead tape, Stacey read the compass, and I was carrying a Pelican box to keep the priceless book dry. Jay was able to put the first station in a nice little ceiling crevice. Things went quickly downhill, as we were in near-sump territory thereafter. The hoods were a lifesaver, as we had just enough space to survey through. Just as we were approaching terminal chill, we popped into a reasonably sized room. It was the famed terminal room, complete with a sump, the DJ initials, and the initials from the Minnesota crew. The stream came out from under a rock pile that didn't look like it was going to move. We could feel air movement and swore we could hear water noises from the Frog Junction room which we knew to be close. The left side of the terminal room was blocked by a sandbar. On the far side of the sandbar, one could see what looked to be a crawl space that some digging could open. Having originally geared up for Grappling Falls, we had not brought any digging gear.

At least one digging effort is warranted here to see if the terminal room might not be the end of the line after all. It's amazing to realize how close some of the oldtimers were to discovering Wanda's Walkway many years before its time. Still, there is poetic justice in the division of spoils. Those not surveying or writing reports missed out, while the thorough folks like Schuman, Engh, et. al. were rewarded with a big discovery out Wanda's Walkway culminating in the thundering glory of Grappling Falls.

THE BECKER WATERFALL SURVEY

-or-

We came, we crawled, we surveyed.

Becker Quarry Cave, Dubuque County, Iowa
June 23, 1991
Mike Lace, Stacey Cyphert, and Jay Wells

by Mike Lace

We knew that the survey of this Dubuque cave was almost complete. This was the fourth trip into it in June and each trip had left us with the sobering realization that there was a lot more to be done. The Waterfall Passage, being the longest of the side passages, was the last area to be mapped. A long and elbow-grinding crawl led us to its end where it once connected to nearby Level Crevice Cave.

We made good time out to the end of the survey, not stopping to admire the lovely "squeeze on your side" type segments of the passage. The chip left by Marc and his party on the last trip was easy enough to find but it took up a little while to map the sloping side passage beyond it. We encountered the 20 foot deep test pit with the metal pipe across its top and many formations along the way before reaching the end of the passage.

The last passage to be done that day was the route to the Waterfall. Things went quickly before Jay had to crawl into a small side lead that of course had to stretch on for a ways. We finally wrapped up the day's work with a shot into a small room complete with a cold pool of water where the lead tape man (Jay) had to wallow. We were all a little chilly but the long crawl out took care of that. Upon reaching the entrance, however, we heard the voices of local kids in the quarry below. We ducked back into the cave for a bit until they moved on, not wanting to call any unnecessary attention to the cave or ourselves.

BECKER QUARRY CAVE SURVEY COMPLETED

Becker Quarry Cave, Dubuque County, Iowa
July 3, 1991
Marc Ohms and Pat Schenck

by Marc Ohms

Pat and I went into Becker Quarry Cave with plans on finishing the survey by mopping up a few small side leads. We needed 100 feet to reach my goal for the cave. We surveyed all remaining leads and got a total of 131 and reached and passed my goal. The total length of the cave is 4,531 feet making it one of the longer caves in Iowa. I would like to thank everybody that helped out with the project, could not have done it without you. Thanks.

WIEDENMAN'S: AFTER THE FLOOD

Wiedenman's Cave, Clayton County, Iowa
July 5-6, 1991
Larry Welch, Mike Lace and Jay Wells

by Larry Welch

Wiedenman's Pit has always proven to be a difficult proposition, and this time was no different. Portions of Clayton County had suffered from a massive rain and subsequent flooding early this summer. The landowner estimated he had received 13 inches of rain in 24 hours at his place (his rain gauge had overflowed so he wasn't sure). The result: 127 bridges out in Clayton County, a herd of cattle washed away, farm implements stacked like dominoes in Elkader, and the famous keystone bridge in Elkader nearly washed away. The aftermath proved to be quite sobering; in particular, the landowner's descriptions of Wiedenman's being "full to the brim and taking a stream the size of the Mississippi" would certainly make one think twice before attempting to wait out a storm at the base of the pit.

Mike and I got to the cave about midafternoon on Friday, expecting some work would be required to open the pit. This proved to be correct, so after scoping out the sinking streams and the new and the modified sinkholes up the draw, we got out the digging gear. If we hadn't been in the pit before, we might have spent the

whole day just looking for the pit (like we did the first time). Some large tree trunks barred our previous pathway into the pit, so we tunneled down right next to them, figuring we weren't going to budge them. We were nearly stymied by a large wood block that was too heavy to move. We chopped on it for an hour or so with my mattock (thanks Sue and Dave) until it was reduced to a size we could maneuver. Another stump managed to wedge itself in our tunnel somewhat later. Only hearty bashing with a crowbar could dislodge it and send it down the pit. This was the last major obstacle, and by dusk we had the pit opened and its ledges dug out and cleaned.

Jay showed up the next morning at breakfast, raring to go. Both Mike and I were dragging from the hours of chopping, heaving, and hauling the previous day and were glad to have a fresh body to help. Our previous rigging tree had washed away in the flood, as had our rope-wrapping log. Wetsuits were packed in a duffel in preparation for a venture into the infamous cesspool. I rigged on for the first rappel, intending to clean some debris that had snagged on a ledge fifteen feet below the mouth of the pit.

As I got down to the ledge, I could tell that something was wrong. There was a constriction in the pit at the level of the ledge. The pit had been much wider before, and after closer inspection, I determined that a large rock had wedged in the pit, hidden under a pile of debris that had accumulated during our cleaning the previous day. What to do? The rock was very stable. In fact, I spent quite a bit of time standing on it. There was enough room to squeeze past the rock on its far side and I could see that the rest of the pit was clear. However, this would have put a lot of strain on the rope, which would rub significantly on the rock. If the rock were to fall with someone on rope below it -- sayonara.

After hemming and hawing for a bit, we decided to pull the rope up onto the ledge so it (and attached caver) were not at risk from the rock. We were not going to descend the pit until the rock was dislodged. Since I was already there, I took the first digging shift, cleaning the debris off and exposing the offending slab. This done, one could see that very little was holding it in place despite its feel of stability. Jay took the next shift, using prybars to lever it out of place. He pried the near edge of the rock upward until it finally started to move, crashing with a tremendous roar to the floor over 100 feet below. We could finally contemplate dropping the pit in earnest.

Unfortunately, the rock-moving process had consumed a large part of our day. We didn't have the time for a full wetsuit push, but did want to at least see if any alterations had occurred to the bottom of the pit. Jay and I dropped the pit for a look around. The floor of the landing zone was probably eight feet higher from all the talus that had been knocked down the shaft. The cesspool, as usual, did not look inviting. What did look interesting was a lead up ten feet from the cesspool. We had noted it before, postulating that it connected to a similar-looking lead in the first dome past the cesspool. Both had been clogged with mud previously, so it was a pleasant surprise to see it blasted open as if a fire hose had been used. I climbed up and crawled in on my side. The crawl was tight and I was quickly snagged by my climbing harness on the walls. Backing out, I had Jay attack it sans harnesses. He was much more fresh than I anyway and was more likely to push the crawl.

Sure enough, Jay slithered into the Sidewinder Passage and just kept going. The going got a little easier after fifteen feet, but it was still a slow crawl. He followed the crawl to a fork, taking the left branch to a mud bank. With a little body-trenching, he slithered up into Sidewinder Dome, 50-60 feet high. Some digging leads existed, but no obvious exits. Next, Jay pushed the other fork, which required bellying through a puddle in the bedrock, extruding oneself through a narrow spot, then sliding ahead into a dome. This turned out to be the dome we had visited before

on the far side of the cesspool. Jay conned me into following him through the Sidewinder to the dome. It was exciting to be able to bypass the cesspool, but this was no bargain and I noticed that I wasn't exactly dry on the far side. There was plenty of flood debris in the domes. The pancake passage off of the second dome that Mike and I had spent time in previously had been eroded to a much larger size. There was still no evidence of a passage beyond the debris that led anywhere. The drain in the floor of the dome was indeed covered with a pile of debris. We had hoped to excavate here and open the drain we had glimpsed on an earlier trip, but we didn't have time to dig.

Jay was chilling by this time, and headed back through the Sidewinder. I made a misguided venture into the cesspool for a proposed shortcut. The flood had rearranged the garbage in the pool, forcing me back out and through the Sidewinder. The head-first exit is a little tricky, but Jay helped me avoid a full gainer upon exiting. Jay was very cold and headed out immediately. Mike had sent me down some dry clothing and had hauled up part of our gear. Still, by the time the rope was clear, I was shivering, myself. I finally warmed up halfway up the pit and we all escaped unscathed.

Clearly, the Sidewinder will be useful if not comfortable (Mike suggested Sidewhiner due to all of my complaining). The flood evidence has helped us understand the drainage of the system, but clearly a more thorough investigation is needed.

G'DAY MATE.
1991 CHILLAGOE CAVES EXPEDITION
by Bryan A. Bain



July 13, I winged my way to Australia via Kansas City, Dallas, Los Angeles, Honolulu, Sydney, and finally Cairns. The next morning we loaded into an old borrowed truck and proceeded to the small town of Chillagoe located in northern Queensland.

The 1991 Chillagoe Caves Expedition was sponsored by the Explorers Club of America and was led by Brother G. Nicholas Sullivan, past NSS president, co-author of Speleology: The Study of Caves, and world famous speleo-biologist. Other Americans included Edna Black who unfortunately was ill the intire time, and myself. We had one Dutch bloke, Frederik Bonestroo, an able climber. The two Chillagoe Caving Club members on the trip, Bob and Karolee Walcott, are actually former "Yanks" but moved to Australia 18 years ago. Tom Hayllard of the Sydney Speleological Society rounded out the group.

Chillagoe was once a booming mining city but is now only a two pub town. Nearby limestone tower karst riddled with caves has sparked recent interest, prompting the National Park Service to step in and develop a park complete with three guided cave tours open to the general public. Brother Nick has led expeditions here for ten years due to the unique and abundant cave fauna. Past trips have resulted in identifying many new cave adapted species (troglobites).

One of Brother Nick's long-term goals is to establish a speleology research station at Chillagoe. Negotiations with various agencies went very well this year. We also went caving every day for two weeks, mainly taking inventory of the biologically interesting caves. Most of the caves were abnormally dry which resulted in reduced sightings of cave critters.

Nevertheless, it was a fascinating time. The tropical tower karst geology is

intriguing. Two archaeological digs have produced aboriginal artifacts over 20,000 years old. All told, I entered 26 caves, including a virgin cave that we discovered in the Spring Tower area.

Afterwards, we headed off in separate directions. I stayed in Cairns for three days with Tom and Miriam Robertson, Chillagoe Caving Club members. They gave me Chillagoe caves info, arranged an abseiling (rappelling) trip, helped me get on a Great Barrier Reef cruise, and drove me to the airport at 7:00 a.m.

I flew back to Sydney where I spent a day touring the city. My hosts, Don and Grace Matts, members of the Sydney Speleological Society, arranged for me to visit the Blue Mountains of New South Wales with their son, Terry, who is a cave guide at Jenolan Caves National Park. I was introduced as a cave geologist from the U.S., received VIP treatment, and given complementary passes for five different cave tours during my two days at the park. The entire staff along with all the Aussie cavers I met were super. Can't wait to go back!

JULY COLDWATER TRIP

Coldwater Cave, Winneshiek County, Iowa

July 20, 1991

by Marc Ohms

Larry Welch, Jay Wells, and Marc Ohms

We were the only three there for the weekend and we decided to go downstream to the Sinus Passage to survey. When we got down there we were in a bank of fog. The passage was pouring out water and it was warm. When it hit the main stream water, it made the fog. We decided it best not to enter this passage and sat and relaxed in this warm water before returning to mainstream. We then went upstream to Beaver Boneyard in hopes of surveying a lead at the end. When we got there, we found it silted too much to enter. We returned to the mainstream and went further upstream to the "Lead on the Mud Bank" and surveyed it to a point where a rock blocks the passage. The passage goes beyond but also gets smaller. After completing that, we headed out of the cave. (It rained on Friday night which is why Sinus was rushing.)

A BEGINNER'S NIGHT OUT

Maquoketa Caves State Park, Jackson County, Iowa

Monday, July 22, 1991

by George Stewart

George Stewart, Beth Ann Miller, Lori Wilker, Kathy Thomas, Jeff Kernwein, and Tim Hinricher.

I left work Monday night, in a hurry to clean out my truck so everyone would fit. Having finished, I arrived at the meeting point a half hour late, only to take another person's vehicle. We arrived at the caves about 6:30 p.m. After a 15 minute equipment check we proceeded down to the main entrance.

The excitement level remained high, despite not being able to get very far into the holes and crevices into which they so eagerly wriggled. We continued on to Steel Gate Passage where the fun really began. They all had to look in every lead, even if it went nowhere, and the comedy of turning around and changing places was an act worthy of the best Vegas show.

Everyone was careful and conscientious of the stalagmites, stalactites, and columns, which grew in size and number the further we went. Just as I thought we had reached the end, we came upon a 25-30 foot drop through a tight squeeze. With what appears to be a going passage, the necessity of ropes and experience halted our pro-

gress. (To get to the area I just mentioned, it was necessary to crawl over stumps of 15 to 20 stalagmites. Nothing else of the formations remain. I have participated in digs - but where do we draw the line on exploration? Does the added footage justify the removal of formations?)

In any case, we exited the cave and retired to McOtto's in Anamosa for pizza and soda, where I tried to answer all their questions. We had spent two hours in the cave. Everyone had a great time and wants to go back again. They all showed interest and we may have one or two new members from this excursion.

THIRD TIME'S A CHARM

April Cave, Winneshiek County, Iowa

July 27, 1991

by Scott Dankof

Scott Dankof, Larry Welch, Mike Lace, and Stacey Cyphert

They say "Third Time's a Charm". They also say "Three Strikes and You're Out". This was our third attempt at a photo trip in April Cave. The first two times we were rained out, but this day looked great.

We all suited up and headed for the entrance. Marc was elected to open the gate. We waited in the small entrance room while he cheerfully opened it. After crawling through the small opening, you entered a section of crawlway with just enough water to float while pulling yourself along by your hands. After about 100 feet, I thought to myself, this isn't so bad. Then reality set in and we came to what April Cave is famous for; low, wet, coverall snagging, bedrock crawling.

Eventually the crawlway opened up to stoopwalk, then walking passage. As we went on, a distant rumbling sound could be heard. This was Lester Falls, a nice 3 foot waterfall cascading over a flowstone slope. Past this was Ede Falls and then came the impressive Boom Room. This was a large dome room with some nice rimstone dams on one side of the room. We took some photos here, then continued on. The passage was mostly stoopwalking with some places where you could stand up. We stopped at the Columbine Room and the NSS Pipe Organ for more pictures and then headed up the passage toward Cathedral Dome. A few of us climbed up into the dome to look around. Larry commented on an impossible looking lead high up on one wall. Some pictures were taken here and then it was time to head out. One more photo stop was made just downstream from Cathedral Dome. It's a section of passage noted for its ease of travel. The passage is pretty much a straight shot for its 100 feet or so of walking length. We strung out three people with flashes at various points along the passage. We got some good shots as soon as Stacey figured out his flash unit.

I don't know how it happened but on the way back I was elected to lock the gate. This is not as bad as having to open it but runs a close second. It turned out to be a great trip. My new Pelican boxes kept all the camera gear dry and they were a big improvement over the 50 cal. ammo cans.

1991 IOWA GROTTO SUMMER PICNIC - SATURDAY

Timmen's Cave, Cleveland Circle Cave, Dubuque County, Iowa

August 3, 1991

by Marc Ohms

Marc Ohms, Gerda Hartman, George Stewart, Loren Schutt, Pat Schenck, Stacey and Rosemary Cyphert, Chris Beck, Scott Dankof and his daughter

We first went to Timmen's Cave. Everybody made it to the second entrance and

turned around. Scott took some photos using multiple flashes. After everyone was done roaming around in the cave we went for a quick lunch at Hardee's.

After lunch, we went to Cleveland Circle Cave. The brush had grown since I was here last and we did a little bushwhacking to find the cave entrance. Once found by Stacey, we all followed his voice and reached the cave. The cave is relatively friendly and muddy, and despite a few comments, I think everybody had fun. After exiting the cave, it was back to the picnic grounds to start to prepare food.



Suiting up at the entrance, Timmen's Cave, Dubuque County, Iowa.
Photo by Scott Dankof

SOME CAVING AT THE GROTTA PICNIC

Becker Quarry Cave, Dubuque County, Iowa
August 3, 1991

by Mike Lace

Mike Lace, Bryan Bain, Charlie & Zac Winterwood, Jay & Allissa Wells, Doug & Nathan Schmuecker, Neal Hines, Darren Miller, Yamal Rajbhandary, Doc Lewis, Gary Engh, Jeff & Lynette Dyer & family, Dave, Michelle & Betty Cleveland, Alan & Bill Mulder, Paul, Jeffery & Chris Rechter, Jim & Leslie Sinning.

(Sorry if any names are misspelled but I had to go by your signatures)

We really couldn't argue with the weather. Once again we lucked out with a beautiful summer day and plenty of people interested in going caving! While Marc took a group to Timmen's Cave, the rest of us drove the tortuous route through Dubuque to Becker Quarry Cave. Even though we had a large group, Becker is a cave that can easily accomodate that many cavers with over 4500 feet of passages to explore.

There were six of us prepared to make our way out the Waterfall Passage through

some of the more sporting crawlways while the other cavers toured the other passages. Bryan, Neal, Darren, Yamal, Zac and I headed out to take a look at the "Waterfall" and the formations found in that part of the cave. Somehow I was conned into dragging a camera all the way out there although I really didn't remember saying that I'd bring it all the way back. All of us, including the camera, made it out without too much trouble.

The other cavers spent the afternoon touring the many twists and turns of the other lengthy side passages. Most folks then took a tour of Timmen's Cave before the picnic while the rest of us returned to camp.



The Official Grotto Picnic Cake by Deb Gerald's. Photo by Dankof

MORE STUFF AT THE PICNIC

Swiss Valley County Park, Dubuque County, Iowa
August 3, 1991

by Mike Lace

The cave trips during the afternoon were rounded off by the evening picnic. The theme of the cave trips seems to have been that the kids ran their parents into the ground. Many found this to be a sobering experience. There was no shortage of food or hungry cavers but we still managed to have plenty of food left over. One of the highlights of dessert included a cake complete with the Iowa Grotto logo on the icing, courtesy of the Gerald's family. The meal was followed by the Caver Auction, back by popular demand, that featured a wide variety of "priceless" items accompanied by aggressive but friendly bidding. The highest head count during the picnic was 57; that's almost double last year's turnout.

There were brief questionnaires handed out at the picnic, calling for ideas about next year's picnic so if you haven't turned them in yet, please do or just drop us a note about where you'd like to have it and what you'd like the picnic agenda to include. Thanks again to all who came and special thanks to those who helped out with the cave trips and brought auction or picnic items. See you next summer!



Mike Lace conducting the Caver Auction which took in enough to pay for publishing for the rest of the year!
photo by Scott Dankof

1991 SUMMER PICNIC - SUNDAY

Maze Cave, Ewing Diggings Cave, Picnic Pit, Dubuque County, Iowa
August 4, 1991
Marc Ohms and Cris Beck

by Marc Ohms

On Sunday, everybody caving went out to the Timber Range Caves. Jim and Leslie Sinning and Chris Beck entered Maze Cave via the 87 foot vertical shaft. Leslie came back up and I went down, then Jim came up. Chris and I then went exploring. I now know why they called this cave Maze Cave. It is very mazy and all the passages look the same. We wandered around for a good hour before exiting. We then walked over to the small entrance of Ewing Diggings and entered. At the other entrance, the others had a rope rigged in a shaft for beginners to rappel into and walk out through the cave. Doug Schmuecker was belaying them from below. After that, we rigged a rope in an unchecked shaft. Chris Beck went down and reported passage off the bottom. After arriving back up top, he reported a 35-40 foot drop and about 50 to 60 feet of passage at the bottom. He named it Picnic Pit. Bert Jagnow went down and explored the new cave but nobody else could be talked into it so we derigged the shaft. After that, everybody left for home ending the very fun and successful summer picnic.

LEAD CHECKING IN NORTH BUENA VISTA

Unnamed Mine, Clayton County, Iowa
August 15, 1991
Marc Ohms and Loren Schutt

by Marc Ohms

I met Loren and the landowner in North Buena Vista and proceeded to the cave site. It did not take Loren long to locate the mine shaft that we were to check out. We grabbed our gear and rigged the pit. I went down the 65 foot shaft and after reaching bottom, informed Loren that there was indeed passage and he rappelled in. Once down, we explored the passage going to the east and it ended after 80 feet. We turned around and went into the passage going toward the west. This was the main passage as it went for about 300-350 feet, mostly walking size. The cave was mined as the Dubuque caves were and this cave also was in the Galena Dolomite. No traces of ore were seen. While ascending, we noticed passages leading off at half way up the shaft. While I was ascending, I swung over to the east passage and still did not see the end of it. I then swung over to the west passage and this also kept going. I decided to save them for the next trip. In the west passage, there was the head of a large mining pick. The landowners are checking for a possible name of the mine, and if not successful, the job is up to Loren.

A COMFORTABLE COLDWATER SIDE PASSAGE?

Coldwater Cave, Winneshiek County, Iowa
August 16, 1991
Mike Lace and Larry Welch

by Mike Lace

We drove up early Friday night for a brief survey trip to the nearest incompletely surveyed side passage - The Tobogan Ride. We had kept an eye on the weather reports for any imminent signs of rain because the Tobogan Ride has been known to flood after a good rain. Years ago, one caving party was forced to abandon gear and make a hasty exit to the main stream to beat the flood waters.

It must have been two years ago that Larry and I had found ourselves beginning the resurvey of this actively draining side passage (the original survey notes are long lost) and had found a stoop-to-crawl passage complete with rimstones and plenty of chilly pools of water. On that previous trip, we had managed to survey 150 feet or so to where the passage showed little sign of getting much larger before tying off. We now crawled in to our last station and began stretching out the tape in hopes of chalking up the 350 feet needed to put Coldwater Cave over the 14 mile mark.

Surprisingly, the passage didn't wind back and forth too much and actually became a reasonable stoopwalk for a change. Clusters of soda straws were passed on the way and the base of the walls became long masses of flowstone. The rimstone dams never altogether disappeared, if anything, they became more frequent. It was hard to imagine rushing out of this passage without completely destroying both shins and knees in the process.

Eventually, my hands and feet started to get "too" cold so we tied off the survey in comfortably going passage after over 400 feet from our starting point. The Tobogan Ride is reported to go several hundred feet to a flowstone restriction but it will have to wait a bit before we finish it.

Coldwater Cave now stands at over 14 miles of surveyed passage. There are still side passages left to map and the survey work there and in more distant reaches of the cave will continue to help us learn more about Iowa's longest cave.

BEYOND THE SPOUT IN THE JFI PASSAGE

April Cave, Winneshiek County, Iowa
August 19, 1991
Larry Welch and Mike Lace

by Larry Welch

Despite the fact that Mike and I had already been in wetsuits twice on this fine weekend, we had designs on a visit to April. In particular, we wanted to have a better look at the JFI Passage, which looked to be one of the better leads in the cave. Gary Engh and Lowell Burkhead were planning to check some leads on the surface nearby and I trust one of them will report on their findings separately.

The trip into the cave was an odd one. Minimal bat activity had been observed when we visited the cave in July, but it was a veritable shooting gallery this time. Even in the worst stretch of the crawlway, they were zinging past like sniper's bullets. Many of the ceiling crevices that we wanted to rest in for a moment were already occupied. I'm guessing that they had heard that Lowell was back and were excited, hoping to witness another little green men/glasses in the pond epic.

The eerie sounds and sublime beauty of the middle portion of the cave were still there. When we got to the JFI Passage, we unloaded packs and slithered on in. Both of us weren't moving very well, but we were determined to get some survey nonetheless. We hurdled the spout and found the survey marker we had left behind a couple of years ago in the company of Mike Nelson. The shots were short and very wet. Just as we were getting cold, we hit a low section that required me to remove my helmet. I recognized this as the spot I had turned around at a few years back while checking out the passage. It opened on the other side to reveal a short section of low airspace. On the far side of this was an excellent spot to tie off the survey, so we did. The passage continued at a passable size ahead, and will require another trip. Unbelievably, after 24 sloppy meters of survey, the JFI is probably still the best lead in the cave.

When I got to the main passage, I was whipped, so we dragged out of the cave. The trip out was slow and peaceful. The voices were still with us, but the bats had settled down, presumably having realized that Lowell wasn't coming in after all.

COLLECTING WEED SEEDS

April Cave, Winneshiek County, Iowa
August 19, 1991
Lowell Burkhead, Gary Engh, and Babe, the tripeded speleohound

by Lowell Burkhead

Larry Welch had done an overlay of the April Cave lineplot map on a topo map and it showed Nemo Dome in the area of some sinkholes. We went up to do some surface walking to see what they looked like. We headed into the woods down the drainage channel and quickly came to a sinkhole. It had a six inch diameter hole going down that takes the water. It is stabilized by a few old rotting logs. There is no rock showing but there is also no junk in the sink. The digging would be easy with posthole diggers. This sink would show little promise except for its proximity to the cave. We then walked the rest of the drainage channel and found no promising sinks. We walked on deer trails most of the way and Babe and I both got covered with all sorts of stick-tites and weedseeds; Gary seemed to be immune. (The teflon caver) When we got home, I found a deer tick on Babe so be advised that they are in the area although this one wasn't carrying Lyme disease.

WILLARD'S WELL

Willard's Well, Allamakee County, Iowa
August 19, 1991

by Larry Welch

Lester Tezlow, Larry Welch, Mike Lace, Gary Engh, and Lowell Burkhead

Lester Tezlow has a knack for locating caves, and this day was to be no exception. Lester took us to an Allamakee County farm where the owner told us of an open pit at the bottom of one of his many sinkholes. After finding several with bedrock exposed but no pit, Gary and Mike finally found one that was partially open. It was too small for a caver to fit through initially. A dropped rock confirmed the presence of a pit, so we started moving debris. We were initially able to make progress but some wedged rocks stymied us. Gary and I together couldn't heave them out. The "obstruction removal kit" of Lowell's couldn't break them. Only when we resorted to Lester's "Norwegian plier wedge" method could the stones be moved.

At this point, a caver could be stuffed into the pit. That caver ended up being me as I was the only one who had vertical gear. After a false start chimneying, a rope was rigged and I rappelled in. The drop was about 30 feet to a dirt crevice floor. Neither end of the crevice went anywhere, the only outlet being a drain that was filled with dirt and a dead mouse. There were some pretty flowstone deposits and a few stalactites hanging in the corners despite the dryness of the pit. All in all, a very nice little pit that would make a good novice pit if the entry were a little wider. I got to see the pit twice after I dropped my flashlight on the way out. Thunderheads were gathering as we headed back to the cars; it was time to head for home.

THE SUNDAY AFTER

Coldwater Spring, Skunk Cave, Dunning Spring, Dry Cave, Glenwood Cave, Winneshiek County, Iowa

August 19, 1991

by Marc Ohms

Marc Ohms, Pat Schenck, and Chris Beck

It was the Sunday of Coldwater weekend and quite a beautiful day. We started out by hiking up to the Coldwater Cave resurgence (Coldwater Spring), which is very pretty. We then located and entered Skunk Cave. The cave was very wet and sloppy making it a very fun trip. We had heard about the "keyhole" but never had to go through it. We stayed high and apparently went right over it. We realized this once we were in the rear of the cave and we kept wondering where it was, and did not know until that evening when I looked at the map.

We then went into Decorah for lunch and then went to see Dunning Spring. We walked up to the entrance area and went into the small cave called Dry Cave. It is only 30 feet long and relatively uninteresting. The last stop was Glenwood Cave to show Chris and to check the water level which was way down. Hopefully we can get a survey trip going before long.

—(((((((I N T E R C O M))))))—

AVAILABLE BACK ISSUES

| YEAR | VOLUME | 1 | 2 | 3 | 4 | 5 | 6 | COMPLETE |
|------|--------|---------|-------|-----------------------|--------------------|------------|--------|----------|
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| 1966 | 2 | | | complete volumes only | | | | 1.60 |
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| 1968 | 4 | | | complete volumes only | | | | 3.45 |
| 1969 | 5 | \$1.35 | \$.90 | \$1.45 | \$1.90 | \$1.55 | \$1.30 | 8.45 |
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| 1973 | 9 | .75 | .50 | .30 | .40 | .40 | .30 | 2.60 |
| 1974 | 10 | \$10.00 | .50 | .40 | ---unpublished---- | | | 10.90 |
| 1975 | 11 | 1.05 | .60 | 1.00 | 1.35 | .55 | .40 | 4.95 |
| 1976 | 12 | .30 | .35 | .60 | .55 | .85 | .90 | 3.55 |
| 1977 | 13 | .90 | .75 | .95 | .85 | .70 | .35 | 4.50 |
| 1978 | 14 | .50 | .40 | .45 | .50 | .55 | .45 | 2.85 |
| 1979 | 15 | .75 | .75 | .80 | .60 | .60 | .60 | 4.10 |
| 1980 | 16 | .70 | .85 | 1.05 | .80 | 1.00 | .85 | 5.20 |
| 1981 | 17 | .70 | .75 | .55 | .55 | .40 | .45 | 2.70 |
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| 1987 | 23 | 1.50 | .95 | .90 | 1.30 | .70 | .55 | 5.90 |
| 1988 | 24 | .90 | 1.10 | 1.15 | .90 | .85 | 1.10 | 6.00 |
| 1989 | 25 | 1.00 | .70 | .80 | 1.50 | 1.40 | 1.00 | 6.40 |
| 1990 | 26 | .80 | 1.25 | 1.30 | 1.30 | 1.00 | 1.35 | 6.40 |
| 1991 | 27 | 1.15 | .75 | .90 | 1.55 | | | |

The above list includes over 1800 pages at 5¢ per printed page with blank sides free. That's a stack over six inches thick. If we owe you some of these because you were a member or an exchange, let us know. Send all orders to the INTERCOM editor.

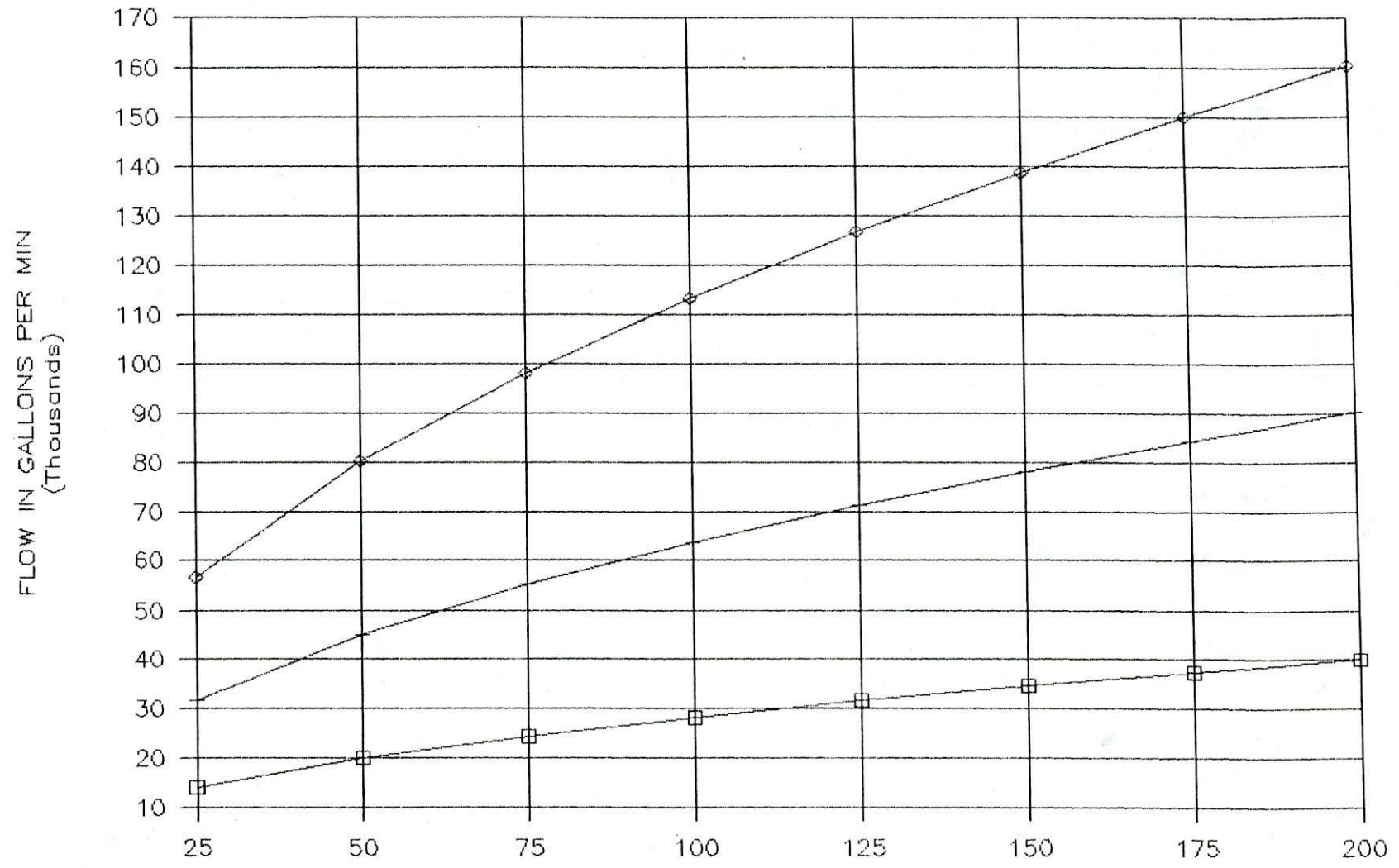
ARTICLES

HOW MUCH WATER WOULD A CRAWLWAY TAKE, IF A CRAWLWAY WOULD TAKE WATER?

by Lowell Burkhead

A great deal of time and effort has been spent in recent years looking for enterable size passage at the bottom of pits in sinkholes. The success has been little and none even though some of these sinks take huge amounts of water and drain large areas. The amount of water indicates to some people that enterable passage has to exist. I set out to find out if this is fact or wishful thinking. I found that it is very little of the first and quite a lot of the second. The following graph shows how much flow in thousands of gallons per minute three different size passages could take with a head of water from 25 to 200 feet high.

CHART — FLOW (GPM) VS. HEAD (FT)



□ 12" DIA OPENING + 18" DIA OPENING ◇ 24" DIA OPENING

Even at low head pressures, huge amounts of water can be pushed through even the 12 inch diameter opening. In most cases, we don't know what the head is because we don't know how full the pit gets. In other cases, we can see that it fills to the top because of all the organic mater plastered on walls and ceiling. Some of the pits fill up and the sinkhole fills up and overflows but yet we still find ourselves down there digging in the muck for passage. My conclusion is that we are unlikely to find passage on the basis of water consumed since interable size passage will take more water than is likely to be available for testing. The following chart shows how even a small drain will take large amounts of water. These represent the amounts of

| Water Head height ft. | Nozzle Inches diameter | Gal/Min flow |
|--------------------------|---------------------------|-----------------|
| 150 | 1 | 240.59 |
| 150 | 2 | 962.34 |
| 150 | 3 | 2165.27 |
| 150 | 4 | 3849.36 |
| 150 | 5 | 6014.63 |
| 150 | 6 | 8661.07 |
| 125 | 1 | 219.62 |
| 125 | 2 | 878.49 |
| 125 | 3 | 1976.61 |
| 125 | 4 | 3513.97 |
| 125 | 5 | 5490.58 |
| 125 | 6 | 7906.44 |
| 100 | 1 | 196.44 |
| 100 | 2 | 785.75 |
| 100 | 3 | 1767.93 |
| 100 | 4 | 3142.99 |
| 100 | 5 | 4910.92 |
| 100 | 6 | 7071.73 |

water that more commonly are seen flowing into a sinkhole when people are saying, "That's got to be wide open". The only way to know is to know how high the head is or how full does that pit get with a given amount of flow. When the head and the flow can be measured, then we can look at the graph and see that the passage size is too small to be enterable. At high heads, there is enough pressure to push large amounts of water through mud plugs and rubble

If all this data is worth nothing, we already know how often we do find going drain passage that connects to stream passage and a spring. The answer is, twice, so far, and one of them was probably modified. Digging in sinkholes will sometimes find upper level cave passages and worthwhile upper level caves, but if you want to find real caves, dig in springs, not sinks.

Much thanks to Lew Winchip M.E. He is a mechanical engineer at Rockwell who generated all this on his computer over lunch hours. He also gave me the formula but I couldn't make it work. He is right often enough that I trust his results.

(LATE) IOWA GROTTO MEETING MINUTES

Regular meeting July 24, 1991

The meeting was called to order by Vice Chairman Marc Ohms at 7:38 p.m. in room 125 of Trowbridge Hall. The secretary was late so the minutes were read and approved after the future trips. TRIP REPORTS: A tourist trip at Maquoketa Caves was reported on by George Stewart with several signs of vandalism noted. Marc Ohms reported on a survey trip to Maze Cave which netted approximately 800 feet and about 400 feet left to survey. Weidenman's Pit was dug back open by Larry Welch, Mike Lace, and Jay Wells. Several notable changes occurred after the recent flooding in the cave. Marc Ohms reported that the Becker Quarry Cave survey is now completed with 4531 feet surveyed and the map is done. Coldwater Cave was visited by Larry Welch, Marc Ohms, and Jay Wells. The survey trip to the Sinus Passage was scrapped after a large flow of very warm water was noted at the entrance of the passage. A small passage was surveyed which brought the total footage to 70 feet shy of 14 miles. Larry Welch and Mike Lace went to Cave Canem and Anderson Cave the following Sunday. Marc Ohms reported on an attempt to lower the water level at Ozark Spring. FUTURE TRIPS: Sept. 6-7, a vertical training class will be held. Sept. 8, a vertical rescue class will be held. August 3-4 is the annual picnic. August Coldwater is the 17th. August 16-18 is the MSS Cornfeed. OLD BUSINESS: The picnic was discussed and signups were mentioned. Marc Ohms mentioned that the cave map book may soon be available. A new membership list will be published soon. NEW BUSINESS: Chris Beck reported on plans in Illinois by the state

to seal old lead mines. There was a discussion on possible harm to the bat populations. Lowell Burkhead distributed a new INTERCOM back issue list. Jay Wells reported on an upcoming possible hypothermia study in Coldwater Cave. A guide book will be offered at this year's picnic. Car-pooling at the picnic to the caves will be mandatory this year. The grotto expresses sympathy to grotto member Gwenne Hayes for the untimely death of her husband, David Hayes. The meeting was adjourned at???

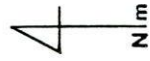
Regular meeting August 28, 1991

The meeting was called to order at 7:30 p.m. by Chairman Mike Lace in room 125 of Trowbridge Hall. The minutes of the previous meeting were read and approved. The Treasurer reported that \$335.19 was received after expenses from the picnic. TRIP REPORTS: Mike Lace reported on a survey trip into Coldwater Cave. 450 feet was surveyed in the Toboggan Run. Coldwater Cave is now over the 14 mile mark. A preliminary study and the locations for the hypothermia study was attempted at Coldwater in August. Marc Ohms, Pat Schenck and Chris Beck went and checked Skunk Cave, Dunning Spring, and Glenwood Cave Sunday following Coldwater. Mike Lace and Larry Welch surveyed a passage in April Cave. Mike Lace reported on a noticeable increase in the Bat population at April Cave. Lowell Burkhead reported on some lead checking of sinkholes near April Cave and also in Alamakee County where a pit was found and dropped by Larry Welch. Mike Lace and Marc Ohms reported on the picnic cave trips which included Becker Quarry, Timmens Cave, Cleveland Circle Cave, and the eight caves in the Timber Range Area. Loren Schutt reported on a trip at an old mine near Buena Vista. The shaft has several passages on the way down the 60 to 65 foot drop and several hundred feet of horizontal passage at the bottom. Chris Beck reported on some of the old mines that were checked prior to the state capping of some of them in the Galena, Ill. area. Greg McCarty reported on a newly found crevice that he named Step Lightly Crevice near a quarry. FUTURE TRIPS: Hodag Hunt in Wisconsin. A beginner vertical class the first weekend of Sept. A to-be-announced trip for lead checking in Jones County and possibly to Searryl's Cave. OLD BUSINESS: This year's cave mapping effort is now at 17 maps this year. A special THANK YOU to all who have participated. A correction was noted on the misspelling of Yauslin Cave in the meeting minutes. The INTERCOM editor explained that there hasn't been a trip report or a cave file sheet turned in to check the secretary's spelling against. NEW BUSINESS: Letters of resignation from two former members were discussed. Secretarial note: Their absence from the Iowa Grotto will be missed. The meeting adjourned at 9:12 p.m.



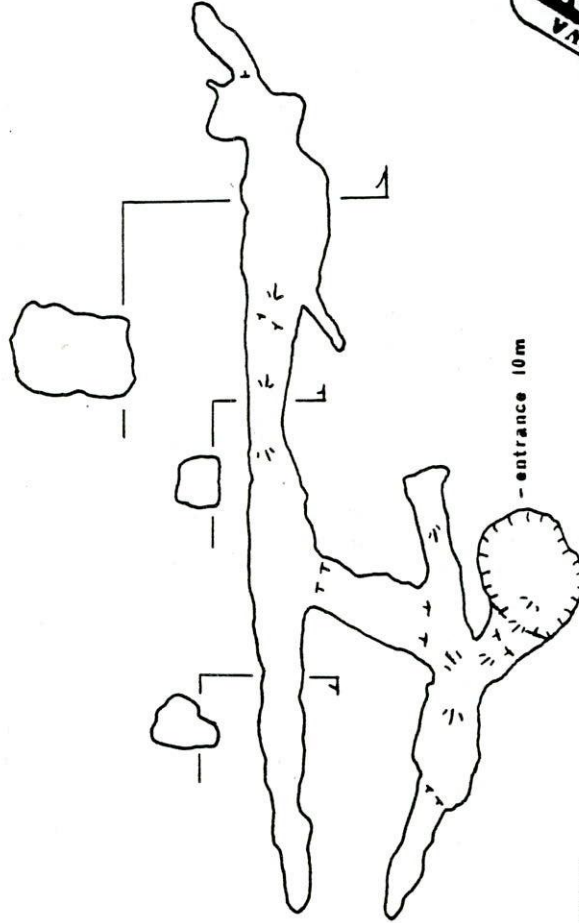
Picnic Pit

Dubuque County, Iowa



0 meters 5

total length: 30m



compass & tape survey
Ohms
Schenck



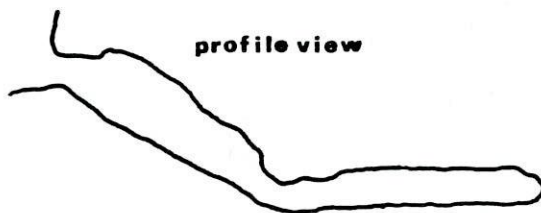
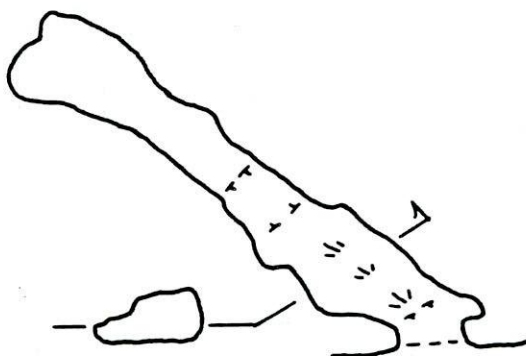
Ohms

Forgotten Hole

Dubuque County, Iowa

0 meters 3

4
N m



profile view

compass & tape survey

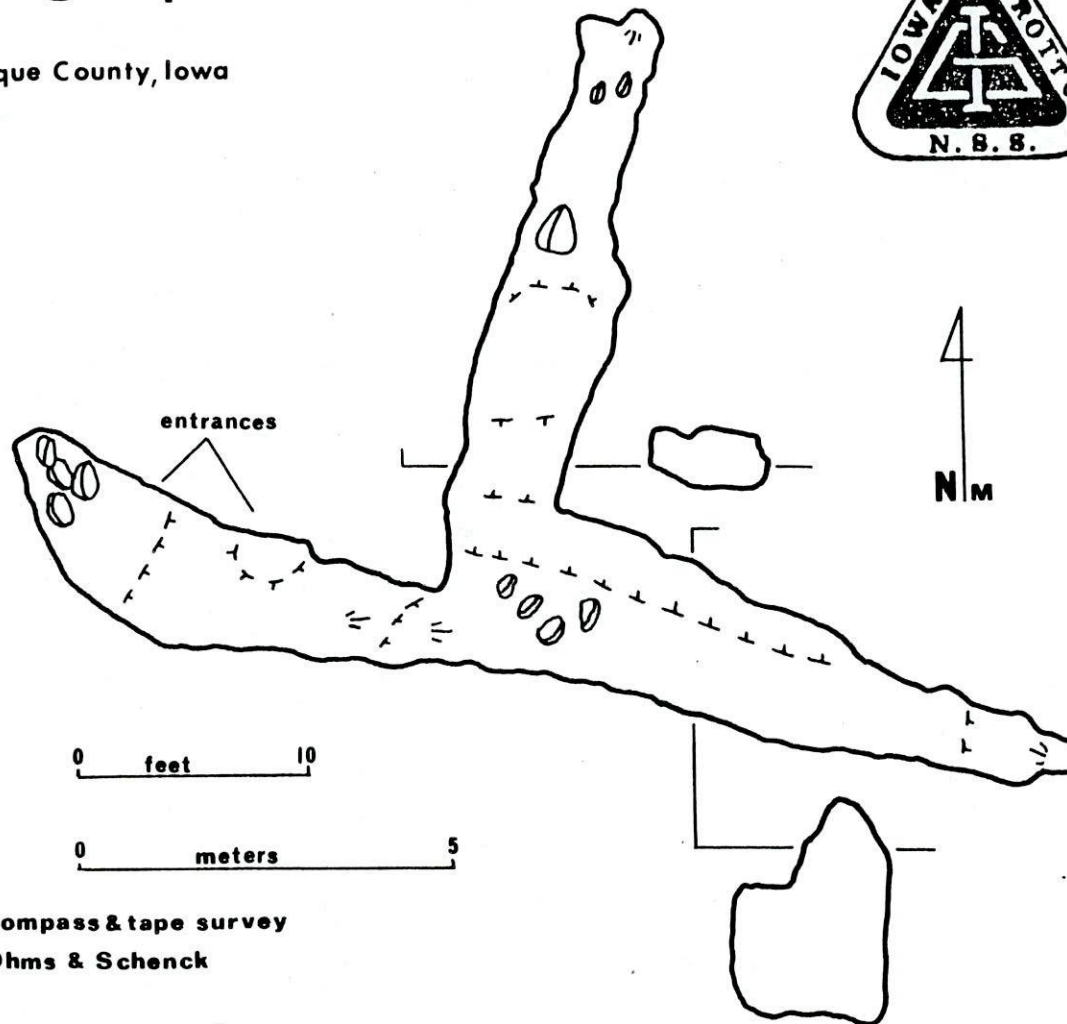
Ohms & Schenck

total length = 6.3m

Ohms

Rising Hope Cave

Dubuque County, Iowa



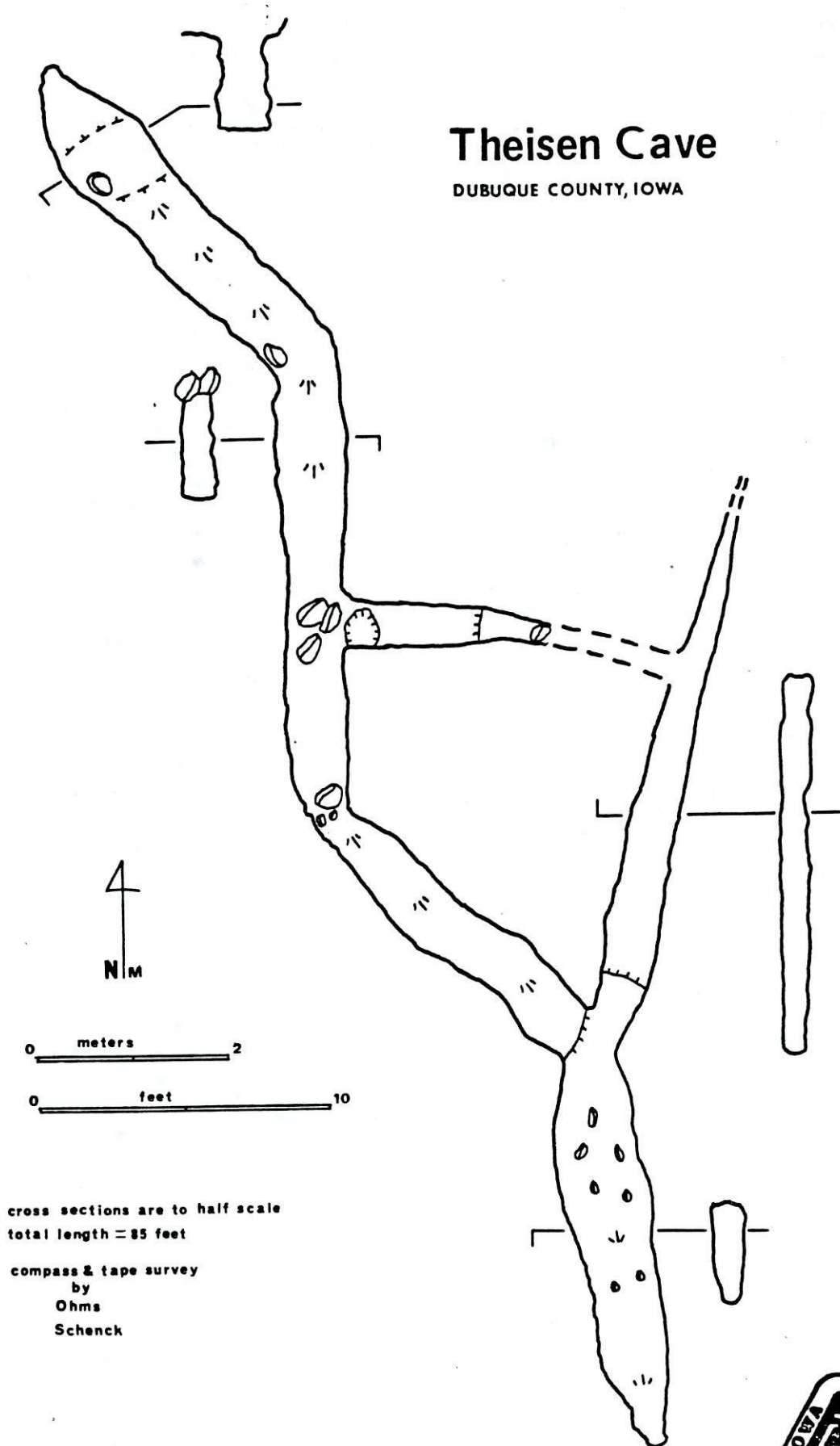
compass & tape survey
Ohms & Schenck

total length : 69 feet

OHMS

Theisen Cave

DUBUQUE COUNTY, IOWA



cross sections are to half scale
total length = 85 feet

compass & tape survey
by
Ohms
Schenck

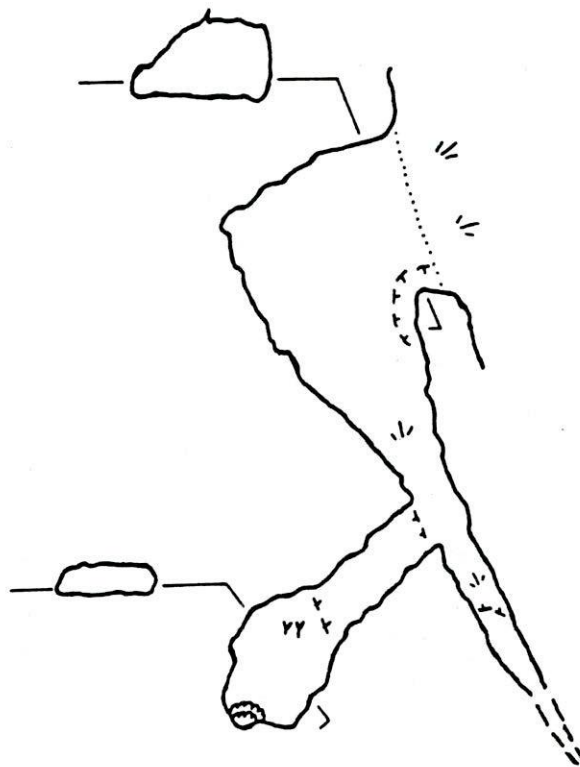


Ohms

Fern Cave Jackson County, Iowa



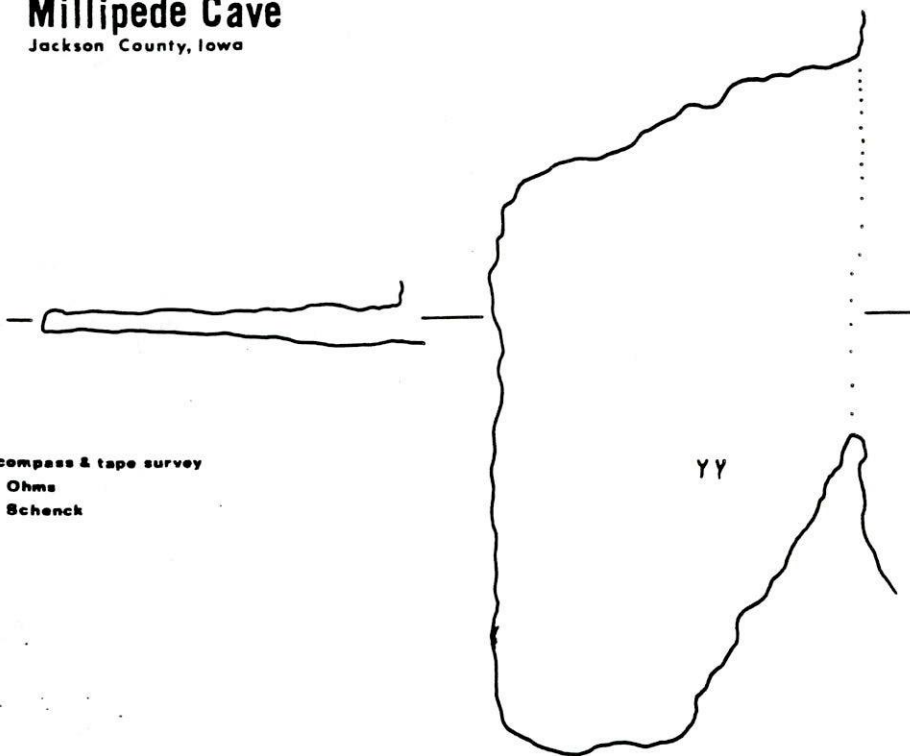
0 meters 5



total length: 16 meters

Millipede Cave Jackson County, Iowa

compass & tape survey
Ohms
Schenck



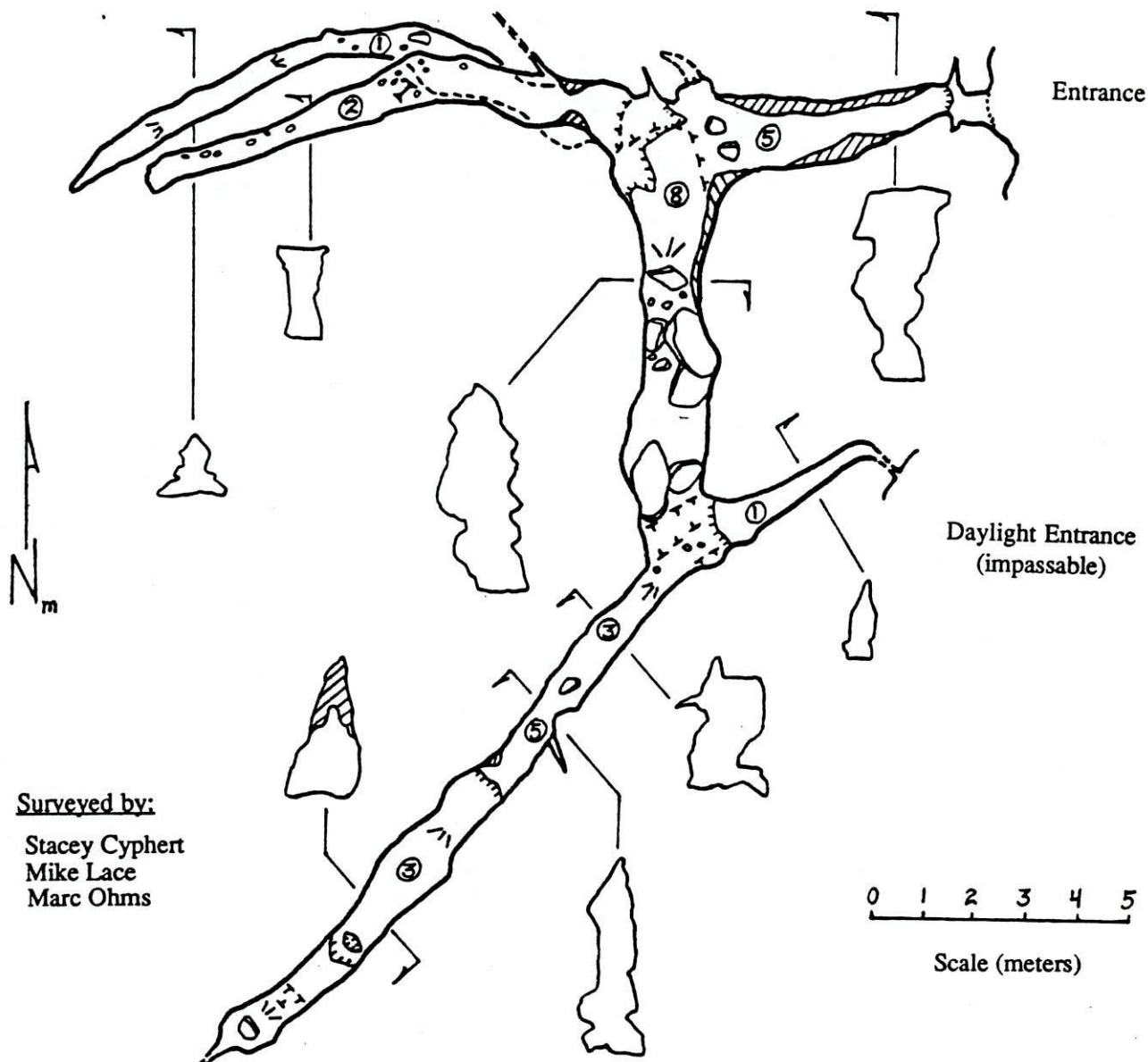
total length: 8 meters

Ohms

Train Cave

Dubuque County, Iowa

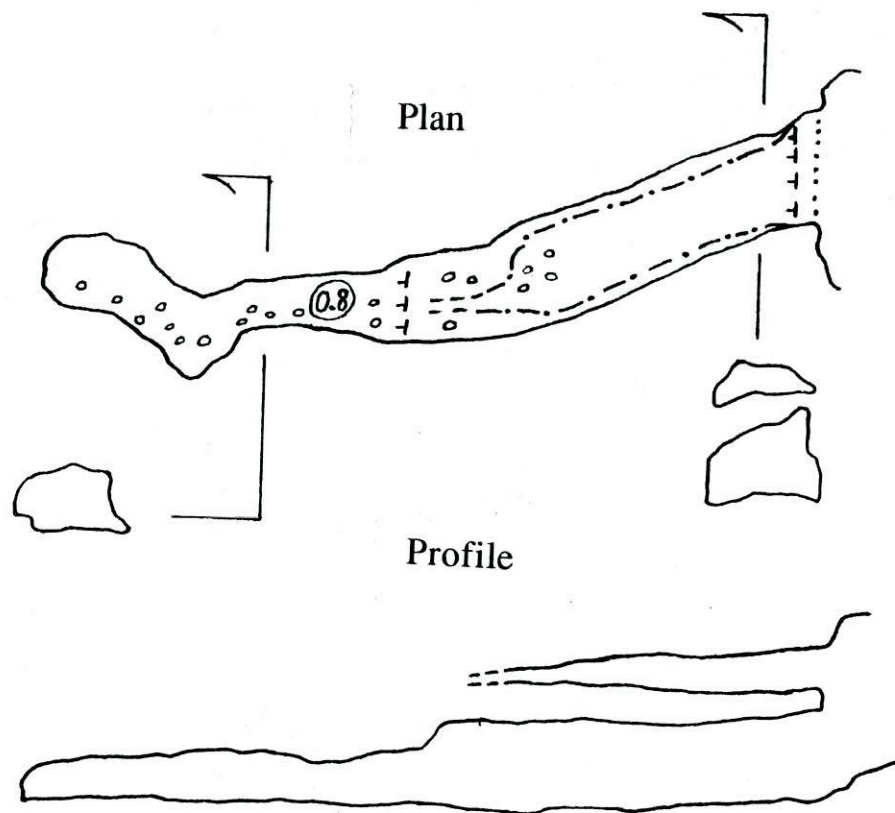
Surveyed Length = 56.58 meters



Cartography by Michael Lace
June, 1991



Riverview Cave
Dubuque County, Iowa



Surveyed by:

Stacey Cyphert
Mike Lace
Marc Ohms

Surveyed Length = 19.35 meters

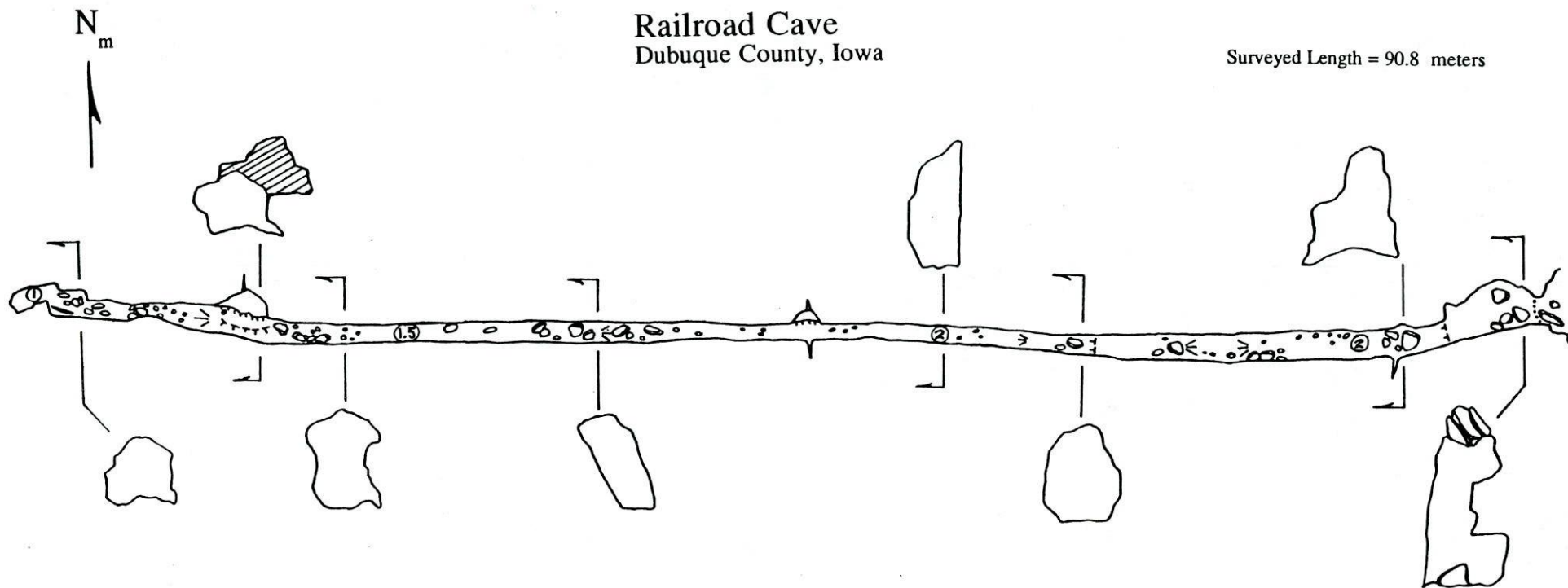
Scale (meters)



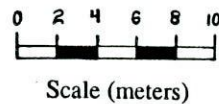
Cartography by
Michael Lace June, 1991

Railroad Cave
Dubuque County, Iowa

Surveyed Length = 90.8 meters



Surveyed by:
Stacey Cyphert
Mike Lace
Marc Ohms



Cartography by Michael Lace
June, 1991

