

Underwater Speleology

Journal of the Cave Diving Section of the National Speleological Society

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from the Chairman

gene melton



"The root of joy, as of duty, is to put all of one's powers towards some great end." - Oliver Wendell Holmes.

Throughout all of our experiences, we sometimes find ourselves standing on a knife edge. We can fall off one side due to over confidence or we can fall off the other side by underestimating the danger. To err in either direction can lead to catastrophic events. We must carefully walk down the edge to safety. When you mentally rehearse an upcoming dive, ask your self a few honest questions that only you can answer, "Have I underestimated the risks?" "Have I over estimated my abilities?" If you can honestly answer "No" to both questions then it may be safe to proceed. World record holders, in many endeavors have pushed the limits of survival to set their record. In some cases they nearly die in the attempt and thus the record. The ultimate outcome of any event has two possibilities - success or failure. So, when pushing one's limits, one must always ask, "What are the consequences of my failure?"

There are rumors of some divers planning to sneak into some of the NSS-CDS managed sites. The management plans were developed to help promote diver safety. The requirements for the different sites vary, but they have the diver's best interest (survival) in mind. Diving in any NSS-CDS managed site without processing a waiver and/or having the qualifications to dive there constitutes trespassing and is against Florida law. If you are caught trespassing, your vehicle and equipment can be seized, not to mention the legal expenses and the opportunity to be a guest in the iron bar hotel.

NSS-CDS Members: You have a responsibility to notify the local police/sheriff immediately when you find someone trespassing on NSS-CDS properties. You are protecting your own interests. The NSS-CDS will prosecute trespassers to the full extent of the law.

Last month the NSS-CDS received a summons as a defendant in a lawsuit. The lawsuit stems from the fatalities that occurred in School Sink (Wayne's World) about two years ago. I can not discuss the suit at this time, however, our defense requires funding. I am asking all NSS-CDS members to make a donation to the Section's defense. The NSS-CDS store is being set up to take your tax deductible donations. Keep your email receipt, as it will be proof of your tax deductible contribution. The BOD members have each contributed $100 and we are asking all of the membership to do likewise, if you can. Every contribution counts, so contribute as much as you can.

There were only two platform statements submitted for the three BOD positions open; there will be no election ballot mailed this year. The by-law approval would have been included in your ballot to reduce the by-law vote expense, so Plan B is now in the works. This is to have an electronic vote for the by-law updates posted on the NSS-CDS website.

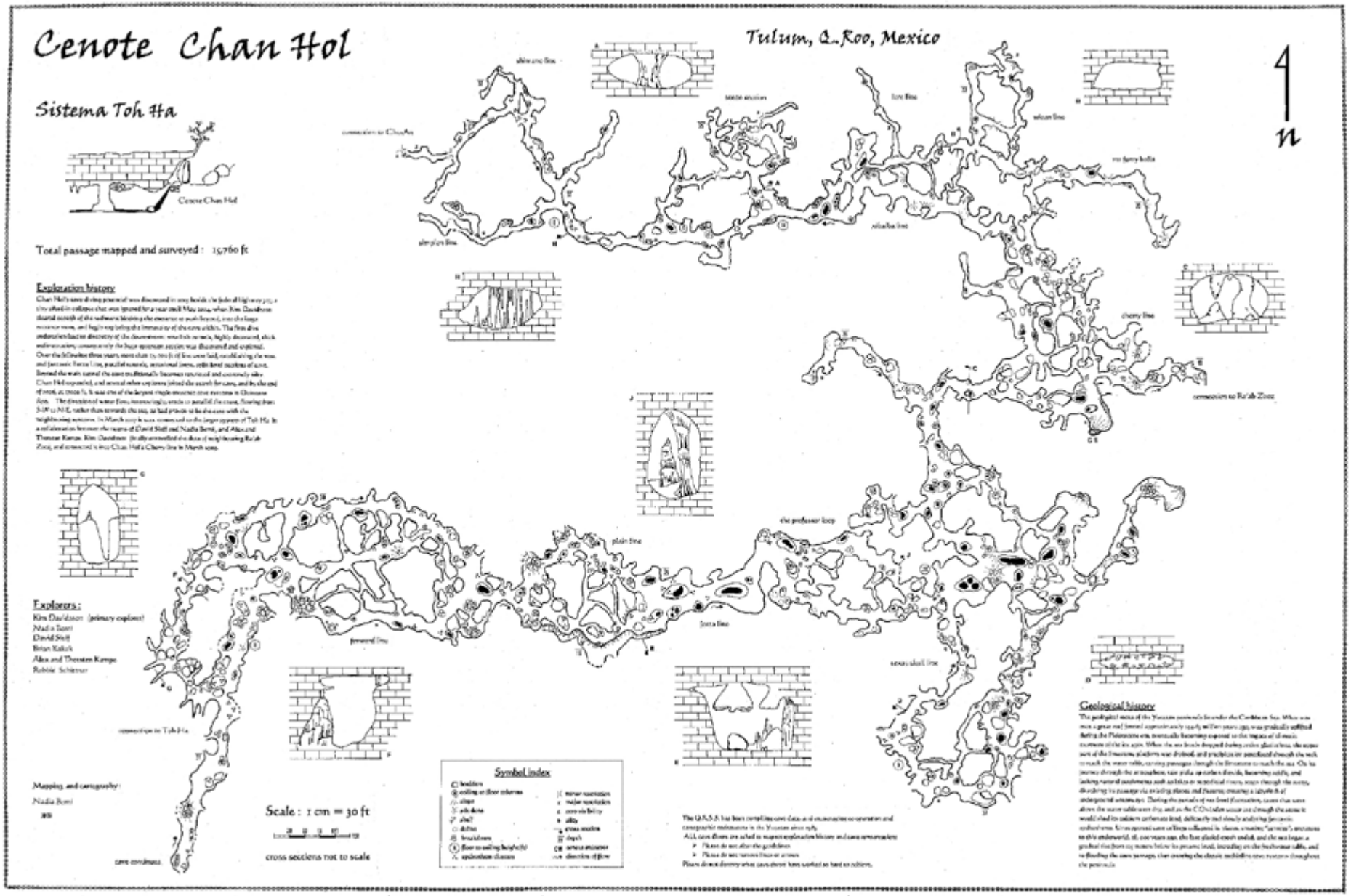
Jim Wyatt has been instrumental in programming the NSS-CDS website store. Thank you Jim for your volunteer time and efforts. The next time you see Jim, thank him.

Terri Skiles has donated one of Wes's photos of Peacock Springs to be the t-shirt logo for the upcoming workshop. Thank you Terri.

The membership dues collection change is still in the works but significant progress has been made. The change should occur in the next month or so (how long have I been saying that) and should be seamless.

Dive safely,

Gene


Cenote Chan Hol
Tulum, Q. Roo, Mexico
Sistema Toh Ha
Cenote Chan Hol
Total passage mapped and surveyed : 15,760 ft
Exploration history
Explorers :
Kim Davidson (primary explorer)
Nadia Bonti
David Shift
Brian Kakuk
Alex and Thorsten Kempe
Robbie Schirmer
Mapping and cartography :
Nadia Bonti
Scale : 1 cm = 30 ft
cross sections not to scale
Symbol index
Geological history
N

Little Hole, Big Finds: Diving Tulum's Chan Hol

By Barbara Dwyer with Kim Davidsson

Chan Hol stands out as one of Yucatán's most beautiful and pristine cave dives. Its shallow passages offer small and grand formations, pre-Ice Age fossils, and a clean and easy-to-follow layout. The cenote's name translates from Mayan as "small hole," but it has yielded big rewards for cave divers.

The cenote's accidental discovery in 2003 is part of its charm. Highway 307 had already been "improved," but much of the land around Tulum remained undeveloped. Yucatán is laced with cenotes, and divers were seeking to make connections. Exploration was underway on a handful of systems, including nearby Sistema Toh Ha.

A sharp-eyed local explorer first sighted the cenote as a clump of low-lying foliage just off the highway south of Tulum. Robbie Schmittner found a silty puddle below an overhang in a collapsed cenote. Busy with explorations and running his dive store, Robbie tabled the lead temporarily. The cenote remained unexplored for a year until he mentioned it to fellow divers Dave Sieff and Kim Davidsson. Kim, afflicted with "exploration fever," seized the opportunity (see "Explorer's Story", below). "I had been walking around the jungle looking for virgin cenotes," Kim recalls, and "had already tried to squeeze into some small holes not fit for my experience level or comfort zone. This one was for sure worth a try."

Preliminary dives were difficult. The silty entry pool measured only about one square meter/10 ft.^{2} Poking around with a mask and flashlight, Kim found an entrance 20 cm/8" high and about 100 cm/40" wide, with a big tooth-shaped rock obstructing the middle of the passage. "I took a deep breath. Dave held on to my feet, and I ducked under. I reached full body length inside the cave and down sloping gravel. There could be something there, but it quickly got silted out. We'd need to go back with dive equipment."

On the first full dive, Kim used sidemounted tanks and had to wriggle and twist to clear the restriction. But just beyond the entrance ramp lay a sizable room. Ledges and flowstone decorated the wall straight across. Two intact Mayan pots lay close to the entry, and cave passage opened left and right.

Kim chose to take the right-hand path (north), hoping for a connection to Sistema Toh Ha (Mayan for Motmot Water, referring to a species of tropical bird). He laid about 900'

"I didn't think about it too much at the beginning, but other cave divers have always been believers that the caves are connected. You just have to connect the dots."



The Author dives at Chan Hol.
Photographer: Scott Boyd

Facing page:2. Map of Chan Hol Cenote: Cartography: Nadia Berni. Main explorers of Toh Ha, Chan Hol section are: Kim Davidsson, Dave Sieff, Nadia Berni, Alex Kampe, Torsten Kampe, Robbie Schmittner, and others.



Chan Hol entrance, exterior view
Photographer: Neil Benjamin

of line, calling the passage Xibalba (the underworld, in Mayan cosmology). In the other direction he would subsequently install the main line with its many offshoots, cavernous rooms, and fossil discoveries. For the next two years Kim continued his exploration mostly at night after work.

The exploration paid off immediately, yielding more and more beautiful passage with varied formations. Chan Hol is reminiscent of the historic portion of Sac Aktun upstream of Gran Cenote. Small sidemount passages and bedding planes contrast with power cave, borehole tunnels, and large rooms with flowstone. There are highly decorated sections featuring spectacular and odd formations. Visibility is crystal clear, with percolation in lightly traveled passages. The average depth is around 10m/33 ft. Negligible flow is present.



Diver in Chan Hol's clear waters

On a more recent dive (2009) Kim connected to Cenote Ba'ab Zooz (Swimming Bats) across the main road. This passage added another 1845 meters/6059 ft and was unlike most other parts of the cave. The tunnels are dark and narrow and require removal of at least one tank through the sidemount restrictions. Brown fluffy "mung" and mud cover the floors and walls. Percolation is abundant, and one careless fin kick will reduce your visibility to zero. There is no little to no flow here. It's an easy place to get lost, and divers are discouraged from casual investigation. For that reason, the route is not easily found.

Chan Hol's access and diving: Chan Hol is located just off Highway 307 about 11 km/7 miles south of Tulum. After the "big bend" in the road, look for the "Rancho Loma Linda" sign on the right hand side. Turn right at the end of the driveway and stop in about 50'. Owners Don Domingo and Doña Hermina welcome divers and collect a fee of $150 pesos per diver per day. They ask that divers be out of the water by dark.

Jungle access is no longer necessary. The owners built their home in 2006. To accommodate divers, they provided tables, removed the itch-producing *chichen* trees, and built an entry step. There is a *baño* (toilet) at the rear of the house. Don Domingo proudly shows his property, pointing out the *chaca* tree (antidote for the *chichen's* effects), his cenote-irrigated vegetable gardens, and his chickens.

The owners and diver traffic have enlarged the entry since the early days of exploration. A few years ago, back-mounted entry required turning to the right and considerable wiggling, even for smaller divers. Now, a large diver with bulky back tanks can clear the floor or the ceiling without silting. The floor has suffered some damage, mostly near the cavern, and the occasional hand print or stage bottle damage is visible as far as about 750-900 meters/2500-3000 ft in. The explorers emphasize conservation and request that divers sharpen their buoyancy control before diving here.

From the entrance, the line leads down a gravel-strewn slope to a "T" (with double white arrows pointing back to the cavern). The left branch of the "T" leads to the Torpedo line, which is a shortcut through small passage to the main line portion of the cave. The right-hand "Xibalba" branch loops around through big passage with multiple offshoots, eventually rejoining the Torpedo line at a second T with double arrows pointing along the shorter Torpedo route out.



Chan Hol cave entrance
Photographer: Neil Benjamin

From here the mainline gives access to the Forza Room, the Professor loop, and thousands of feet of decorated passage beyond. The shallow nature of this cave allows long and multiple dives to be made in a day.

Pre-Ice Age skeleton discovered in 2006. Germans Alex and Torsten Kampe found a nearly intact skeleton just off the main line about 400 meters/1500' into the cave. The find included extremity bones, vertebrae, ribs, and skull with several intact teeth. The minimal dental wearing indicated an early death. *"El joven de Chan Hol"* (the young man of Chan Hol), as scientists dubbed the remains, lived more than 10,000 years ago, before the last Ice Age ended, when Yucatán's caves were above sea level. The remains' layout reportedly suggests that the boy was ritually buried.[1]



Mayan clay potsf ound just inside entrance

previously but last December found only a few bones in a box with INAH's logo.

Alert divers will find other fossils. Some examples, including pottery and intact fire pits, are along the main line and elsewhere. The first pots discovered, along with a monkey's fossilized skull and some long mammalian bones, have been placed on a ledge just across from the entrance.

This discovery and others* will provide new data about settlement of the Americas, according to Mexico's National Institute of Anthropology and History (*Instituto Nacional de Antropología e Historia*, or INAH). Chan Hol's "*el joven*" is one of four such skeletons found in underwater caves near Tulum, with more undoubtedly to come.[2] Its distance from the entrance in addition to previous work done[3] are expected to corroborate radioisotope dating of its age.



"El joven de Chan Hol"

Chan Hol remains under exploration, with new passage being found. For a brief time, it was the longest single-entrance cave in Mexico until the connection was made to Toh Ha. The total sistema is 2426 meters/95273 ft long with a maximum depth of 14.9 meters/42 ft. Sixteen cenotes have been reported in the sistema to date. And no one will be surprised if this "small hole" yields yet more going passage.

Until recently, divers who knew where to look could see these remains. However, the entire skeleton was recovered by INAH investigators for radioisotope dating. We had seen the skeleton



Monkey skull and long bones
Photographer: Neil Benjamin

**Three other human skeletons have been discovered in nearby caves, including* Eva de Naharon *(Eve of Naharon),* La mujer de Las Palmas *(Woman of Las Palmas) and* El hombre del Templo *(The Man of El Templo). Their ages vary between 10,000 and 14,000 years old. Other finds include tools, firepits, and remains of animals that date from the Late Pleistocene Age.[4]*

References:

I. NAH: http://www.inah.gob.mx/index.php/english-press-releases/61-anthropology/62-10000-years-old-skeleton-extracted-from-flooded-cave

2. http://news.nationalgeographic.com/news/2011/03/pictures/110309-oldest-skull-americas-underwater-cave-mexico-mastodon-science-first/

3. Coke, J. G. IV, Perry E.C., Long A., 1991, Sea level curve: Nature: 353, no. 6339,

4. I NAH: http://inah.gob.mx/

”CHAN HOL” The Exploration of One ”SMALL HOLE”

By Kim Davidsson

“The sensation and feeling of squeezing through the entrance, entering a chamber and finding going cave for the first time can´t be described in words. I was really excited.”



Explorer Kim Davidsson in Chan Hol
Photographer: Scott Boyd



Explorer Kim Davidsson in Chan Hol
Photographer: Neil Benjamin,
This photo is incorrecltly credited in the magazine version.

“Sometimes you stumble over things so amazing that you don’t realize how lucky and privileged you are. My first exploration dive pushing through a very small and silty restriction into“Chan Hol” is one of those moments.

At the time of my first explorations, I was living and working in Tulum as a cavern guide. I worked together with Robbie Schmittner, who also was my cave diving instructor. Robbie is a great explorer who always was out in the jungle exploring and looking for new cenotes and connections. This “fever” is contagious, and I for sure got the bug. I had some experience exploring caves but not a lot. My other exploration friends were Dave Sieff and Nadia Berni.

My first real Chan Hol dive was on the 7th of May 2004. Back then we had to park on the other side of the road and walk our equipment over. It was all pure jungle, and there was nothing around. I did not want to disturb the wasps because I felt it was as much their place as mine. Ducking time again---with adrenalin and some pulse I made an effort and squeezed through the restriction. I found myself in a room and straight away on the floor I found two pots. I checked my compass and started exploring north.

I laid about 900’ of line due north (the Xibalba line) because I was looking to connect to a cave called Toh Ha that my friends were exploring. From the beginning I tried my absolute best to lay a very good and safe guide line. I wanted to lay nice straight shots for easy survey. In a virgin cave there’s always a lot of percolation . Surveying out was like swimming in milk in the smaller passages.

Getting back out was not as easy as getting in. At the time I used a butt-mounted canister. This added quite a bit to my profile, and I got stuck on the way out of the restriction. Calming myself down with a few deep breaths I finally made a proper pull, careful not to break the line, and squeezed through.

Completely overwhelmed by what I just had done and seen, I sat in the cenote for about 20 minutes thinking that this is the ultimate feeling, exploring caves. I just loved it.

Cutting my teeth. This was my first proper exploration of a cave. I had around 700 total dives in 2004. One hundred were cave dives, about 35 in sidemount configuration and solo. I explored solo in sidemount, mostly for practical reasons. Every waking moment I thought about exploring Chan Hol. This is the cave that I carved my teeth in and honed my skills in laying line and surveying. I grew with the

cave and the cave grew with me.

I started using an old Tekna scooter to get further into the cave. Using stage tanks, I pushed my dives up to four hours. That was the limit of my skills and comfort zone. I had some stressful experiences; it is all part of learning. The cave was later connected to various cenotes and systems, and now it is part of Toh Ha.

Politics and vibe have been friendly around the exploration of Chan Hol, at least before. It was my project but we all shared. I explored with Robbie, Dave, and Nadia and we were all having fun, enjoying this beautiful place.

Ten thousand year-old skeleton found. By 2006 I had to return to Sweden. Alex and Torsten Kampe continued exploring. Torsten dived on a rebreather and Alex breathes like a mouse so they have pushed the lines to about 7000-8000 ft from the entrance. There the cave "walls out," at least for now.

Alex and Torsten found the human skeleton about 30-40 feet from the mainline on an exploration dive. I managed to swim past it about 10 times! That's what you get for exploring solo just looking forward! INAH made a study and German television a documentary about the find.

Cave stories. Each line used to have original arrows and markers with different colors, dates and names. This way the cave gets a bit of history and it is easy for visitors to learn the cave and navigate it. It helps you when you survey and you know every single line in the cave, since it is marked in a unique way. Unfortunately these arrows have since long been removed by someone for reasons unknown. Whatever reason this or these people have, it is not for the best of the cave nor the ones who dive it.

One of the lines with history is the "Professor line"… I remember it like yesterday. I was sitting outside of the shop watching the European championship in soccer on TV. Sweden was playing, great game against Italy. Up to me comes a nice gentleman who asked about cave diving. His name was Charles Read, a mathematics professor from Leeds, England. He asked if I had any special places. I was happy to share these amazing new sites, and we scheduled three days of diving together. The "Professor line" we explored together. We signed, dated, and labeled "Professor" on the two arrows. We dived on the mainline in Chan Hol until we found a huge looking lead and tunnel to our right. We laid the line, surveyed it and it "looped" back to the mainline but through a truly amazing passage. We both were extremely happy after the dive. That is the story of the "Professor Line," explored by Charles Read and Kim Davidsson.

Since the first explorations of Chan Hol, there have been many changes. The entrance has been made bigger by the amount of diver traffic and also was dug open by the owners. The road going south, Federal 307, has been made wider. The land owner built his house there in 2006. Now there is an entrance fee of 150 pesos, tables, garbage cans and a road with parking on the ceiling of the cenote. "The only thing that is constant is change," as they say.

A passion for conservation. Chan Hol is a truly magical and special place for me. I have so many great memories from the cave. I burn for conservation, and it is a "double edged" sword exploring caves. On one hand you want to protect these amazing places and keep them away from anyone; on the other hand you also want to share them. I now work and live as a cave diving instructor. On that note I train more people to go "destroy" the caves, which is what we really are doing. We have to do our best, train divers to our best, raise conservation issues, and educate local, non-divers and divers, about this true treasure and the importance of cave conservation.

This is my story about the initial exploration of "Chan Hol." I continue to explore in the area and again, you don´t realize how lucky you are that very first time you stumble over such a great cave. I still have got the "fever," and my search goes on for the next "Chan Hol."



Chan Hol Passage



Explorer:
Kim Davidsson



Entrance to Ranch



Ranch chickens



Chan Hol Passage



Agnes in Florida

Agnes Milowka 1981 - 2011

Agnes Milowka died in a cave diving accident in Tank Cave, South Australia on February 27th 2011, aged 29 years. She was doing what she loved and did best...laying line in virgin passage and pushing her own limits in a quest to satisfy the burning curiosity to see what was around the next corner. For many people this will be hard to understand. But for true explorers, the feeling of being the first, to be able to lay claim to a small piece of the earth that has never had human eyes upon it is as addictive as any drug. And in this realm, Ag was one of the best.

Her exploits in cave exploration are remarkable, especially considering the short time she had put her energies into the field. In just a few short years of exploring, she uncovered more new passage and extraordinary natural wonders than most of will find in a lifetime in the sport. She began as an accomplished wreck diver, pursuing her interest in maritime archeology before getting bitten by the cave bug.

Ag a spent a year working with Dive Rite in Florida and this is when her cave diving skills really developed. Her daily routine saw her driving to Dive Rite in Lake City, then to Ginnie Springs and finally home to her apartment in Alachua. She dived to the very furthest reaches of Ginnie Springs and quickly caught up with the most serious cave explorers. One of her great achievements was passing a very challenging restriction in Baptizing Spring and laying thousands of feet of new line. On a later trip to the USA in August 2010, with her buddy James Toland, she made history by connecting Baptizing Spring to the Peacock Spring system.

She made friends with many of the famous Florida cave divers. Wes Skiles is said to have seen something of his younger self in Agnes. They collaborated on several projects including filming of the Natural Geographic special on the caves of the Bahamas. Wes helped Agnes get started in her dream to make a career from cave diving, documentary making and exploration. The proposed “Agnes Milowka Project” would have seen Agnes filmed as she visited underwater caves around the world. It is a great tragedy that we will never see this.

Back in Australia at Mt Gambier she made some great discoveries in Tank Cave. At Buchan, in her home state of Victoria, Ag and buddy Jim Arundale explored and revealed over a kilometre of streamway passage in the Elk Cave system, passing six horribly tight sumps in the process. She visited Cocklebiddy Cave on the Nullarbor and swam almost to the end with ease, surpassing the efforts of most who had gone before. In the cold water of Tiger’s Eye in Tasmania she immediately found the deep going passage where others had failed. She even made her name in Hollywood as a stunt double on the feature film “Sanctum”.



Agnes on the set of “Sanctum”

In a few short years Ag had made her name as a professional diver, conservationist and explorer. She was also a woman with an engaging smile and unlimited cheerful enthusiasm who brightened the lives of all who knew her. We can only wonder what she would have achieved if she had not been taken from us so soon and so tragically.

Agnes, we will always miss you!

On behalf of all her friends by Richard “Harry” Harris and Ken Smith.

Skills, Tips & Techniques

By Jim Wyatt

Choose Your Gas Supplier Wisely
–OR-
You Are What You Breathe

Just this week I read a harrowing article about two divers who almost died and are suffering long term debilitating effects from breathing what we generally refer to as “Bad Gas”. The impetus of this article is to help readers know what “Bad Gas” is and some tips as to how to avoid getting & breathing “Bad Gas”.

Florida law requires any vendor of breathing gas to have it tested on a quarterly basis at a minimum. Industry standards require vendors have it tested anytime they suspect that some event has made the potential for them to be pumping “Bad Gas”. The vendor should post the gas analysis certificate in a conspicuous place for customers to view. Some vendors only post the certificate, some post the actual test results similar to what is shown below. Clearly you should make sure you see these certificates and read them. While it is no guarantee the gas is good, it is a good start.

What is “Bad Gas”? There are standards for purification that determine whether or not a gas sample meets minimum standards for purity. There are several things that are checked in order to help make this determination. Some of the more obvious ones are: Carbon Dioxide, nitrogen, oxygen, argon, carbon monoxide, water vapor, hydrocarbons, methane, and oil.

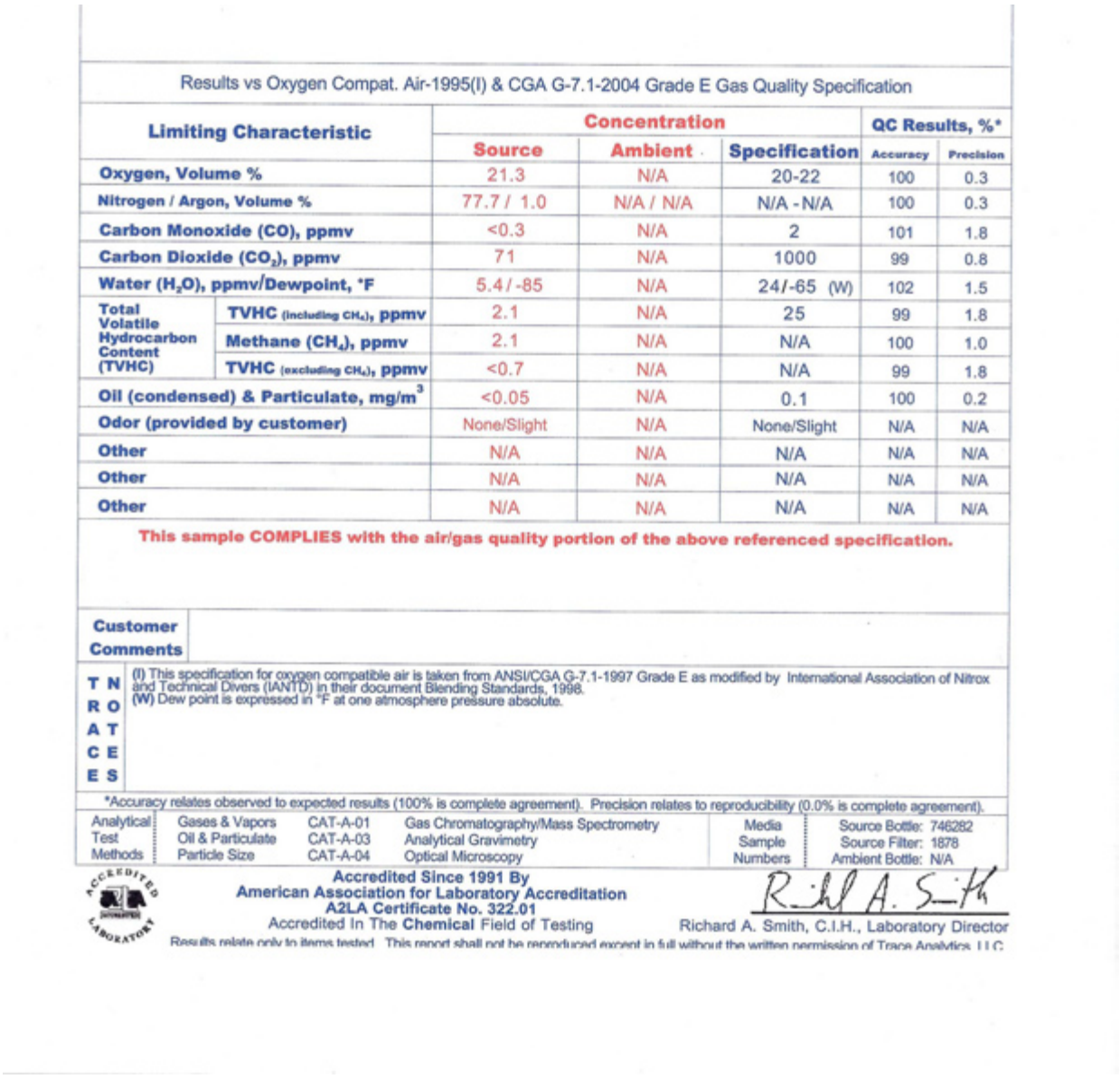
Editor’s Note: The folowing discussion is for review purposes only and not a substitute for training with a

Some of the things you can also do is to take a look at the compressors where you get your gas fills. If they are dirty that should tell you something. Dirty compressors do not cool as well as clean compressors. The very fact that a compressor is dirty tells me volumes about the staff at the facility. Consider the ventilation around the compressor. Compressors need to be cooled – many operators blow air across the compressor while it is running.

If the air temperature around the compressor is hot it can render the Hopcalite in the filter to be ineffective. Hopcalite is a catalyst that coverts carbon monoxide to carbon dioxide. If the Hopcalite gets much above 100 degrees Fahrenheit it will no longer convert CO to CO2. Hopcalite is advertised to handle as high as 300 ppmv of CO. If the oil reaches its flashpoint the Hopcalite will be unable to handle & convert that volume of CO to CO2 so you will get a lot of CO in the breathing gas.

If the gas coming through the filter is moist it will also render the Hopcalite ineffective. The dew point must be at least -50 degrees Fahrenheit. Because of this there must be a drying agent in the filter before the gas reaches the Hopcalite in the filter. You can note that the CO in the reported sample is less than 0.3 ppmv. The filter in this compressor has a Hopcalite layer in it.

Compressor operators are wise to run their compressors when it is cool and dry, if at all possible. Running the compressor at the hottest and most humid part of the day may be required to meet gas volume demands. If the compressor is being run during these times extra care should be given to cooling the compressor and ensuring adequate ventilation.



Results vs Oxygen Compat. Air-1995(I) & CGA G-7.1-2004 Grade E Gas Quality Specification

Limiting Characteristic		Concentration			QC Results, %*	
		Source	Ambient	Specification	Accuracy	Precision
Oxygen, Volume %		21.3	N/A	20-22	100	0.3
Nitrogen / Argon, Volume %		77.7 / 1.0	N/A / N/A	N/A - N/A	100	0.3
Carbon Monoxide (CO), ppmv		<0.3	N/A	2	101	1.8
Carbon Dioxide (CO_2), ppmv		71	N/A	1000	99	0.8
Water (H_2O), ppmv/Dewpoint, °F		5.4 / -85	N/A	24 / -65 (W)	102	1.5
Total Volatile Hydrocarbon Content (TVHC)	TVHC (including CH_4), ppmv	2.1	N/A	25	99	1.8
	Methane (CH_4), ppmv	2.1	N/A	N/A	100	1.0
	TVHC (excluding CH_4), ppmv	<0.7	N/A	N/A	99	1.8
Oil (condensed) & Particulate, mg/m^3		<0.05	N/A	0.1	100	0.2
Odor (provided by customer)		None/Slight	N/A	None/Slight	N/A	N/A
Other		N/A	N/A	N/A	N/A	N/A
Other		N/A	N/A	N/A	N/A	N/A
Other		N/A	N/A	N/A	N/A	N/A

This sample COMPLIES with the air/gas quality portion of the above referenced specification.

Customer Comments

TRACES

(I) This specification for oxygen compatible air is taken from ANSI/CGA G-7.1-1997 Grade E as modified by International Association of Nitrox and Technical Divers (IANTD) in their document Blending Standards, 1998.
(W) Dew point is expressed in °F at one atmosphere pressure absolute.

*Accuracy relates observed to expected results (100% is complete agreement). Precision relates to reproducibility (0.0% is complete agreement).

Analytical Test Methods				Media Sample Numbers	
	Gases & Vapors	CAT-A-01	Gas Chromatography/Mass Spectrometry		Source Bottle: 746282
	Oil & Particulate	CAT-A-03	Analytical Gravimetry		Source Filter: 1878
	Particle Size	CAT-A-04	Optical Microscopy		Ambient Bottle: N/A

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Richard A. Smith, C.I.H., Laboratory Director

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Compressor operators should be using synthetic oil rather than mineral oil. Synthetic oils have a higher flashpoint, are not as bad for you if breathed. (But it is still not good). Ask your vendor what they use; you may be surprised at some of the responses.

Operators would also be wise to install CO monitors in their gas system. CO monitors are available for purchase at retail for $400. This seems to me a small price to pay for the vendor to constantly monitor for CO. These are also relatively simple to install. Ask your vendor if they have a CO monitor.

After you get your tanks filled and before you connect your regulator to your tanks crack open the valve and perform a ‘sniff test”. While this test is not all encompassing it may yield a result that will tell you NOT to dive that gas. If the gas has any odor to it at all, do not breathe it. Tell the supplier of that gas that it has an odor and give them the opportunity to correct any problem that may exist. Some people I know have sent samples of these bad smelling gasses out for analysis.

Wes Skiles Peacock Springs Interpretive Trail

By Kelly Jessop

Located near the Suwannee River, south of Live Oak, Florida is Wes Skiles Peacock Springs. This property has a long history with the Weeden Island Indian culture, Spanish exploration era, and ownership by Dr. Peacock in 1857. Presently it is a protected state park that was recently renamed Wes Skiles Peacock Springs State park in memory of famed cave explorer and videographer Wes Skiles. Besides the usual recreational activities synonymous with state parks, there is large appeal to cave divers due to its 30,000 feet (9100 meters) of submerged cave passage, with multiple sink holes.

State parks in Florida, through state legislation, have a mechanism to provide support to a specific park, called a Citizen Support Organization (CSO). The CSO for Peacock Springs is called the North Florida Springs Alliance (NFSA), which is a non-profit organization composed of locals and cave divers that enhance the park experience with educational programs,improvements, and hosting events.

Several years ago, the officers and members of the NFSA put a plan into place to build an interpretive trail in the park. The plan was to have a trail that would superimpose the cave passages above ground and educate the hiker about the resource below their feet with kiosks scattered along the trail. While walking the trail, there would be an opportunity to experience the transition from floodplain swamp, to upland hardwood forest, and see the Florida Maples, American Hollies, and Pignut Hickories that populate the park.

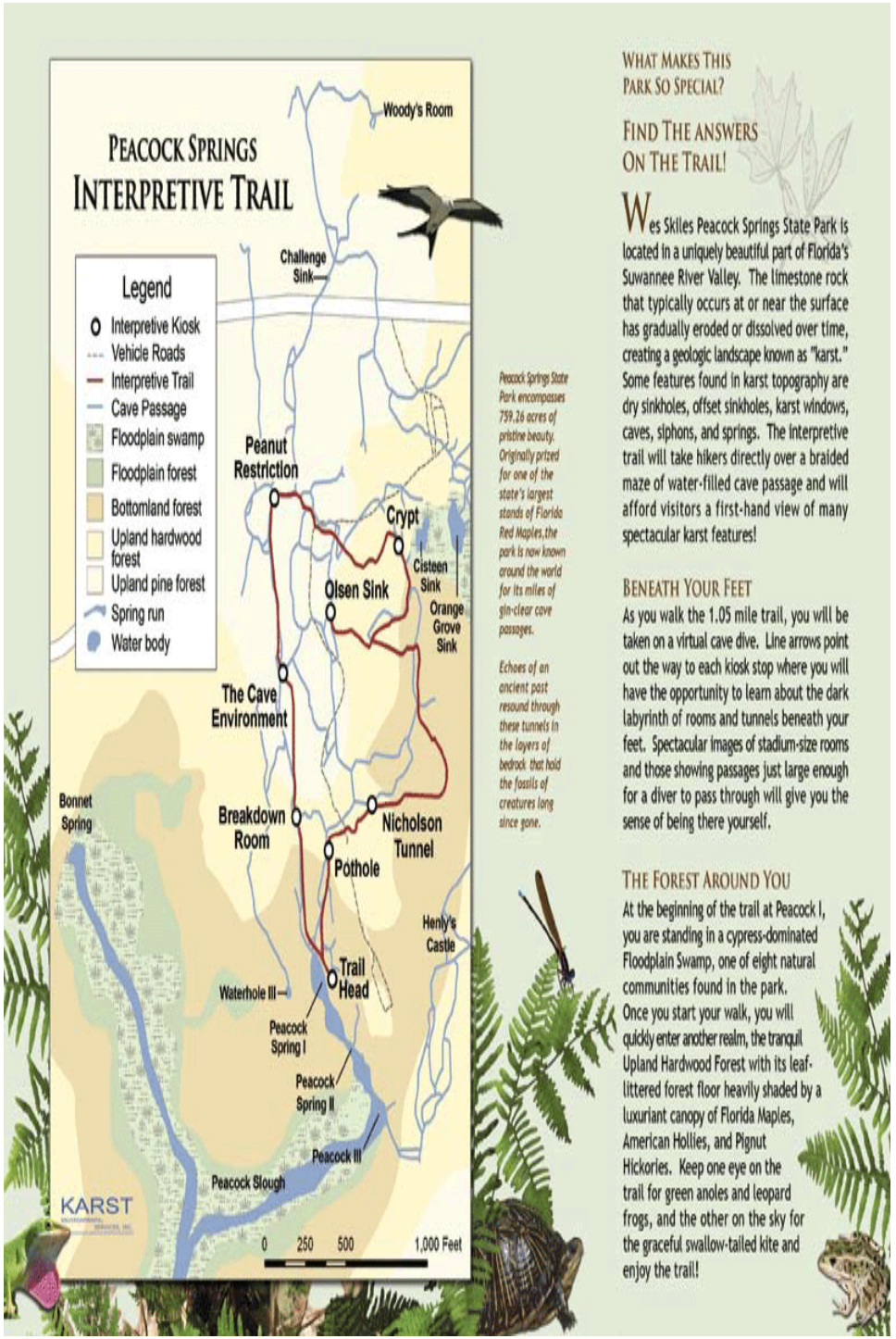
The first phase of the trail was to locate the surface of the cave passages in the woods, and this was accomplished by using radio locaters developed by Brian Pease and Ken Smith. With the combination of detailed maps, GPS, and radio locates the trail path was developed with the intent of covering many unique features of the karst environment in the park. The next phase was interacting with park management and state biologists to get approval for the trail, and assure that no rare species would be harmed, as well as erosion mitigation. Once the trail was cut, the process of designing the layout and copy for the educational kiosks required multiple levels of approval through state agencies, which all had their individual requirements and formatting. Money was solicited through many agencies that provide cave diver training and conservation education, as well as local shops that cater to cave divers, to build the kiosks that would be placed on the trail.



Above:Peanut Restriction Kiosk

Next Page: Interpretive Trail Pamphlet

Page 20: Trail Start Kiosk



Peacock Springs State Park encompasses 759.26 acres of pristine beauty. Originally prized for one of the state's largest stands of Florida Red Maples, the park is now known around the world for its miles of gin-clear cave passages.

Echoes of an ancient past resound through these tunnels in the layers of bedrock that hold the fossils of creatures long since gone.

What Makes This Park So Special?

Find The Answers On The Trail!

Wes Skiles Peacock Springs State Park is located in a uniquely beautiful part of Florida's Suwannee River Valley. The limestone rock that typically occurs at or near the surface has gradually eroded or dissolved over time, creating a geologic landscape known as "karst." Some features found in karst topography are dry sinkholes, offset sinkholes, karst windows, caves, siphons, and springs. The interpretive trail will take hikers directly over a braided maze of water-filled cave passage and will afford visitors a first-hand view of many spectacular karst features!

Beneath Your Feet

As you walk the 1.05 mile trail, you will be taken on a virtual cave dive. Line arrows point out the way to each kiosk stop where you will have the opportunity to learn about the dark labyrinth of rooms and tunnels beneath your feet. Spectacular images of stadium-size rooms and those showing passages just large enough for a diver to pass through will give you the sense of being there yourself.

The Forest Around You

At the beginning of the trail at Peacock I, you are standing in a cypress-dominated Floodplain Swamp, one of eight natural communities found in the park. Once you start your walk, you will quickly enter another realm, the tranquil Upland Hardwood Forest with its leaf-littered forest floor heavily shaded by a luxuriant canopy of Florida Maples, American Hollies, and Pignut Hickories. Keep one eye on the trail for green anoles and leopard frogs, and the other on the sky for the graceful swallow-tailed kite and enjoy the trail!

The North Florida Springs Alliance (NFSA) is a Citizen Support Organization (CSO) for Wes Skiles Peacock Springs and Troy Springs State Parks. CSO's were created by Florida Legislation (258.015) as nonprofit cooperatives with state parks to allow users of the park to conduct programs and activities to better the park. These groups provide support to parks by volunteering, educating visitors, hosting events and raising funds for specific park projects. They play a vital role supporting Florida's state parks, ensuring that our natural, cultural and historical resources are protected for future generations.

With help from members and volunteers, the NFSA has conducted educational programs and made many improvements to Peacock Springs State Park including the construction of changing rooms, scuba tank benches, a walkway to the Peacock I spring basin, and the state's premier interpretive hiking trail. These projects were funded by member dues and donations, the Adopt-a-Cave program, and tee shirt sales. All money raised goes to park projects.

If you're interested in becoming a NFSA member and receiving our monthly e-newsletter, volunteering on the next park project, or just enjoying an afternoon at the next social, go to www.northfloridaspringsalliance.org.

North Florida SPRINGS Alliance

The North Florida Springs Alliance owes a special debt of gratitude to the generous sponsors, volunteers, and all those who made the interpretive trail possible:

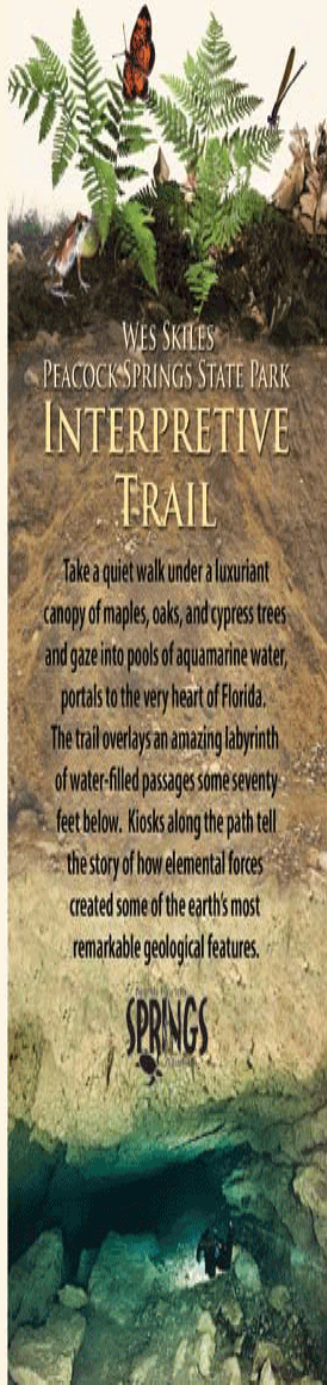
The State of Florida Parks Department-District 2, Dive Rite, the National Speleological Society Cave Diving Section, the National Association for Cave Diving, Amigos Dive Center, Dive Outpost, Halcyon, Global Underwater Explorers, Extreme Exposure, Jim & Gwen Wyatt, John P. Jones Scuba, Tom McMillan, Cave Excursions, photographers Jill Heinerth & Ken Clizbe, Karst Environmental Services, and kiosk designer Beth Murphy of New Moon Promotions.



Peacock Springs State Recreation Area
is located 16 miles southwest of Live Oak on S.R.. 41, two miles east of Luraville on Peacock Springs Road.

For more information, contact
Peacock Springs State Recreation Area
Peacock Springs Road
Luraville, Florida
(386) 776-2194

To learn more about the North Florida Springs Alliance go to:
www.northfloridaspringsalliance.org



Wes Skiles Peacock Springs State Park
Interpretive Trail

Take a quiet walk under a luxuriant canopy of maples, oaks, and cypress trees and gaze into pools of aquamarine water, portals to the very heart of Florida. The trail overlays an amazing labyrinth of water-filled passages some seventy feet below. Kiosks along the path tell the story of how elemental forces created some of the earth's most remarkable geological features.

SPRINGS

The trail has a dual role; it provides a virtual cave dive with a circuit being completed by the participant on the one mile trail. With Florida's springs in danger of pollution and ground water over utilization, the trail's kiosks educate on karst environment and conservation, which is very expedient for the inhabitants of the Floridan aquifer region. The story told with high resolution kiosks starts with the Breakdown room. The participant sees this large room illuminated to full glory, but is instructed on speleogenisis that caused this formation. The next stop is the Cave Enviroment kiosk which is a key intersection between two trunk passages. This kiosk educates on the species that live in the system, and the difference between troglobites, troglophiles, and trogloxenes. There is an important message on the hydrodynamics between the spring and the Suwannee River, as well as porous karst and the pollutants that can enter the system. When approaching the Peanut Restriction kiosk, the participant encounters a very deep dry sink, and they are educated on sinkhole formation with the mechanisms involved. The Crypt is a landmark that is an offset sink, and combined with pictures and text, this kiosk provides information on its formation, and debris mound. Olsen sink, which is the next stop, has a pool of azure blue water at the bottom and the scenic overlook allows the viewer to see this sink, as well as a passing cave diver who has to cross the shallow depths before reentering the cave. The kiosk here teaches about spring sheds and windows into the aquifer. The last two kiosks, which are the Nicholson tunnel and Pot Hole sink, instruct on the cave diver's concern for safety and conservation, as well as the role they play to protect springs.

This trail has become not only a tremendous asset to the park, but to the state of Florida. In order for Florida to address many of its long term water management issues it is imperative that the public be educated on these springs, and the karst below their feet. Slowly old harmful practices are going away, but this trail can serve as a catalyst to help facilitate the future protection and preservation.

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Cave Diving Milestones

By Shirley Kasser

In May 2010, the NSS-CDS was pleased to present two Henry Nicholson Safety Awards, to Russell Edge and John E. Ivanic. The Henry Nicholson award represents five hundred safe cave dives beyond cave training. This is truly a remarkable accomplishment. Previously in this column, John Ivanic shared his 500th dive with us. In this issue, we have the pleasure of hearing from Russell Edge:

"In February of 2010 I was talking to Shirley, the Awards Coordinator, about my upcoming Henry Nicholson award. I told her I was eighteen dives away from 500, and I didn't think I had any chance of getting eighteen in before the workshop. She then reminded me that although dives originally had to be a minimum of thirty minutes to count (back when I started counting), they changed it several years ago, and now any dive that takes place in a cave is considered a cave dive, and counts toward the award. I knew I had a bunch of 25- to 29-minute dives, so I recounted, and sure enough, I had attained 500 more than a year earlier. So rewind to December of 2008:

"The Cave Diver's Forum had its social on Wednesday, December 31 at the Little Devil pavilion, and at 6pm we moved everything to the Ginnie pavilion and had a smaller cookout and a bonfire, leading up to the midnight Galaxy Dive. I took this opportunity to put my Mako scooter on charge, on a picnic table behind the pavilion where it would be out of the way. The Galaxy Dive was very successful, and afterward some friends and I went to one of the Ginnie trailers we had rented to get some sleep.

"The next morning (January 1) I went to dive the Devil System, and I stopped by the Ginnie pavilion to see if we had left any chips or other goodies behind, and when I saw the picnic table, I remembered my scooter. I didn't remember putting it back in my trailer. I jumped out and looked, but it wasn't in there. There was no sign of it, the charger, or anything. I went to the office and nobody knew anything about it. Dejectedly, I went and made a solo swim dive, but was so depressed at my stupidity that instead of staying in cave country through the weekend, I packed up and drove home.

"When I recounted my dives, it turns out that solo dive to the July Spring tunnel on January 1, 2009 was my 500th cave dive. (And three days later I found out a friend had seen my scooter at 7am, and rather than taking it to the office, or trying to get my phone number from any of our mutual friends, he just took it back to Georgia and dropped it off at the shop where I work.) "

Thank you, Slüdge, for taking the time to share your story.

What's your story?

Email your milestone stories and photographs to me at abedavis@nsscds.org, or snail mail them to me at 2612 Grassy Point Dr, #110, Lake Mary, FL 32746.
Shirley Kasser

Visit With A Cave:



"Steam" rises off the warm spring water on a cold morning in late December.



Rocky Horror Passage is difficult to turn in - I had to contort myself and still couldn't get myown fin



The upstream side of the Half Hitch.

Passing a jump early in the system.



Passing through the Half Hitch restriction.



Madison Blue Springs
Photos by Brandon McWilliams



An in/out sign is used to indicate the presence of teams past the entrance to Potter's Delight as the small passage makes it difficult to pass or turn around.



Rocky Horror Passage.

Madison Blue Springs
Madison, Florida

Madison Blue Spring is about 10 miles east of Madison, Florida on the west bank of the Withlacoochee River.

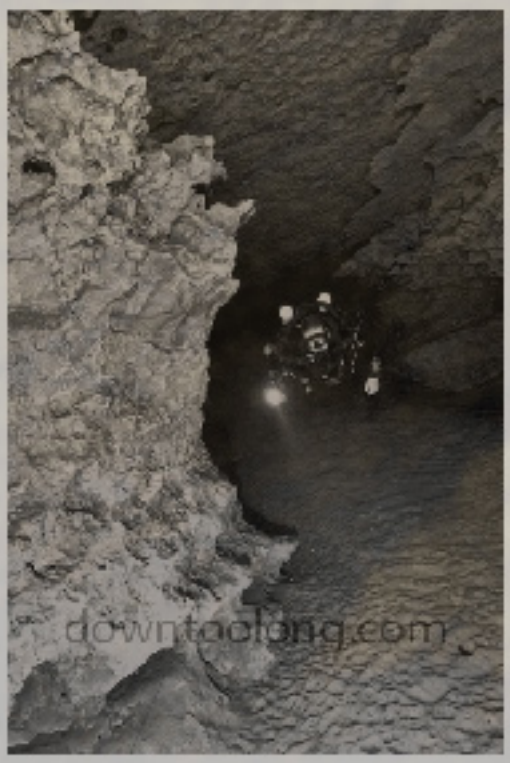
It is a first magnitude spring coming up from about 25ft deep into a limestone basin about 80 feet across. The spring run is approximately 100 feet long and empties into the river.

Once closed to diving, but now reopened, this spring is now state owned, although it is managed as a County Recreational Park.

There is a fee for park entry and diving.

Swimming, picnicing, and walking trails are on site, as well as parking and bathrooms.

New tank benches were recently installed thanks to the North Floirda Springs Alliance.





Upper Left: On the mainline
Upper right: The world of light meets the world of darkness
Below: Larger tunnel on the mainline with breakdown



Conservation Corner

By Kelly Jessop

DPV Benefit to Cave Conservation

Jackson Blue's aquifer is well charged, and there is a screaming flow today. We have two cave diving teams crossing the flat area just past the second breakdown. Team 1 is swimming and Team 2 is using a DPV. Who is possibly causing the least impact?

DPVs have received a bad reputation in some circles, but in reality in the hands of a skilled pilot, it can reduce cave impact. In high flow cave systems, where a DPV is manageable, their use will reduce physical contact with the cave to move forward. Also, in caves with depth shifts, a DPV can help to keep neutral buoyancy with forward propulsion, so there is less contact with the ceiling or floor.

This being said the user has certain responsibilities. Being skilled and well-practiced in the use of a DPV is critical. The DPV needs to be well balanced with proper tow rope length. Plus, the pilot needs to pick a speed appropriate for the cave passage they are traversing.

Returning to the two cave teams in Jackson Blue. Team 1 is having to grab any ridge in the floor to pull themselves forward, and also dodge the fragile fossilized urchin spines. Team 2 is moving forward without having to make any contact with the cave.

Often we will use this column to acknowledge individuals or groups that have made an impact on cave conservation. I would like to make members aware of the Florida Springs Institute, and their web site floridaspringsinstitute.org. As most of us are aware the springs are in danger of many threats, and this organization is making an effort to generate awareness.

Photographer:

Australia: Down Under Diary

By Forrest Wilson

The plans for this trip actually started in the fall of 1977, when I met an Australian cave diver named Ian Lewis. He gave a talk at the old Steamboat motel restaurant in Branford, Florida. After his talk, I invited him to go sump diving in West Virginia, and he accepted. He ended up staying several months, because he met a girl.

A few years after Ian returned to Australia and gave my name to another Australian cave diver, Ken Smith. Ken's job sent him to the US often, and we dove together a dozen or so times over the next couple of decades. Ken invited me to speak at the annual meeting of the CDAA (Cave Divers Association of Australia).

The following are exerpts of my diary from this trip.



Monday (9-27-2010) - I got into Sydney. Ian Lewis met me at baggage claim and he took me to where Ken Smith was parked.

We went to Glenelg, where the colony of South Australia was established in 1836. Then we went to a nature preserve, Cleland Park, and saw kangaroos, koalas, dingoes, shore birds, heard a kookaburra and saw some small marsupials.

Tuesday (9-28) - I woke up early, but not much before my regular time. I am pretty sure I heard a Koala during the nigh;, they sound like pigs grunting.

Then we packed a truck Ken had borrowed, and we headed towards Mount Gambier, the local version of Branford. We stopped in Naracoorte, and Ian Lewis took us through some small tourist caves. One is known worldwide for the discovery of a large fossil area. There were things I had never heard of, such as the marsupial lion (Thylacoleo Carnifax). We also got to view bats through a new infrared camera. It is too messy to go into the cave, because the guano is really deep. They can zoom the camera in enough to see insects crawling in the guano.

That night, we stayed in an old church near Mount Gambier. It is owned by cave diver Deb Williams, and there are several bunk beds in the choir loft. The caretaker had come by, and left a fire burning for us.

Wednesday (9-29) - We went to Pines Cave; it was nice. It was a sinkhole with a way through the breakdown into another chamber, called CCR (Crazy Czechs Room).

The water is colder than Florida, closer to north Georgia. We got down to 129' and were in for about an hour, so we had to deco for about 15 minutes (diving on air). My drysuit started leaking right at turnaround, so I was pretty cold on deco. We were sharing a single O2 bottle, so I couldn't leave when my computer cleared. The dive was 129' for 69 minutes, including deco.

Thursday (9-30) – We went back into Mount Gambier to Englebrecht's Cave, a commercial cave. This side is called Englebrecht's West and is the longer dive. About a hundred yards inside, there is a sump. We hauled our gear down to the sump. Ken said the water level was way down from his last visit. Now there is only space for one diver to gear up in the small head pool, so I went in first and waited. The cave was much like Tennessee; black silt on the floor, about 30' of viz, and cold. Around 600' in, we came out of the sump. When we got to the end of the breakdown, there was no way to swim into the second sump. The water was too low, so we turned back. Of course we had to haul the gear back, and that was uphill. The computer logged it as two dives. Dive #1 was 28' for 17 minutes, and dive #2 was 30' for 17 minutes.

Friday (10-1) – We went to Piccaninnie Ponds today. It is more like a cavern dive, but goes pretty deep (over 300'). Divers are limited to 120 feet, unless they have a special research permit. It was a deep canyon in the floor of a big pond and reminded me of Little Devil's cave, but much larger. You can pretty much see the entrance from anywhere above 120 feet. There are two parts to the canyon, separated by breakdown. Coming back through the breakdown and looking back up was spectacular. It has a limit of how many divers can be in the water, and teams get assigned a start, and stop time. It is worse than Manatee. The dive was 122' for 30 minutes.

The second dive was in Ewens Ponds. There are three of them, connected by shallow runs, a little like Peacock, but wider, and full of interesting plants. No overhead at all, unless you stick your head into some small holes. The floor of the ponds has sand, and water is boiling up through the sand, making little "dust devils." My computer showed 31' for 35 minutes, I guess it didn't have time to reset between dives.

Saturday (10-2-2010) – The day of the CDAA Annual Meeting. The first thing on the agenda was concurrent talks by Christophe Le Maillot and Ian Lewis. I went to Ian's talk about his Ph. D. thesis on the formation of sinkholes around the Mount Gambier (extinct) volcano.

I was up next, and then Christophe, who talked about cave diving in Bosnia/Herzegovina. There were talks on a new movie coming out, called "Sanctum", and after "tea," Christophe was back talking about exploration in Mexico and giving a sales pitch for DIR/GUE.

Sunday (10-3) - We packed up and headed for Tank Cave, the best cave in the Mount Gambier area. It used to be hidden under an old water tank to keep cows from falling in. The entrance is only about three feet by three feet, and there is a ladder going down about ten feet. It is about 50' from the base of the ladder to the water. They have dug out the floor, and cut steps into the rock. At one time you had to crawl to the water.

We dove with Martyn Winston, and the cave is very nice, reminding me a lot of Florida. The passages ranged from about five feet by five feet to fifteen by thirty. The limestone is relatively soft, and there is white clay in some areas. Silting isn't a huge problem, and doesn't totally obscure vision. However, once it does silt, it stays suspended for a long time, due to very little, if any, flow.

Our first dive went up the A line, to the C line, to the end, which was about 1000'. We put in a jump reel, and looked for a new line that Agnes Milowka had put in last year, but it was pretty small getting to it, and we gave up. On the way out, we went up a couple of side leads; at C7 we looked at the R section, and at C1 we looked at the D tunnel. The dive was 44' for 83 minutes.

We ate lunch between dives, and for the second dive, we did a circuit following the A and B lines. We did a bypass (SC1) around the shallow section we had done on the first dive. The halfway point was about 1300', and we did a couple of side leads along the way, B7 High White Room,



Forrest Wilson in Tank Cave

and B14 H tunnel to a no name tunnel and turned at the F line. We stopped to poke our heads in an air bell that was 16' deep. We also looked up a well bore, all the way to the surface. The dive was 44' for 86 minutes.

Monday (10-4) - Ken repacked the truck with stuff we needed on the Nullarbor. There are no stores, so we had to take everything we needed for ten days.

Tuesday (10-5) – Warbla Cave is in a national park, and requires a permit. Ken's friend Peter Rogers has a permit, and had put our names on it before I arrived. We arrived at the cave about an hour before dark, and set up camp. After supper, the other cavers showed up; Peter Rogers, Cheryl Bass, and Grant Pearce.

Wednesday (10-6) –The entrance is a big sinkhole, and you have to rappel part way to get in. They are just about to lower a long compressor hose, so they can fill right in the cave. They set up a metal frame over the edge of the sinkhole to lower tanks since it is hard to rappel/climb with them.



Abrakurrie Cave

Thursday (10-7) I decided not to dive (UTI) and helped move gear to the lowering point, which is on the high side of the sinkhole. I gave some pointers on SRT and rigging, as these guys are more divers than cavers.

I went for a trek and took a nap. Park rangers stopped by and I told them Peter was in the cave. They knew we would be there, so there was no problem. I am glad we did this legally, as Agnes got caught sneak diving it, and was banned from diving CDAA-controlled sites for a year.

Friday (10-8) – I felt a lot better this morning, but I was still not great, so I planned to stay out of the cave today.

Ken had placed one of his "pingers" (radio cave location devices) and stayed up looking for it last night, and went back this morning to recheck.

One of the plans today is to mark the line with reference points for further research. They really needed cave cookies, but settled for arrows. They just barely had enough, so rather than have them diving without enough, I donated three of mine to the project.

Harry Harris arrived with Liz, Roger's daughter. They had been out on the Roe Plain in Western Australia diving the recently discovered Olwolgin and Burnabbie Caves.

Saturday (10-9) – I helped lower my gear, along with Harry's camera gear. After we did that, we all started 'abseiling' into the sinkhole. The entrance is very large, and it is several hundred feet to the sump, mostly sloping downward. The cave remains very large (like Camp's Gulf) until you get to the water, then it is pretty crowded with gear for seven divers. There is no flat spot anywhere, and when I set Ken's Transpac down, it slid right into the water. Ken arrived soon after, and he had left the rest of my gear back in a larger area so I had room to put on my drysuit. Liz went in first solo; she is fast becoming another Agnes. Harry, Peter, and Grant went in next, and took the camera gear. Ken and I had more space to gear up then. By the time we were ready, Liz was back.

Ken's job on that dive was to move the pinger to a new location, in a sidemount passage that was a left jump off the mainline, just above the "bathtub" formation. It was pretty far into the cave, so I got a good feel for the size. It is pretty shallow, around 50' max, and only 30' or so a lot of the time. There is a thermo/halocline at around 35', and that is where the bacteria grow that Peter had a permit to study. They seem to form in pockets, and actually "eat" the cave. Since fresh water with high CO2 content is rare here, the bacteria are doing most of the cave enlargement at the present time. We passed a couple of these

pockets today, and I hope to see more on a different dive tomorrow.

The passages are generally large, 20' to 40' wide, and 10' to 20' high, except for the side passage we were in which ended in an air chamber, which they call a "lake." We passed the camera crew on their way out, and ended up as part of the documentary. The computer logged it as two dives. Dive #1 was 49' for 31 minutes, and Dive #2 was 49' for 49 minutes.

Sunday (10-10) – The dive plan today was taking still photos and to retrieve the pinger. Ken, Harry, and Grant went to do that, and I went with Liz, Peter, and Cheryl. We just stayed on the line into the lower tunnel.

I carried a slave flash to light up the cave wall behind me and Liz shot a lot of pictures. We got all the way to the end of the line and I saw some small tunnels; but it would have been no-mount to continue, so I left them for when Agnes' sentence is suspended.

The camera flash quit working on the way out, so we got a break from posing. The dive was 66' for 75 minutes.

Monday (10-11) – Most are going back home, but Ken wanted me to see Weebubbie. Harry called me over to see a giant centipede, but killed it before I could get a photo.

We arrived at Weebubbie and unpacked, and hauled some gear to the water. The entrance is smaller than Warbla, but the cave is bigger. The path is well-worn, since it is very popular. We got to the lake, and set our gear down. I was looking for a way in, and Ken put his hand in to show me the surface was 3" below the huge rock we were standing on. I got both my tanks and regs to the water, so I only had to bring down my drysuit, etc. tomorrow.

Tuesday (10-12) – I got up at first light, and Ken not too long after. We hauled the last of our dive gear the 1000' (and 300' deep) back to the water. This place is a lot cleaner and clearer than Warbla at the entry point. The lake is 200 yards long, and 10-20 feet deep in the middle, but up to 100' at the undercut edges. We swam on our backs to the end, to conserve air. Ken went to the bottom to leave the O2 bottle, and I soon followed. The passage is even bigger than Warbla, and slowly slopes down to 132' at the end. The passage size also gets smaller, and seems more like Florida at the end. We had considered doing deco, and going into a side lead to another air dome, but both of us were cold at the end of deco, so we opted to swim out at the bottom of the entry lake. It in itself is a nice dive. The dive ran 76 minutes with deco.

Wednesday (10-13) – Abrakurrie Cave is another sinkhole, but is longer than the others I have seen here, and has no water. We set up slave strobes and got a couple of decent pictures. It is pretty hard since the rooms are so big. Ken's strobes are for underwater, so they are pretty bright, and at least we got enough to show the size.

We ended up at Nullarbor Hotel Motel (sic). We got the "backpacker's" room, with the toilets a couple hundred feet away over a gravel road. Still better then a tent, and a shovel.

Thursday (10-14) – We got up at 5am and headed back to Adelaide.

Friday (10-15) –There was a barbeque at Adrian's this evening, and we stayed there because it is closer to the airport.

The BBQ was nice and there were a lot of famous CDAA cave divers there. Dave Warnes, Phil Prust, Adrian Richards, Peter Horn, Chris Brown, Glen Harrison, and Greg Bulling were there.

Saturday (10-16) – We got to the airport pretty quickly, but the plane was delayed an hour due to bad weather in Sydney. A fellow pilot took me to the Zoo; it was nice. I stayed at his place overnight.

Sunday (10-17) – We got up and got to the airport 2 hours before the flight. It almost wasn't enough, because the Sydney airport is very disorganized. It was a long day because we crossed the dateline and it stayed the same day for about 36 hours. I switched to LAX time as soon as I got on the plane, hoping to reduce jet lag.



Warbla Cave bacteria colony
Photographer: Liz Rogers







Weebubbie Cave

All Photos by Ken Smith





Piccanninie Pond

Piccinninie Pond



Weebubbie Entrance





Tank Cave

Tank Cave

Warbla Gear Lowering



May 27-29, 2011 in Marianna, FL

7am-10pm - Friday Night
Social with stories about Wes Skiles lead byTom Morris

8am-5pm - Saturday
Presentations

Master of Ceremonies -
Walter Pickel

- Cindy Butler & Alan Heck
  Suwanee River State Park exploration project
- Joerg Hess
  Wakulla Springs
- Tom Iliffe
  Bermuda Caves & Cave Biology
- Brian Kakuk
  Bahama Caves exploration/ conservation
- Jerry Murphy
  Rose/McCormick connection
- Edd Sorenson
  Hole in the Wall exploration project
- Mike Young
  GEM Rebreather

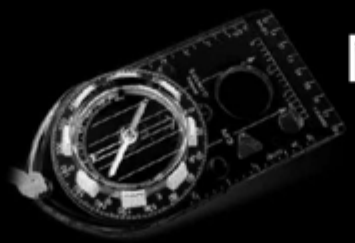
Rebreather Panel Discussion

8am-5pm - Sunday Clinics

- In-water rebreather clinic
- Sidemount clinic
- IUCRR Recovery class
- Indian Spring guided dives
- Silent Submersion Demo DPV
- KISS GEM clinic
- Shearwater Predator clinic
- HOG regulator clinic

Exploration · Conservation





2011 NSS-CDS Annual Workshop

Marianna, FL

Vendors

Bahamas Underground
Cave Diving Museum
HOG
Hollis
NACD
NFSA
KISS
Shearwater
Sidemount Rebreathers
Silent Submersion
Wakulla Dive Center

Door Prizes

Dive Rite gift certificate
Gamble Scuba gift certificate
HOG D1 Cold 1st stage w/ 2nd stage
Hollis SMS100
Shearwater Predator
2 nights at Cave Country Lodging
2 nights at Rum Island House

We have dive gear from Cave Adventurers and Ft. White Dive Center, products from the NSS-CDS online store, and lots of other prizes to give away throughout the day.

Winners must be present!

Free workshop t-shirt to all early registrants!

Saturday lunch included!

Free entry to Blue Springs Recreational Area (Jackson Blue park) all weekend with paid attendance!



Book Review
By Forrest Wilson

Cave Diving - The Cave Diving Group Manual

Copyright - The Cave Diving Group 2008
Publishing Editors: A M Ward, C P Hayward
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The CDG manual was written to support cave diver training within the Cave Diving Group of Great Britain. Most CDG diving is done inside of "dry" caves (i.e. sumps). The CDG manual covers all aspects of that type diving, with additional information for CDG divers that may go on expeditions, or on a diving holiday outside the UK.

The CDG manual would be very useful to an American cave diver with an interest in diving sumps in the US, as there are many similarities in the problems involved. The manual covers things like transporting gear through "dry" caves to a sump, minimalistic harnesses (kits) that are less cumbersome than commercially available sidemount rigs, and the logistics involved. Anyone thinking of trying sidemount, especially in small silty passages would also be interested.

There are chapters on CDG history, planning, equipment, skills, exploring, and surveying. To round out a CDG trainee's knowledge, there is also some information about compressors, trimix, rescue, dye tracing, and rebreathers.

Wisconsin Cave Diving

Thanks to a grass roots cave diver effort, the Wisconsin ban and/or restrictions on cave diving, for the protection of the bat population from White-Nose Syndrome, has been reversed. The WDNR (Wisconsin Department of Natural Resources) is now working with the local cave diving community to establish additional protocols for sump diving.

According to the WDNR website:

Statement regarding the implementation of NR 40 with respect to diving and cave diving:

•Diving in lakes, rivers or any other surface water body is not restricted by the proposed changes to NR 40.

•Cave diving at sites that are fully inundated with water is also exempt from the proposed changes to NR 40.

•The department is currently working with the diving community to develop decontamination protocols for sump diving. While the protocols are in development, there is no restriction on sump diving.

Madison Blue Cleanup

On March 19, volunteers participated in a clean-up day at Madison Blue Springs.

3 new tank benches, built by members of the North Florida Springs Alliance were installed.

Volunteers also painted the bathrooms, pressurized the Martz steps and filled and leveled parts of the road, along with clearing brush on the highway access road.

Kudos to the coordinators and all who participated.

CALENDAR of EVENTS

April

May

27th-29th - 2011 NSS-CDS Workshop

June

June 15 Submission date for UWS Magazine Volume 38 No. 3

Send submissions to
cccheryld@aol.com