



# UNDERWATER SPELEOLOGY

Volume 10 No. 5/6

JUST TO CONVINCe ALL OUR DRY CAVING FRIENDS THAT THE SECTION'S MEMBERS REALLY DO GO INTO DRY CAVES, ANNE FEHRING IS SHOWN RECEIVING RAPPELLING INSTRUCTION FROM STEVE HUDSON, CDS BOARD MEMBER IN THE PHOTO AT RIGHT. BELOW, ANNE IS EVALUATING THE 90 FT. DROP IN CEMETARY CAVE IN NORTH GEORGIA.



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By

The Cave Diving Section of  
The National Speleological Society

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WAYNE MARSHALL, Editor  
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ology are not necessarily those of the  
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\* \* \* NEWSLETTER SUBMISSIONS \* \* \*

All submissions to the newsletter are  
gratefully accepted. We will mail you  
a notice that your article has been re-  
ceived and the estimated time of publica-  
tion only if requested. Since all arti-  
cles must be re-typed anyway, all we  
want is a readable copy. It is not nec-  
essary at all that the article be typed.  
Further, we need short notes to fill in  
spaces at the end of articles as well as  
longer works to more thoroughly explore  
certain subjects.

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\*\* WORKSHOP AGENDA \*\*

SATURDAY, DECEMBER 31, 1983  
BRANFORD, FLA.

8:30-9:00 AM REGISTRATIONS, GREETINGS, COFFEE AND DONUTS, ETC

9:00-10:00 AM 1983 RECOVERY PROGRAM ACTIVITY-PUERTO RICO et. al.  
Henry Nicholson, NCRC Diving Officer

10:00-10:45 AM RECENT DEVELOPMENTS IN N. FLORIDA CAVES  
Wes Skiles, Cave Diving Consultant

10:45-11:00 AM BREAK

11:00-11:45 AM GEOLOGY OF FLORIDA CAVES  
Bill Sinclair, U.S. Geological Serv.

11:45-12:15 PM PHYSICS POTPOURRI - PROPERTIES OF LIGHT etc.  
Richard Dixon

12:15-1:30 PM LUNCH

1:30-2:00 PM CAVING IN BELIZE  
C.J. Rushin-Bell

2:00-2:30 PM INFORMATION SURVEY- CAVE FILES-MEMBERSHIP DATA etc.  
Wayne Marshall, Editor

2:30-3:15 PM ADVANCED TECHNIQUES  
Wes Skiles

3:15-3:30 PM BREAK

3:30-4:00 PM DESIGNING and BUILDING LIGHTS and CHARGERS  
Forrest Wilson, Training Director

4:00-4:30 PM SHEPHERD SPRING ECOLOGICAL STUDY  
Bill Fehring, Science Coordinator

4:30-5:00 PM NEW DEVELOPMENTS IN DRY SUITS  
Larry Richardson

5:00-5:30 PM RESEARCH IN LUCAYAN CAVERNS  
Jeff Bozanik

5:30-6:30 PM SCHEDULE TO BE ANNOUNCED

6:30-7:30 PM DINNER

7:30-8:30 PM SECTION MEETING - THE CHALET

8:30-??? AM DECOMPRESSION PARTIES

\* \* CHAIRMAN'S MESSAGE \* \*

Steve Ormeroid

Throughout my year as Chairman, I've had the opportunity to talk with many cave divers from all over the world. The most common question I hear is "What's the Section doing for cave diving?" Unfortunately, this last year, we've not gotten the Underwater Speleology back onto a schedule, so that is a very legitimate question. Fortunately, I can answer very strongly that yes, the CDS is alive and well. We are also working on several significant projects for the cave diving community.

I'd like to briefly detail what has happened to date this year. The CDS started out the new year with a new Constitution which provided us with more workable guidelines for the purpose and direction of the Section. An important feature is the manner in which the officers are selected. Starting with this year's election, we will elect board members to two year alternate terms. This should provide better continuity every year as three board members will stay on when three new ones are elected. Your Board will select amongst themselves the officers for the year. This feature will eliminate the problem of having to decide between two excellent candidates for a single position.

Our recovery training program is continuing to grow. The 2nd Recovery Workshop was held April 30th at Indian Springs near Tallahassee, Fl. The motivation behind the formation of the recovery network and the continued dedication of the many fine coordinators and instructors is a fine example of the efforts of the cave diving community in working with other organizations and individuals who are not knowledgeable of the special skills and techniques involved in this

highly technical aspect of our sport. Henry Nicholson, our recovery network coordinator, was recently appointed Diving Officer for the National Cave Rescue Commission. In that capacity he will be able to interface even more effectively with the various law enforcement agencies and rescue organizations around the country. We can better the standing in the public eye of the cave diving community with our honest efforts to provide a worthy service in this area.

Several fine presentations produced by members of the CDS were shown at the N.S.S. Convention held in Elkins, W. Va. this July. It is interesting to note the curiosity most dry cavers have for the cave divers. It is ironic that many dry cavers have no understanding of the time, effort, and amount of training necessary to become a competent and skilled cave diver. Even though we are a part of the N.S.S., we are often looked at from afar. Our continued involvement with the N.S.S. on several levels is helping our Section to become more understood and accepted by the average N.S.S. member. The concept of "those strange people who cave with scuba tanks and string" can be eliminated. As is noted elsewhere in this newsletter, the next convention is well into the planning stages. I hope to have the CDS well represented again in Sheridan, Wyoming in 1984.

A promise I made to the CDS when I became Chairman was to work toward a promising level of communication and understanding with the NACD. Due to the willingness of Terry Leitheuser, President of NACD and his fellow officers and members, I feel we are on the way to a viable, working relationship between the two. As I mentioned earlier, we, as cave divers, are viewed with curiosity and and sometimes even disdain by those who do not understand us.

Cooperative education programs, one of which we will participate in with the NACD this spring, are the key to our continuance and acceptance.

It will be of little importance what organization someone belongs to when a cave system is closed to all because of accidents. Cave divers know who die in caves - primarily those who are not part of the trained cave diving community.

The latest project we have become involved in is the purchase of the Peacock Slough ecosystem, which includes the extensive Peacock Springs system. At this moment, I have little to report to you. I am, along with several other CDS members, communicating with all parties involved. Our primary desire is to preserve access to the cave system for research and exploration. What level of involvement we will have is not known at this time. Many NSS conservation committees are providing us with information and support. I will continue to report on this project as it progresses.

I have enjoyed this year as Chairman. The cooperation and excellent support of this years BOD and committee coordinators has made my job pleasant. Their enthusiasm for the CDS has certainly helped me to decide to become a part of the Board again this upcoming year.

In closing, I would like to share this thought with all cave divers. I hope we are always viewed with curiosity from the general public. I would want our accomplishments and unselfish achievements to be the reason.

GOOD CAVING-

Steve

\* \* NEWS SHORT ON PEACOCK STATUS \* \*

Peacock Slough, Fl. - Many interested divers have been curious as to the fate of Peacock Slough, currently owned by Bob Wray of Ginnie Springs, and his partners. At the present time, the Natures Conservancy is looking seriously into the purchase of Peacock Slough, Bonnet Springs and adjacent land including the run to the Suwannee river. The purchase of the land will probably be turned over to the Suwannee River Water Management District for protection of the water source. S.W.R.M.D. has made it clear that they will not be active in any form of management of the use of the property. This includes diving.

At this point, our chairman, Steve Ormeroid is in contact with the Natures Conservancy to provide possible alternatives to management of the property and to assist in the development of management plans.

Steve has requested immediate input from any members of the cave diving community that have ideas, comments, suggestions, etc., PRO OR CON, on the issue. Steve's address is 461 W. 4th St., Marysville, Ohio 43040

\* \* PHONE NUMBERS FOR DIVING INFO \* \*

We have often debated the value of publishing reports of current conditions of various dive sites. By the time UNDERWATER SPELEOLOGY gets to the printer, back to us for stamps, labels and mailing, and gets delivered to you the information is no longer valid. Tallahassee can change in a matter of hours if it rains hard enough.

Now there is a better way! Both Branford Dive Center and Ginnie Springs have obtained toll free phone numbers for you to call and make reservations or get current dive info.

Branford 800-342-0442 in Fla.  
800-874-0443 National

Ginnie 800-874-8571 National  
Ginnie does not currently have a  
Fla. watts number (904) 454-2202

\* \* WE ARE GATHERED HERE TODAY \* \*

Sometimes we Editors get to be the bearers of good news about those we really care about and that have earned a special warm spot in our hearts. It is just such an occasion that I have before me now.

Ladies and gentlemen, may I present the Bride and Groom. Mr. and Mrs. Mary Ellen Exley... or is it Sheck Eckhoff?

Very quietly and surrepticiously these two jaybirds snuck off and up and got hitched on November 19th! There were those of us of the Brandon contingent of the CDS that were planning a no-holds barred assault on the ceremony so as to provide the occasion with the proper decorum and respect such a momentous event deserved. But alas, such was not to be the case. If you can believe it, they kept the time and place a secret! I wonder why! The Section was well represented, however as Henry Nicholson performed the ceremony.

At any rate, on behalf of the membership of the Cave Diving Section of the National Speleological Society, let me be the first to congratulate the groom, and offer my sympathy to the bride.

Mary Ellen has taken on a major rehabilitation project to say the least. In his bachelorhood, Sheck has acquired two philosophies in organization and house-keeping. They are 1) I KNOW I HAD IT IN HERE SOMEPLACE and 2) I GUESS I'LL JUST HAVE TO LEARN TO STEP A LITTLE HIGHER. Seriously though, don't you

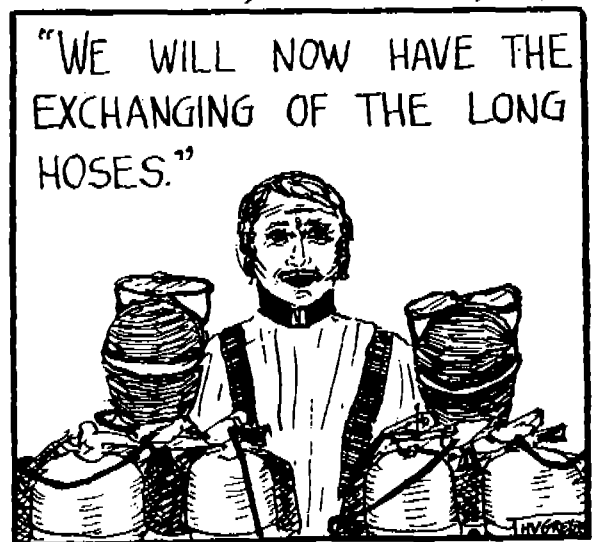
think they will keep all their diving spots and discoveries even more secret now that they have a built-in buddy system. Woe is we! I hope they are tremendously happy and wish them all the best in their future endeavors and pursuits. Safe Diving to both of our best buddies.

While we are on the subject of the personal affairs of the family Exley, let us inform you that they recently became the proud parents of a new ..... sink-hole. Also in November, they bought Thunder Hole sink and some surrounding property. A special vote of thanks is in order for their very enlightened attitude regarding access to this site for cave divers.

The area will be gated and locked, but any certified cave diver that is a member of the Cave Diving Section can obtain permission to dive by submitting a release form. At that time a combination to the lock will be mailed out to the diver. Instructors that want to take divers in for training will also be allowed to do so, provided all divers have executed the proper release forms.

That idea makes so much sense that I wish I could claim it! Nice way to handle the problem, guys!

*The Rev. Henry Nicholson presiding*



\* \* EXPLORERS AND RESEARCHERS \* \*

Wayne Marshall

Recently, we had the opportunity to wax philosophic with a couple of cronies while watching the TV special "The Day After". Talk turned to politics and the observation that exploration of new frontiers transcended any consideration of political boundaries.

The comment was made that explorers had always been characteristically lacking in political motivations or loyalties. The thought comes to mind of Columbus going from one country to another until he could find a backer for his quest.

Well, a few tangents later, we got to thinking about the differences in explorers and those who prefer to follow afterward. No negative connotation was attached to that role at all, by the way. Take for instance the case of scientific research. Typically the explorers will come along and thoroughly wall out, if there truly is such a thing, a cave system and pronounce it all used up. Soon, someone who has a little different approach to the same environment comes along and notices that a certain opening looks interesting. AWAAAAAY WE GO! Time to call out the explorers again.

Meanwhile this same scientific person continues to methodically explore and catalog ALL the details of a site and discovers facts, artifacts, or species yet unknown. Research does not have to take place thousands of PSI back into a system. In fact, it seldom does. The critters and rocks of a system are all friends and tell all their little secrets to one another for the most part. Now along comes someone who has the desire to listen while they methodically search for these secrets. Suddenly the little rewards of science pop up with vigor.

I am reminded of a project that I was involved with for 3 years in the late 60's as a novice underwater worker. There had been a sea battle between two ships, a Confederate Blockade runner and its Union counterpart in about 1863. The rebel ship eventually caught fire and an attempt was made to beach her onto Galveston Island, Texas. She lodged on a clay bank, burned to the water line, and sank about 1000 yds offshore. The wreck stayed there exposed to looters, hurricanes, toredo worms, and was otherwise scattered about for more than a century until it was found during a magnetometer survey.

Divers were solicited to help work on the systematic salvage of the valuable historic artifacts from the wreck site. Being young, energetic, and totally naive as to amount of grunt work involved, I volunteered. We worked in visibility of 1 meter or less almost all the time, so a 1 meter grid system was established on the bottom that covered the extensive wreck site.

After about one year of truly nasty work trying to learn the message of all that lay before us, we were blessed! One summer day we showed up and found flat calm seas and over 50 ft. of visibility! We could not contain ourselves and used all our air supply just roaring about the site to gain visual impressions of this hidden treasure! Then the tanks came off and we snorkeled about for four more hours.

Now the moral of all of this is that we saw something with a totally new perspective and made new discoveries as well as reaching new conclusions. What that means for us as cave divers is that we too can learn to look at our diving environs with new vision.

There are divers that are so interested in laying new line that they don't even

survey what they've laid so they can hurry up and go lay some more new line. These are the exception of course, but if only an explorer type can go there, how are the rest of the divers going to know about it if the communication and the work stops there?

I also know of divers that are perfectly content to make their own discoveries in already known sites. The special moments which we treasure are ours alone and it doesn't matter whether we are the first or number 10,001 as long as we feel that the moment and its memory are special.

If those who have gone into a site before us are as considerate of us as they would want us to be of them, we would never know that we were not the first person to ever see the magnificent preview of a coming attraction that is around the bend! It is our fervent desire for you to always have nothing but the very best of moments and memories. ( Ed note - See editorial entitled "But I'm just one person elsewhere in this issue )

The average recreational cave diver is a tourist, casually visiting a site for a few brief ticks of the clock just to look at the sights.

Why not improve your skill level by analyzing what you are doing right on a dive sometime. That is much more fun than always ragging on yourself for messing up. Its also a lot more productive and informative.

What is to prevent you from choosing a different path or listening to a different drummer than Adam Ant? Why not try a new task such as surveying on your next dive? It doesn't have to be virgin passage to be surveyed you know. Sure, we all know a little about what "those guys that make the maps" do, but

have you failed to try a new experience and missed the chance to discover your niche in the world. What do you really know about Troglocambarus lucifugus anyway? What is the difference between Suwannee, Dade, and Ocala Limestone? Why not build that gadget you've always wanted to try and perfect? Why not volunteer to work for the betterment of the Cave Diving Section and cave diving at large? Why not be a speaker at the next workshop put on by CDS or NACD?

Why not be an explorer in your own sphere of influence? Why not lead the way, someone has to. After all, you're just one person, anyway!

#### \* \* INSTRUCTOR INSTITUTE \* \*

The weekend of November 20-21,1983 found 8 candidates for instructor status and four staff members descending upon Ginnie springs. The proverbial good time was had by all! Many ideas and much experience was shared between all of the participants of this intensive learning and evaluation opportunity.

Candidates were Jeff Bozanic, Pete Butt, Craig Huntress, Jerry Kubicek, Sumner Perry, Joe Prosser, Jon Russell, and Philip Sirota. The staff consisted of Mark Leonard, Wayne Marshall, and Forrest Wilson, CDS Training Director. Wes Skiles, well known to readers of Underwater Speleology for his exploits and mis-adventures in vertical cave diving/ropework, was the Institute Director.

The material covered by the staff was extensive and included such topics as policies and procedures for Cave/Cavern Diving Instructors in the NSS/CDS, teaching techniques, watermanship, dive planning, safety procedures, oral presentations (both classroom and pre-dive) and a series of evaluated skills in the

water and on land. Each candidate also had to provide documentation of prior experience. In addition, a candidate for instructor certification must be currently certified as an instructor with a recognized open water SCUBA agency. A formal examination is also included along with all the other evaluations of candidates and their suitability as Instructors.

The excellent quality of these candidates produced the following new instructors.

CAVERN DIVING INSTRUCTOR  
Craig Huntress  
Jerry Kubicek

BASIC CAVE DIVING INSTRUCTOR  
Pete Butt  
Sumner Perry  
Philip Sirota

CAVE DIVING INSTRUCTOR  
Jeff Bozanic  
Joe Prosser  
Jon Russell

\* \* WE NEED INFO \* \*

We are going to publish as an annual feature in Underwater Speleology an updated list of all individuals and companies who manufacture or distribute gear designed for cave diving, or gear of interest to cave divers.

We are interested in lights, reels, scooters, braided line, neat knives, batteries and battery packs, back plates, line markers, technical climbing gear, sleeping and camping gear, and all sorts of other goodies.

What we will need is full information on the company (name, address, phone, catalog price, if any, etc.) as well as a description of features and prices for

each item.

We will also swap info between us and NACD News in order to maintain the most up to date listing possible. This info should be sent in as quickly as possible so that the data can be published in the February issue.

Please send any names and addresses you may be aware of to;

WAYNE MARSHALL, EDITOR  
2623 TULIP TREE CIRCLE  
SEFFNER, FL 33584  
(813) 681-3629

I'm sure that it need not be explained that the more help we get from our readers, the better and more comprehensive list we can provide, so I won't say that! I'll just say thanks for the help!

\* \* RECENT EXPLORATIONS of the \* \*  
\* \* PEACOCK SPRINGS SYSTEM \* \*

Wes Skiles

Recently, just after our last flood, several cave divers took a closer look at just where the water was coming from that exits Peacock Slough in Suwannee County, Fl. It was an excellent time to do this research due to the excessive discharge that was caused by the reversing of flow in the Peacock III siphon after the floods.

(Ed note - for those of you that are not familiar with this phenomenon, the syphon becomes a spring after flooding because of the excess water that has piled up in the catchment area due to the reduction of the normal hydrostatic head. This prevents the normal flow of the hydrological model of either the springs or siphons of a system. Then the surplus water of the spring or syphon will then be released as soon as the flood waters begin to recede. GWM)

It is interesting to note that when springs reverse they siphon and then shortly after the river reaches its crest, siphoning springs begin to discharge once again. On the other hand, when this same process occurs to a siphon the siphon continues to inflow until the river crests then begins to flow for quite a while in some cases.

It was for these reasons that Mark Long, Bob Bastian, and Wes Skiles made a visit to the Henley's Castle area of Peacock III. Approximately 1400 ft. into the system the water was unusually clear and I felt that I was seeing the system with a new pair of eyes. Upon beginning our exit on the main line, I noticed a small passage on the north side of the cave that appeared to have a noticeably bluer water as compared to the water we were currently in. At this point, Mark Long pulled out an exploratory reel and we proceeded with GUSTO! The passage remained low and interesting for about 180' before breaking out into a more classic Peacock style tunnel. At that point the remainder of the 300' of line was permanently placed before we exited due to reaching our air turn-around.

Exploration continued for many weeks as Bastian and Long returned to lay 350' of line before the exploration team of Woody Jasper, Lamar Hires, and Wes Skiles got together for an assault. By the fourth week a 3350' penetration had been obtained with some very interesting rooms and multi-level tunnels. Further investigation provided two additional side tunnels which both eventually looped back into the main system.

One fascinating fact presented itself upon compiling survey data collected from both survey teams. We were using an overland surveying device which consists of a rolling wheel that tracks both feet and meters using standard topo

maps to correlate our data to surface observations. We discovered that a room located some 2600' into the upstream side was only 150' from Orange Grove Sink to the southeast. This corresponds with a depressed area with water in it (no entrance) just behind the sink from where you park. At this point underground, a single passage exited the room at a depth of 30' and continued east another 750' before becoming too restrictive to continue.

Other news of the Peacock system; In 1982 Woody Jasper discovered what could be a link between Cisteen Sink and Orange Grove via the Crypt. Jasper and team added 400' of line at 140' headed directly for Orange Grove in what is considered the Suwannee/Ocala limestone contact. Further exploration was halted due to the spring '83 flood.

When the springs returned to a flowing state, Woody's desire to continue exploration in the Crypt was rekindled. Now I must tell you that this area leaves a little to be desired, at best. Both Bill Main and myself had agreed that there was something foreboding about the Crypt area other than the name. Despite these observations I decided to dive with Woody in the summer to hopefully participate in a landmark connection between Cisteen and Orange Grove Sinks.

The beginning of the dive had 5 people; Sam Ranzino, Wes Duvaney, Lamar Hires, Wes Skiles, and Woody Jasper. I had lost the coin toss with Lamar and therefore had to make the dive into the Crypt's lower levels with Woody. When we arrived at the Crypt we began to filter down thru the breakdown of the contact area. As we were leading the group, Woody and I were not aware of the problem taking place behind us in the other group of 3 divers. As Sam was going thru a minor restriction he had a

complete manifold failure in which all of the air in his double tanks was dumped within just a few moments. This happened according to Murphy's Law of course! Sam was precariously perched head-down in the middle of the restriction at the time! He calmly(?) went up to Wes Duvaney after backing out of the restriction, and they exited the cave. Lamar at this point followed at a safe distance to provide help if needed.

Woody and I had reached the end of the line in the lower level. I noticed two things right away; 1) although the depth was supposed to be 140', my gauge read only 130' 2) the line appeared to be tied off so that it just ended in silt and rock without any real termination tie-off point. After attaching a gap line, we continued on for approximately 110' along a floor full of huge breakdown blocks about 20' wide. Upon hearing the sound of Woody's maniacal laugh I realized that there in front of my adrenalin widened eyes was the line coming up at a 45 degree angle out of the breakdown pile! My brain was rushing with thoughts of what cataclism must have caused this to say the least.

I yelled thru my Poseidon "UP NOW!" as I was shoving my thumb in Woody's face. My thought was there was to be no decision making at all, we were leaving NOW! A disappointed Jasper agreed and we exited. I couldn't help but run several questions through my mind over and over on the way out of the cave and for days to come. When did it fall? Was it immediately after an earlier dive? During the flood? What made it fall? The air from exhaust? Perhaps something morbidly subterreanean to do with the Crypt?

One thing for sure, it is the first major collapse ever recorded in which proof of the intensity of the collapse can be measured. That's all well and

good, but I for one am just glad I wasn't there underneath with my yardstick to measure it!

P.S. If you haven't all ready written this one off from your list of "Want-to-dives", I would recommend doing so. I think from past observation of other similar areas that these contact areas are unstable and should be avoided if at all possible.

Other exploration news;

A new lead was located in Twin Cave which has extended the system an additional 2000 feet. A small spring on the west bank of the Chipola River near the town of Altha has been explored 1600' at a depth of 30'. It's a beautiful cave with many unusual formations and extremely large catfish. Some thirty pounders were observed well into the cave. It has been named Maddachalk Spring. It is way up there on the list of best dives.

\* \* ITEMS FOR SALE \* \*

- 2 SCUBAPRO MARK V REGULATORS with 5 ft. hose and pressure gauge..(each)..\$200.00
- 1 Primary light 14.4v w/37.5 watt Sealed beam and 90 min burn time. 175.00
- 1 Aluminum backplate..... 40.00
- 1 Ocean Dynamics Back mounted B.C. with extra long power inflator..... 50.00
- 1 U.S. Divers Regulator..... 40.00
- 1 Scubapro 500ft Depth Gauge..... 60.00
- 1 Ikelite case for Kodak 320 Movie Camera..... 75.00
- 1 Scubapro Flex wetsuit; 1/4 in. Farmer John size large (16 1/2 shirt, 5'8", 190 lbs. for reference)..... 200.00  
See next column for address info...

\* \* THE SCIENCE CORNER \* \*

by Bill Fehring

All items as listed or make offers.  
Contact; ROY BAILEY  
180 WALLACE RD. APT H-8  
NASHVILLE, TN 37211  
(615) 832-0628

Science marches on! Over the past several months, several Section members have been actively pursuing a number of new and on-going studies which have produced some exciting new results.

\* \* N.S.S. CONVENTION NEWS \* \*

The 1984 N.S.S. Convention will be held June 24 - June 29 in Sheridan, Wyoming. The Cave Diving Section is planning once again to inform, enlighten, and educate the masses of cavers who have not yet evolved beyond crawling in the mud. This is the first call to the photographers, explorers, and the researchers to put together your papers, programs, and presentations.

Even if you know that your body can't be there, the Section will be sure to represent you in whatever manner is applicable. There will be a call for papers in the Feb. NSS NEWS. If you are planning to attend, if you have a program, or even an idea for one, contact Steve Ormeroid, 629 w. 4th St., Marysville, Ohio 43040

Over in the Bahamas, Jill Yager has continued her work with Remipedia, a new class of Crustacea. Jill and Dennis Williams have been collecting in the Canary Islands and the Turks/Caicos. Their efforts have resulted in the discovery of four new species, making a total of five for the class. Readers will remember the startling discovery of the first species, Speleonectes lucayensis, which starred in the movie Descent into Darkness. These "living fossils" are found in marine caves and appear to be most similar to surface forms which disappeared eons ago. There are lots of places yet to look, so additional species are quite likely to be found still.

\* \* NEW SHIRTS WITH COLLARS \* \*

At the request of many of our members, knit shirts with collars and NSS/CDS Logo imprinted on the front pocket will be available at the December 31st workshop for \$12.50 each. Colors are navy blue with white logo and white with blue logo. Sizes are Medium, Large and X-large. The shirts can be ordered following the workshop from;

Valerie Grey, Publications Chairman  
P.O. BOX 575  
Venice, Fl. 33595

Many other items can be ordered from Valerie including books, pamphlets, & maps.

(Ed. note - For you non-scientific types, an eon is a unit of time approximately equal to three times longer than the sum of all the very cold 10 ft stops thus far experienced by the entire population of cave divers. In other words, a LOOONG time! GWM )

Also working in the Bahamas is Jeff Bozanic, a graduate student at the University of Miami. He has been studying cave formation and water quality in Lucayan Caverns and other sites on Grand Bahama Island. Assisted by Dennis Williams and Gene Melton, Jeff is studying the process of cave formation at the salt water/fresh water interface as well as checking the quality of the freshwater supply. Related research is underway in west Florida by Bill Sinclair of the U.S. Geological Service.

Bill is studying hydrogen sulfide layers in sinkholes and is investigating the possibility that hydrogen sulfide plays a role in cave formation in coastal areas.

Up in the Mammoth Cave area Terry Leitheuser is continuing his graduate studies of the Kentucky cave shrimp. Terry's research was recently cited in the Federal Register. (Ed note - October 12, 1983 - 48FR46337 is the issue to find for reference - GWM) In the Register the U.S. Fish and Wildlife Service listed this species as endangered and has designated the Roaring River passage of the Flint-Mammoth cave system as its critical habitat. This action was based largely on the work of Terry and Dr. John R. Holsinger. Terry has been most gracious in allowing lay persons to come up to the area and assist him in his work from time to time.

The Fish and Wildlife Service is involved in another project currently underway in Florida. Dr. Bill (author of this column) and his wife Sandy, assisted by Paul DeLoach, Sheck and Mary Ellen Exley, Dr. John Zumrick, and Steve Straatsma have been conducting a study of a spring in the St. Marks Wildlife Refuge. This work has consisted of biological and geological collections, water quality measurements, surveying, and photographic documentation. An ecological survey of the spring and cave is being prepared for the F & W Service. Early results are very interesting, including a continuing change in the species found in the spring and a complete disappearance or die-off of all non-troglobitic species when dissolved oxygen levels dropped from 1.0 to 0.5 parts per million. Of particular interest is the possibility that the resident crayfish may represent another new species, but further collections are necessary to support this theory.

Bill and Sandy Fehring have also been conducting behavioral studies with crayfish from the St. Marks Refuge site. Captive animals are being observed and have been found to be quite aggressive and territorial ( Ed. note - I think those are learned behaviors resulting from the crayfish's having been exposed to Paul DeLoach. ) Both this form, and the smaller Procambarus leitheuseri found in the Pasco/Hernando county area of central Florida will climb out of the water and over barriers, indicating an adaptation for wet/dry caves. Bill and Sandy, along with Wayne Marshall, have also been studying the distribution of P. leitheuseri in relation to water quality and have found them to be tolerant of brackish water up to at least 4 parts per thousand.

All of these studies and discoveries clearly indicate that cave diving has "arrived" as a legitimate tool of science. The opportunities are almost unlimited. Members interested in starting their own projects or contributing to ongoing ones are encouraged to do so and may contact me if assistance is desired.

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(Ed. note - Some of you may feel that there no way that you could help and that this type of work is beyond your skill level at the present time. Let me assure you that virtually all of the work done being done by researchers in the Speleo-sciences area and particularly work done by cave divers has tasks that can be done by competent cave divers after some initial training by a qualified researcher. See the related article elsewhere in this issue on the differences between explorers and researchers. -GWM )

\* \* DECOMPRESSION PARTIES \* \*

Both Ginnie Springs and Branford Dive Center are planning to have Decompression Parties to help all of us celebrate the New Year properly!

In both cases, a dive is planned so that revelers can be underwater at midnight on New Year's Eve. What a delightfully appropriate way to bring in the 1984 diving season.

Also in both cases, there will alcoholic beverages served (Read that to say KEG) for those who are so inclined. However, in the interest of common sense and safety, the keg will not be available to those diving until after the dive. In fact, to keep honest folks honest, they are NOT planning to tap the keg until the divers leave the surface! Now wait a minute, there will be plenty left when you come back up, Fred!

The folks at Ginnie are charging for camping and diving, but that is really not a bad deal, because they are encouraging everyone that wants to stay over and camp instead of trying to drive while woozy. (from fatigue and lack of sleep)

Anyway the details are as follows;

BRANFORD DIVE CENTER

Everyone will rendezvous at the shop around 9:00 or so, and then caravan over to YANA Springs. (YANA is also known as Green Sink in the Lafayette Blue system)

The dive will commence at around 11:30 for those who want to go there directly. After the dive Lamar Hires tells me there is going to be a large bonfire and a JOKE-OFF until the wee hours of the morning!!

GINNIE

Party will start at 10:00 or so and the dive will commence around 11:30. Wes tells me that they will have food and music in the Ginnie Pavillion. In addition it is gonna be brighter than daylight inside Ginnie Spring!

The cost will be a one time fee of \$7.00 which will include the Party, diving on Saturday night, and diving all day on Sunday as well as the Speleo-Olympics on Sunday. Those who do not come in on Saturday night can attend Speleo-Olympics and dive on Sunday for the paltry sum of \$3.00

So there you have it folks, you can choose between two entirely different approaches to the same problem of nothing to do on New Year's Eve. Either one sure beats staying home and kissing your sister!

The Speleo-Olympics will be held At Ginnie on Sunday, beginning at 10:00 SST. The events will include one on land, the line following drill and one in the water, a specialized propulsion techniques race in full cave gear as well as one other event that Wes has cooked up. He made me promise not to tell anyone because it was going to be a doozy!

\* \* GRAMMA'S PLACE \* \*

While we were discussing what to do for eats the Saturday night of the Instructor Institute held at Ginnie Springs recently, Jon Russell let us in on the secret of the year. There is a new hot spot for eating in the town of Alachua. Top quality place known as GRAMMA'S PLACE. Anyway, back to Gramma's (there's a joke there somewhere) it is on Main St in Alachua, and the phone is 462-4696. The owner, Mrs. Norma Lyons, says they are willing to stay open late for a group, and they have an excellent menu as well as a buffet. The piano player in this place is incredible also!

\* \* BUT I'M ONLY ONE PERSON! \* \*

I used to read editorials by editors of both Underwater Speleology and NACD News bemoaning the destruction or damage to various popular dive sites. These authors would always say something to the effect that times had changed, and that the diving was ruined for all.

I must confess that at the time (six or seven years ago) I must have been either blind or selfish in my philosophy about the cave environment.

Something has changed out there folks. I am not really certain what it is, but I recently dove in several places that I hadn't been in a while. These places are common and popular dive paths in well known Florida cave systems. I have frequently passed through these places on my way to someplace further into the system or to another offshoot tunnel beyond that point and just overlooked the damage that has been done. Maybe it was just complacency, ... or even apathy. I don't know.

Whatever the reason, I observed for the first time with my new eyes the common occurrence of totally unnecessary and permanent damage to parts of caves that I wish to remember as totally unspoiled and pristine. I can no longer remember their former beauty as clearly as I wish I could!

Lest I ramble too much here, what I am speaking of is deep gouges in the bottom in places that no competent cave diver would need to touch the bottom at all. This damage is the result of quite a few people using a grossly improper choice of technique for moving against the current. It is simply not required anywhere in the front 2000 feet of the Devil's Eye system for a diver to use the technique of stabbing their fingers into the clay on the bottom and pulling along. First, the tunnel is way too

large to require the use of a technique designed for small places, and second, the technique is really not intended for a clay bottom where its use will permanently mar a bottom that will not self-repair.

It is possible that those of us that are instructors in the art and skill of cave diving are just not teaching some of the logic that goes into choosing the proper technique for a given situation. Certainly, these methods are developed over an extended period of time. The efficiency that eliminates or avoids some of the more destructive means of propulsion is elusive for the novice cave diver.

Broken pieces of rock that are the result of undue force were also much in evidence during this dive of discovery. It was also sad to note that places that once were totally black and silky looking in the Eye are now totally white from the random rubbings and bumpings caused by careless contact. I recently saw an excellent photo of 2 divers descending thru the keyhole and could not recognize the location because it was all white! The times they are a changing, as they say!

Now I don't want to sound like I have no awareness of the tremendous increase over the last few years of divers through these sites. I am acutely aware of having to wait in line to dive some places that I consider to be old friends. I am also cognizant of the number of people that are met in portions of certain systems on the way out! Haven't you always wondered if they knew that the divers coming out had the right of way in a crowded passageway?

I am also not a raving conservative. At least not a card carrying member.

CONT'D ON BACK COVER

I'm just a cave diver, one of many. It occurs to me that there are probably many of you out there who are equally disturbed by observing some of these same changes. In talking of this problem with a friend recently, he said, "But what can I do, after all, I'm only one person."

I'M ONLY ONE PERSON. True enough, but isn't that all any of us is, just one person. That's all Abe Lincoln or Douglas McArthur or Richard Nixon was, just one person. (How did Nixon sneak in there?) Only one person caused the damage to each of the eyesores that we can observe on any Sunday. THIS person is going to propose a partial solution.

There are few things more important in the our little community than insuring that all future cave divers will have the same opportunity to observe a cave as we can now see it. Who knows, perhaps my 18 month old son will one day want to dive in Devil's Eye..... or your son/daughter! Here's hoping we can turn the tide and begin to reverse some of the effect of our passing.

We ALL need to care a little more and try a little harder to do better.

\* \* IMPORTANT SAFETY WARNING \* \*

THERE HAVE BEEN SEVERAL CASES RECENTLY OF MANIFOLD SEAL FAILURES FAR INTO A DIVE AFTER THE TANKS HAVE BEEN DROPPED OR FELL OVER. One such incident occurred after the diver fell down on the steps at Devil's Eye and banged the tanks really good on the steps. Another time the tanks were sitting in a van and fell over. IN BOTH CASES THERE WAS NO EVIDENCE OF ANY PROBLEM UNTIL WELL INTO THE DIVE!! At that point, probably due to the reduction of pressure or an additional bang on the ceiling, the manifold seal failed, causing a total loss of air. Fortunately, both divers were able to share air with their buddies and exit the system without further incident. WHAT IF THEY WERE DIVING SOLO, OR IF THEY HAD BEEN PUSHING THE LIMITS OF AIR PENETRATION??????

WE DON'T NEED TO MAKE ANY DIVE SO BADLY THAT WE OVERRIDE SAFETY CONSIDERATIONS!!

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