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# UNDERWATER SPELEOLOGY



OFFICIAL NEWSLETTER OF THE CAVE DIVING SECTION OF THE  
NATIONAL SPELEOLOGICAL SOCIETY  
VOLUME 8 NUMBER 1

# UNDERWATER SPELEOLOGY

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## ON THE COVER

Sheck Exley (NSS 13146) begins an extensive  
exploration of one of the many clear first  
magnitude springs in Florida. These springs  
include nine of the ten longest caves in  
Florida. Photo by John Zumrick (NSS 18788).

## CALENDAR

July 12-18 5th International Cave Diving  
Camp. Contact Sheck Exley, 10259  
Crystal Sprgs Rd., Jacksonville,  
Florida 32221

July 18-24 8th International Congress of  
Speleology, Bowling Green, Ky.  
For information write Eighth  
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\*\*\*\*\*RENEWAL TIME?\*\*\*\*\*

All CDS members, who received Volume 7 of  
Underwater Speleology, have been mailed this  
first issue of Volume 8. The Editor wants to  
get the newsletter back on schedule. There  
would have been more delay in starting Volume 8,  
if we had waited until membership renewals had  
arrived.

So look at your mailing label, if there is a 07-6  
above your name, you will not receive any more of  
newsletters unless you renew!

## EDITORIAL

by John Zumrick (NSS 18788)

1980 was a successful year for the Cave  
Diving Section. During this past year we be-  
came the largest organization of cave divers  
in the world. Much of the credit for this  
success must stand with our officers and com-  
mittee members. ' We sure owe them a big  
thanks. I for one remember the friendly  
charm and firm determination with which India  
Young fulfilled her role as chairperson.  
Certainly, the quiet efficiency with which  
Bill Fehring, the outgoing secretary, got the

election ballots and notices to you, generally on short notice, should not go unrecognized. Gene Melton spent countless hours editing our newsletter over the past two years as well as designing and producing the section's Tee shirts. To all you and to Greg McCarty our outgoing vice-chairperson, thank you.

The newly elected executive committee for 1981 includes: Dennis Williams, chairperson, Karen Wark, vice-chairperson; Mary Ellen Eckhoff, secretary; Steven Maegerlein, treasurer; Forrest Wilson, training director; and myself as editor. I feel confident that, with the possible exception of the editor, this group will guide the section along its currently successful path.

The new chairperson, Dennis Williams, has concerned himself primarily with the study of Lucayan Caverns and the various offshore blue holes of Grand Bahama Island where he lives. Many have enjoyed his magnificent slides of these caves at workshops here in Florida as well as at several past NSS conventions. Though not a stranger to Florida, Karen Wark is better known for her investigations in various Virginia sumps including that in Butler Cave. Those who know her are sure that she will carry out her position with the same fervor she has shown in these past pursuits. Mary Ellen Eckhoff, probably the most active cave diver in Florida, is also the most active NSS cave diving instructor and also the organizer of one of our most successful cave diving workshops. Though she characteristically underestimates her abilities, you can be sure she will keep you well informed as secretary. Steven Maegerlein a long time officer and Indiana cave diver

hardly needs an introduction. Aided by his trusty microcomputer, he is our ever efficient treasurer and newsletter publisher. Forrest Wilson has been training director since the section first began instruction in cave and cavern diving. Under his guidance this program has become the largest of its type in the U.S. Finally, there's the editor. Well, my efforts shall be only to plain for you to evaluate.

This issue begins volume 8 of Underwater Speleology. In this volume I shall endeavor to continue in the tradition of past editors, Incidents and Cave Diving Notes and to begin a new column, The Instructors Corner. By organizing these columns as well as our regular articles into a two column format and reducing the print size, I hope to provide twice the information on cave diving per issue at little if any increase in publishing costs.

However, if I am to succeed in this effort, I need your help. My exploits alone cannot fill these pages with sufficiently varied news to keep you interested. I must depend on you, the membership, for that. Should you want to write a full length article complete with maps and photos, great, I'll publish all I can get. However, if you just want to scribble a little note to me on a napkin, that's great too. What I need is a lot of thoughts, feelings, dive reports, and experiences from a lot of different cave divers to keep this newsletter interesting and useful to the entire section, not just those of us in Florida. Say you can't write! Ok, I'll write it for you, but send me the information. Help the section to have the best newsletter in the NSS.

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#### A NEW TYPE OF DIVERS DRY SUIT

by John Zumrick (NSS 18788)

Slowly, a new generation of dry suits will hit the commercial market. These new suits offer the potential of keeping a diver warm for upwards of six hours in near freezing water. Furthermore, these suits will suffer only a small loss of insulation as depth increases when compared with conventional wet suits or the foam neoprene dry suit.

Developed by the U.S. Navy, these suits

consist of an outer dry suit garment which, unlike the foam neoprene dry suits, offers no insulation in itself, but functions primarily as a water barrier. This suit will be much like the currently available Viking dry suit, being made of a very tough though noninsulative material. Though very durable, these suits will limit diver motion somewhat. To retain as much mobility as possible these suits will be tailored somewhat oversized.

Another material, crushed neoprene may help reduce this problem somewhat.

The entire insulation to the diver is provided by the underwear which is made of a synthetic insulator called Thinsulate which is manufactured by the 3M Corporation. Thinsulate appears nearly ideal for use underwater. It offers almost twice the insulation of down at a fraction of the cost. Unlike down, Thinsulate retains most of its insulation when wet. Because Thinsulate is hydrophobic, any water leakage into the suit is repelled by the material rather than absorbed. As a result the material below the surface layers remains dry and retains its insulation.

When using a foam neoprene dry suit part of the insulation is provided by the suit and part by the underwear worn underneath. Thus, even if air is added to the suit on de-

scend, compression of the closed cell foam material of the suit will reduce the divers insulation perhaps to half that of the surface insulation. Since all the insulation for these new suits is provided by the underwear, and since adding air to the suit will prevent compression of the Thinsulate underwear, insulation at depth is nearly the same as on the surface.

The Viking dry suit is already available and the crushed foam suit is expected soon. It is hoped that the Thinsulate underwear will be available soon. You should, however, be aware that currently available outdoor gear made of Thinsulate uses a different type of Thinsulate material that is not as suitable for dry suit use. Although most of the initial suits will be directed toward the commercial diving industry, it is hoped that sport diver models will be released shortly thereafter.

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#### AN AMERICAN IN WOOKEY HOLE

by Sheck Exley (NSS 13146F)

As part of a chance of a lifetime visit to Paris and London, I had the opportunity to take a train to Bristol to meet Oliver Lyold, Martyn Farr, and other members of the Cave Diving Group of Great Britain. From years of correspondence and perusing copies of the CDS newsletter, I felt that I already knew them. However, this was a not to be missed opportunity to meet my friends. I had the pleasure of staying with Oliver at Whitey House. Oliver is one of the most amazing men I have ever met. He is a retired pathologist, in addition to being an accomplished musician, archeologist, botanist, chef, author, connoisseur of fine wines, stage manager, and, oh yes, spiritual leader of the Cave Diving Group as its hard-working newsletter editor. He is also the controller of all dives at Wookey Hole, considered by most as the finest cave dive in the British Isles.

Wookey Hole is a well known commercial cave owned by Madame Tussaud who also owns the famous wax museum. It also sports a museum which documents the efforts of the Cave Diving Group there since the mid-thirties. Especially interesting are the archeological displays and the three manikins

decked out in the various types of diving gear used at Wookey: hard hat, closed circuit oxygen, and the modern side-mounted open circuit scuba.

My first dive at Wookey was on the evening of May 17, when Dany Bradshaw took me from Wookey 1 to Wookey 3, a short traverse of only 150 feet at a maximum depth of perhaps 15 feet. Dany laid the line while I followed along, somewhat uncomfortably, since I was not used to the side mounted forty cubic foot tank Oliver had lent me. Amazingly, the underwater portions of Wookey reminded me of Peacock Slough with its clean, cream colored ceiling and walls. The similarities even extended to the slight flow and relatively clear blue water. But there the similarities stopped. The water, as warm as any in the British Isles, was only 56 degrees; the floor was covered with red clay silt; and, naturally, there were plenty of air spaces.

The next evening wearing two of Oliver's forties, one on each side, Dany and Bob Cork took me from Wookey 3 to Wookey 20 and back. I can now definitely see the advantages of the small side mounted cylinders in negotiating the low bedding passages so frequently

found in Britain, as well as for climbing out of the water beyond sumps. At chamber 20 Martyn Farr, author of The Darkness Beckons and engineer of the famous Wookey 25 deep dive, invited me to climb out of the water for a look at the air-filled passage they had discovered a few years previously. I declined since I was a little concerned about the silt washing into the water and my return through this same passage which was new to me.

One of the most striking differences between the British style of cave diving and our own is the way they handle their lines. From Wookey 3 on there are fixed permanent guidelines, all of large diameter floating polypropylene. To avoid confusion all lines are tied together above water in the air

spaces. Rather than pulling their lines tight as we do, they are intentionally left slack so they can be pulled back and forth while negotiating restrictions. And you are expected to pull yourself along the line. Mindful of the good visibility and relative lack of silt, I once let go of the line where it was routed through an area too small to negotiate, and was severely admonished later for doing so. While these procedures may seem strange in the context of our Florida caves, they make good sense in Britain.

I am forever indebted to Oliver and the other members of the Cave Diving Group, who were perfect hosts and were exceptionally friendly toward and patient with me during my visit. Hopefully, we can repay a portion of this at the cave diving camp this summer.

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#### A COLD DIVE IN CLARKSVILLE CAVE

by Tom Cook (NSS 15548)

A month earlier John Evans and I had told Bob Jeffreys that we would check him out in cave diving so he would be ready for his upcoming Mexican experience. As we were driving up the Massachusetts Pike Friday night, toasting Flash Gordon and Ming the Merciless, we had occasion to stop on the roadside to release some of the processed spirits that we had consumed. It was at that time, when a wine bottle fell out of the truck and broke, and the wine froze, that we began thinking that maybe this was not the right time of the year to do this. Quickly, finding an Albany station on our supspace communicator we learned that the projected low temperature for the night was -12 to -17 degrees cold, cold, cold. Checking our astrologic charts, we found that Cancer was rising and Mars was burried by an avalanche. Not being ones to disregard such ominous warnings, we decided not to stay in the cabin and instead checked the star charts, went to sublight speed and headed for Sue Sloans house. Kicking it back into hyperspeed, we decided that we may be in trouble tomorrow, so we offered sacrificial beer cans to the gods in the hope that Bob's van would not start and that we could abort this questionable undertaking.

Arriving at our alternate rest area without breaking into subspace, we spent a warm night next to Sue's wood stove. The next morning after trying to make the cold weather

go away, we put on our dive suits. I had a new dry suit, but John only had his old wet suit, an air conditioned one at that, ha, ha. I checked the tanks that we had left in the truck the previous evening. They were a nice shade of ice and mucho frost. Since it didn't seem like things were going at all right, we decided to consult the IChing. It told us to pray that Jeffreys has four flats before reaching Clarksville. So we offered old O-rings that this be so, and drove off looking for a Burger King to flaunt our black rubber in.

After having a deleterious breakfast of beer and donuts, we noticed that the beer was freezing in the cab of the truck with the heater going strong. It was about this time that we began thinking of making blood sacrifices, preferably someone elses, in the hope that the cold would go away. But time was not on our side, as the cave parking lot loomed up at us. As we go out of the truck a black cat crossed our path and froze to death, a mirror broke, a cock crowed thrice, and we walked under a ladder. We put ourselves into overdrive and dashed for the truck. As we were just kicking in the main drive for a quick escape, knowing the Bob would not be coming, he drove up.

Resigning ourselves to fate, I asked Bob to get his diving gear out so I could look it

over. "What gear?", he replied, "I told you I needed to borrow some." Poor John didn't have a chance to offer Bob his gear as I was standing on his throat. "You can use mine Bob", I said with a smile you could see all the way to New Hampshire. I was thinking that I still had a chance to get out of this alive.

John and I packed the gear. Bob wanted to carry it in while we checked the regulators. As he lifted two tanks, we just starred and put Bob's name down as chief bearer on our next diving expedition. In a short time all the gear was at Gregory's entrance. Just then all my cave lights died, an omen if I ever saw one. The inside of the cave was very cold, but we got all the gear back to the Cook sump area in short order.

We went over the dive plan. John would lead, Bob would follow, and I would swim on the surface as far as I could to keep tabs on them. The water temperature was 42 degrees, not bad. John tied off the reel, and he and Bob were gone - somewhat. Bob was positive and popped to the surface. After adjusting his weights, he was down again. I followed behind, and found that I could free dive the sump. I was impressed by the amount of light

Bob's MSA helmet light put out even though it was no use in the turbid water. Looking it over, I decided I could waterproof it; another project for the El Cheapo.

About this time Bob said he had had enough. I undressed him as by now his hands were numb. Me, I was fine, dry suit you know. John wasn't in such great shape either. With mucho speed we packed up the gear and headed for the entrance. It was colder outside so we hustled to the trucks. John and Bob got into Bob's van with its big heater so they could change to dry clothes fast. I hung around outside, drank coffee, and packed the gear into the pickup. About this time John discovered that he had left his fins at the cave. Seeing he was not the right color, white not pink, I got them for him. We all agreed that what we did we shouldn't have done. Being out of beer and donut we went back to Delmar to eat and get warm. We found a very nice cafe on the main drag and for the next three hours proceeded to solve the problems of the Northeast Region and to worry the waitress. Now all John and I have to look forward to is our annual February ocean dive. I sure hope John has his dry suit by then.

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#### ORGANIZING CAVE DIVERS - AN OPINION

by John Zumrick (NSS 18788)

A short time ago a close friend of mine had a bone spur removed from his foot at considerable expense. Though he had had this problem for years, it had only become bothersome after he took up running. Another friend commented that he couldn't understand why he would go to such expense when he would be alright if he just gave up running, and besides he wasn't a very good runner anyway. This second friend simply couldn't understand how running could be so important as to justify such expense.

It shouldn't, therefore, be hard to understand why a landowner who has a potentially diveable cave on his land might be reluctant to let you dive. Most simply cannot relate to someone diving into a deep, black hole in the ground, a situation obviously foreign and potentially dangerous. Their feeling are occasionally reinforced by newspaper accounts of drownings in underwater caves. These

reports probably represent his entire knowledge of cave diving and to him these open-water divers are just like you, a cave diver.

In that past all that was frequently necessary to obtain permission to dive was to establish a relationship with the landowner. Conversations about interesting things found in caves and the careful training and experience you have in cave diving were generally adequate to get you permission to dive, especially if you kept the landowner informed about what you found.

However, the courts, particularly with their viewpoint towards individual liability, has changed this. Fearing potential liability from next of kin, landowners whose potential wealth has increased due to the increased value of their land are more reluctant than ever to allow one to dive. To make

matters worse, most now realize that even a signed release from a diver cannot completely absolve them from responsibility at least in the eyes of the court. As a result it has gotten more difficult to gain access even to some of the traditional cave diving sites.

Unfortunately, for many cave divers attitudes as to their right to dive certain well known caves have not changed. Many long time cave divers seem to feel it is their right to dive these traditional and still popular cave diving sites even when the owner disagrees. Without even checking the law, they site laws of proscriptive easement which they interpret give them the right to dive anywhere that has been open for diving in the past. Full of emotional zeal, somehow they feel they can obtain access by assuming an adversary relationship, rather than one based on friendship.

Even many caving organizations appear to have ignored this changing attitude among landowners. The new Florida cave law while a good one, does not have a provision providing the landowner protection from liability suits from those venturing into his cave as do the laws in some states. Fortunately, more groups are becoming aware of this problem. At the last NSS Cave Diving Section workshop held in Branford, Florida, it was pointed out that in Florida at least there is a law protecting landowners from liability who allow others at no charge to use his land for recreational purposes. One member has offered to research this law and to try to determine if it truly provides the landowner protection.

Another approach is to assume the role of a serious speleologist, by assuring the owner that you are interested primarily in studying his cave by surveying it, photographing it, and taking water quality samples. Certainly, any such data you gain will be useful in better understanding the geology of the area. It is of course particularly helpful if you can demonstrate true interest in speleology by providing the owner with evidence of previous experience such as a map, or participation in some other worthwhile project. That you are doing this as a recreational outlet is also a useful benefit to you. In sharing this information you gain with the landowner, you will provide him with something for his efforts.

As suburbia expands and many cave ridden pasturelands are acquired by corporations, access is likely to become even more restrictive. Even assuming the role of amateur speleologist may not be successful. In this instance your request to dive will likely be referred to attorneys if considered at all. These attorneys are less likely to be impressed with the benefits of your diving and more impressed with the legal ramifications of diving. They are likely to request that you provide the owners with indemnification insurance to protect them in case of an accident. This has already happened.

It is highly unlikely that an individual could afford to provide insurance in the amount required. Most insurance companies seem to become highly nervous when diving is involved, and I shudder to think about their response to a request to provide cave diving insurance. What is needed is an organization of speleologists with a demonstrated record of productivity and above all a clean safety record. Since most landowners are likely to require controlled and limited access, such an organization must assume a structure like that of the Cave Research Foundation, or as an official NSS project.

The benefits of such an organization should be obvious. By combining the accomplishments of many individuals, its achievements will look even more impressive than those of the individuals. By combining the talents of many to accomplish a project, productivity will probably increase. Such groups can usually afford to print brochures to further enhance their professionalism. In such a context sporadic reports of cave drownings will assume much less importance to the group.

As individualistic as many cavers tend to be such an organization despite its advantages is bound to create problems. Since the group has promised to provide the owner with a certain product in exchange for permission to dive, and since landowners will in most instances restrict access to a limited number of participants, any such group must limit its membership to those who are productive in its viewpoint. Unfortunately, such an arrangement precludes participation by those who dive for purely recreational purposes, or those new cave divers who have not yet established themselves. Any old timers who are

not included in the group and who share the traditional attitudes of right of access are likely to complain, not because they would have been a useful asset, but most likely because they will have viewed their stature in the cave diving community as being lessened. For example, in one group of 30 participants in a project where most of the work is done by the six organizers, it is at times difficult to get any of the other participants to even come along. Yet any attempt to replace these participants with others who may wish to contribute is certain to result in severe criticism of the organizers and the group by a few. Somehow in not being able to dive on exactly our own terms when we want, we ignore the fact that these same people who are criticized at least provided the opportunity to dive a place normally closed to diving.

Unfortunately, it is also possible that such a group may become controlled by a few who in a narrowminded view overly restrict participation to a few, and who become overly possessive of the cave. Such behaviour will probably lessen their productivity and consequently their control of diving at the cave.

Whatever the consequences and evils of such an organization, they are a necessary part of the new cave diving scene. It is essential that we cave divers redirect our thoughts toward such groups, and rather than try resist forming them to concentrate on structuring a group that will accomplish all our goals. Failure to do so may restrict cave diving in Florida to those few commercial cave diving sites.

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#### CAVE DIVING SECTION SPRING THING

by John Zumrick (NSS 18788)

Tonight is Monday July 21 as I sit writing this and marvelling that the wonderful machine that is my body remains relatively intact. I had just returned from a Cave Diving Section expedition to do some dry caving in northern Alabama. This trip provided Mary Ellen Eckhoff and myself under the tutelage of our fearless leader, Mike Sanders, the opportunity to learn some vertical caving techniques and to do some exploration of the local caves.

Friday we arrived at Stephens Gap pit to try our hands at rappelling and prussicing. Mike carefully secured the rope and lowered it into the pit, while I somewhat cowardly crawled to the brink for a short peek downward. The second peek didn't come until considerably later, after I recovered from what I saw during the first look. I couldn't see the bottom through the mist. I gasped to Mike, "You expect me to go down into that on a rope!" And they say cave divers are crazy. Well, to you vertical cavers, remember. I can swim, can you fly?

Mike rappelled down smoothly and easily, the force must have been with him, while Mary Ellen and I descended to the 90 foot level via another route by a more trusty means, footpower. I just had to try to rappel from, this somewhat less lofty perch. Mary Ellen

went down some 50 feet further to the bottom to belay me on my first rappel. Then I fell! I had always wondered if one who in falling to his death really emitted those blood curdling screams like on TV. Now I know. Actually, after getting on rope, I stooped down to see how the seat harness felt. In doing so I slipped over the edge. As I swung over the abyss pendulum fashion, Mike complimented me on how smoothly and without fuss I stepped off. I saw no point in correcting him just then. Mary Ellen gasped, "You didn't say you were on rope; you weren't on belay." Now she tells me. Why couldn't she just wait till I got down?

On Saturday we met Forrest Wilson who along with Mike Sanders had organized this trip. In all about twenty Cave Diving Section members were present. We proceeded to Fern Cave in three groups. We all entered through the New Fern entrance. E.T. Davis was to lead one group on a short trip through the upper section. Forrest was to lead a second group to a thirty foot pit for some vertical work. The last group five in all including Mary Ellen, Mike Sanders, and myself were to continue past this pit hopefully to Helectite Heaven about a mile from the entrance.

Mary Ellen descended the pit first. Judging from her giggles and the prolonged time she swung on the rope, she must have enjoyed the rappel. Shortly thereafter, however, it became apparent that Mike was out to destroy our bodies. After subjecting my wonderful body to a steep climb up a mountain in midday heat, he proceeded to guide us through a nine hour trip in this beautiful cave. It really was interesting, particularly when he feined to be lost. Or was he?

Finally, on Sunday the fearless trio jour-nied to another pit, 105 feet deep and immediately adjacent to a narrow winding mountain road. Mike demonstrated his enthusiasm for this pit by nearly driving his truck off the road into it. I kid you not. The trucks right front wheel was airborne as we teetered on the edge of the road. Hoping to lighten that side of the truck, I opened the door and immediately disappear from their view as I slid down the incline toward the pit. Mary Ellen later pointed out that was the first time she had ever encountered where one needed a belay to get out of a truck. What an

ominous beginning to my deepest rappel to date.

To make matters worse, a few other cavers alerted us that a nasty tempered poisonous snake awaited us below. Who should go first? Using the time honored democratic process, Mary Ellen and I decided that it should be Mike. Our wonderful bodies you know.

Mike having disposed of the snake, we proceeded to rappel down to meet him. Mary Ellen went first. Later she gasped that throughout the descent she was a nervous wreck. Ever wonder what a wreck looks like?

All told it was a most interesting and adventurous trip. We all owe Mike, Forrest and all the others our thanks. From this trip I can draw some close parallels to cave diving, Florida style. Our rappel progression of from 30 to 110 feet suggests that divers after their initial checkout of about 30 feet should dive to 110 and 330 feet respectively. Perhaps vertical cavers should adhere to our progression 4, 10 and 30 feet. Then there would be fewer wrecks in Live Oak.

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#### FLORIDA SEARCH AND RECOVERY TEAM

Any cave drowning, even if the victim is not a trained cave diver, reflects unfavorably on the cave diving community. Because a sheriff was unable to locate capable search and recovery divers, a recent accident victim was not recovered for several days resulting in additional grief to the victims family as well as more negative cave diving publicity. To aid local sheriffs in this unpleasant task and as a public service to the cave diving community, Jeff Parker (NSS 20192) and Dutch Stelling (NSS 20645) have begun organizing an NSS Search and Recovery team in Florida.

The goal of the project is to distribute to county sheriffs a list of cave diving team-leaders and members. This new network will be patterned after the well known and respected National Cave Rescue Commission and also integrated into it. Currently, Jeff and Dutch are formulating search and recovery procedures which they will present for discussion to search and recovery team members during a meeting to be held in May at Branford, Florida. If you are interested in helping, write to Jeff Parker, 402 E Carolina, Tallahassee, Florida 32301, and he will send you an information form.

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#### MAMMOTH CAVE CRAYFISH SIGHTED

The Cave Research Foundation reports in it's December newsletter that a rare and possibly extinct species of cave shrimp, *Palaemonias ganteri*, the Mammoth Cave shrimp, was spotted by divers Stephen Maegerlein (NSS 8340) and John W. Dickerson, 360 feet under-

ground in Echo river in Mammoth Cave. This species once abundant in the Roaring River area of Mammoth Cave has been declining and was last seen alive in 1967. The designation of this shrimp as a rare and endangered species is being sought.

THE ABE DAVIS SAFETY AWARD  
EARNING IT GETTING TOUGHER ALL THE TIME

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by Sheck Exley (NSS 13146F)

To date 115 American cave divers have received the Abe Davis Safety Award for the successful completion of 100 or more cave dives. This NSS Cave Diving Section sponsored award not only recognizes a dedication to cave diving safety, as evidenced by the only incontrovertible criteria, long term survival, but also gives the cave diving community a positive statistic with which to counter the detractors of cave diving who ignorantly proclaim it a suicidal activity. If you have logged 100 cave dives or know somebody who has and has not yet received this award, please notify India Young, Route 3, Box 119K, Byron, Georgia 31008.

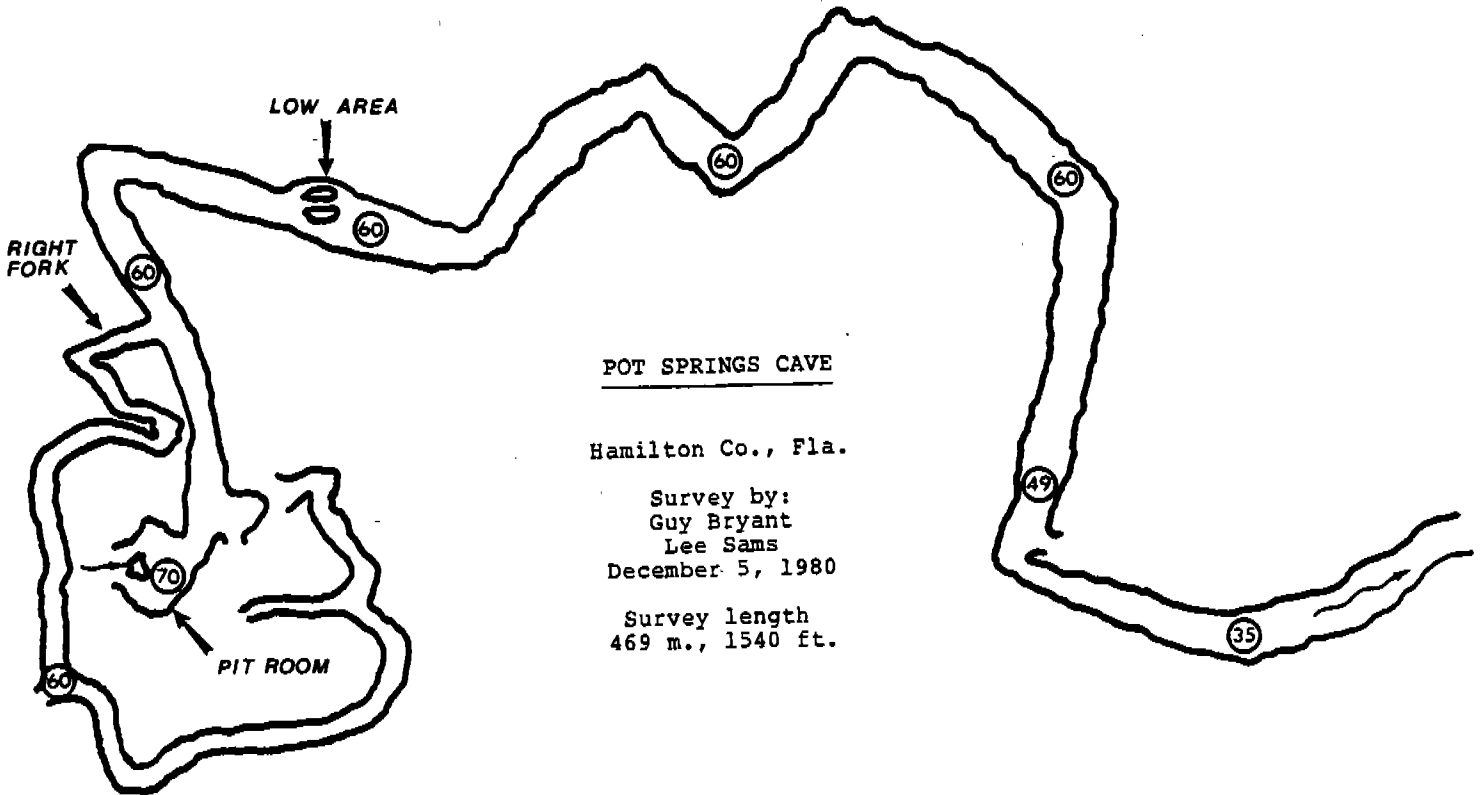
If you haven't yet qualified for this award, get set for some bad news. It is getting harder to get with each passing day. No, the criteria for the award haven't changed. The simple fact is that today it is harder to make 100 cave dives than at any other time over the past two decades.

One major reason is the rapidly escalating cost of diving. These costs seem to be rising more rapidly than the purchasing power of the diver. When I completed my 100th cave dive on August 2, 1967, gasoline could be purchased for just over 20 cents per gallon, and scuba tanks retailed for 60 to 80 dollars. Now gas sells for \$1.30 a gallon and the same scuba cylinder for over \$180. If you consider the costs to John Harper who started cave diving in 1959 and probably qualified for this award by 1961, the difference is even greater. Though incomes have increased over this period, they probably have not kept pace with this three to five time increase in cost unless you were very lucky. When I started cave diving in 1965, the best dressed cave divers did not have to have octopus regulators, dual valve manifolds, double hundreds, nickel cadmium lights, or diver propulsion vehicles since such items did not exist. Today many of these are considered essential safety items. Finally, in 1960 those dive sites that charged five dollars admission were few and far between.

Those divers who have logged 1000 cave dives: Paul DeLoach, Tom Mount, myself, and

perhaps John Harper, who probably has made 1000 cave dives but does not keep a log, have one thing in common. The three of us logged large numbers of dives in the sixties when an interesting and challenging cave dive was far shorter, and less involved than they are today. The frontiers of cave diving have advanced enormously. The longest penetration into a spring in Florida by 1965 was probably less than 1500 feet, about a fourth of today's maximum distances. So it is not surprising that the longest penetration made during my first 100 cave dives was only 400 feet. With today's improved safety equipment and procedures, students frequently venture further during training. Today, it seems almost inconceivable that anyone could make 100 cave dives without straying further than 400 feet back without collapsing from sheer boredom, unless you are a paid cave diving instructor (another advantage Tom Mount and I enjoyed). During these early days of cave diving multiple dives each diving day were common, and long exposures were avoided. I averaged two dives per dive day in 1966, but only one per day in 1979.

Another factor in limiting the number of dives logged today is that even if you can afford to dive, chances are that you don't have the time to dive. Those with plenty of time on their hands, college students for example, no longer have the wherewithal to overdose on cave diving. My most prolific year for cave diving, 287 dives, was my last year in college, when I took advantage of senior priority to schedule my classes in four days, two of which I often cut to take advantage of a five day cave diving weekend. Alas, with today's increased tuition costs most students are hard pressed just to stay in school even with a part time job, not to mention having enough money to go cave diving. For many years in eastern Europe, cave divers have not been able to afford their own equipment. Instead they joined together into large clubs to purchase a few sets of gear to be used on a rotating basis. Also, they could only afford to travel to dive sites in large groups only once or twice each year. We may reach the same point here soon. So hurry and get your Abe Davis Safety Award while the gettin's good.



#### THE EXPLORATION OF POT SPRINGS CAVE

by Guy Bryant

Pot Springs is a little known spring on the left bank of the Withlacooche River just downstream from Madison Blue Springs. I first saw it while on a canoe trip with Buddy Sanders and Hal Davis in July 1978. I didn't know if it had been dived. It looked promising, but, unfortunately, we didn't have any dive gear along.

A few weeks later, Buddy returned with Court Smith and Doug Douglas. Sure enough, nobody had been in before. Following a more or less typical phreatic tube, they installed about 300 feet of line before being stopped by a low bedding plane area.

In August 1980, Lee Sams and myself returned to see what this tunnel looked like. Wearing double tanks, we easily reached the low area. After looking it over carefully, we decided we might be able to add more line and squeezed through. A cave divers dream, it opened back up and went roaring out of sight. Adrenalin flowing, we swiftly laid

line until stopped in the pit room by breakdown. Still having plenty of air, we returned to the right fork tunnel and explored about 200 feet further, before we had to call an exit. Good thing we did as the tunnel was very silty. We didn't see much exiting.

Lee and I returned in September, this time with double hundreds, intending to map the cave. We extended the line in the right fork tunnel until it ended, leaving only one small tunnel along its right wall to be checked. This we did in October after cleaning up some of the incomplete survey. Lee was to go first and I was to follow surveying. Poof, a total silt out. I waited about thirty seconds and followed, but only got about ten feet before running into Lee. I was able to back out, but Lee was stuck more securely, and had to remove his tanks to effect an exit. Pushing his tanks ahead of him, Lee and I decided that a prompt if not graceful exit was in order.

