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Tom Hruska

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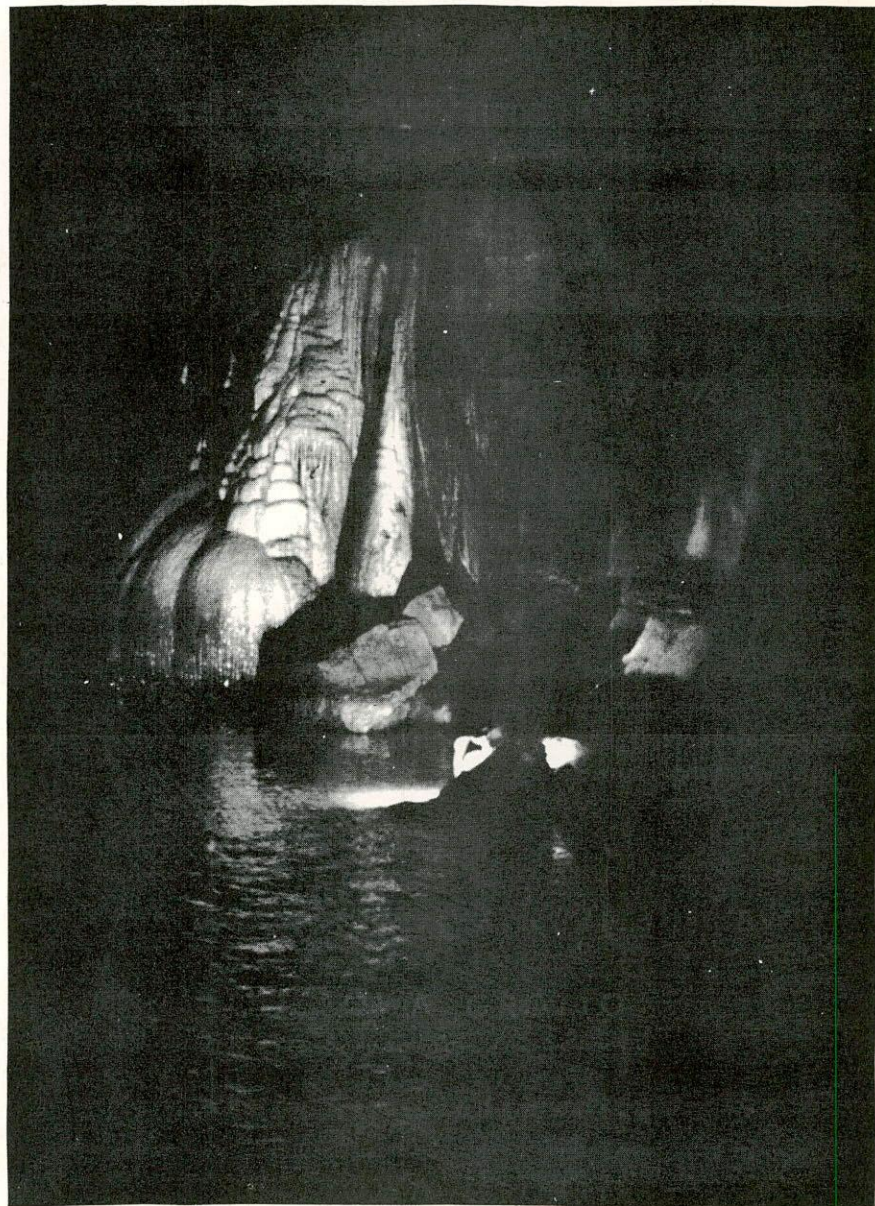
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Vol. 11 #3
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THE IOWA GROTTO
National Speleological Society

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IOWA GROTTO INTERCOM
P. O. Box 228
Iowa City, Iowa 52240

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Photo by Steve Hurley



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GROTTO MINUTES AT A GLANCE

Thomas Hruska, Secretary

Regular Meeting May 14, 1975

The vertical climbing practice session that was planned in lieu of the normal business meeting, was cancelled by mutual agreement of members attending the April 23, 1975, meeting. Several grotto members were planning to attend the theater organ concert in Cedar Rapids. Other grotto members pointed out that the practice session was scheduled during final exams at the university.

Regular Meeting May 28, 1975

Room 3407 Called to order: 7:55 PM Adjourned: 9:40 PM
Attendance: 7 members and 5 guests Treasury: \$163.00
The book binder is almost finished with the binding of the "Report on Cold Water Cave." Greg McCarty reported that his group did not have time to clean the formations in Cold Water Cave after completing their exploration trip through the cave. The Dubuque Survey work is progressing slowly. The Congress of Grottos resolutions were discussed by members attending the meeting. Each point was decided upon as to how the grotto will vote at the COG meeting at the convention in Angels Camp, California. Some convention literature and a schedule of events was included in the *I.O. Newsletter*. Greg McCarty reported on his trip to Cold Water Cave. Lowell Burkhead told about his visit to Hunts Cave. The mapping trip to Becker Quarry Cave was described by John Johnson. Loren Schutt told about his visit to a small cave at the Mississippi Palisades. Greg McCarty is planning a future trip to check vertical cave leads near Monona. After the meeting, the NSS slide show, "Caving Around Huntsville," was shown.

Regular Meeting June 11, 1975

In lieu of the regular business meeting, seven grotto members met in the north gym of the old university field house to use the climbing wall. The wall is twenty-four feet high and covered with plywood. The plywood sheets have holes cut in them and small wooden blocks attached to the front surface. By using these available hand and foot holds, one climbs to the top of the wall. All climbers were belayed from the bottom with a rope rigged through a pulley at the top of the wall.

Regular Meeting June 25, 1975

Room 3407 Called to order: 7:50 PM Adjourned: 8:30 PM
Attendance: 4 members and no guests Treasury: \$146.02
After the minutes were read and approved, Greg McCarty reported on the progress on issues of the *Intercom*. He also gave a trip report on a two-day trip to Decorah and elsewhere. Greg also mentioned a possible two-day trip to the Monona area on the weekend of June 28-29, 1975. Some discussion followed and the meeting was adjourned.

HISTOPLASMOSIS IN IOWA

Warren C. Lewis, M. D.

Histoplasmosis, the cave explorer's pneumonia has been the glamor disease of the past few decades. It is caused by inhalation of the spores of *Histoplasma capsulatum*, a dimorphic fungus found in the soil. It may cause a transient pneumonia when inhaled, or may invade the entire body with disastrous results. Histoplasmosis is not only an infectious, but also an immune disease in which the resistance of the host plays a vital role. The State of Iowa lies on the northwestern fringe of the North American "Histo-Belt". In spite of that geographic fact, Iowans have made significant contributions to the knowledge of this unusual disease.

In 1932 almost nothing was known about the clinical course of the disease. In that year two Iowa City physicians, Dr. G. H. Hansman and Dr. D. J. Schenken studied a man with indolent ulcers of his skin. These sores stubbornly resisted all treatment. Cultures were taken from these lesions that grew an unusual yeast-like organism. Although they did not know it at the time, these doctors seem to be the first to have grown the fungus histoplasmosis from a living person. The form of the disease that they studied is now known to be quite rare. A short time later their work was confirmed by other investigators and linked to Darling's disease.

Dr. Chester W. Emmons of the Public Health Service was born in What Cheer, Iowa. He seems to have been the first person to culture histoplasmosis from infected soil. This proved to be a difficult problem because of many spores and bacteria in soil specimens. Other fungi and bacteria in the soil would grow rapidly on the culture media and crowd out the pathogenic fungus. One hundred fifty-seven attempts were made before he succeeded in culturing histoplasmosis. He was a persistent man. Later he examined over eleven hundred small wild mammals before finding the first animal infected in nature with histoplasmosis.

When skin testing was developed, Iowans were found to show rather striking variations in sensitivity. Seventy percent of all people living along the southern border of the state were positive by the time they reached the age of twenty. Along the northern tier of counties only two percent were positive. Few, if any, of them knew when or where they had been exposed to the air-borne spores.

A few cases were traced by Public Health investigators. When members of a farm family in eastern Jackson County were found to be positive, infected soils were found near an outbuilding on the farm. Several Boy Scouts got sick after a campout in Linn County. Soil studies were made of the pasture woodlot where they had camped. Cultures were positive from soil and bark under a woodpile in the pasture. The boys had got wood from this woodpile for their camp fire.

A child in University Hospital in Iowa City was found to have histoplasmosis. Soil testing showed infected soil lay under a dog house in the child's playyard at home. In another study the fungus was found in a haymow in Cedar County in 1965. Undoubtedly other soil and dust samples have been reported positive.

Iowa's greatest epidemics occurred in Mason City in 1962 and 1964 when a bridge was being constructed over Willow Creek. A five-acre plot in the center of town was being cleared for the bridge abutment. Part of the site was wooded and was a starling roost. Heavy equipment was brought in to clear the trees and brush and to level the ground.

The first attempt caused twenty-nine cases of acute histoplasmosis. Three people died including the man who operated the bulldozer at the construction site. About five thousand citizens inhaled the dust from this

operation. They became positive on skin testing but did not know that they had an unusual illness.

The second attempt two years later resulted in eighty-seven cases. Thirty of these broke out with the irregular blotchy skin rash of erythema multiforme. This is often found with acute fungal diseases. They also had fever, chills, aching, sweating, and weakness. All of the victims had visited the downtown area of Mason City during the clearing of the starling roost in February. An additional six thousand residents became skin-test positive from inhaling the dust.

Afterward a large scale attempt was made to disinfect the site. A railroad tank car full of formalin was diluted and sprayed over the entire area. Followup tests showed that the fungus was killed on the surface. However, soil that was six inches below the surface was tested a year later and the fungus was alive and would grow readily from below the surface.

A unique study was made in Jackson County in 1955. Skin tests were performed on 3146 school children and thirty-eight soil samples were tested. The largest number of positive children lived close to Maquoketa Caves State Park. The tests suggested that the children were not infected at home because of the unusual distribution within the family. Younger children were affected as well as high school students throughout this area. Maquoketa Park contains numerous picnic areas and caves. Along the sides of Racoon Creek Valley are numerous shelter-type caves with names like Rainy Day Cave and Hernandos Hideaway. Some of these are dry and dusty. Bats are present in small numbers and are protected in the park. They have been observed flying and drinking from the flowing cave stream in the dead of winter. Infected soil specimens were found outside the entrance to one of the caves in the park. Other cave soils were not studied.

Another group of students who had positive skin tests were attending high school in the town of Andrew. The high school draws students from several townships. The younger brothers and sisters of these students remained unaffected. The research team knew of other instances when children had been infected in a school building or playground. They suspected that the high school building might have become infected. However, the town of Andrew is well known to Iowa cavers because of Hunter's Cave. This is one of the largest caves of eastern Iowa and also one of the most heavily visited. Many of the passages require crawling. There is a small bat population. The biology and physical characteristics of the cave have been studied by Iowa cavers. Without further evidence, the involvement of Hunter's Cave remains problematical.

Histoplasmosis is an illness of several forms. The acute pulmonary form is the one most often found in cavers. One or two weeks after breathing infected air the victim feels as if he had a cold or the "flu". He has a sore throat, cough, fever, and aching. These symptoms subside without any special treatment. A month or so later his skin test becomes positive. In a year, an x-ray may show small calcified nodules in lungs or spleen. These indicate the places that infection was located at the start. However, the patient has no harmful effects from these nodules.

By contrast, the advanced cases in Iowa Hospitals and Sanitariums have chronic lung disease. X-rays may show scarring, tumor-like masses or cavities. There may be a severe cough with much sputum, weight loss, and weakness. Some victims are incapacitated. No one knows why the disease is progressive and invasive in these patients. Perhaps there is some defect in the immune mechanism of the body tissues.

Over ninety percent of the outbreaks of histoplasmosis in this country are associated with birds and bird roosts. Blackbird and starling roosts are frequently found to be infected. The fungus is often found around outbuildings, pigeon lofts, unused silos, woodpiles, and especially old

chicken houses. The bird manure is rich in phosphates and nitrogenous compounds that stimulate the growth of the fungus. The manner in which the bird roosts become infected is not known. Birds do not appear to contract the disease in nature.

In the country of Mexico, epidemics are associated with the roosting places of bats rather than birds. Bats become infected like other creatures by inhaling the spores of the fungus. However, bat are quite resistant to the infection and may fly long distances after becoming infected. If the lymph nodes in the bowel wall become infected and ulcerate, the fungus is passed with the feces. Infected guano has been found in many bat-inhabited caves. The ancient, thoroughly decayed piles seem even more likely to be infected.

Many cases of histoplasmosis have resulted from digging in infected soils. It would seem prudent not to dig, sift, or otherwise disturb dirt that might be infected. Bats and other cave creatures should be left strictly alone. If exposure is unavoidable, then it should be very light until immunity is acquired. If one gets sick after exposure, he should notify his doctor of his activities.

In summary, several Iowans have made significant contributions to the knowledge of histoplasmosis. Bird roosts constitute a major source of infection and may infect entire communities. Some Iowa caves are infected. Iowa children may become positive from visiting and playing in caves. Activities should be planned to reduce exposure to infected soils to a minimum.

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PUSHING THE WATERFALL PASSAGE IN COLD WATER CAVE

Greg McCarty

May 11, 1975

Jim Blecker, Steve Hurley, Harold Herington, Bruce Baker, Greg McCarty

The title of this trip report is "Pushing The Waterfall Passage In Cold Water Cave". That could be a little misleading, because actually it was the Waterfall Passage that pushed us. Even our trog suits had trouble making it through the long trip. But I am getting ahead of myself, as a lot happened before we even entered this passage. Steve picked me up early Sunday morning and we took off for Decorah to meet the others. Jim had camped out Saturday night at Strawberry Point. Harold and Bruce were to meet him there and they would drive up to Decorah together. Steve was really tired, so I drove up to Decorah from Anamosa while he slept. It turned out later that Steve, Jim, and I each had gotten about three hours sleep the night before. We made very good time in spite of a light rain and arrived at Decorah well before the meeting time, so we decided to look at Siewer and Dunning springs before we went to the cafe. The water flowing from Siewer Spring was quite cloudy, while the water from Dunning Spring was quite clear. We got to the cafe five minutes before the meeting time, but the cafe was closed. We wandered up and down the streets for a while to see if the others were parked down the street, but we saw no one. We went back to the closed cafe and waited under a building overhang, to keep out of the light rain that was falling. We waited for an hour, wondering where the hell the others were, before they finally showed up. It turned out that they had been in Decorah all the time, arriving at the cafe a few minutes before we did. When they saw that the cafe was closed, they drove to the Colonial Kitchen to eat. That move cost a lot of precious time and didn't make me very happy. Steve and I hurried down to the other cafe to eat, then roared on out to the Kenneth Flatland farm to rejoin the others. Unfortunately it wasn't the smoothest ride. The road was under construction and left much to be desired. Steve had to drive fairly fast to keep from being bogged down by the mud, but that caused another problem when we hit an extremely large dip and bump. It ripped the muffler clear off the car. Nothing was left. We didn't stop to pick it up because we were afraid that we wouldn't be able to get going again. Steve's VW Squareback sounded like an undermuffled muscle car that a high school kid would be driving.

When we got to Flatland's, we were surprised to find that the others hadn't gotten there yet. It turned out that Bruce and his wife were checking on a place to launch their canoe. We quickly changed into our wet suits and descended the shaft into the cave. There was a little misunderstanding about what we were going to do first, but we finally decided to go downstream a ways and then return to the shaft so Harold and Bruce could leave. They were only going to stay in the cave for a while and then go canoeing with Bruce's wife the rest of the afternoon. We moved quickly downstream, admiring the many speleothems and other interesting features. During rest stops, Harold and Jim took slides. We had planned to go as far as the Well Passage, the side passage that is penetrated by a well casing, but we turned back about 400 feet from the Breakdown Passage. When we reached the Orange & Black Dome, Steve and I left the others behind so they could take some pictures. We took our time so that the others could catch up and checked out some interesting things in this part of the cave which we hadn't seen before. Steve climbed up a mud bank to a dirt filled passage, but the fill went all the way to the ceiling. Harold had been in the cave before up to the Well Passage, by diving in the spring entrance and going upstream. Steve and I had been upstream to the sump and downstream as far as the Orange & Black Dome. Jim hadn't been in the cave before.

Steve and I were admiring some helectites while waiting for the others to catch up when we heard Bruce calling us. When he got close enough, he told us that they had decided to turn back. At the place we turned back, about 400 feet upstream from the Breakdown Passage (about $\frac{1}{3}$ mile upstream from the Well Passage and about $\frac{2}{3}$ mile downstream from the shaft), the passage had changed greatly. Before it was 25 to 30 feet high with straight walls and a flat ceiling, but now it was 15 feet high with an arched ceiling and walls that slanted down to the water. There also was a large ceiling channel present. Steve and I plodded back upstream and before long we passed Jim and Harold again. We caught up with Bruce in Pothole Country, where he was resting. He mentioned that he had seen a fish near the end of Pothole Country. It was about ten inches long. He tried to catch it but it got away. I believe this is by far the furthest upstream that a fish has been seen. I decided to check out a side passage that had intrigued me on the last trip. There is a large rimstone dam and flowstone cascade at its entrance, so I climbed along the wall to avoid it. The passage is about 18 feet high and $1\frac{1}{2}$ feet wide for about 30 feet. Then the lower canyon is blocked by a pretty wall of white flowstone. At the top of the canyon is a phreatic passage with a flat ceiling, four feet high by seven feet wide. I tried to chimney up to it, but when I was nearly to the top I turned back because I was tiring myself too much. With the thick wet suit on, it took too much effort to keep from sliding back down. I made a couple attempts at climbing up the wall to the passage, but decided it was too slippery. Steve had gone on ahead to the shaft platform to check on some gear, so Bruce and I were doing some close looking at some of the larger flowstone formations. On the largest one we found several rows of tiny heligmites running down much of the length of the cascade. We tried washing some more of the hand prints off the flowstone (I described these in the trip report for the 3/29/75 trip into the cave) but didn't have much luck. One of the purposes of this trip was to clean these handprints off the formations, but it turned out later that we were too tired from the exploring to attempt it. I had brought items to do the cleaning with, but this will have to be done on the next trip.

We all met on the platform and had something to eat. After rearranging some gear, Harold and Bruce left the cave. Steve, Jim, and I gathered ourselves for the long trip ahead, then started off for the Waterfall Passage. I was captivated once again by the myriad of beautiful draperies and stalactites in the first part of the Breakdown Section of the cave. Even after you leave the high ceilinged Breakdown Section and enter the stooping and crawling portion leading up to the sump, the many ceiling crevices hold a wealth of beauty. We rested for a while in the final room before the sump (the sump is about $\frac{3}{4}$ mile from the shaft) then started up the Waterfall Passage. Steve Barnett is the only one who had seen the Waterfall Dome previously and he said it was about $\frac{1}{2}$ mile from the main passage. We were soon to wish that his estimate were more correct. We wanted to check out the dome to see if it was possible to climb up to an upper level, or at least see if there even was an upper level. When Steve was there, his light was too dim and there was too much spray for him to see anything. We had electric lights to use when we got to the dome, so that our carbide lamps wouldn't be put out by the spray. We made good progress and before long we were beyond the place where Steve and I had stopped on the last trip. Immediately we came upon a feature Steve Barnett had described to Steve and me. It was a huge pile of small rocks that extends right on up through a round hole in the ceiling, about 15 feet in diameter, and looks just like a collapse from a sinkhole or dome of some kind. There isn't any way you can get up through the rocks to see what it leads to, though. Already feeling the effects of the day's activities and the lack of sleep the night before, we charged ahead thinking that we were nearly half the way there (from the start of the Waterfall Passage). We

went through hundreds of feet of low, back breaking stoopway. Most of the rest of the passage was kneecrawl, or crawling on your side over rocks and on your belly under hundreds of stalactites and soda straws. We passed at least fifteen enterable side branches along the way, but didn't do more than glance at any of them. We had a set destination and didn't want to use up our energy on side trips until after we had accomplished our main goal. As it turned out, we needed every bit of energy we had just to get to the dome and back. The passage starts out heading NNW but after the first one thousand feet I wouldn't care to guess as to what direction it heads. The main passage slants upward from the spring entrance to the sump, and of course the Waterfall Passage does also. But after one-half mile the passage starts to slant upward at a greater angle. The passage narrows and becomes an obvious vadose trench cut in the bottom of a phreatic ellipse. The gradient steepens enough to keep the floor noticeably cleaner and there even are a couple short stretches of potholes. One stretch of passage is very interesting because it indicates the water level was once much lower than the present. Here there is a stalagmite in the middle of the streambed with a 1½-foot long helectite coming down to within a couple inches of meeting it. Also there are some cascades of flowstone along the walls that continue uninterrupted below the water line. The passage at this point is about 3½ feet high by 4 feet wide.

After we thought we had crawled for forever, we reached a place where the passage has an interesting change for a short distance. We had seen enough of the type of passage we had been going through. A pair of domes, one 20 feet high and the other 35 feet high, are separated by 30 feet of walking passage. But of course the passage immediately goes back to crawlway. For a while though, you got to crawl on sand that was backed up by the breakdown from the second dome. I had been leading all the way up to this point and didn't feel exceptionally tired. Steve had said a little earlier that he was getting pretty tired, but he was determined to make it to the dome. He led the way now while I waited for Jim. Jim was feeling pretty tired and discouraged by now and kept wanting me to leave him behind on a mud bank and pick him up on the way out. I kept telling him that it must be just around the next corner because we had already gone well over ½ mile from the main passage, but he reminded me that I had been saying that for the last ½ hour. I finally convinced him to just keep plodding along. Meanwhile Steve had gotten well ahead of us. I yelled at him to see what he was finding and he said that it didn't look too good because the passage was getting pretty small. The passage kept gradually tapering down to a smaller size until we reached a wye. This was what Steve had meant by smaller passage. It was about 1½ feet high by 2½ feet wide and had a bare bedrock floor that was a mass of sharp scallops and points. Our coveralls, which were already torn, snagged constantly. This type of passage didn't agree with me and I tired very rapidly until I was little better off than Jim. With coveralls snagging everytime we tried to move and unable to raise up more than a couple inches because the millstone I was wearing caught on the ceiling, we inched forward. It seemed to take minutes just to move inches forward, and it almost did. We couldn't understand how Steve had gotten so far ahead of us, having been so tired earlier. As Jim and I were wiggling along, we heard a loud noise down the passage. I yelled at Steve until I got his attention and asked him if he was all right and he said he was, so Jim and I kept crawling. We had trouble communicating because of all the roaring noises. Steve wasn't at the Waterfall Dome, but he said that he was at something really neat. Even this encouragement couldn't speed Jim and me up, however. Pretty soon we heard another loud booming splash, so I yelled to Steve again. This time I asked what was going on and he said that he was trying to climb up to a passage and he kept falling back down into a pool of water. Near the end of the crawlway it widened out to 40 feet, but the stream was contained in the same channel. All of a sudden

there was a big hole in the ceiling, and a blank wall straight ahead. You could stand up in a little dome that had a walking passage leading off the one side, about eight feet above the previous level. There was a neat waterfall plunging into a four foot deep pool. This pool had straight walls of solid bedrock and took me by surprise when I stepped into it. Steve was out of sight in the upper level and didn't respond to my yells so I turned my attention to Jim. He was still a ways down the passage and saying something about not even wanting to go the last few feet. When Steve got back to where he could hear me (there was a lot of roaring noise) he said that the Waterfall Dome was just ahead, and that it was really neat! This was how he had gotten ahead of Jim and me. When he heard all the roaring from the two waterfalls, he got real excited and just charged on through. Steve explained how he had climbed up to the passage, then I started on up. Jim, who had just joined us, didn't think he could make it up there without help though, so I got back down and gave him a boost up to where he could crawl over the lip. I'm sure that he could have made it, but was just too tired at the moment to believe it. Another short chimney up an incline soon followed, then it was just 20 more feet of narrow walking passage to our goal.

The dome itself isn't very impressive, 35 feet high by five feet wide by 15 feet long, but the leaky faucet at the top sure is. We left our carbide lamps behind on a ledge to keep them from being doused by the shower of water (there is a fair amount of water coming down the dome) and used our electric lights to probe the top for any passage leading on. It was extremely difficult to find a place where you could look up. The big drops of water could about knock your eyeballs out. I finally chimneyed up a little ways to where I could see the top, in between having to dodge globs of water. It appears that there is a passage at the top, where the water comes out, and that it is about four feet high at the lip. Steve tried to chimney up to it, but we abanded it as too risky. The pounding water is part of the trouble, and fragile chert nodules combined with a wide chimney is the rest. If you fall, you would land on a pile of breakdown blocks. I didn't think we could carry anyone all the way back to the shaft, so we decided to wait until we had bolts to provide protection on the climb.

Steve is real interested in going back there to scale the dome, but I want to wait a while so I can forget a little about how far it is to the dome. We agreed that next year would be a good time to come back. Even with a wet suit on, when you stood under the full force of the waterfall it really did things for you. Talk about an invigorating shower! The Waterfall Dome, the connecting passage and the first little waterfall, and the stream channel in the crawlway all appear to be a recent development. The dome would be much larger if it wasn't recent, because there's just too much water coming down it. The water must be acidic because there is no sign of any flowstone anywhere in the area. Perhaps an upper level streamway got pirated down a new dome. That would explain several features at the end of the Waterfall Passage that I don't have time to describe right now. Also my memory is a little foggy on the exact possision of a few things. I wasn't thinking scientifically at the time. I was thinking that I would give just about anything to be able to just "zap" myself back to the shaft in an instant. It was going to be a long haul!

We slid back down the small waterfall, making a big splash in the plunge pool and then changed carbide while we ate most of what was left of our food supply. We learned on this trip to bring plenty of food because we ran out before we got out. While Steve took his boots off to rearrange his socks, Jim and I just lay down to rest for the long trip out. I was really turned off by the idea of having to go back through that stretch of solid bedrock crawlway, or any of the rest of our 1½ mile journey for that matter, so I started doing some looking around on the right side (as you're

looking out) of the 40-foot wide crawlway. It looked like there might be another route that would bypass the worst stretch of passage in the whole trip and then rejoin the main stream. If it was passable (assuming that it existed) it wouldn't be any higher than the other way, but the mud floor would allow you to slide along. I slid along on my belly until I was a ways down the passage, but it kept getting lower. I don't know if I could have made it or not, the fog made it impossible to see what was ahead. When I was just about to turn back, I banged my carbide lamp on the ceiling quite hard. This bent the spade mount and partially ripped it loose from the lamp. I had been a little short on solder when I put the bracket on the lamp. I was afraid to bend it back into place for fear of ripping it completely off, so I went the rest of the way out with the lamp pointing off at an angle.

After I had squirmed back to the little dome and had rested a bit, we started the slow trip out. I felt like we were an impossible distance from the entrance. It seemed like it would take us at least ten hours to reach the entrance, if we could even get that far. Physically I was very tired, but my mental outlook was even worse. This was caused by the exhaustion, lack of sleep the night before, and in no small part by the disappointment in not being able to go beyond the Waterfall Dome after all the effort it took to get that far. I began to wonder why I insist upon doing things that I dislike so much. Such as climbing up a face to reach an opening when no belay is available, or squeezing through tight crevices to see around the next corner when it almost certainly will end, or fighting freezing wind and deep snow to check a lead in some farmer's field, or crawling and stooping for $1\frac{1}{2}$ miles through a cave while wearing a wet suit just to see if there is a passage that can be climbed up to at the top of a dome. At the time I was discouraged enough that I couldn't answer that question, even though I've asked it of myself on a couple other occasions when I was in difficulty. While I'm doing these things I swear that I never want to get into a situation like that again, but as soon as I'm out of it I start planning the next escapade. Near the end of the trip, while walking down the main passage to the shaft, I was already planning the next trip into Cold Water. Deciding which passages would be entered on that trip and thinking about how we would push them to the very end. There are several things I wish to accomplish in caving and unfortunately the only way to accomplish a couple of those goals is to do the things that I described above. I've been doing an enormous amount of caving in the last $3\frac{1}{2}$ years and I just hope that I don't get burned out on any of the aspects of caving before I accomplish my goals. I don't think that I'll ever leave caving, as I've been crawling in caves ever since I was a little kid, but I might become less enthusiastic about completing certain projects. I'll just have to wait and see how long I can keep up the pace, but I already see signs of slowing down. Maybe it's just a temporary condition.

In case you've forgotten where I left off, before my mind started wandering, I'll remind you that the intrpid trio still had $1\frac{1}{2}$ miles of "not nice" passage to go through in order to reach the shaft. I led the way out, pushing my gear ahead of me this time. But pushing a small millstone coupled with two canteens and a six-volt flashlight through that crawlway of snags with exhausted arms made for slow going. Ever get the impression that I didn't like that stretch of crawlway? My $\frac{3}{8}$ -inch wet suit jacket covered by tight fitting coveralls provided too much resistance to arm movements and tired me more than was necessary. I don't have to worry about the coveralls anymore, though, because they didn't survive the trip. They were shredded front and back. Jim's nylon coveralls didn't make it either. At one point I picked up a piece that had torn off and Jim had to stop and rip a whole leg off because it was getting in the way too much. Of course, these pieces were stored in his pack for the trip out. Steve's coveralls were also badly damaged, but I don't think they were

ruined. When the legs of my coveralls were completely shredded, this presented an additional problem for me. I had damaged the knees of my wet suit on my last trip into Glenwood Cave and it wasn't long before all the crawling wore through the knees of my wet suit also. I was crawling on all those rocks with bare knees. By the time we were out of the Waterfall Passage it felt like my knees were just hamburger. I was a mess of scabs and bruises for the next three weeks. After quite a while of plodding along, we decided that I was going too slow. So Jim and Steve took the lead with the hope that I would be pulled along at their pace. We passed several landmarks that we recognized and tried to remember how much farther it was. But after we had gone for quite a ways, we passed a landmark which we knew was way back in the cave. It was going to be a long time before we saw the main passage. On the way in, we admired the hundreds and hundreds of white stalactites and soda straws (some of them in big bunches). But on the way out they were a pain in the ass because usually you had to get down on your belly and carefully work your way past them. If they were in a stooping passage you had to get back down on your knees to miss them. Too bad they don't have foldup models that you can just fold up to the ceiling for the trip out. I was better able to keep up in the larger passages and our rest stops weren't so frequent then. There was one size of passage I couldn't handle, though. That was when it was $3\frac{1}{2}$ to 4 feet high. The best way to go through this size passage is by leaning on a mud bank and going sideways. But my leg hadn't healed yet from the injury I picked up on the 3/29/75 trip into Cold Water and it just wouldn't allow me to do that particular motion. It hurt during other movements, but at least I could get my leg to move.

When we finally reached the part of the passage that Steve and I had seen on the trip in March, it felt like we were nearly out. It almost seemed like home when we popped out into the main passage and threw ourselves down on the big mud bank that dominates one side of the room. Although we were only half the distance back to the shaft from the Waterfall Dome, the biggest share of the work was over. We laid down for a long rest and changed carbide for the last time. This was our fifth fill. We finished off what little food Jim had left, then just laid there and watched the muddy water flow out of the side passage we had just exited and mix with the clear water of the main stream. Laying on a dry mud bank we were quite comfortable, but after being in the cave for so long you would get a little chilly if you laid still in the stream for more than a couple minutes. After a nice long rest, we made ourselves pack up our gear for the last push out. On the way out we observed the other two parts of an interesting phenomenon. The first part occurred when Steve got some adrenalin going and quickly pushed ahead for the last 200 feet to the Waterfall Dome. Now in the main passage, Jim was running wild in the stoopway section, leaving Steve and me far behind. We couldn't imagine where all that energy was coming from. Jim waited at the start of the Breakdown Section and said that it was now time for me to lead the way. I charged off down the passage, thankful for the chance to walk upright again. After a while I noticed that Jim and Steve were falling behind and that everytime I looked back they were getting farther behind. By the time I reached the Snake Passage (about 250 feet upstream from the shaft) they were well back of me, so I stopped and waited for them. I thought that my leg was hindering me so much that they would have no trouble keeping up, but for some reason it was my turn to have a burst of energy. Jim said it was because I ate half of his last Breakfast Square. The shaft platform was an unusual but welcome sight and we wasted no time in readying ourselves for the climb up the 96-foot ladder. Steve went up first and I followed. The two of us were going to pull up the basket of gear while Jim pushed from underneath. When I got to the top, I found out that Harold had returned from the canoe trip. He was fresh, so he pulled the basket of gear up

with ease. When Jim climbed out of the shaft he looked pretty haggard and Steve was obviously tired. But strangely I felt fairly energetic, like I had just finished a good workout. We had spent 12½ hours in the cave. I know we would have done better if we had gotten some sleep the night before and if we would have had some more food along, but the main thing was that we weren't in good enough shape. We had to be in some kind of shape or we couldn't have made the trip, but I know that we each have quite a ways to go to get to where we should be for that kind of exploration. It was really nice coming out of a cave into warm air for a change, after four wet suit this past winter.

After climbing out of our wet suits and locking up the cave again, we all headed for home. Steve and I stopped off at Flatland's, but he and his wife were at a bowling tournament. We waited for a while and ate some more sandwiches served by their daughters, then decided that we had to hit the road. I had to drive back home because Steve was too sleepy, but he didn't get to sleep much going back. I had to have somebody to talk to off and on or I'd fall asleep too. Without a muffler, we literally roared home. It was 3:00 AM when we reached my house, so Steve sacked out there and drove on to Mechanicville just in time for work after a few hours sleep.

THE REDISCOVERY OF HUNTS CAVE

Terry Sires

May 18, 1975

Jim Hannon, Lowell Burkhead, Terry Sires

Having nothing to do one weekend, I called Jim and Lowell to see if they wanted to check out a lead I had gotten from some friends that hunt around the Hopkinton area. They were willing so we headed for Hopkinton. After getting on the wrong road, then trying to navigate to the farm where the cave was located, we finally arrived. After getting permission and directions to the cave, we were ready to do some caving. We wandered around the better part of an hour, then reconstructed the farmer's instructions and headed in the other direction where we finally located the cave. Assuming the normal Iowa caving position (the four-point crawl), we entered the entrance only to find we had to immediately assume another familiar Iowa caving position (the belly crawl). We proceeded into the cave where we met an obstacle ... the partial remains of a racoon that we had to crawl over or move. I am not sure who moved it but it was someone with a stronger stomach than mine. The cave was very interesting with several rimstone dams and a nice crystal pool that my boots found. I won't go into any details, since the cave has been described before. After spending several hours in the cave, we started out, removing two six-packs of empty Budweiser cans as we went. After reaching the entrance we had a bit to eat, rested for a while, then checked some holes in the bluffs across the valley at the same level as the cave but found nothing. By this time we were really tired and it was all we could do to drag our gear back to the truck. When we left we checked the land owner's name which was, by great coincidence, Bob Hunt. So went the rediscovery of Hunts Cave.

HOT SUMMER TRIPS AREN'T ALL BAD

Greg McCarty

June 19-20, 1975

Ed Smith, Greg McCarty

Both Ed and I are tied up on weekends, so we decided to take a trip during the week. I had lots of vertical leads to check, so we decided to concentrate on them. It had been nice and cool the previous days with a lot of rain, but it suddenly turned terribly hot just before our trip.

Ed drove into Anamosa Wednesday night and we left before 6:00AM the next morning. We stopped first in Elkader to see if a guy we know in the Soil Conservation Service had any more leads for us. Our next stop was supposed to be a farm to the east of Anderson Cave, but we got sidetracked when Ed thought he saw a mammoth sinkhole off in some woods. We stopped at the nearest farmhouse, but neither parent was home so we still don't know if it really is a sink. We also checked a couple abandoned quarries along a gravel road, but only found a large groundhog. We talked to the farmer we had started out to see and he did have some things for us to look at. Jerry Hemingson had talked to him last winter on one of his trips, but hadn't checked the leads because they were in the process of entering Cave Canem Cave. The farmer, driving by on his tractor, stopped to talk to them because he thought they might be deer poachers. Ed and I just grabbed our flashlights and followed him down a creek valley for some distance. I located the hole he wanted to show us and Ed put on his helmet and checked it out. It quickly ended in dirt fill. He told us he had three sinks on the side of the hill above the creek and pointed in the direction of each. He couldn't show us because he had to leave. Since he had never entered them, he didn't know whether or not they were open. Ed and I soon found all of the sinks, there were more than six, only one of which was open. It was a pit about twenty feet deep and the passage continued on down out of sight around a corner. The top of the pit had straight dirt walls and there was a pile of dirt at the bottom, so it looks fairly recent. It also looks fairly unpromising, but it is right above Big Spring. I called it Hayfield Pit, because of the long hayfield we had to walk through to get to it. Neither of us had our boots on and the wet hay was over two feet deep. We didn't enter the pit then because we were getting hot and didn't feel like bringing the ropes and other gear back to it. We left a note in the owner's mailbox telling him what we had found and that we would be back. We then headed on down the road to the Anderson farm. I thought there might be a sink beside the road along our way, but after following the ravine for quite a ways the water channel went through a culvert under the road. There are many other places that can be seen from the road that resemble sinks, though, so more checking in the area is definately in order.

We were hungry by the time we got to the Anderson farm, so we ate our lunch while we talked to the owners. (Cavers take note that the farm is now being tenanted and that Mr. Anderson now lives in a mobile home beside the house.) There's a great view from this high farm and there was a good breeze helping to cool us as we sat in the shade of tall pines. It was hard to tear ourselves away and go back down into the upland valley and its stiffling heat. We attempted to locate Anderson Cave, which was reported to be plugged, and I think we found it. A sink with a bunch of junk in it, mostly boards and logs, had a lot of cool air coming out of it. On a hot day like that, we weren't about to attempt digging the cave open, so we continued checking the other sinks. Sure enough, one of the sinks had dropped open recently. We dug out the gear we would need, then I set up a belay. I was eaten by

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mosquitoes while Ed checked out this twenty-foot deep wonder. It becomes an impenetrable rathole at that depth, so I called it Pitiful Pit. Disappointed, we drove on up to Cave Canem Cave and rigged the entrance drop. I can testify that the steep-sided sink at the entrance to Cave Canem is far safer in the summer than when it is covered with ice and snow, though it still bears watching as you can lose your footing and slide down the pit. Ed had never seen the cave.

The recent rains had left a mountain of goopy mud at the top of the pit. Unfortunately we didn't notice this until I had already rigged onto the rope and was placing the rope pad. After removing some very dangerous loose rocks from the path of the rope, I kicked all the slop down the pit. Here's where we learned a lesson, since the goop coated the rope all the way to the bottom. It was a mess and didn't do our vertical gear any good at all. When I reached the bottom of the pit, I did something that I'd only done once before during a lapse of thought in a practice rappel. I ran some of my hair into the rack. I had twisted around so that I could yell up the shaft to Ed, when some hair got run through the top breakbar. Somehow though, some hair also got run through the top bar from the opposite direction as well. So when I tried to feed the rope back through, while standing on my tiptoes and trying to keep from moving off the hump I was standing on, it didn't solve the problem. Fortunately I was on the bottom, so I didn't have to sacrifice the hair. I have so little to spare anyway. I just unhooked the rack from my seat harness and unsnapped the bars.

While Ed was rappelling down the forty-five foot entrance shaft, I left my gear on a dry hump of mud in the downstream passage. I traversed along the canyon passage to where it splits, then chimneyed down to the bottom after giving a ceiling crevice the once over. When I was in the cave during December of 1972, there was water nearly two feet deep in the bottom of the canyon passage despite the fact that there hadn't been a thaw for weeks. Now, even though there had been lots of rain during the week, the bottom was relatively dry. There was an Iowa Grotto register at the intersection, but I didn't bother to try and open the worthless contrivance. The shape of the canyon passage is pretty neat, but it's a little difficult to chimney up the mud greased walls. Satisfied that there wasn't an obvious passage except the one the water follows, we squeezed into a narrower joint passage that parallels the canyon passage. Again the passage is widest, or only passable, at the top. This passage continues to the west through dirt fill and water flows through the passage to join the main flow. It must come from one of the adjacent sinks. The passage here has a flat ceiling, though, and may be phreatic. Or it may be just a prominent bedding plane parting. Downstream the passage quickly splits in two. To the right is a narrower crevice passage, while straight ahead is a belly crawl that looked like it would pinch out in dirt fill. I decided to scrounge up some courage and attempt the crevice. It looked like it got wider after ten feet and then went around a corner to the right. The passage varied between seven and a half and nine inches in width and normally would be no great problem. But the walls were completely coated with greasy mud. Due to a hump of mud on some breakdown, I had to enter this passage at ceiling height. I had no way of knowing for sure that I could even fit through if I slid down to the bottom. With some difficulty, I managed to traverse over to where I could see that the passage actually turned a right angle bend to the left and that to the right was just a pocket. I got back as quickly as I could because I could feel myself slipping down the crevice. When I got back to the hump, I found that I had dropped down over two feet and that I couldn't get back up out of the crevice. My feet were about six feet above the bottom of the crevice, but more importantly my head was four feet short of the top. I called Ed over to assist me and we tried several things without making any progress. If I could have gotten a

single foot hold, I could have worked myself out of there in no time. But the greasy walls were very smooth and I couldn't get even a minute purchase. Laying on a mud bank near this intersection was a prusik sling that somebody had lost on a previous trip, perhaps during the 1974 NSS Convention. I had Ed bring it over to me and tie a loop in it. He dangled it over the top of me and I tried to get it over the toe of my boot. I kept trying, because I knew that was my best chance for getting out of the crevice, but I couldn't get it over my toe. The long reach from my head to my foot let the loop hang limp. I was getting tired of that and I was slipping a little more. I had Ed take my helmet off so that I could turn my head. I tried several times to turn my foot, but the pain got too strong before I could bend it enough. I could reach a couple sloping ledges with my hands, but couldn't make use of my arms to pull myself out. These were a great assist in my struggle to keep from going lower, though. Ed jammed his boots in the crevice and I used these to push down on. Using a variation of methods, I occasionally gained almost an inch, only to lose it again later. This was not to be a battle of inches, as I lost a little more than I gained during our struggle. We tried hooking the loop on my heel, but that failed also. Ed accidentally dropped the loop, but we couldn't make use of it anyway. I tried moving back and forth in the crevice to try and find a wider spot where I could just slip on up, but that didn't work either. The only thing that had made any progress at all was when I tried to find a tiny point to hook my boot on and pulled with my left hand on the ledge and pushed with my right hand on Ed's jammed boot while Ed pulled on the collar of my coveralls.

It had been thirty minutes since we had started the fight to get me out and I was no better off than I was when we started. I rested for a bit again, then we tried once more. Ed was getting a little worried and I was getting exhausted from having to hold myself up. If nothing else worked, then I would just try slidding down to the bottom of the crevice and seeing if I could make it back to the first intersection through the canyon. I didn't want to try that until it looked like nothing else was going to work without additional equipment, because if it was narrower then I would just be in worse trouble. Fortunately on this one big try, my foot found a tiny point that held for about two seconds. Using everything I had in me, I moved up a few inches in the brief moment that I was on that hold. Once I started moving there was no stopping me. Every inch I gained gave me better mechanical advantage in the use of my arms and also allowed Ed to pull more. I yelled to keep going and we gave it everything because I knew we had it licked. In a vicious struggle that seemed to last for a minute, but was actually only ten seconds, we pulled my body up to where I could use my arms to lift myself out of the crevice.

Once I was out, I was determined to look at the crawlway to see if it really did end. Ed was anxious to leave the cave, as he had used up all his nervous energy getting me out of the crevice, so I was just going to take a quick look. I was pretty tired anyway and my carbide lamp didn't have much farther to go. When I had worked my way around the first corner, I was surprised to see that the passage continued on and reconnected with the crevice. I worked my way up to where I was almost to the intersection with the crevice, then I just gave up and started backing out. I'm sure I could have made it around the next corner without any great trouble, but I decided to save it for the next trip.

When I had gotten all the way back to my pile of vertical gear, I found a toad sitting on top of my emergency pack. After I got all rigged up, I put him in one of my gloves and stuck him in Ed's pack. This was the second beast that Ed and I have rescued from a pit and this one fared much better than the mouse. The mouse we tried to rescue from Miller's Cave, a

couple years ago, died of fright. Toads aren't smart enough to get that frightened, so he was quite content to be carried out of the cave. I released him beyond the lip of the sink, in hopes that he wouldn't hop back in there some day. It took both of us a record amount of time to Jumar out of the pit. Ed was trying a new rig again, so it took him over twenty five minutes to reach the surface. My problem was all the mud on the rope. There wasn't anything at the bottom of the pit suitable for weighting the rope, so my T-bar didn't slide until I was about eight feet from the top. The gritty mud just provided too much friction. For each step I took I had to pull the rope up to where I could reach the T-bar and move it up by hand.

We rested for a while at the Anderson farm, then started off for West Union. We couldn't use our vertical gear again without cleaning it first, but we figured that if we found anything we could use the farmer's garden hose to rinse the mud off. A closed gravel road caused us to do some unnecessary running around, but we eventually reached the farm we wanted. The farmer wasn't home, so we rested under his shade tree and talked things over, then headed for Decorah. We were going to try to locate a pit that Dr. Knudson had told us about last winter. We tried to find it on that trip, but gave up because of waist deep snow. Now we were running around through the fields in sweltering heat and accomplishing the same thing. we wandered all over the area and checked a few sinks, but could find no trace of the pit. We had combed the area that was supposed to be the place and then had branched out for quite a ways. We decided that we would have to have another talk with Dr. Knudson before we were going to find this one.

We pulled on into the Decorah City Campground, to set up our sleeping accommodations. Ed wanted to camp here because of the good shower facilities, which after a hot sweaty day of caving was quite welcome. It costs \$2.50 though. Our next stop was a car wash to get the crud cleaned out of our vertical gear, then we headed back to the campground to get ourselves cleaned up. After showering and eating supper, we went over to talk to Dr. Knudson. He couldn't explain why we hadn't found the pit yet, so he offered to go with us the next morning to locate it. He wanted us to check the position of some chert nodules in the Devil's Hole above Ice Cave, so we told him we would do that early the next morning. He loaned us a compass so that we could check the direction the crevice heads also.

We got up early Friday morning, had breakfast, and headed out to the Decorah Ice Cave. It was already starting to get hot, so we knew it was going to be another miserable day. We entered Ice Cave to look at the ice and found it to be in a state of mild decay. There were some very nice stalactites and ribbons, though, and one wall had an armor of ice three inches thick. Our body heat expanded the air in the cave and caused the air flow out of the cave to greatly increase. There was a band of fog exiting from the cave after we left. We climbed on up the bluff and quickly located the Devil's Hole. I had brought my seventy five feet of five sixteenths inch Blue Water handline and I rigged it on a cedar tree leaning over the crevice. Ed chimneyed down the crevice using a Jumar belay on the handline. I didn't desire to chimney down because I had left my coveralls in the car. I no longer owned a spare pair of coveralls, after the last trip into Cold Water Cave, and the ones I had used the day before were still wet. I did chimney down fifteen feet to a ledge, though, just to see what it was like. Ed reported that the total depth of the cave is over seventy feet and that the passage extends to the west for about 100 feet. The crevice runs exactly east-west, surprise, surprise, and the bed of chert nodules he checked indicate the south block of limestone has moved down about eight inches. After we got back off the bluff and had cooled off again in the entrance to Ice Cave, we headed on over to the county courthouse. Ed wanted to buy a plat book, so we wouldn't have so much confusion over who owns what in Winneshiek County. The new book is \$5.50, so you have to really want one

to pay that much. Armed with this new lead checking assistant, we headed back to Dr. Knudson's. I suggested that maybe we had been checking the wrong creek in our attempts to find the pit, so Ed and Dr. Knudson checked that out on the plat book. Sure enough, Dr. Knudson started thinking that it was the next creek to the south that had the pit. We noticed in this area the name of a land owner that was supposed to have a pit on his land, according to a trip report published ten years ago in the *Intercom*. When we had matched everything up, we decided that they were the same pit. Looking at the plat book jarred his memory and Dr. Knudson gave us several other leads that we'll check on future trips. Ed and I thanked him, then took off once again to look for the pit. This time, though, we were very confident that we would be able to find it. And find it we did.

A long hike up a creek valley and through a corn field that had been chewed to the ground by cows, brought us to our goal. It's a very unusual location for a pit and the shape of the pit is unusual also. The pit is two-thirds of the way up a steep hillside and has no sink of even the smallest size above it. It's elongated, probably along a joint, back into the hill and is obviously a dome that has been intersected by the downcutting creek valley. It looks exactly like most of the domes in Cold Water and Glenwood Caves. If this pit took any water, it would probably come out Siewer Spring. We were pretty excited about its potential. After rigging the ropes, we flipped Ed's watch for the honor of being first down. Ed won and started down, but he had to climb back over the lip so we could remove some loose rocks. We had to pull the rope back up because of one boulder that was in the path of the rope. It made a nice crash when it hit bottom. When Ed reached bottom, he immediately reported that there wasn't any passage leading off the bottom. I couldn't understand how he could be so certain when he wasn't even off the rope yet. From the top it looked like the dome had a continuation or passage going around a corner. When I reached the bottom, though, I immediately understood. The bottom was roughly circular, about fifteen feet across. There wasn't any passage leading away from the pit and the pit was only forty feet deep. That sounds pretty blah, doesn't it. Well I've got news for you, that pit was the highlight of the whole trip. It's the most beautiful pit in the whole state. Ed named it Flowstone Pot. On the opposite side of the pit from where you enter, the dome continues up another five feet or so. From this point all the way down to the lowest point in the pit is a continuous flowstone cascade. Near the top it has ribs and is red with other fine colors, while the rest of the way down it's gray to white and is a massive pillar. This mammoth cascade of flowstone reminds you very much of the flowstone formations in Cold Water Cave. The wall that you rappel down is also covered with flowstone, but this is old and dead. It is peeling off the wall near the top. Ed had to remove some of the most precarious pieces on his descent, or the rope would have sent them down on our heads when it brushed against them. That is a big piece of evidence in support of the idea that the pit was virgin. We know it hadn't been entered by organized cavers and we're pretty sure that it hadn't been entered by locals either. If they had, they surely would have knocked the flowstone loose from the wall. There was one boulder at the lip of the pit that probably would have been knocked loose and a lot of frost shattered flowstone that fell at a touch. As far as we're concerned, the pit was virgin. The floor of the pit was completely covered with fragments of rock and flowstone. I would be willing to bet money that underneath that pile of rocks is a passage that connects with a large spring cave. It would take a massive effort, and some money, to attempt digging it open.

After admiring the fantastic beauty of this pit once more as we Jumaried out, we hiked back to the car. Our next stop was the farm south of West Union again. This time the farmer was home, but we found out that the pit wasn't on

his land. It's on state land a couple miles to the east. He gave us directions to it, but it sounds like a pit that will end quickly in dirt fill. His son told us about a cave he knew of on the neighbors land and took us over to see it. It was quite a ways down a creek valley, again through stiffling heat and bugs, then up a side branch that joins the main creek. The cave is about 70 feet long and features wide passage of knee crawl height over loose rocks. I called it Section Four Cave, because that's as good a name as it deserves. We were surprised by this boys delight in spooking his neighbors cattle as we were walking to the cave, and it was then that we realized he really is a person of questionable character.

We had spent a fair amount of time talking to this farmer, because we knew it was our last stop of the day. Ed had a long drive back to Boone after dropping me off and I had a very busy weekend coming up so we had to head for Anamosa.