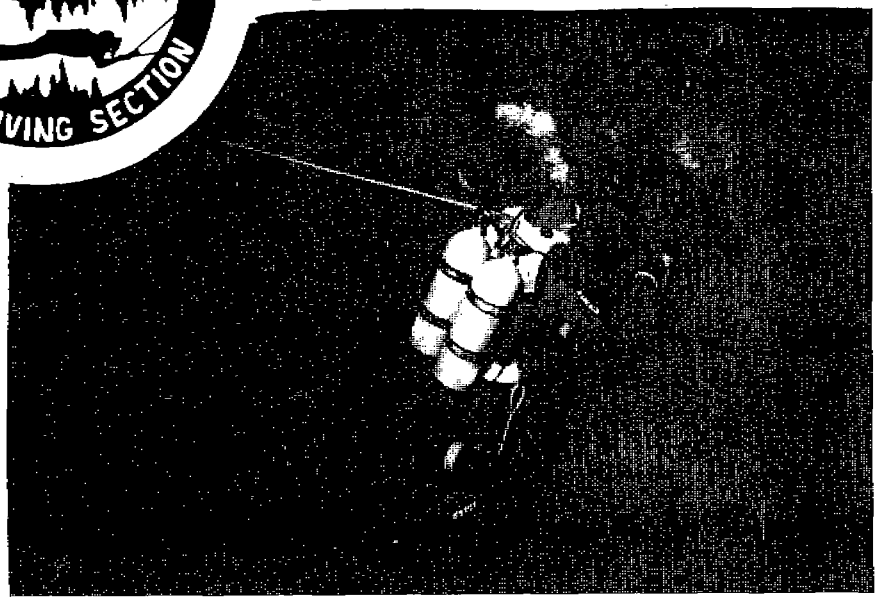
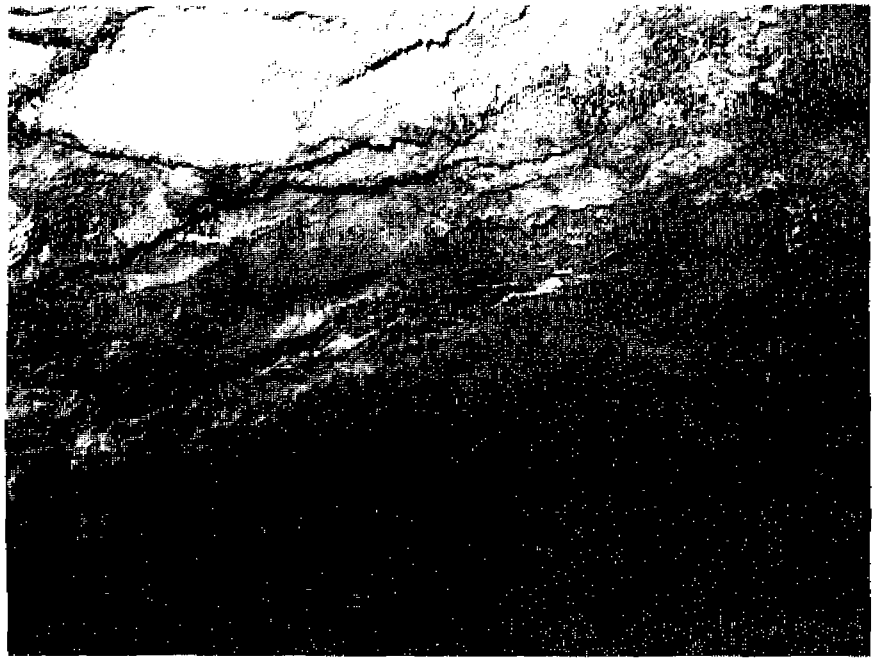
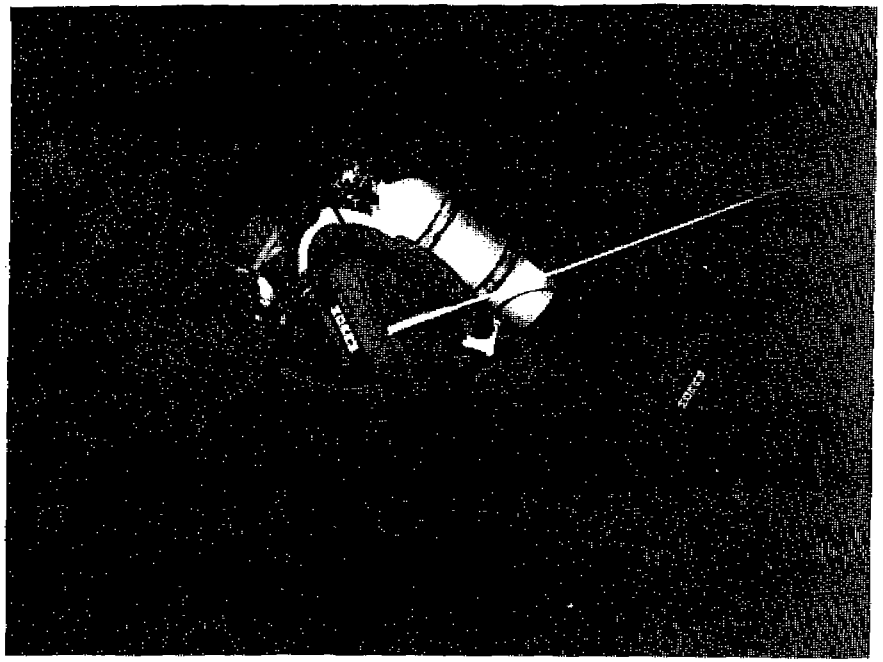
UNDERWATER SPELEOLOGY

VOLUME FOURTEEN, NUMBER ONE, January 13, 1987



The Malheur lava cave system in Oregon. Photos by Karl Anderson. See story page 5.





Underwater Speleology is the official newsletter of the Cave Diving Section of the National Speleological Society, Inc. Section membership, which includes subscription to the newsletter, is open to all members in good standing of the NSS at $5.00 per year. Subscriptions for non-members are $10.00 per year. Membership/subscription information, applications, and status may be obtained by writing to the Secretary-Treasurer c/o the Section's permanent address:

Joe Prosser, Sec./Treas.
NSS Cave Diving Section
P.O. Box 950
Branford, FL 32008-0950

All current news items, reports, articles, photographs, negatives, slides, cartoons, or other submissions for the newsletter should be sent or telephoned in directly to the Editor:

H.V. Grey, Editor, UWS
P.O. Box 575
Venice, FL 34284-0575
(813) 485-0799 (bus.)

CALENDAR

Mar. 28-29 - NACD Cavern Workshop for Open-water Instructors, Manatee and Ginnie Springs (Chiefland and High Springs, FL). Workshop Chairman: Steve Gerrard, 5714 Ed White Ct., Tallahassee, FL 32301, (904) 877-8196.

May 23-24 - NSS-CDS Cave Diving Festival, Registration at Branford High School, Branford, FL.

ELECTION RESULTS - by H.V. Grey

The ballots were counted and tabulated Friday, December 26, 1986, before the Winter Workshop, with the result that the three board positions were filled by incumbents Joe Prosser and Jeff Bozanic, and new member Pete Butt. Joe Prosser agreed to continue on as Secretary/Treasurer; Jeff Bozanic was elected in absentia (car problems the night before the workshop prevented his attendance) to the position of Vice-Chairman; and Pete Butt has agreed to take on the newly created--and vitally needed--position of Leadership Coordinator.

We bid retiring board member Wayne Marshall a fond farewell, and thank him for his tireless efforts over the last several years of effort on behalf of the Section and cave diving. Wayne has been on the board for several years; was editor of Underwater Speleology for more than two years; produced the Section's very fine official Slide Show Presentation; and has been a Cave Diving Instructor since almost the very beginning of the Training Program.

We welcome Pete Butt, of High Springs, Florida, who is a Cave Diving Instructor, and manager of the Ginnie Springs Dive Resort. Pete has been a very active participant in cave-diving affairs for the last

several years and we greet his enthusiasm and sincere interest in the future of cave living with open arms. We thank Bob Gibson of Panama City, Florida, for running in the election and for his willingness to take on the responsibility of helping to run the machinery of the Section. We look forward to Bob's continuing participation in cave diving.

And now for the bad news. APATHY, in the form of insufficient voter turnout, has struck again. Only 172 of the more than 400 people who were current members at the time the ballots were mailed, sent back their ballots. This did not provide us the with 51% majority required to pass the revisions in the By-Laws, in spite of the fact that only 7 of the 142 votes cast concerning the By-Laws were negative. (That's just another reason why we need to change the By-Laws--so that we're not strangled by voter apathy.) Jeff Bozanic went to a lot of trouble to develop his revisions and submit them to the board (although in all fairness it should be noted for the record, that only 3 of the other 6 board members bothered to respond to Jeff's preliminary review); I went to a lot of trouble to prepare the blue mailer on the By-Laws and send it out; and Joe Prosser went to a lot of trouble to prepare and mail out the ballots. Every effort was made to try to make the voting process as clear and easy as possible. Please let us know why you didn't vote, and what we can do to try to encourage you to vote next time.

SECTION RECEIVES VALUABLE DONATION OF COMPUTER

John Zumrick has recently made a very generous donation to the Cave Diving Section in the form of a Texas Instruments Professional Computer, complete with numerous software programs (wordprocessing, file systems, data management, etc.). The computer was presented to the Section at the Winter Workshop, and was given in hopes that a computer owned by the Section can provide a foundation for a permanent method of information storage, which can be transferred to Secretaries, Treasurers, and/or Newsletter Editors as these positions are filled by new people.

Dr. Zumrick is an NSS-CDS Cave Diving Instructor; was one of the expedition physicians on the Juatla Cave Expedition in Mexico; is a past Chairman of the Section, as well as former editor of Underwater Speleology; and is presently authoring the Section's new Cavern Diving Manual, which is reaching completion stages. Dr. Zumrick is currently the Senior Medical Officer of the U.S. Navy's Experimental Diving Unit in Panama City and an expert authority of Diving Medicine. He has recently been promoted to the rank of Captain in the U.S. Navy Medical Corps, and has been awarded a residency in Anesthesia, which he will begin in July at the Naval Hospital in Bethesda, Maryland. John, we salute you, and thank you for your ceaseless efforts for the betterment of the sport and science of cave diving. The best of luck in your new medical career.

POSDIVE, INC. CREATES NEW CAVE-DIVING EXPLORATION AWARD AND PRIZE

Craig Jennings of Posdive, Inc., of Port Washington, New York, the United States distributor for Poseidon Systems, announced his company's intention to institute a new industry award for excellence in cave-diving exploration, discovery, and innovation. The first annual award presentation will occur in December of 1987 at the NSS-CDS Winter Workshop and will involve the extremely generous cash award of $500 to the individual or group chosen.

Mr. Jennings made his presentation to a joint council of NSS-CDS and NACD board members. His offer was greeted with enthusiasm by all members present. Mr. Jennings explained that Posdive, Inc.--and Poseidon --were grateful for the recommendations, comments, criticisms, and helpful suggestions made by cave divers for the improvement of Poseidon diving equipment. Mr. Jennings generously gave cave divers as a group credit for having made a significant impact on the development of new diving systems, out of all proportion to our small numbers. The award and cash prize are a positive way of expressing his company's appreciation for the continuous feedback received from cave divers, and encouraging future exploration and equipment innovation by cave divers.

Ron Abner of Orange City, FL (an NACD Board Member and Cave Diving Instructor, and member of both the NACD and NSS-CDS), has agreed to act as Coordinator of the Award and as liason with Craig Jennings and Posdive, Inc. A joint committee comprising board members of both cave-diving organizations will make the selection. All individuals or groups interested in being considered for the award and cash prize should get in touch with Ron Abner. The criteria for the first annual award include all exceptional cave-diving exploration, discovery, and innovation achievements from the beginning of cave diving up to the present day. The exact procedures for nominations and the mechanics of administering the award have not yet been established, but more information will be forthcoming in future issues of both Underwater Speleology and NACD News.

Ron Abner may be reached at:
608 Heatherlane
Orange City, FL 32763
(904) 775-4032

SPRING WORKSHOP -- MAY 23-24 - by H.V. Grey

The CDS Board of Directors has decided to institute a new format for the upcoming Spring Workshop. Instead of the usual lectures, slide presentations, and classroom work at the Branford High School, this year's Spring Workshop will consist almost entirely of outdoor events.

The plan is to organize a host of "guided" cave-diving trips to area springs, many of which are ordinarily difficult to access, and also a number of cave-diving projects, such as sign installations, line repairing or re-laying, conservation and cleanup projects both above ground and underwater. Also on the drawing board are some in-water advanced-techniques instructional courses on such topics as staging, scootering, and side-mounts. There will also be activities for open-water divers and even non-divers. Also, hopefully, a few dry-caving opportunities as well.

Registration (with coffee and doughnuts) is planned for 7am Sat. May 23 in the Branford High School parking lot. However, because of the limited number of people who will be able to go on the dive trips to caves such as Azure and Friedman, early pre-registration will be very important. A distance limit of approximately one hour's driving time to the dive sites is being considered in order to make it possible for everyone to attend the big Cookout and Bonfire Party planned for later in the evening.

Additional dive trips may be planned for Sunday as well, depending upon member response and most importantly, cave-diving instructor and guide-leader participation.

We--the members of the board of directors--think that the idea of a completely field-oriented Cave Diving Festival is very exciting and will be a lot of fun for everyone involved no matter which trip or project they go on. (The work projects are going to be extremely interesting, too! For example, helping to install signs a couple of years ago in Peacock, Orange Grove, and Little River was one of the more exciting cave-diving experiences I have ever had. [If you don't think there isn't a challenge to trying to transport a 150-pound concrete base down into Peacock Springs or Little River, think again!])

If you are interested in volunteering your services to make this Cave Diving Festival a success, please get in touch with Chairman Steve Ormeroid right away:

629 West 4th Street
Marysville, OH 43040
(513) 642-7775

JILL YAGER RECEIVES NSS RESEARCH AWARD - reprinted from NSS News, August 1986

Jill Yager is the recipient of the Ralph W. Stone Research Award for 1986. She is a graduate student with Dr. John R. Holsinger in the Department of Biological Sciences, Old Dominion University, Norfolk, Virginia. Ms. Yager received the award for her research proposal entitled, "An Ecological Study of Remipedia, a Class of Troglobitic Crustacean from the Bahamas and Turks and Caicos." Ms. Yager will investigate the Remipedes, which she herself discovered, in the anchialine (submerged marine) caves of these Caribbean islands. Her proposed research has the potential for generating a whole field of new knowledge about this cryptic environment and its ecological and faunistic components.

Ms. Yager received a Bachelor of Science degree in Biological Sciences from Colorado State University in 1967, and a Master of Science Education degree from the Florida Institute of Technology in 1982. She also has extensive professional experience as a high school teacher in mathematics, biology and general science.

In addition, the following CDS members received NSS Fellowships: Noel Sloan, Gary D. Storrick, and Gary Zumwalt.

JEFF BOZANIC RECEIVES NAUI AWARD

At the 1986 International Conference on Underwater Education, held in Miami, Florida Oct. 3-5, Jeff Bozanic (the CDS's new Vice-Chairman) was presented with an Outstanding Service Award by NAUI. This was presented in part for his efforts in promoting cave-diving safety. The inscription reads, "With sincere appreciation for continuing service to NAUI and sport diving, thru contributions to many NAUI leadership development courses and workshops and as a fluent spokesman for safe cave and cavern diving practices." Congratulations, Jeff!

COMPUTER UPDATE - by Kelly Brady

Several articles and messages about cave-diving safety were posted on the computer network. About 10 people have responded, and an information packet containing brochures and NSS information was mailed out to them. A few divers on the network responded with messages that state their interest in staying out of caves. Currently, there is a permanent message about cave diving for scuba divers to view, and a general message about the NSS in the Outdoors section of the network. Incidently, the entire NSS-CDS brochure is available electronically on the network, and in a matter of minutes, any user can print it out.

EXPLORATION OF THE MALHEUR SYSTEM - PART II - by Karl Anderson

For those of you who read Vol. 13, No. of Underwater Speleology you will recall the description I gave of our exploration of the Malheur System in central Oregon, sans diving. As it had been almost a year from when we made those observations and when I wrote the article, there were a few discrepancies in the accuracy my description of the system. Those changes are included in this writing, as well as the finds beyond our last trek, which we found fascinating to say the least!

On Aug. 1 of this year, Donna and I returned to the Malheur system, some fifty miles from Burns, where we met Ken Clark, my diving colleague, and two divers from Boise, Idaho: Paul Kvamme and Charles Sterling. The area looked so different from what we had seen in the middle of winter that I passed it by the first time through. We trailered a 14-foot aluminum boat into the system behind Ken's 4 x 4, after loading it with most of the dive gear, and proceeded into the cave approximately 600 feet until reaching the bleachers and podium (used by the Masons), where we made our camp.

The Malheur River, which we suspect either connects with the cave system or parallels it. Photo by Karl Anderson.

Coleman lanterns were assembled and lit, until a total of 16 combined to light our site as well as the 1/8 of a mile from this point to were the water began. Ken was just as anxious as I to explore the cave from this point onward, so we then carried the boat (in stages, I must add!) to our "launching point."

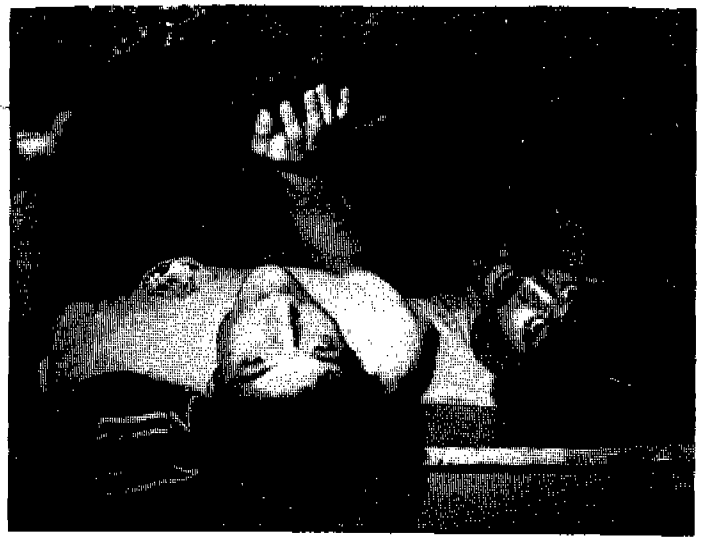
Ken manned the oars while I sat at the bow with a dive light fixed on the bottom for observation. The ceiling of this lava tube ranged in height from 6-20 feet as we penetrated deeper into the system; the

The entrance to the Malheur System. Photo by Karl Anderson.

water was crystal clear. After 1/4 of a mile or so, a rowboat, perfectly intact, loomed ahead on the bottom in 20 feet of water. Just as I pondered what such an object was doing in this place, another came into view not 20 feet from the first one! This one was a bit larger, though deteriorated considerably. Not 30 feet from this one was a third! I don't think I was over-reacting when I wondered at this point if there might be someone or something that was sinking these vessels and consuming their occupants!

Still able to see the bottom as clear as a bell, we pushed onward, in spite of our uneasiness. The system made two slight turns to the left and then two to the right. Water depth appeared to be approximately 30-40' at this point, taking into account that the exceptional visibility was deceiving. We passed under two low points in the ceiling that couldn't have been more than 3 feet from the surface, and finally came to a third that was less than two feet high. It was obvious at this point that we could not gain access beyond this point... without more weight in the boat, so we returned to camp, in awe every minute at the glistening mineral deposits and fungus which clung in patches here and there on the ceiling and walls.

Upon reaching camp, we found that Paul and Charles were just as eager to see the system, and didn't want to wait until the next morning. Back we went, four of us this time, until we reached the ceiling drop where we had turned back. With the four of us all lying in the bottom of our craft (leaving no room to spare!), we approached the ceiling, inch by inch, so as not to find ourselves wedged in place against our wishes and unable to retreat. I was in the bow once again, and guided the boat left and right, back and forth, to the

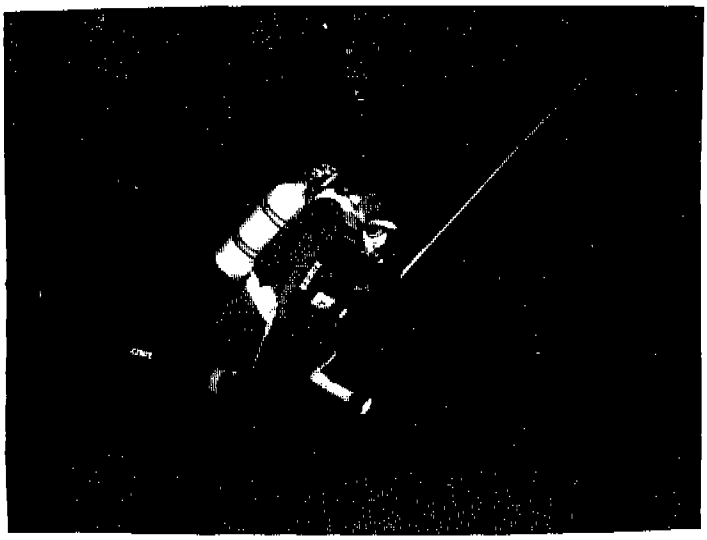


The "Planer"--gaining entry into the last air-filled chamber, via boat. Photo by Karl Anderson.

directions of Paul and Chas.

With all four of us pushing up against the ceiling, we made more and more headway. After 20 feet or so, another chamber beckoned ahead. Small stalactites were breaking off on the sides of the boat and falling amongst us. We all had a few laughs when Paul suggested that he was somewhat claustrophobic, and when we all stopped our pressure on the ceiling, the boat was held firmly in place without so much as a single rocking movement on the water!

Continuing, we came free and clear in another 5 feet, and found ourselves in a chamber nearly 50 feet long and 20 feet wide. The ceiling in this room was approximately 15 feet above the water. Moving to the far end, we snuffed the lantern and shone our dive lights below the surface. The tube continued on just as massively as it had behind us, but underwater. We all extinguished our beams for a few minutes to



Ken Clark during our penetration beyond the last air-filled chamber. Photo by Karl Anderson.

sit in total darkness, and as we sat there, not uttering so much as one sound, we heard an eerie echo of what we all agreed seemed to be a television set somewhere out there, bellowing the alternating tones of several persons' voices. Passing below what we aptly named the "Planer" was much easier the second time around, and plans were made for our dives as we headed back to camp once more.

The next morning (Aug. 2), I transported Paul and Charles through the system to the Planer. Because of the small size of our craft, they put on the majority of their gear while in the water. Because there are typically no objects in a lava tube to use for wraps, and seldom any crevices which could catch or tangle a line, we opted to use a 200-foot spool of polypropylene ice-diving line, which would be tended by me, in the boat. One diver would have the line secured to himself, while the other diver remained on the line. Paul and

"The ceiling in the air-filled portion was full of color and peculiar shapes." Photo by Karl Anderson.

Charles made their descent on the outer side of the Planer, and planned to simply explore the walls below the surface, but not to penetrate beyond the final air-filled chamber. My job was made a lot easier by yearly practice tending divers in our Ice Diving projects: I would give line as needed, and take up any slack during their return. As they descended and headed through the final chamber, I could clearly see the beams of their lights dancing off the walls below and beyond. Visibility had to be somewhere between 100 and 150 feet!

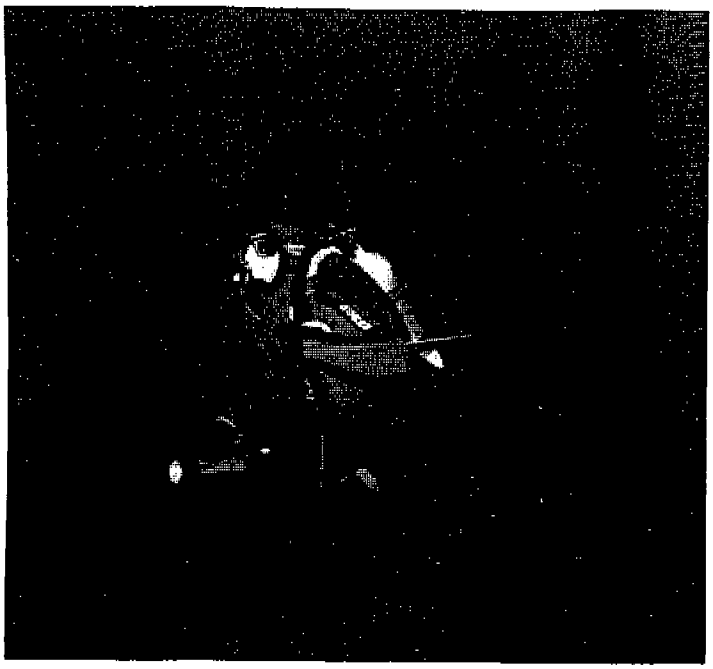
In 30 minutes, they terminated their dive, returning to the boat. Piece by piece, I pulled gear into the boat, until they too came out with a simple scissor kick. Having gone to the beginning of the portion entirely underwater they reported

manmade graffiti approximately 2 feet below the surface in the final chamber, evidence that the water level does or has fluctuated to some extent. No form of aquatic life whatsoever was observed, and no current was noted anywhere. We returned to camp for lunch, after which Ken and I would make our dive farther into the system.

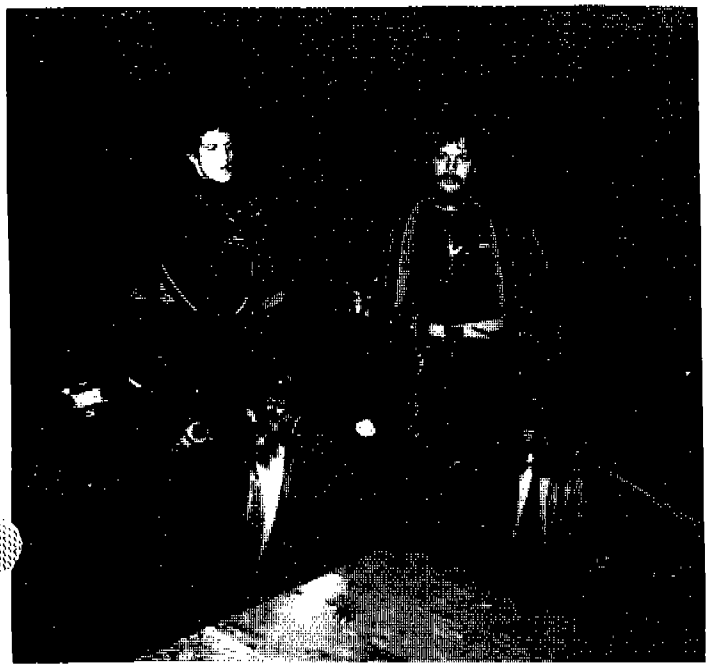
Shortly after noon, the four of us returned to the boat, gained access into the final surface chamber, and Ken and I donned most of our cave-diving gear in the water, as Paul and Charles had done. Armed with more lights and double tanks, Ken and I descended just outside the underwater passage and began our penetration. The angle of the tube took a slight downward cant, yet continued just as wide and high as that portion which held air on the surface. Depth here was 40-50 feet. We had only penetrated for a little more than 100 feet when Ken called the dive; some uncanny premonition his wife had had about "trouble in the cave" gave him a few knocks in the "comfort zone" and told him we would dive this one again.

We returned to within a few feet of the "border" for some photos, after which Ken made some observations of the walls while I got into some fly-walking on the ledges near the boat. On the bottom, just below our vessel, I found some metallic object which puzzles me even now; I know it's manmade, but I just can't figure out what it is! Ken recovered two antique liquor bottles closer to camp in 20 feet of water, and we paused for a few shots on the wrecks before making it back to camp.

CONCLUSIONS: To begin with, this is indeed a lava cave of undetermined length. There is a good-sized river approximately 1/2 mile from the mouth of the cave, as a crow flies. Water in the river is murky; aquatic weeds and fish abound. If this cave does connect with the river at some point, the exceptional visibility of the cave could be the result of sediment having been the ideal opportunity to settle, as there is a good amount of clay-colored silt on the bottom and on the walls here and there. One would think that some aquatic life (or remnants thereof) would have made its way into the system to some extent. The river walls (appearing as a gorge) are of lava as well.



Ken Clark at penetration of approximately 100 feet beyond the last chamber. Photo by Karl Anderson.



Paul Kvamme and Charles Sterling prior to beginning the journey by boat to the dive site.

There is direct evidence that man has been into this system at least to the final air-filled chamber, and that the water level has some fluctuation. The water temperature is a steady 58-60 degrees, and the visibility is 100-150 feet, with no current whatsoever.

This is what I would term as an incredibly unique cave, suitable for advanced cavers as well as the beginner. With the entire system, at least up to the final chamber (beyond the Planer) being air filled, a diver can surface at any time. Yet because of the nature of the water being so far from the mouth, this is a system which cannot be initiated as a cavern dive; it's CAVE any way you look at it. Simply by virtue of the fact that there are three wrecked vessels in the system makes it unique; Paul inquired as to whether or not he could be certified for WRECK and CAVE diving simultaneously! How 'bout that for a specialty combo!

The objective for our next trip will be to gain more penetration and perhaps learn if this system does tie in with the

river. I will keep all of you informed as to our progress, and in the meantime, would like to invite any cave divers to contact me if you are interested in diving this system. The land surrounding the system is privately owned; the Masons own the cave itself and the road to the system. Just before passing away, Dick Hayes gave written permission for Ken and me to have an unlimited access, along with those accompanying us.

I must reflect that the caving experiences I had with Doug Clark in the springs of Florida will always stand out as some of the best diving experiences I could ever ask for; I received my CAVERN and CAVE certifications through him. It is one of my dreams to obtain certification as an NSS-CDS Instructor someday; the only obstacle to that dream is that I can't afford the trip to Florida at this time for the Instructor Institute! With Jeff Bozanic's assistance, realization of that dream may not be too far off, as he has expressed an interest in adding Oregon to his massive list of caving experiences! For any others of you, feel free to write me at 20600 U.S. 101 South, Cloverdale, Oregon, 97112. Until next time, may all your cave dives be safe and exciting ones!

LETTER TO THE EDITOR - from Kelly Brady

November 15, 1986

I received the Safety Brochures and Workshop Posters you sent. Thanks! Lately, I have distributed even more brochures than in recent months--so many places that should have them are always out when I am visiting. I've distributed quite a few to Dive Shops in my area, and to places I visit. I need about 300-400 to hold me through the winter. As the oceans become cooler than the springs, many of the local dive trips avoid the oceans in favor of the springs. In the summer, I assist with the dive trips to Panama City, Florida about every 4-8 weeks.

On the way down, our group normally stops at Morrison or Vortex Spring for open-water checkouts (no cavern or cave entry). The last 3 times that I was at Morrison, there were no NSS or NACD brochures at all. The proprietor stated that "every once in a while, we get a couple hundred in the mail." On a later trip, he told me something about how they run out because they mailed many out with information packets. Each time, I gave him all I had with me. The number of divers at Morrison is very high in the summer; it is probably the best fresh open-water dive in the Panhandle. Owing to the fact that there have been approximately 6 deaths at this spring recently, I'd like to see divers become more aware of the near-cave environment here, and how it differs from open-water diving.

At Morrison, there are no signs indicating that the cavern can be unsafe, especially at night. There is nothing in the dive shop to indicate this either. There are no certified cave divers around to warn open-water divers. I understand that it is the fault of the Spring's management that there are no signs, and that the NSS has offered more than once to erect them. I'd like to see a regular mailing of brochures to this site in the future. If this is not possible, I will be glad to request brochures for the Spring, and deliver or mail them as needed.

Additional deaths at this Panhandle site due to ignorance would be tragic and might cause closings, which in turn could affect other nearby sites. Marianna is very close, and Tallahassee is not too far away. Vortex Blue Springs, which doesn't attract cave divers, is even closer, and I could write volumes about the potential for problems there.

Vortex is expanding into a tourist attraction which lures divers in greater numbers than before. Moped rental, horseback riding and other attractions are being added. A new and larger headpool is being terraformed, and rumor has it that they plan to connect to a cave passage making another area for cave diving. Currently, Vortex features a nice headpool, underwater airbell, easy access to the water, a very silty and small cave, and a 300-foot cave dive to a depth of 110 feet. A very thick novice line is in place. Vortex has a warning sign near the spring. It basically says to dive with a buddy, have (I believe) 2000psi, and that no spearfishing is allowed.

Inside the dive shop, there is a stack of leaflets that say the same thing. I found NSS and NACD brochures in the back of the dive shop under a shelf, in a dimly lit, unattractive part of the building. Evidently, they do not recognize the value of these brochures. They also do something that makes me question their understanding of cave-diving safety. When a purchase is made from their dive shop, the items are put into a bag that says "Florida Cave Diver Survivor." They also have caps, patches, and bumper stickers which have the same slogan. It reminds me of T-shirts that say things like "'86 Whitewater Canoe Round-up Survivor" or "I Survived Hurricane Elena." The attitude that this slogan suggests is "Cave are a challenge--C'mon, divers, be a survivor and become one of the few, the proud."

I really don't know what will happen to Vortex, or what can be done to enhance the diving atmosphere there, without interfering with the profit-making potential for the owner. I simply feel that conditions may worsen, as more divers are attracted.

The lack of awareness in the Panhandle is a problem that can be combatted in two

ways: by dealing with the heart of the problem, and by improving the local conditions by increasing divers' awareness. The heart of the problem is the lack of information provided to instructors by the certifying agencies, who pass on their ignorance of cavern- and cave-diving safety to their students. Part of this is also the individual divers' fault for not paying attention to warnings such as signs, and for not exploring the various opportunities to increase their general knowledge of their sport. Most divers take the sport for granted, as most of the diving they participate in is very safe.

To combat the Panhandle problem we could saturate the area with a continuous and consistent flow of information about cave-diving safety. This could include regular distribution of safety brochures to all Panhandle dive shops in the vicinity of the springs, and to the springs themselves. Dive stores in Panama City, Tallahassee, Ft. Walton Beach, and Destin are prime targets. A free copy of each issue of Underwater Speleology for each spring and dive shop would also help make the owners more aware. By taking these additional measures, which admittedly are slightly extreme, we can make divers aware that training exists, and that without it, each dive into a cave is a potential tragedy. Once these divers become more aware, we can then focus on the causes of diver ignorance, and combat them.

ANNOUNCING A NEW COLUMN - "MCGUIRE'S FORUM"

Starting immediately Rob McGuire will be accepting submissions for a new UWS column entitled "McGuire's Forum." Its purpose is to serve the needs of experienced cave divers who seek an exchange of ideas on the more advanced, and sometimes controversial, topics of cave diving. Rob was kind enough to point out what he considered to be a serious deficiency in UWS, and offered to edit a column that would address these subjects.

"The sole purpose of this forum would be to invite ideas to improve the art of cave diving. Possible subjects would be: solo diving, staging, DPV's, equipment modifications, organizing experienced divers for exploration and surveys, and similar items. The main purpose of this would be to have a central point to collect information and to present all aspects of the subject."

Please send your articles, letters, questions, comments, etc. directly to Rob:

SSGT R.D. McGuire
P.O. Box 5-024
MCRD, PISC 29905
(803) 525-9529

BATTERY REMINDER - by Rob McGuire

During a stage/scooter dive in Telford Spring last year with two other cave divers, we had a total of 15 lights either fail or burn down extremely fast. Nine of these were small backup lights that burned out in about 5-10 minutes of use. After the dive we tried to determine the cause for these failures. All three of my Super QXL lights had Duracell batteries of which none were more than four months old and the only use was to check whether they worked or not. It was apparent that merely the turning on to check before each dive caused the early battery failure.

After the dive I reviewed backup lights available and found that the (Underwater Kinetics) QXL4R with its tight beam pattern and small size proved to be the best choice. Also, the number of lights I carried at this time was six (to include a Micro-light). Now I carry 8-10 depending on the duration of the dive. Of course, carrying this many lights could cause danglies. With four lights on tank straps, two more backup lights can be carried by using a ring on your primary light canister and held by an inner tube band or a piece of surgical tubing. This location and method stops danglies, and is easily accessible using one hand and without stopping. This was the first dive in over 200 in which lights have been a problem and certainly brought lights into the (no pun intended) spotlight. If anyone else has had a similar problem with backup lights, I'd be glad to hear from you.

SSGT R.D. McGuire
P.O. Box 5-024
MCRD, PISC 29905

PUBLICATIONS WELCOMES JUDY VERANO

Judy Verano of Clearwater, Florida, has volunteered to take on the job of mailing out individual orders of books, patches and decals. Judy is a nurse, and has been cave diving now for several years. Welcome to the team, Judy, and thanks for your help!

THANK YOU FROM THE EDITOR - to Tex Chalkley of Ocala, Florida, and Tom Gilleland of Englewood, Ohio for responding to my appeal for a SpellCheck program for my computer. On behalf of myself, the Section, and--I hope!--the readership, I thank you gentlemen for your fast response and for the trouble you both went to to try secure programs for my antiquated computer. Reders willl, I hope, notise a distinkt improviemennt in thee speling of fyoochure neuwsletteres.

ROARING RIVER EAGLE EXPEDITION -
Introduction by Bill Hanson
Dive Description by Joe Dabbs

In a clandestine hollow almost on the county line between Marshall and Jackson counties in Alabama, is a marvelous little waterfall. It emerges from a dark hole, cascades 40 feet down a limestone cliff face and disappears again. Cavers have enjoyed following this stream underground for many years. The water has carved out Roaring River Cave and Upper River Cave, and on July 26 Joe Dabbs and Rob Millott attempted to prove that this stream is also responsible for War Eagle Cave.

By plotting the Roaring River and War Eagle caves on the USGS topo map, the connection seems obvious. The two sumps are separated by only 450 feet. There is a second sump in War Eagle at the opposite end of the cave. Mary Ellen Exley entered the spring which drains War Eagle on June 22, 1980. She negotiated 800 feet of meandering and low passage to find herself in the Fish Pool not far from the base of the pit entrance. Since there are no tributaries to the stream in War Eagle, the sump at the head of the stream carries the same amount of water as the sump leading to the spring.

The only nonwater entrance to War Eagle Cave is a 137-foot pit leaving the caver on a ledge still 20 feet above the water level of the stream. The pit is quite spectacular. Almost open air, there is a sheltering alcove over the drop. The alcove and the walls of the pit ooze formations of every type. One particularly annoying speleothem is the flowstone which forms the lip of the pit. 10 feet of smooth curving slope defies clipping a Jumar into a rope stretched over it. It ends with a 6-foot undercut with flowstone dripping off the edge, a hung stone umbrella.

From the bottom of the pit to the upstream sump is about a mile of large canyon passage, 30- to 50-foot high ceiling, 20 to 100 feet across. Formations become rare in the upstream section of the cave. The character changes as well. The single megapassage splits into a crawling maze. The easternmost branch carries the water and continues as a gradually sumping passage 5 feet in diameter.

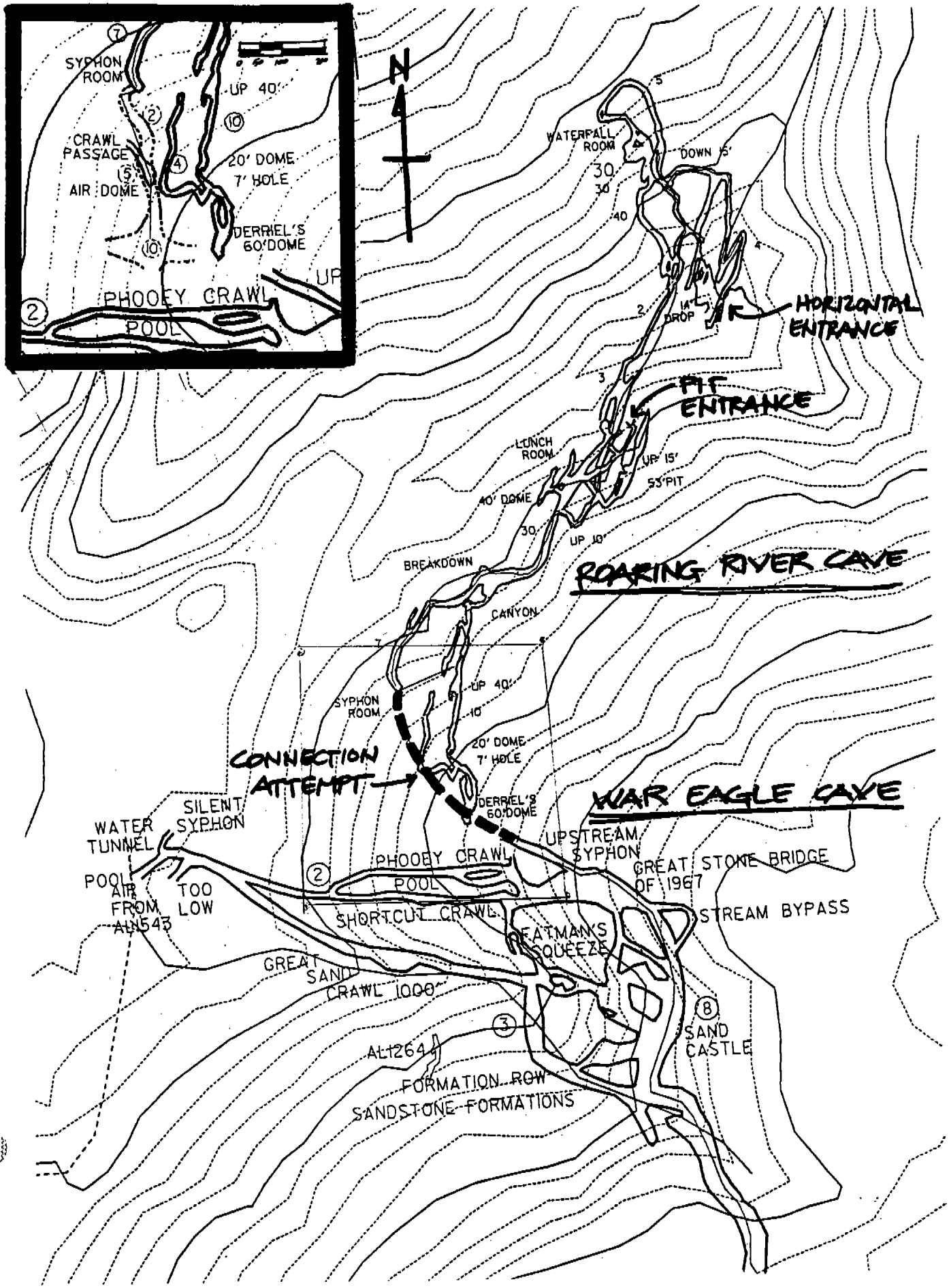
Roaring River Cave is markedly different. A large horizontal entrance accepts the waterfall. It is not possible to follow the water which disappears into breakdown. However, a 10-foot crawl leads to an 8-foot drop and into the underground stream passage which leads to the sump some 2000 feet downstream. The first 1000 feet is stoopway and crawls, but opens up dramatically into large canyon passage. [It is] smaller in scale but similar to the passage near the pit in War Eagle. A second entrance connects with the stream passage here. This entrance has a 100-foot crawl and a 50-foot pit, but is walking passage after that. More importantly, it by-passes the stoopways and crawls of the horizontal route.

The stream passage twists away from the upper canyon, but still maintains headroom along the Bobsled Run. This section is 3 feet wide and 6 feet high. The walls and floor blend into a "U" shape, and twist smoothly through a 500-foot long serpentine. A perfectly regular pattern of 2-inch scalloping covers the walls and floor. The stream flows at your feet until just before the sump. The stream ducks under a ledge and the walking passage becomes dry. The passage ends on a large slab of limestone jutting into the sump pool, 6 inches out of the water. The pool is only 4 feet deep, and the sump passage leaves the pool at a right angle to the passage leading to the room.

The advantages of starting from the downstream side were compared with the advantages of easier access and the friendlier prep room of the upstream end. Should the divers enter from the upstream side the silt would follow them, and the water flow would add to the penetration distance while working against the return. Fortunately, the two divers making the attempt are seasoned sump divers, Joe Dabbs and Rob Millott. As a team they have dived sumps in Dry Creek, Fern Cave, Skidmore Cave and Hughes Cave in northern Alabama, and just about every spring in Florida. Joe felt that the water movement was not sufficient to affect the dive. The upstream sump would be the starting point.

Over 30 veteran cavers representing the Huntsville Grotto, the Birmingham Grotto, the Michigan Interlakes Grotto, the Detroit Urban Grotto, the Dogwood City Grotto, Undergraph, and of course, the Cave Diving Section, converged at the cave for the dive effort. Don Francis organized a practice session for the Alabama Cave Rescue Unit on the Friday night before the dive. The rescuers were required to transport large amounts of medical gear (compressed air tanks, regulators, lead weights, etc.) to support a victim during a lengthy rescue. This put half of the sherpa work behind us and provided good rescue practice besides.

Saturday morning, Rob was taught basic Single Rope Technique to negotiate the 50-foot pit. About noon, both divers were at the sump along with 15 of the support crew. I was aiming the video camera, and Lamont Brown was directing the still photography. At the other end of the sump, John V. Swearingen IV placed a signal strobe light in the water at 2:15 pm and was set up to photograph the divers should they connect the caves. The divers entered the sump at 2:34 pm. Joe described the dive as


SYPHON ROOM
UP 40'
CRAWL PASSAGE
20' DOME
7' HOLE
AIR DOME
DERRIEL'S 60' DOME
PHOOEY CRAWL
POOL
WATERFALL ROOM
DOWN 15'
HORIZONTAL ENTRANCE
14' DROP
PIT ENTRANCE
LUNCH ROOM
UP 15'
53' PIT
40' DOME
UP 10'
BREAKDOWN
ROARING RIVER CAVE
CANYON
CONNECTION ATTEMPT
WAR EAGLE CAVE
WATER TUNNEL
SILENT SYPHON
POOL
AIR FROM AL543
TOO LOW
UPSTREAM SYPHON
GREAT STONE BRIDGE OF 1967
STREAM BYPASS
SHORTCUT CRAWL
FATMAN'S SQUEEZE
GREAT SAND CRAWL 1000'
SAND CASTLE
AL1264
FORMATION ROW
SANDSTONE FORMATIONS

follows:

The sump starts under a ledge, which is 15-20 inches high, with a floor of silt and gravel. Initial entry causes such a total silt out that all visual impressions of the sump are only fleeting; only for brief instants are you enough ahead of the silt cloud to see anything. The very tight slot gave way suddenly to a drop off into a depth of 6-8 feet. I'm only sure of this because I felt myself sinking and had to add air to the BC. But visually all was black.

Recovering, I swam straight ahead and felt myself rising. Brief glimpses out of the school of muck gave an impression of a passage having a mound of silt down the middle with the roof and silt dropping off to the left side, but nowhere providing more than 2 feet of vertical room, at the most. The depth was very shallow, not enough to move my depth gauge off the pin.

Soon the floor sloped downward to give a depth of 5-6 feet, and then the passage spread out to form a room with an airbell in the center. Surfacing, we could see an above-water passage heading back in the general direction from which we'd come. I felt that a limited exploration of that passage would provide no real information of interest. The passage went down again and after another low section we entered a larger room with a deeper floor. The ceiling seemed to come down on the sides but with a definite impression of possible continuation of passages ahead and to the right and left. The floor seemed to be sloping in those directions also.

By this time we had over 300 feet of line out with absolutely no tie-offs after the initial sump. Line control was becoming a major concern with the line drifting upwards and threatening to entangle both of us at every move. I had to free Bob's leg at least twice from the line. Looking for anchors, I attempted to anchor to a bread-loaf shaped rock on the bottom but found it sealed in a strangely firm layer of silt. The rock seemed cemented in place on the floor and I hesitated to create a disturbance by breaking it free.

At this time Bob and I decided to turn the dive, having no clear indication of where to go. The submerged section between Roaring River and War Eagle is evidently a complex system in its own right instead of the simple passage that we had hoped for. The passage started off at 210 degrees but we made two turns of at least 20-30 degrees to the right. This created some problems in retracing our path as the unconstrained line found its way into the crevices on the side of the tunnel as we returned, forcing us to find the passable portion of the tunnel by feel.

Altogether we had penetrated a little over 300 feet and saw several possible side tunnels, but had elected to head in the generally southerly direction, until the lack of line tie-offs forced us to turn back.

The ability to control the line over a long run is the limiting problem. Air was no problem; we had about 25 minutes diving time and had used less than half the amount allocated for penetration. Lack of visibility is not in itself limiting, but means of controlling line has been a troublesome area on other sump dives. One possibility previously mentioned is to carry 4-5 lead weights and to anchor to these at each change of direction. However, this calls for considerable reserve buoyancy, and therefore bulk. The walls did not seem to have sufficient cracks for pitons or nuts. One possibility is to use some sort of mud piton such as a thin metal rod. I once tried this in Skidmore cave with mixed results. The problem is that the silt is very soft to a depth of 5-6 inches, but quite often hard underneath and unable to support the pull of the line.

The dive was interesting and Bob Millott felt that the weekend was worth the drive from Florida. The vertical training made a big impression on Bob and his son Trey (if I can stop using the expression "crash course"). Trey was all set to do Natural Well Sunday but we elected to go to the river in consideration of the rest of the family, but he is talking about getting some "Seal Training" during next year's summer training at the Naval Academy where he's a Midshipman. Thanks to Bill Hanson, Mitzy Adams and other trainers, both of them negotiated the pit without a problem.

The logistics were very smooth with only one high-speed trip back for an errant duffle bag. Some confusion was introduced by the divers in that I sent all four tanks in ahead of time along with my gear to expedite things, but Bob's double harness should really have been partially assembled at the surface and then reassembled on site. One lesson learned is to have a check list for critical items. As it is, I believe that Bill Hanson and his crew did a fantastic job supporting the dive. The keg of beer outside the cave entrance was a class act! There are a few missing or misplaced carabiners floating around, but all in all it was a fantastic job.

A REMINDER! - RESCUE/RECOVERY TEAM MEMBERS

Please be sure to notify the National Crime Information Center (NCIC) in Jacksonville FL, of any change in your address or phone numbers within 24 hours. This is absolutely necessary if the Recovery Team is to maintain its credibility and efficacy. NCIC Phone: (904) 633-4159

NAHARON -

by James G. Coke and Johanna de Groot

Naharon, the Mayan name of a rather special cenote, has an appeal to me that classifies this cave dive as one of my favorites. In more than a year's exploration, I have come to know this cave system like others know their backyards.

July of 1985 marked my first visit to this cenote as a neophyte explorer of these "Jewels of the Jungle," looking for new ground to be broken. For years people have swum and drunk from its crystal clear spring/syphon pool, paying little attention to the dark, uninviting cavern opening on the far side of the cenote. Local Mayan descendants still claim today that Chac Mool, the Mayan Water God, still resides in this cave, making nocturnal visits to the open pool.

Superstitions still run high with the Mayans in Quintana Roo, and these superstitions were later to catch up to me, much to my chagrin. Who knows what a well-remembered monkey hunter thought as the still night waters of Naharon suddenly bubbled to life accompanied by an intense glow, the whooshing of air, and a chuckle of delight. It was then that I found myself at the wrong end of a gun; Que Pasa? At that moment daytime exploration seemed to be the rule rather than the exception.

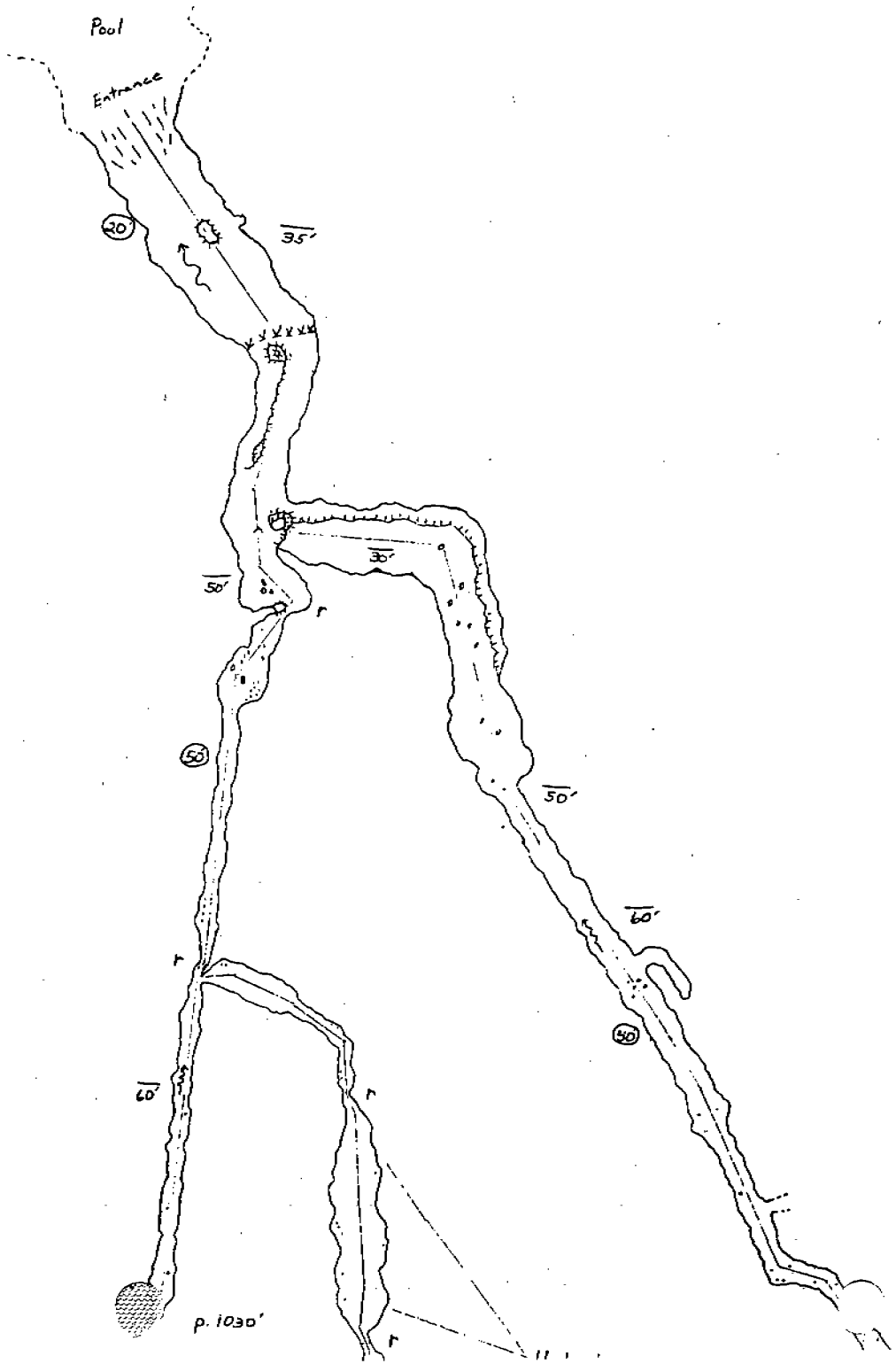
Johanna de Groot and Willey, the jeep. Photo by James Coke.

Johanna de Groot in the Halocline Room of Naharon Cenote. Photo by James Coke.

The first dive in Naharon (with Hillario Hiler and Jose A. Ezquiel) was merely a "peeking" dive; one to determine if there was anything worthwhile for later exploration. Since we were not equipped at the time for penetration, we limited our dive to the daylight portion of the cavern. The dark limestone and huge speleothems added to our appreciation of the sheer size of the main cavern; the lure of the unknown beyond the natural light zone was tremendous. Beyond the large dripstone that blocked the cavern opening we could see more cave that stayed just as large as the cavern portion. Prudence won the day, though, as we turned the dive, satisfying our curiosity that there was indeed more to be seen.

Returning to Naharon in November, I was prepared this time for some serious cave diving with another trained cave diver, Johanna de Groot. The 50-yard walk into the jungle carrying our twin 80's was rather warm. The 75-degree water was a relief which also brought anticipation to the upcoming exploration. After several exploratory dives, Johanna commented:

> The first time I descended into Naharon Cenote was in the pitch of night. A walk through the jungle with flashlights and cave-diving gear was quite different from the days five years back when I used to walk to this particular cenote in the heat of day for a cool, refreshing dip. Back then I had snorkeled down and wondered if that dark hole at the far end of the cenote actually went anywhere. Now I know, from first-hand experience, that it certainly does.
>
> It is no longer a dark hole for me, but the doorway to a beautiful cavern/cave system with large rooms and narrow passageways, along with a diversity in cave diving which is far and few between.



NAHARON CENOTE

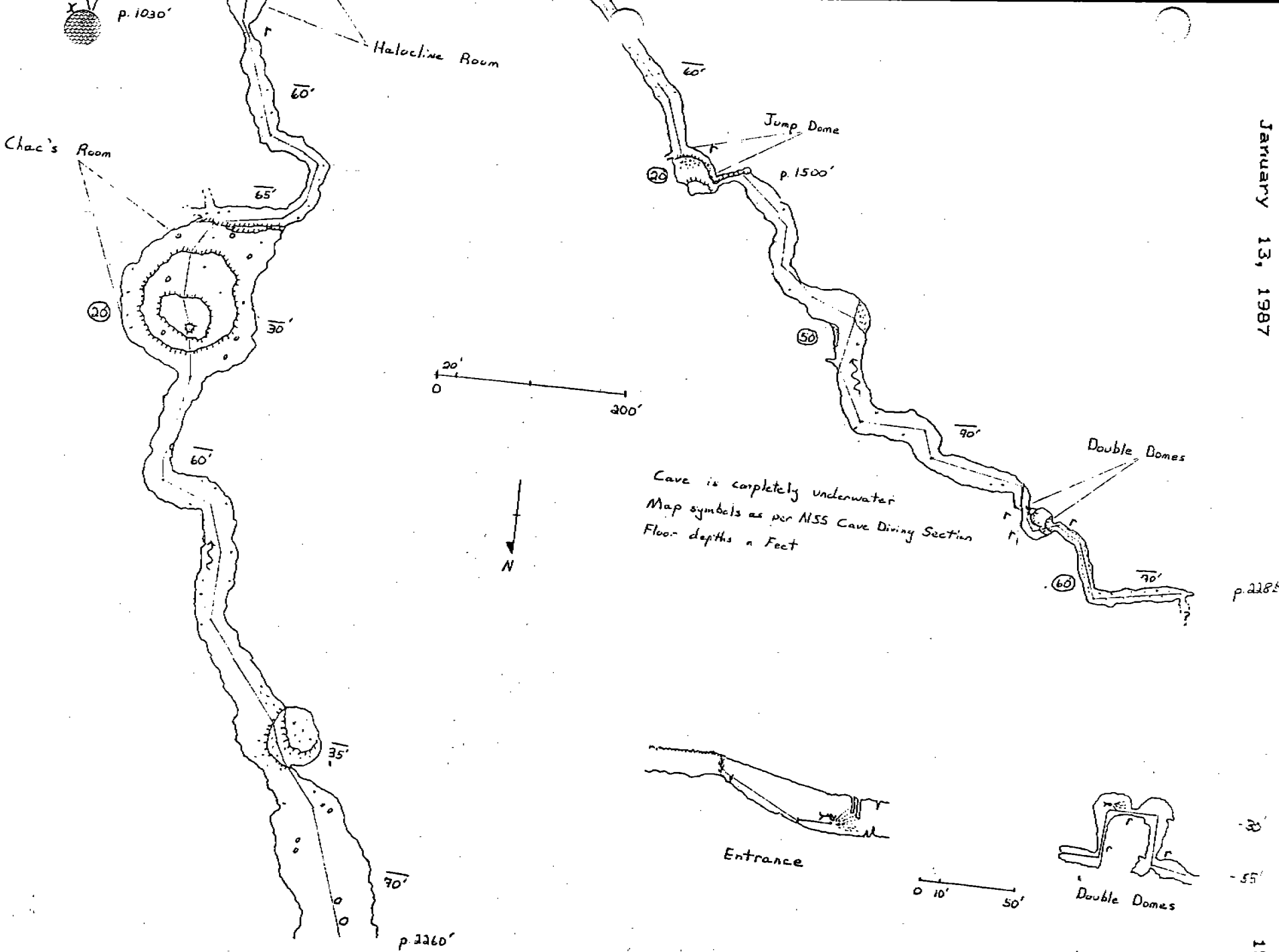
Tulum, Quintana Roo

Mexico

Compass and Line Survey
by James G. Coke
Assisted by Johanna de Groot

June 1, 1986

Total Passage Surveyed 4445'


p. 1030'
Halocline Room
60'
Chac's Room
65'
20
30'
60'
35'
70'
p. 2260'
20'
0
200'
N
Jump Dome
p. 1500'
20
50
90'
Double Domes
60
70'
p. 2285
Cave is completely underwater
Map symbols as per NSS Cave Diving Section
Floor depths in Feet
Entrance
0 10' 50'
Double Domes
-30'
-55'

Every passageway leads to a room. Many of the smaller rooms dip into the halocline while others are very large, with beautiful speleothems and large domes. The passageways have spectacular pencil columns, and soda straws litter the ceiling. After diving in this system several times, I finally had the opportunity to dive there in the daytime.

As I was reeling out, I was stopped in my tracks by the beauty of the opening --a perfect semicircle of turquoise light. Truly worth waiting for.

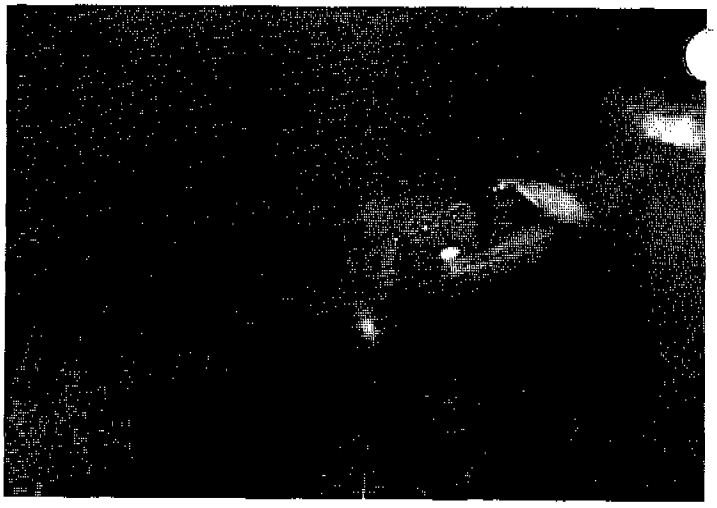
The next 30 dives afterwards entailed exploration and surveying down the West or Jump Side. Without pushing our Thirds, we comfortably explored up to the Jump Dome, looking into some dead-end side passages. Placing safety bottles at that point and staging single 80's, we found the restriction that led us beyond to the Double Domes and the end of the line as it is today. A promising tunnel below the halocline definitely leads on in the right direction; however, double staging and greater depth have delayed further exploration in this tunnel to date.

The next 15 dives found us exploring the Halocline System or East Side of the cave complex. The spring current is not as strong on this side, and in parts the lime-

The Gang who helped and Willey, the jeep. Photo courtesy of "The Dive Shop," Akumal, Quintana Roo.

stone is much cleaner and brighter. With a halocline laying in the middle of the tunnel and chamber system, visual beauty and distortion play a large part in portions of the dive, especially in the Halocline Room. Beyond this point the system narrows down, wandering towards Chac's Room, the largest room in the whole system. With more staging, the exploration has continued beyond into a wide bedding plane system, leading to confusion as to the best direction to proceed in.

Logistics can be somewhat of a problem



Johanna de Groot entering the Halocline Room of Naharon Cenote. Photo by James Coke.

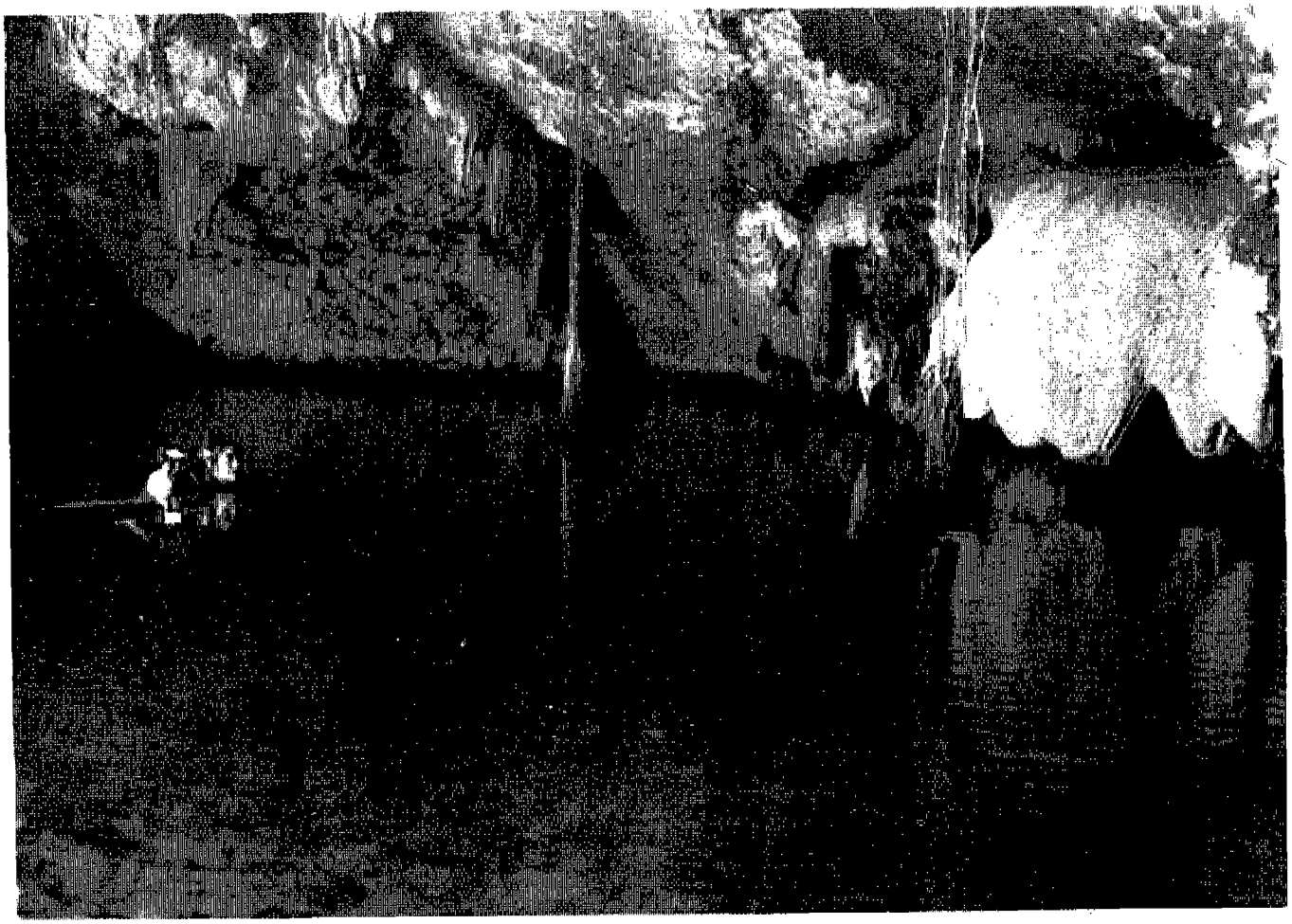
in diving Naharon and other cenotes in Quintana Roo and the Yucatan. Arranging for the proper equipment has always been a hassle. All the correct gear must be brought in from the States. Double 100's, drysuits, and other such luxuries are difficult to import and to hold on to. And, if specialized equipment fails, replacement parts can take weeks to obtain.

Just getting to the dive site can itself be taxing. Naharon is a 50-yard walk in and out. After our longer dives, as many as six trips are made back and forth to the cenote to minimize the chance of decompression sickness. The nearest recompression chambers are in Cozumel and Merida--when they are working. Other cenotes are very close to the access point; some required the use of a 4-wheel drive jeep, thickly padded seats, and a knowledgeable guide.

All in all, the spirit of exploration remains strong in Quintana Roo. The few resident cave divers with CDS training are beginning to make significant contributions to the international cave-diving community; this becomes apparent due to the greater amount of information that originates from this part of the world. The number of non-resident cave divers visiting this area is increasing as well; their testimony will support the fact that the Yucatan is indeed a rich area still largely untouched in underwater cave exploration.

Equipment and logistical considerations will slowly change over the next few years, making accessibility to the caves easier. Yet there will always be the same sense of adventure in cenote diving in the Quintana Roo, not barring superstition, Chac Mool, or surprised monkey hunters.

PHOTOS opposite page: (Top) Johanna de Groot in the spring side of Ojo East of Dos Ojos Cenotes. Photo by James Coke. (Bottom left) Mayan corn grinder in Ojo West Cavern. Photo by Johanna de Groot. (Bottom right) Mayan artifacts in Ojo West Cavern. Photo by Johanna de Groot.



Johanna de Groot in typical bedding plane of Dos Ojos Cenotes.
Photo by James Coke.

LAND GIFT: ERYTHROPS CAVE -
reprinted from the Nature Conservancy Newsletter, Winter 1986

Erythrops Cave and an associated sinkhole system have been donated to The Nature Conservancy for the protection of the globally unique red-eyed cave crayfish.

Named Procambarus erythrops, the crayfish exists on this two-acre site in numbers unmatched anywhere. Other highly ranked invertebrates--McLane's Cave Crayfish and cave amphipods--also share the sink.

The site was a November gift from Buford C. Pruitt, Jr. of Jacksonville, who bought the site and surrounding acreage in 1985 specifically to protect its natural values. Pruitt, a professional ecologist, is a long-time friend of the Conservancy.

The area will be managed through the Conservancy's Florida State Office and is the fourth subterranean acquisition to date. Others are: Warren Cave, Marianna Bat Cave, and Peacock Springs. These sites protect some of the nation's most rare fauna, many found nowhere else in the world.

ANOTHER REASON TO DIVE LITTLE RIVER -
by Rob McGuire

Sometimes it is difficult to get your dive buddies (Dan Butler) to dive a cave system that they have dived before and then think that there is nothing else to see. Well, if this is you problem with Little River, then I have have good news for you.

While diving with Bob Gibson in late June, I was checking for possible leads in the "Old Deep Tunnel" without success. On this particular dive I pushed a small tunnel, about 50 feet into the Deep Tunnel, on the left side. Pushing through a restriction, the tunnel continued for about 15 feet were it then branched to the left and right. The right branch loops back to the Deep Tunnel while the left continues on to a restriction. I had laid 40 feet of line (yes, Roger, it's knotted) up to this restriction, which consisted of a ledge projecting half way across the tunnel. Trying to worm through the restriction knocked one of my first stages really good and caused an air loss. Before turning the dive I pushed through and sized up the remainder of the tunnel, which continued

about 12 inches wider than 100's, and about 3 feet high.

On a subsequent dive I laid another 20 feet of line, but the passage now consisted of delicate projections and a "crust" on the floor which would have been damaged by continued "worming." There are several other small areas and cracks which could yield new passage.

I hope that some of you quiet types out there will write of some of your interesting dives. It definitely keeps UWS on the good reading list.

CAVE DIVING SECTION MUGS - now available

Treasurer Joe Prosser came up with the idea of having coffee mugs made up with the CDS logo on one side, and the basic rules of cave diving on the other. The 6-oz. cups are are made of white china-glass, and the emblem and rules are printed in black. (The entire stock that he brought to the Winter Workshop sold out almost immediately.)

The Coffee Mugs are:

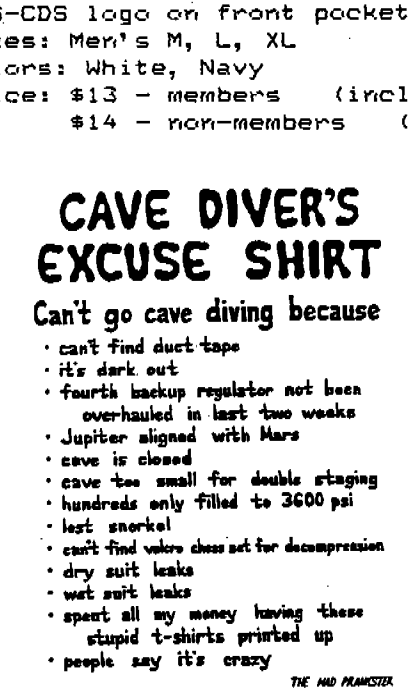
$5 - members ($4 + $1 post/hand)
$6 - non-members/UWS subscribers ($5 + $1 post/hand)

They can be mail-ordered by sending a check or money order for the appropriate amount to:

NSS-CDS Publications
P.O. 950
Branford, FL 32008-0950

We have put in a couple of enormous orders for new T-shirts to meet the increasing demand. We hope to have new shirts of the "Single Diver" and "Two Diver" designs from TAPS Graphics of High Springs (Terri Skiles) sometime in the very near future; announcement will be made in UWS. However, the new order of white and navy collared sports shirts and Cave Diver's Excuse Shirts has already been completed. These may be ordered through Publications at the above address.

COLLARED SPORTS SHIRT
Short sleeve
NSS-CDS logo on front pocket
Sizes: Men's M, L, XL
Colors: White, Navy
Price: $13 - members (includes p/h)
$14 - non-members (")



CAVE DIVER'S EXCUSE SHIRT
Short sleeve
Black printing on front of shirt
Sizes: M, L, XL
Colors: Gold, Orange

(pre-existing stock):
White printing on front of shirt
Sizes: Men's L (Green), XL (Green), M (Maroon), S (Teale Blue)

Price: $9.50 - members (includes p/h)
$10.50 - non-members (")

PROFESSIONAL DIVING INSTRUCTION: LLOYD BAILEY

by Milledge Murphey

AUTHOR'S NOTE: The development of a cave-diving instructor is a process of interest to us all. Lloyd Bailey typifies this development and his scuba-diving story follows:

During 1976, Lloyd Bailey moved from North Carolina to Florida to work at Disney World as a lifeguard at the Polynesian Resort Hotel. He later taught water skiing and sailing at the Disney Contemporary Resort Hotel. While there he taught advanced lifesaving to Disney World staff and learned scuba diving at Disney World through the employees scuba program there. Wayne Mitchell was Lloyd's NAUI instructor at Disney for his initial NAUI Basic Scuba rating and has had a profound effect on his scuba career.

The events which led to Lloyd's move from Rocky Mount, North Carolina, to Orlando included seven summers spent at sailing camp where, at 12 years of age, he asked to take scuba lessons but was refused by his parents. He then waited from 1968 until 1978 to realize his dream of becoming a certified diver.

Following certification, and during his years in Orlando, he dove West Palm Beach, Cape Canaveral, Ft. Pierce and other sites, being heavily involved in low-visibility spearfishing with Jim Reid. (Author's note: Lloyd regards Jim as the most competent spearfisherman with whom he has come in contact).

He transferred from Valencia Community College to the University of Florida with a major in Chemistry during 1979, and became involved in Advanced Scuba Diving Training under the late Paul Meng. (Author's note: Lloyd emphatically states that Paul is the only genius he has ever met). Following the advanced course, Paul motivated Lloyd to become a scuba instructor, and in 1981 Lloyd became a PADI instructor in an Instructor Training Course conducted at the University of Florida. Paul Meng so stimulated Lloyd's interest that Lloyd attended an I.T.C. previous to the one during which he was certified (as an audit experience). During the summer of 1981, Lloyd began full-time professional scuba instruction with six open-water and advanced scuba courses, some taught through Sea Level Scuba in Gainesville, and others, independently.

At one time, Lloyd stated that he would never go into subaquatic caves, never go deeper than 100 feet, nor do stage decompression. (Author's note: Lloyd now does all of these things weekly.)

Lloyd began cavern diving with the Gator Scuba Club at the University of Florida during 1980, and in 1981 asked Paul to teach him NACD Cave Diving. Paul

agreed, and Lloyd entered training as an NACD Cave Diver; however, this training did not end in certification due to Paul's untimely death. Lloyd states that he has never been certified as a Cavern or Cave Diver and that the circumstances surrounding this were Paul's untimely death and a chance meeting of Lloyd and Forrest Wilson at Peacock Slough during March, 1982. At this meeting, Forrest invited Lloyd to attend an NSS Cave Diving I.T.C. of which he was course director, with a staff including Wes Skiles and several other cave-diving notables. Among the students in the course were Mark Leonard, Joe Odom, R.C. Crotty, and Bill Dunn, all of whom have been active members of the NSS-CDS.

Lloyd completed the NSS-CDS Cavern Diving I.T.C. during the Spring of 1982 with his student-assistant duties being conducted under the experienced guidance of Wes Skiles. Lloyd continued to assist Wes and ultimately was certified as an NSS-CDS Basic Cave Diving Instructor (February 1984).

Shortly after being certified as a full cave-diving instructor, Lloyd was employed as a part-time cavern- and cave-diving instructor (along with Mark Leonard, Director of Underwater Education) at the Branford Dive Center. This was during the Fall of 1983, and during May 1984 Lloyd became Director of Underwater Education at Branford Dive Center. During 1984, Lloyd was the most active cave-diving instructor in America, with 151 students taught and certified at Branford Dive Center, and he was appointed to the NSS-CDS Cave Diving Training Committee.

"Lloyd Bailey's Scuba" was initiated as a business during 1981 and reached significant income levels during 1983. At this juncture Lloyd was teaching open-water courses at all levels independently, teaching NSS-CDS Cavern and Basic Cave courses for Branford Dive Center, and conducting dive trips to West Palm Beach, the Bahamas, and other resort areas. In addition, Lloyd continued his retail sales position with Sea Level Scuba in Gainesville.

During 1984, Lloyd taught 4 assistant instructors, 5 divemasters (3 became NAUI instructors), and more than 200 students to scuba dive (or cavern and cave dive). Lloyd became a sales representative with Dive Rite Manufacturing Company [Mark Leonard, President] during the summer of 1984, after having great success with retailing for Sea Level Scuba ($20,000 gross sales during 1983).

During February, 1985, Lloyd once again increased his professional license by successfully completing the NACD Cave Diving I.T.C. at Ginnie Springs with Training Director, Ron Menke, assisted by Steve Gerrard and Ron Abner. Lloyd then became one of a select few in cave-diving instruction who have been certified by both the NSS-CDS (#172) and the NACD (#43) as full Cave Diving Instructors.

Lloyd subsequently incorporated cavern- and cave-diving instruction into his Gainesville-based scuba-instruction business and presently teaches actively in the Gainesville area, in Rocky Mount, North Carolina, and in Charleston, South Carolina. Few, if any, independent instructors teach in three states; thus Lloyd's energy and perseverence make him unique in the scuba-instruction world. Lloyd plans to expand his North and South Carolina instructional activities in the immediate future, in addition to his already successful Gainesville-based business interests.

I asked Lloyd for specific information about his personal diving and learned that he had been influenced greatly by Woody Jasper during his formative subaquatic-cave exploration period. Lloyd credits Woody with expertise as an innovative cave diver, explorer, and equipment-modification wizard. Lloyd's personal statistics as of Oct. 23, 1985 were 1,210 total dives with a yearly average of 300+ dives.

His accomplishments include a maximum depth of 230 feet (at the Eagles Nest upstream section during 1982), and a maximum penetration dive at Anderson Springs in North Suwannee County during Fall 1983 on a single stage dive during which 110 feet of new line were added to an impasse at a severe, almost complete restriction. This dive was led by Lamar Hires, and Lloyd counts it as one of his most memorable dives. Other dives have included a triple stage in Little River with Hires during which they penetrated past the Terminal Room. At this point, Lloyd describes the passage as ominous, with an unstable "Jello-like" floor with a rolling gray appearance at a depth of 80 feet (5 feet maximum vertical clearance) and no perceptible water flow.

Another recollection which Lloyd has is his first actual cave dive, which was in Alachua Sink. With no training, he and Will Whitesides (from Tennessee), began diving weekly at Alachua Sink. Lloyd's first stage dive was at this site with a single 94.6-cubic-foot tank on his back and a single 50-cubic-foot tank (complete with back pack) worn on his chest. After this dive, he quickly decided to seek training, as he had heard that no trained cave diver had ever succumbed to the alluring depths of the subaquatic environment.

Lloyd Bailey (far right) and cave-diving students.

Lloyd has double staged and scootered in Devil's Eye, double staged upstream from Friedman's Sink, and done extensive reconnaissance in the Green Sink System. Further, he has staged in Madison and plans scooter stages in the Tallahassee and Merritt Mill Pond areas in the future. Lloyd has great respect for Bill Main and states that Bill was the only advanced cave diver would would readily offer advice when he was learning how to cave dive during 1981. Many other advanced cave divers snubbed Lloyd and his friends in those early years, Lloyd reports.

During the Spring of 1981, Lloyd and Will Whitesides dove Eagles Nest to a depth of 190 feet on a morning dive, and later in the afternoon, decided to dive at Hospital Hole to 140 feet. For the dive at Hospital Hole they each used a single 94.6-cubic-foot cylinder with two second-stage regulators, leaving them without safe seconds (octopuses). The tanks were filled to a hefty 3,600 psi and both divers believed that the dive could be conducted safely without safe seconds as they placed a decompression cylinder at 10 feet for this stop should it be needed.

Things went uneventfully until it was discovered that an air-calculation error had been made (in that Whitesides had inadvertantly violated the Third's Rule) resulting in an out-of-air situation during the second decompression (20 feet).

At this point both divers were at 20 feet buddy breathing from Lloyd's rapidly dwindling air supply with the full cylinder in view above them at the 10-foot stop. As the remaining air grew ominously small, Whitesides decided to free ascend to the 10-foot stop, and he remained at 10 feet to complete his interrupted decompression schedule.

Lloyd states that from this point on he decided that he would never again dive anywhere without a safe second and further, that he would always leave his decompression cylinder at the lowest possible decompression stop for the planned dive.

Another dive Lloyd remembers is the Spring House at White Springs where he used all of his safety reels and continued the dive to a depth of 160 feet (with no guess as to penetration) due to the turbidity of 5-20-meter visibility water. Finally, a near miss occurred when Lloyd and Jeff Bozanic entered the confines of Bonnett Springs during August 1984. During this dive, Bozanic, using unfamiliar equipment, experienced a first-stage high-pressure failure at the upstream/downstream juncture (1,800 feet penetration). A massive freeflow ensued during which Bozanic inadvertently closed his non-freeflowing valve.

At this point, with 6-inch visibility, Lloyd gave his safe second to Jeff, who was leading, and the pair began a touch-contact-on-line exit. Bozanic later regained the freeflowing regulator in order to make use of the air which he now discovered he was losing. In the resulting silted-out situation, the wrong passage was inadvertently selected at a fork in the line and Lloyd, whose policy it is to mark all line forks with his own clothes pin, discovered the error, enabling the pair to regain the correct exit route. As they passed the Phreatic Way restriction, Bozanic finally discovered that he had turned off his non-freeflowing regulator, at which point he reopened the appropriate valve. The pair then exited, after an infinitely close call.

Lloyd's favorite part of his profession is teaching cavern and cave diving. He believes that the cavern program is the most valuable diving training currently offered for all divers, whether they intend to cave dive or not. (Author's note: I concur fully with this belief.) Lloyd has enjoyed meeting people from across the United States and foreign countries during his instruction and now teaches NSS-CDS, NACD, and PADI Cavern Courses on the 1st weekend of each month. Additionally, he teaches Basic Cave on the 3rd weekend of each month and offers open-water courses at all levels through the NAUI, PADI, and YMCA certifying agencies.

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