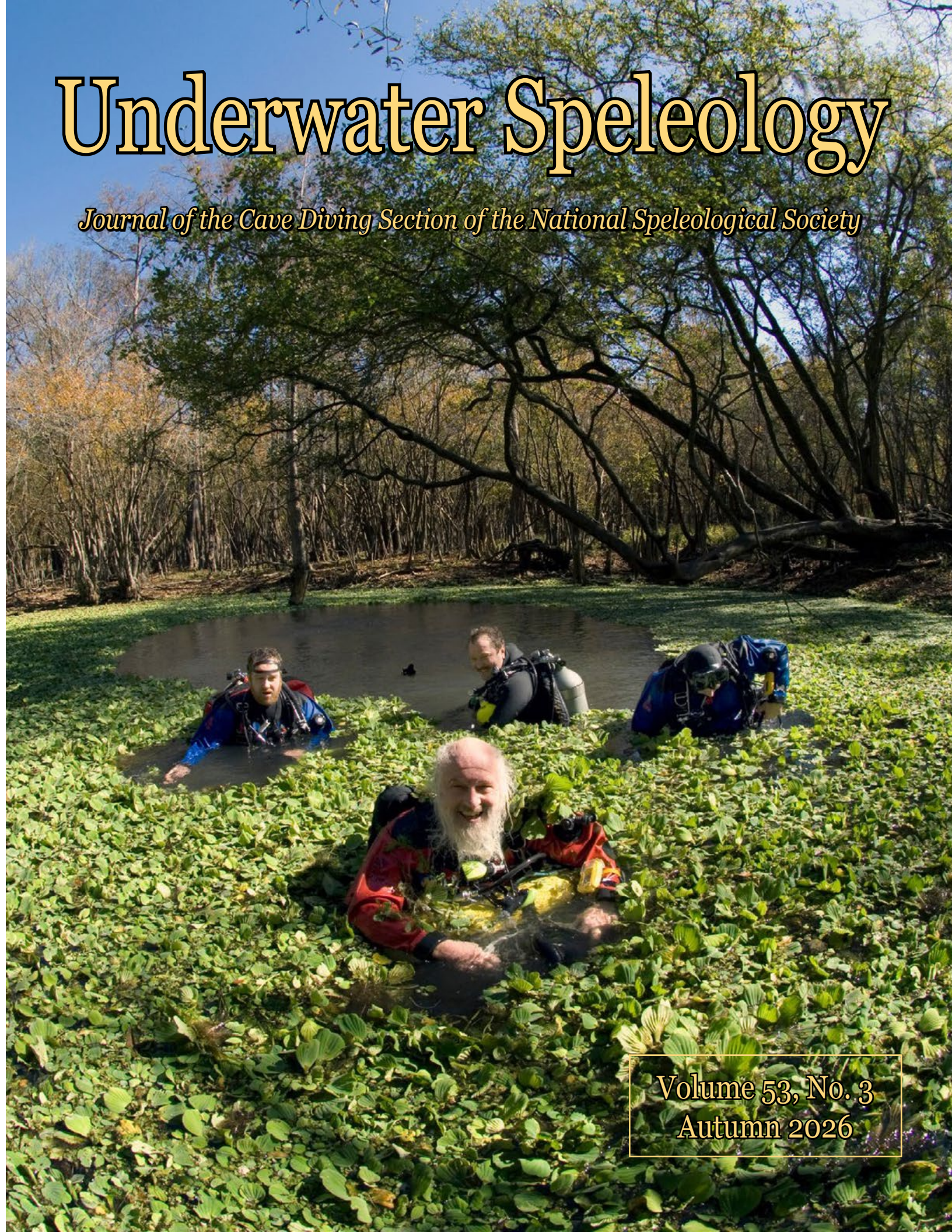


Underwater Speleology

Journal of the Cave Diving Section of the National Speleological Society



Volume 53, No. 3
Autumn 2026

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Underwater Speleology

Volume 53, Number 3, Autumn 2026

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COVER: Forrest Wilson and friends in Hart Springs's Black Lagoon. © Jill Heinerth.

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by Fred Stratton

The searing summer heat has diminished, and leaves are turning in northern climes. The drought in Florida has abated somewhat, although the Floridan aquifer is still suffering. While we pray for rain, take advantage of reduced flow and increased visibility while you can.

Is DiePolder in Danger? Scouting America's plan to sell 604 acres of Sand Hill Scout Reservation to create a Planned Development District has created a firestorm of outrage from swaths of concerned citizens, including cave divers.

Mr. Larry DiePolder willed 1,300 acres of coastal Hernando County land zoned for recreational use to the Boy Scouts and directed that it never be commercialized. The land transferred to the Scouts upon his death in 1978. Sand Hill encompasses the massive, deep cave system that bears his family's name. Explorers have surveyed and mapped its wonders and shared data with scientists and public officials, but hydrogeological and biological mysteries remain. Paving nearly half of this mostly untouched property is sure to have deleterious impacts.

Coastal Engineering, a firm hired by Scouting America, conducted a public information workshop in Weeki Wachee on 6 October. Over 300 citizens attended, including many NSS-CDS members. No one spoke in support of the rezoning and sale of the 604 acres. The next phase in the six-step process is a hearing to review the Comprehensive Plan Amendment likely to occur in November or December. We will keep everyone posted.

The Black Lagoon in Hart Springs County Park had angled steps, a rickety platform and no handrails. Working with the Gilchrist County Diving Advisory Board (several members of which are also NSS-CDS members), we will be replacing the dilapidated structure with brand new pressure-treated lumber and corrosion-resistant hardware. This little-dived site has periods of nearly infinite visibility and stunning features. The \$25 fee to dive with a guide is well worth it for full cave divers with 100 documented post-training dives.

The Mill Creek Sink Nature Preserve - one of 23 owned and protected by the National Speleological Society - needs your help. Persistent attempts by a developer to build multiple commercial and residential developments on parcels surrounding the preserve compound the risk of stormwater and non-point source pollution that will drain into Mill Creek Sink.

The NSS has hired Sunshine Law to review the applications for zoning variances and building permits related to these developments. Using our Litigation to Protect Caves Fund, we can pay for consultation, research, and sustained legal defense to protect of this fragile underwater habitat.

As of 20 September the NSS had raised \$5,705 to fund this battle. Please help us meet the \$10,000 goal. Your financial donations will help us protect this preserve. Donate here: <https://secure.givelively.org/donate/national-speleological-society/mill-creek-sink-defense>

Record attendance at the 2026 Midwest Workshop. An unprecedented 73 people attended the 25-27 September event in St. Robert, Missouri. Hats off to CDS members Chad Dalton and Gayle Orner, our sponsors, and volunteers for resurrecting this event after a five-year hiatus. We will cover the festivities — social, workshop, caving and cave diving—in the next issue of UWS.

The 2026 DEMA Show is in New Orleans 03 -06 November, and the NSS-CDS will be there. We have been in the black over the past several years and reaped manifold tangible and intangible benefits by participating in this show that draws thousands of people from all 50 states and around the world. These include interacting with current and potential sponsors, selling merchandise, hosting a presentation in the Technical Resource Center, signing up new members, and educating people on our mission to name a few. Drop by and see us at Booth # 2552 in the Technical Diving Center!

The 2027 Winter Workshop (WW27) is shaping up. We will open registration in October for this event at the High Springs Civic Center in — you guessed it — beautiful High Springs, Florida, on Saturday, 16 January 2027. We will have engaging presentations, tasty food, raffle prizes, and breakout hands-on sessions that you've come to enjoy. Come for the superb cave diving and wrap up your week at the Winter Workshop!

Go dive. Have fun. Be safe!

Fred Stratton is the 2026-2027 NSS-CDS Chair. Diving since 1987, the darkness beckoned to him in 2003.



FORREST WILSON

HIS LIFE - HIS LEGACY

by Jill Heinerth, Mark Wenner, and Brian Williams

Cave Explorer, Inventor, Mentor, Friend

'Some people leave behind discoveries. Others leave behind inventions. The rarest leave behind generations of explorers who see the world differently because they crossed paths with them.

That was Forrest Wilson.

His shock of white hair and flowing beard made him instantly recognizable. But it was his smile—equal parts curiosity, kindness and quiet mischief—that people remember most. He carried the infectious enthusiasm of someone who never lost the wonder of being a child. Perhaps in many ways he never did.

The Explorer Who Never Stopped Moving

Forrest Wilson, one of nine siblings, was born on October 18, 1944 to Rosemary Girnus Mobbs and Ralph Wilson and died July 16, 2026. In line with his wishes there was a graveside memorial and internment service held on August 29, 2026 with members of his family at Nashville Cemetery, Nashville, AR. Our caving and cave diving communities have lost someone impossible to

replace. Friends can send donations to the National Speleological Society or to the NSS-CDS.

Within our memories lie the experience and stories that need to be told. Now it is our time and responsibility to share some of Forrest's life and passions with you. It's overwhelming to write an article befitting one who gave so much to the caving and diving community. The time between the years 2000 -2020 passed so quickly, spent on more projects than we can possibly detail. He had so many adventures long before we had the honor of caving with him. He shared his life and stories with so many who listened, laughed, and learned another lesson.

Constantly Striving for Improvement

Forrest studied physics at Loyola University with minors in mathematics and computer science at the Baton Rouge Planetarium while saving money for diving equipment available at that time. Later he worked at the Smithsonian Institute, gaining technical experience. Shortly before 1967, he was hired by the Fernbank Science Center and moved to Atlanta. There he was known for converting a mechanical projector system with switches and levers into a fully automated computer-driven show. He maintained Fernbank's equipment and exhibits for more than five decades while dedicating himself to diving.

Regardless of what Forrest did for a career, it couldn't contain his restless curiosity. If something interested him, he learned how it worked, then figured out how to build a better version.

Forrest's contributions to caving and the world of cave diving are indeed revolutionary. Cavers in the UK had been pushing caves through sumps and siphons for many years but "sump diving" was fairly new to



Six days of exploration and diving in West Dominican Republic/ Haiti jungle. L to R: Forrest Wilson, Cristian Pittaro, unknown guide. Photo by Mark Wenner.



Forrest after his last dive at Jackson Blue, April 5th, 2019. Photo by Mark Wenner.

US caving when Forrest began his explorations. His father had regularly taken him to university lectures while he was still in elementary school, and one speaker left a lasting impression on the eight-year-old Forrest: Jacques Cousteau. Among his many stories, Cousteau offered one simple piece of advice that Forrest never forgot: *If you ever go into a cave underwater, take a guideline.* Through trial and error and some close calls, he learned and taught the art of sump diving to many of us.

A Lifetime of Dedication

Forrest began diving in the late 1950s and discovered cave diving in 1969. Around that same time, he was elected the Vertical Training Director for the District of Columbia's Grotto. He became an open-water instructor in 1974, completing his first sump dive the following year. In 1978, his dive partner Sheck Exley broke ground and presented him with the first cave-diving instructor card issued by the newly created NSS-CDS. As a lifetime member of the NSS, he received close to every achievement award that can be given. Another first was being elected Training Director/Chairman of the NSS-CDS from 1975 - 2019. He served as the National Dive Coordinator for the National Cave Rescue Commission (NCRC) from 2006 thru 2019.

Forrest helped create a think tank of divers who became personally responsible for developing safe cave diving protocols. Cave diving has a reputation as being dangerous, and at that time the sport was taking too many lives. In the early CDS years, he worked alongside Wes Skiles, Joe Prosser, and

others to develop the first cavern and cave-diving certification program. This program in itself helped to produce more qualified cave divers than all the other organizations combined. He was constantly teaching protégés how to safely and smoothly maneuver through submerged cave passages. This was long before many cave-dive certifications gained their footholds.

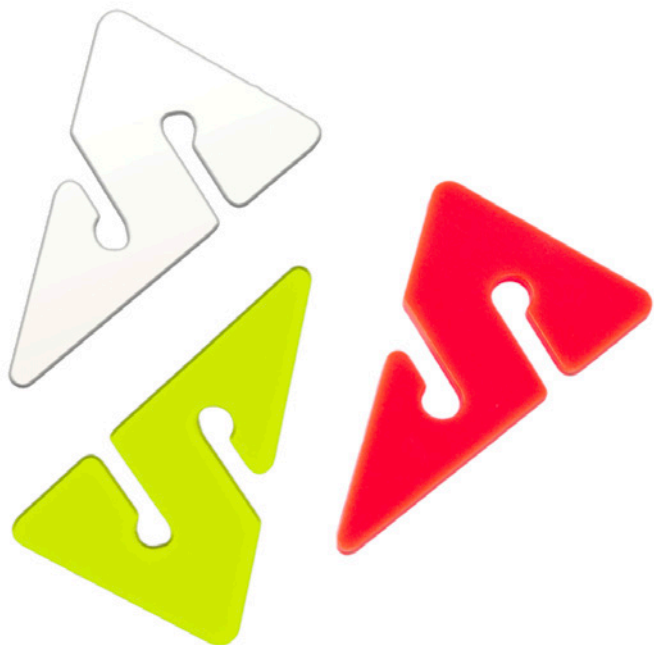
When Forrest wasn't diving, he was busy building a "Delta Wing" hang glider and racing motocross motorcycles just to warm his adventurous engine. The next challenge and investment came with the building of two Rotan model 40 "Defiant" airplanes from the ground up—one plane for himself and the second one for his second wife, Sylvia. Innovation wasn't a hobby. It was simply how Forrest's mind worked.

One of Forrest's greatest contributions came from solving a deceptively simple problem. In the earliest days of Florida cave diving, permanent guidelines were uncommon. Divers carried their reels into caves and reeled them back out when they left. When permanent lines finally appeared, there was still no reliable way to indicate the direction to safety. During an early NSS-CDS Workshop, Sheck Exley asked Forrest to lead a discussion with other contributors. That eventually produced the durable plastic triangular directional line arrow. Today, millions of those little arrows quietly guide cave divers back to the surface. Countless lives have been saved by an idea that began with Forrest asking a simple question: how can we make this better?

In an era when no commercial cave-diving equipment existed, Forrest designed and fabricated his own. As a scientist, electronics whiz, ham radio operator,



Forrest completes his pre-flight plan. Lebanon, TN Airport, June 6, 2009. Photo by Mark Wenner.



and inventor, he came to develop the Wilson dive line reels, cave lights, underwater camera systems, and much more. He worked closely with Mike Young before Mike's purchase of KISS Rebreathers in 2012. That collaboration helped create some of the earliest versions of a "compact" sidemount rebreather, which is now commonplace in the diving industry.

During a lifetime of exploration, Forrest completed well over 2,000 dives in more than 200 caves across 12 U.S. states and 10 countries, including Mexico, the Bahamas, Australia, France, England, Wales, and the Dominican Republic. He was also the first person in the United States to lay a continuous mile of guideline beyond a sump—a remarkable achievement during an era when every foot of exploration demanded ingenuity and determination.

Forrest had an extraordinary gift for spotting potential in others as well. He constantly invited younger cavers and divers into his projects. He taught without ego, shared knowledge freely and celebrated other people's successes as enthusiastically as his own. He understood that exploration is not measured by the places we reach, but by the explorers we help create.

Those of us who rallied around Forrest were drawn to what comes with being older and the experience gained in his knowing better. Back in the day it wasn't so much about technically advanced tools and aggressive personalities. It was more about the simplicity of proven tools and evenly tempered attitudes. By 2007, Williams, Vinzant, and Wenner had

been invited by Cave Research Foundation (CRF) to dive Roppel Cave, part of Mammoth Cave National Park (MCNP). Management there immediately recognized Forrest's influence on us—that of restraint and a conservative approach.

The passage of time has secretly blended some of the details of our adventures together like sediment suspended in the water column. Endless piles of muddy gear to clean, sort, and stage in preparation for our next foray. Our stories, photos, videos and close calls coexist in the name of exploration.

Back in those earlier days, one of us would make a call to those of us who consistently showed up to participate in whatever plans were made. Matt Vinzant and Brian Williams lived in FL, so their investment in travel time was greater than that of Tennessee locals Marbry Hardin, Mark Wenner, or Joshua Shouse, who lived in Louisville, KY.

Diving sumps was definitely in our blood, and our physical drive was in full throttle. We typically followed shared coordinates to find the location of choice. It wouldn't take long to sort the gear required for each trip then head off into the woods. Flagging our route with survey tape helped on the way out, especially when it was pitch black and the middle of the night, or in freezing temperatures, and/ or when we were exhausted.

Many of those adventures have been well documented over the years. If you'd like to review just a few of our exploits, visit [this link](#).



L to R: Marbry Hardin, Forrest Wilson, Matt Vinzant, and Mark Wenner at Snail Shell Cave near Murfreesboro, TN. August 23, 2003. Photo by Brian Williams.



The Delta Wing hang glider Forrest built piloted by Ann McMahon, with Forrest on the tail boom and Lee Wilson in the background. Tucker, GA 1973. Photo by Rhett McMahon.

The Golden Years

There were many long nights spent together underground waiting for the designated divers to return from their dive. One night in particular we returned from the other side of an upstream sump and found Forrest sleeping comfortably on the sandy beach from which we had staged our work that night. Shooting from the hip, Mark said, “Forrest – you’re laying there sleeping while we do all the hard work?” Without missing a beat, his reply came without hesitation, quick and cutting, “ya well, wait till you’re



Connecting Windy River Cave to Blackrock Cave. L to R: Brian Williams, Mark Wenner, Marbry Hardin, Becky Dettoree, Forrest Wilson. August 6, 2005. Photo by Brian Williams.

my age” —he was 60 years old and senior at the time. The same subject came up for discussion ten years later in some some long-forgotten cave in Tennessee, Alabama, or Georgia (TAG), take your pick. “Forrest, I’m the age you were back in Snail Shell 10 years ago.” His memory snapped back, pure conviction in the truth, “well, now you’ve got another 10 more years to go.”

Forrest’s innovations in exploration are surpassed only by his achievements and the foundation that he left behind for us to build upon. Forrest continued pushing virgin passages well into his 70s. He lived the promise he had made to himself as a teenager to “never stop moving,” proving that exploration is not reserved for the young but for the curious.

Forrest was never interested in monuments. His memorial already exists in the caves of the world, in the directional arrows clipped to permanent lines, in innovations that have become so commonplace we forget they were once revolutionary. Most importantly, they are embodied in the countless explorers who carry forward his generosity, wisdom, and insatiable curiosities.

His final cave dive was in Jackson Blue, Mill Pond, FL on April 5th, 2019, with his long-time dive partner Mark Wenner, with whom he also made his 500th and 1000th dives.

Forrest, you may wonder – your adventures will never end....



Mark Wenner (L) and Forrest ran 700 feet of line into virgin passage at Odell's Spring, GA. October 7, 2011. Photo by DeWayne Hyatt.

Remembering Forrest





Thanks to Ken Smith, Duncan Price, Mark Wenner, Liz Rogers, Jill Heinerth, Amy Vu, and everyone who contributed photos of Forrest.

PART I: THE EXPLORATION OF BEAVER CREEK RISE

by Sean McCarthy

The exploration of Beaver Spring started during our efforts to find new caves in Florida's Taylor County. Many new springs had been documented within the Spring Creek Wildlife Management Area; none had been made available to the public. My dive buddy Tracy Niesent and I had acquired an unpublished map of these springs. For years we had traversed and boated to every magnitude 2 spring listed and crossed off those on our list that were either previously explored or not big enough to enter. I used Google Maps and the US Geological Services (USGS) web site to add springs that looked as if they might have exploration potential.

Beaver Spring made our short list because of its proximity to a road and its flow. The Florida DEP Bulletin 66 noted a 78 cu ft per minute flow at the time of its report. I had done a direct terrestrial observation of the tannic shallow pond and noticed a barely discernible boil. It was a curious but uninviting swamp with stagnant water on three sides and plenty of mosquitos to dissuade the average spring hunter. The report—which is static—had outdated access information that would further discourage all but the most determined explorers.

A spring-hunting day

On September 26, 2017, we started kayaking to scout for a spring that I had plotted from a dot on the USGS map. This turned out to be a mud boil with no discernible flow. A second spring looked promising from published reports— it was a creek adjacent to a private road. No sign prohibited entrance but the road stopped us. We had to carefully back up to avoid disabling my half-ton two-wheel-drive truck in the deep sand. It was only 3 pm, and it seemed as if we had loaded up full dive gear with nothing to show for it.

Last recon of the day

"What else do you have?" Tracy asked. I initially drew a blank. There was nothing easily accessible even with a kayak. But then I remembered the unassuming swampy pond I had looked at two weeks prior. "Well,

there is one called Beaver Spring not too far from here," I said. "It didn't look like much though." "Let's do it!" she exclaimed.

Tracy was determined to find a new underwater cave. Every spring we looked at offered her a chance to be the first to explore a new system. At the slightest indication from me that there could be a virgin cave, Tracy would use her rest day from her nursing night shift job and drive the hundred or so miles just to check it out.

It was late in the day. Our hastily prepared ham sandwiches didn't do much to offset the energy we would expend doing a full recon of Spring Warrior Creek, but I agreed that we might as well. I felt good that I had at least something for us to look at before we drove all the way back to camp. I knew we could access the spring, so we made the 15-mile trip to show Tracy the tannic swampy lagoon that I had seen two weeks prior.

The only reason I had initially looked at Beaver Spring was its proximity to a road. The report had noted that it was located on private property, but there were no signs, gates, or fences forbidding access. We sat in the car, safe from the swarming mosquitos, and reviewed the DEP report on our phones. It noted:



Beaver Spring is an uninviting swamp with sulfuric, stagnant water and enough mosquitoes to discourage the average spring hunter. Photo by Sean McCarthy.

Beaver Creek Spring forms an oval-shaped pool 120 ft (36.7 m) by 80 ft (24.4 m), and 6 ft (1.8 m) deep. Two small vents are located in the center of the sand bottom spring pool. Detritus and brown algae also coat the bottom, and the spring water is slightly cloudy. Two small boils are visible in the center of the pool. The spring run is 10 ft (3 m) wide, 3 ft (0.9 m) deep, and flows 0.3 miles (0.5 km) south into the Steinhatchee River. The SRWMD property around this spring is a lowland hardwood forest. Evidence of beavers is apparent around the spring pool and run. Discharge of Beaver Creek Spring measured on July 6, 1999 was 74.98 ft/s.



Tracy made the primary tie off to the vertical branch (to the left of center in the foreground) just below the waterline. Photo by Sean McCarthy.

According to this report, this innocuous-looking pond that reeked of hydrogen sulfide was an equivalent magnitude 2 spring, which equaled the flow of the much-explored Lineater Spring on the Suwannee River. This fact alone warranted further reconnaissance.

We lathered up with Deet and tromped through the thin woods waving our spider sticks. At the swamp's edge, we tried to find signs of the spring in the stagnant tannic water. This involved much peeking around trees and palmettos trying to scope the pond that was laden with fallen brush and guarded by hungry carpenter ants. I finally remembered where I had seen the boil. We could not see any clear water, but we saw water moving past us to what appeared to be a run heading toward the Steinhatchee River.

We would need to do a wet recon where I had first seen the boil to add or eliminate Beaver Spring from our short list. Thoughts of aggressive snakes, snapping turtles, and biting beavers were enough to discourage me from a swim, as was the reek of hydrogen sulfide. I had no spare dry clothes, having fearlessly snorkeled earlier with the perceived large reptiles — the ones that lay in wait for people dumb enough to swim into deep dark water to investigate bubbles that keep coming from the bottom of Spring Warrior Creek.

Tracy volunteered to do the recon. I was relieved to avoid exposing my flesh. I wanted to know that we had done everything possible to not miss out on a potential new cave that might be lurking in this most uninviting, smelly pond.

"If you don't want to go, I wouldn't blame you," I said. Tracy said she would get her dry suit on. I suggested we get a kayak so she could float around and possibly spot something.

Floating in the kayak and shoving the paddle down through the dark water to check for holes had become our standard procedure. Tracy paddled around the 80 ft by 100 ft pond dodging fallen and submerged limbs but saw nothing promising. When she shoved her paddle down where we suspected a boil, however, things changed.

"Look at this" she exclaimed. "It's deeper than my paddle and my arm!" This was worth further recon. And since it was her turn to get wet, all I had to do was wait for her results. Tracy claims she gets cold easily, but this was not the first time that I had witnessed her jumping into a cold spring without her drysuit. But this time it was a hole in the bottom of a dark swamp.

"Oh my God it's deep! There's something down here," she said. "You need to check this out!" Skeptical as always, I retrieved my mask and light, donned my wet undergarment, and paddled over while she stood on a log. "Right down here," she said. I found a way to get out of the kayak without flipping it, donned my mask, and submerged to take a look.

I saw a deep rocky hole with a limestone ledge and darkness underneath.

"Did you see it?" Thinking only of concealed snapping turtles, I didn't reply. I took four deep breaths, let out some air to sink straight down to 12 feet, and ducked under the ledge to scan the huge cavern. I peered in several directions to the limit of the visibility and my 1200-lumen wrist-mounted light.

I was astonished.

"It's definitely a cave," I said. "I told you! It's big, really big." Tracy was elated. I knew the opening was the right size for a second-magnitude spring. This alone warranted hauling tanks and suiting up with full cave gear. The only question was when. "I've got to check this thing out today," Tracy continued. "I won't be able to sleep."

Bitten by the cave bug

Tracy's passion was to find a virgin cave. There was no stopping her. It was 4:30 pm, and the mosquitoes were beginning to swarm. She had to go back to camp with me to pick up her car, drive a hundred miles to Ocala, and be at a hospital in Orlando early tomorrow for training. "Are you sure?" I asked. "I have to," she said.

I suggested that just one of us go in. I would help her with equipment. I wanted to see the cave, but given the day's lateness I thought this was the best way to proceed. Now that I knew there was a cave, no more thoughts of reptiles or smelly water entered my mind. It was all about getting into the opening to find a going cave.

I myself had not been bitten by the cave bug. To me, this was a limestone hole that might or might not go. But for Tracy, passion overtook curiosity. It was almost an obsession to find and go where no one has gone before. And she meant now!

She donned her drysuit without undergarments, explaining that the water was warmer than the average spring. I zipped her up, and we each carried a tank down. Within 20 minutes, she was attaching her tanks and submerging down through the duck-under, extending her tie off from a submerged log using the exploration reel that she calls Big Bertha. Before I could ask a question she had disappeared into the dark water.

I could only wait for Tracy's return as I was not suited up. I watched a small trickle of bubbles for about 15 minutes, and then they stopped. Her tanks did not have a cave fill. In 15 more minutes, I would have to go in if she did not return.

Oh, the things that go through your mind just waiting.

After 25 minutes of total bottom time, I was relieved to see exhaust bubbles and knew she was coming out of the cave.

It's huge, it's virgin, and it's the mother lode

When Tracy surfaced, her eyes were as big as saucers. I think the first words out of her mouth were, "there's no line!" followed by "it's huge, and it's virgin cave. We found the mother lode," she said as she reached out for a celebratory hug. Not one to turn down a hug with our combined weight I had to attempt a breath hold as I thought we were going to sink into the cavern.

I was in disbelief and so glad for her as all she had talked about for the last month was finding a virgin cave. But this was better — it was a virgin cave *system* with many passages. Tracy's excitement was uncontained but tempered with disbelief of what we had found.

It was still daylight as we decided to celebrate at Fiddler's in Steinhatchee. Tracy wanted champagne but we settled for margaritas with dinner. I truly felt like we were the most mysteriously special people in the place.

"It's so big. We are going to need help. We cannot do this ourselves." We talked about who we could trust and who would not scoop our cave. We considered code names. Tracy texted two trusted experienced cave divers, who responded, I won't tell, and don't tell anyone. It was hard to believe that no cave diver had ever been in there. Anyone who had been would have installed a guideline and claimed the discovery and exploration for themselves.

We named the cave "Dreamscape" because both of us had had a dream the night before that we had found unexplored cave. The name also served as a code. "Beaver Spring" was in the public domain and easily recognizable to other explorers who scanned the Florida inventory.

This was Tracy's cave. The discovery and exploration were at long last going to be hers. Nothing else mattered, just getting into the cave to properly line, survey, and claim the exploration. She was already planning a team to explore and survey the expected thousands of feet of passage. She was lining up people to draw the map. This was big, and she knew it.

Extolling gratitude for what the universe had bestowed upon her, she left camp at 11 pm for the two-hour trip home to be in Orlando early in the morning.



Tracy found that gearing up in side mount configuration was just as easy in the dark, knee-deep water as was misplacing a tank in the layer of leaves, sticks, and silt. Photo by Sean McCarthy.

Over the next couple of days, Tracy texted me advice on knotting and running line and exhorted me to go to the cave. No sooner than I had 400 feet of knotted line on the reel, I was summoned to be at a job in Alabama in three days. I told her it's no fun to do this alone and suggested she come up after her class Friday. She did not need convincing and arrived at the cave site just before sunset.

My turn to go where no one has been

I had filled two tanks for Tracy and hung glow lights along a path to the edge of the pond. I hesitantly suited up with her in the dark knowing if I did not go, my chance of running line in virgin cave might be over as she would have dived solo. We planned to stay together with my following her line and looking for going cave beyond her last tie of about 200 feet. I planned to add 400 feet of knotted line. It would be my turn now to go where no one had gone before.

The dive

After tying off outside the cavern, Tracy had wrapped her line around a submerged log 10 feet inside, then threaded it down through a vertical restriction partially occupied by tree limbs. The line led to a large room at 30 feet where she had tied into a rock on the floor before turning horizontally into wide cave. I had to stray from this tie off to make out the sides of the room which I estimated to be more than 30 feet wide and perhaps 20 feet high.

I was impressed with Tracy's line work. The cave was huge, making it difficult to gain reference. There was a noticeable flow, and visibility was just over 10 feet. I kept looking to see if there were other passages.

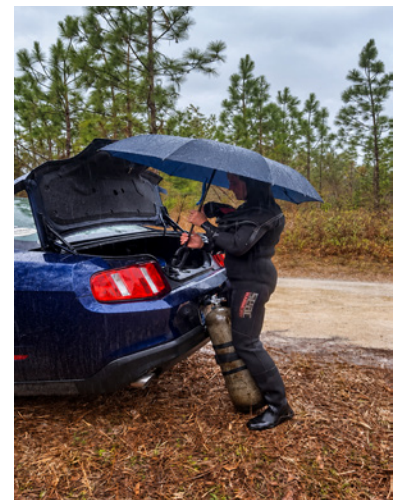
At about 150 feet of penetration, I had to pull the line up above a deep layer of loose organic matter in the area in which Tracy had said she needed a silt stake. Further along, the line took a right angle, and there was rock on the left side.

I could only see the faint glow of Tracy's light looking back 15 feet or so. The cave was a hodgepodge of flat slabs, delicate fans, and rounded limestone. With a sheer ledge on the left and a narrow canyon below, we traversed over large slabs of limestone that had a light dusting of coarse silt. I reached Tracy's final tie and directional arrow at about 300 ft of penetration at the end of the solid slab on the left.

Another wider canyon and solid rock ran in front of us, perpendicular to our direction. I took some leeway to swim from the line, first left and then right, at this 25-foot high canyon junction. Just as Tracy approached, I wrapped around the jut of rock that she had used to make her final tie. I locked my line and headed to the right about 90 degrees into total blackness with the large wall now on my left. Our depth was 40 feet, and I was swimming slowly over solid rock.

There was a narrow canyon at least 10 feet below the wall on the left and the slab of rock we were swimming over. The left wall—smooth and shorter now—did not appear to contact the ceiling. The ceiling was black and looked like different strata. As I reeled out my line I again made sure it was solid rock overhead. After about 80 feet, we encountered another slab to the right that warranted a slight change of direction back to the left. I felt that this change would resume the general heading that got us to this point. The canyon wall on the left ended and gave way to blackness ahead and above and to a narrow canyon below.

Tracy has dived rain or shine to run miles of line over the last few years. Photo by Sean McCarthy.





Tracy meticulously verifies her survey data for a Karstreams project. Photo by Karstreams.

I searched for a spot to tie off to change direction and found a small jut that would have sufficed in most caves. It became apparent that smaller tie offs would not work. I was disappointed to see the 8 inch piece of soft thin rock where I tied break off and flutter toward the canyon floor, leaving a white scar.

I felt badly that I had damaged the cave.

I had to go deeper between the two slabs to find a tie off, causing my line to change direction as I went over the ledge. I found a good placement and continued about 40 feet in a straight line out of the canyon to a more shallow depth— only narrow duck unders were deeper than our 45-foot depth.

I turned to the left to head in the direction that I thought was inward. There was a wall on my left that reached almost to the ceiling at 35 feet. I saw some narrow passage, so I decided to go back and head more in a straight line. Soon the slabs that made up the floor on the right were building and pushing me left. I think I had perhaps three tie offs and one additional change of direction in almost 200 feet of line.

The stair-step sideways fracture was confusing to follow. I again came to a point at which I was ready to tie off. I could feel Tracy pulling on the line, so I gave her slack. After she tied, I found a tie off

but backtracked 20 feet to verify our previous tie off among the smooth squarish slabs that I had negotiated. We did not want to have extra stations making survey difficult. Tracy had made a good tie at a good location for the direction I had chosen.

I swam back to my identified tie-off point and laid about 50 more feet of line into pitch blackness. I turned left into the large room. Tie offs were difficult to locate because the 15-foot visibility made the next direction of travel uncertain.

Tracy was placing tie offs as I returned after running into rock rubble and having to try another direction. My inexperience must have been showing. Tracy surely must have been frustrated as I went to and fro while she tried to wrap the line without the reel. After about 250 feet of this, Tracy tried to get me to pull up slack again. I was frustrated, trying to find a tie off in this huge room while figuring out the next direction of travel. Keeping a reference and staying in the main passage were difficult considering visibility.

But there was no symmetry in this cave. It had flat slabs below, soft round rock on the side, and space all in between and every which way. I attempted to give Tracy the reel because I had no idea which way to go, but she did not understand and encouraged me on. I had seen a smaller area ahead with open passage beyond. But I was not in the mood to add a major restriction to this venture.

The irregular room was growing in size. It was becoming difficult to sense flow or see the sides of the cave. The room was also getting longer. We were 300 feet from Tracy's tie off in the now 60-foot wide-room. I did not realize that this was not a room at all. It was simply "the cave." Nor did I realize that I was an insignificant speck in the blackness trying to negotiate forward much like an ant follows a wall or the edge of a sidewalk.

What did strike me was that nobody had ever been in this part of Mother Earth. It was up to me to choose the route among the mish mash of non-symmetrical features that presented themselves as we persevered into the unknown, further into darkness. In spite of the difficulties, I thought of the honor of defining how and where to move forward on behalf of those divers who could only retrace my steps.

It was hard to find placements, and I spent a lot of effort tying and retying. I was close to thirds. Tracy worked diligently to tie the line close to the deepest penetration. I reached thirds shining the light for her as she finally took the reel from me and did the final wrap.

I thought she had it, so I followed the line back above a slab next to the line. I considered this a line trap, so I tugged to raise the line and another tie came loose. There was now slack for Tracy to take up. I watched as she tied and knotted. We both thumbbed the dive at about the same time.

On the return, tie offs were delicate but in a good placement. We had added about 250 feet (not counting her last 30). Following the line out was a breeze. I thought I could have run more, but the last two placements were time consuming and difficult because I did not know which way to proceed in the huge dark cave.

...to be continued....

Part 2 will detail Dreamscape/Beaver Spring's major exploration. Tracy organized a team that included some of cave diving's notable explorers. Together, they extended the line for miles.



Dreamscape's swampy lagoon entry area today looks the same as it did when I performed a direct terrestrial observation and noticed a barely discernible boil. Photo by Sean McCarthy.



Sean McCarthy is a cave diver and explorer who lives in Florida's cave country. Since this exploration, he has founded [Karstreams\(.com\)](http://Karstreams.com), an organization of karstographers who locate and study cave hydrology in the Suwannee River watershed.

A CONVERSATION WITH GAYLE HALL: CAVE DIVING, CONSERVATION, AND SHOWING UP

by Rachael McCarthy

Gayle Hall accepted the 2026 NSS-CDS Annual Conservation Award at the International Conference in June. She has been on the front lines of the protection efforts for the Mill Creek Sink Preserve, which proposed development threatens. Gayle is a leader with [Our Alachua Water](#), a grassroots coalition of conservation organizations. She is a past member of the CDS Board of Directors.

Rachael McCarthy sat down with Gayle to talk about how her conservation work aligns with her cave diving. This profile is the first of the 2026 NSS-CDS Annual Achievement Award recipients, which will follow in upcoming issues.
— Editor's note

Spend enough time around cave divers and you learn pretty quickly that there is rarely a straight line between a person's first dive and where they eventually end up. Gayle Hall may be an especially good example. Today, she dives some of North Florida's best-known cave systems, dives CCR, volunteers within the cave-diving community, and has become an outspoken advocate for Florida's springs and groundwater. Her introduction to scuba was considerably less impressive.

Rachael: Let's start at the beginning. When did you start diving?

Gayle: Around 2015. My son Walker was 14, and I asked him what his goals were for the summer. He said, "I want to do swim team, and I want to get certified to scuba dive." Where that came from, I have no idea. He had to have a parent do it with him, and my husband wasn't going to do it, so that left me. Walker breezed through everything. No fear whatsoever. I was on the struggle bus from you-know-where. It took me six months. I could not stay underwater. I was terrified. Having water in my face really bothered me. I was traveling a lot for work then, so I would fill the bathtub in the hotel, put a snorkel in my mouth, stick my face in the water and just sit there breathing. At home I would walk around the house with my mask on with water under my nose. My husband would look at me and say, "You're lucky I'm not on Facebook."

Rachael: And somehow that eventually turned into cave diving.

Gayle: Yes! The dive shop I certified with did group trips, and one was to Ginnie. We were swimming

around the top of Ginnie, over the Eye and the Ear, and I was watching these people disappear into the earth. I remember thinking, "That is the coolest thing ever." They took us into the Ballroom, too. After that it was a lot of Google, a lot of research, and a lot of videos.

Rachael: You were hooked?

Gayle: I was!

FINDING THE CAVE DIVING COMMUNITY

Rachael: When did you become involved with the NSS-CDS?

Gayle: I want to say around 2019. I went to a Winter



Preparing to dive at Ginnie Springs. Gayle advocates fiercely to protect Florida's springs and groundwater. Photo by Bori Bennett.



Gayle has several favorite caves, but her favorite dive is always “the next one.” Photo by Lureen Ferretti.

Workshop at Hart Springs. I got to talk with different people, hear the presentations, and learn more about the organization. Later I started volunteering, especially with the international workshop, just doing whatever they needed. If somebody asked for volunteers, I helped however I could. I really think it’s important to be part of the community and support what we’re doing. You hear so much infighting sometimes, people fighting with each other or trying to tear things down. But if you look at the bigger picture, we need to present a unified front. There are organizations and decision makers making rules that affect cave divers and cave access. If we’re busy fighting with each other, how are we going to be effective when it comes to protecting access to these systems and the things cave divers actually care about?

Rachael: You were recently recognized for that work. What did the award mean to you?

Gayle: I was surprised. I really felt like I was just helping out. I was very honored, though, because the causes we’ve worked on are important. And the thing is, it doesn’t stop. It’s not one and done. You have to keep showing up. I’m pretty much retired now, and I’m grateful that I have the time to devote to some of these things when people who are still working or raising families may not be able to. I feel like that gives me an opportunity to give back.

SHOWING UP, AND THEN SHOWING UP AGAIN

Rachael: Of the conservation issues you’ve worked on recently, what stands out the most?

Gayle: That’s hard because there have been so many. What happened with Alachua and Mill Creek

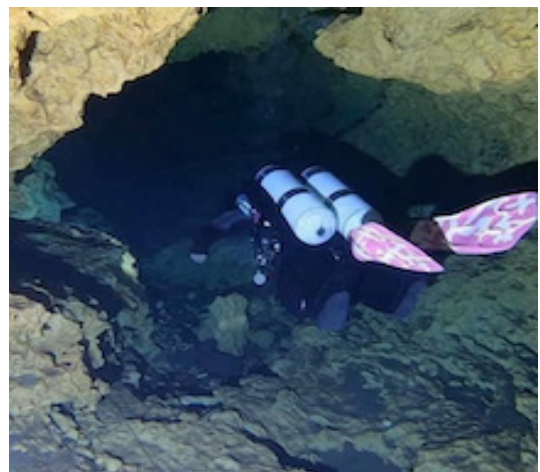
was incredibly important because there were so many different sides to it. At the hearing in January, I counted about 90 people who stood up and spoke against the proposal. What struck me was that almost everybody came at it from a different perspective. Some people were concerned about divers. Some were concerned about karst terrain. Some were worried about their wells. Other people were talking about the sink, the underground water system, Hornsby Spring, the Santa Fe River and the other springs in that area. It showed that something like this doesn’t have just one effect. And seeing the community come together like that was awesome.

Rachael: And they had to come back more than once.

Gayle: Exactly. There were two meetings that were packed. At the first one, they didn’t even have time for public comment because of the affected party testimony, so everybody had to come back. That’s where advocacy gets difficult. It’s pretty easy to do something once. It’s harder to stay involved for the long haul. Sometimes the people pushing projects that could negatively affect these resources are prepared to wait. They can wait for everybody else to get tired, get busy, and stop coming. So having people come back for that second meeting, and having around 90 people stand up and speak, was huge. I think it made an impression on the decision makers.

THE WATER UNDER OUR FEET

The conversation eventually moves from one proposed development to another, then to groundwater withdrawals, drought, agriculture, and North Florida’s increasing development pressure. For



Gayle dives at Mill Creek Sink, a cave that she’s working actively to protect. Photo by James Draker.



"If we don't protect the aquifer, who will?" Gayle accepts her NSS-CDS Conservation Award with Hailey Hall of WWALS, John Quarterman of WWALS and Suwannee Riverkeeper, and Chelsea Dinon, NSS-CDS Conservation Subcommittee Coordinator.

Gayle, however, all of those issues eventually return to the same thing: water.

Rachael: One thing I think cave divers understand differently is that this isn't just the water where we dive. This is our drinking water.

Gayle: Right. And we've seen what's happening during this drought. We're in a negative water balance, and the drought isn't expected to just disappear. We really need to be taking a hard look at where water is being pumped from and how much is being used. There are so many competing demands, development, agriculture, cattle, industry, and all of them add up.

Rachael: And once something happens to one of these systems, you can't necessarily undo it.

Gayle: Exactly. If you lose it, you lose it. You can't just put it back. That's why I think cave divers need to work with organizations outside of cave diving too, the [Florida Springs Institute](#), [WWALS](#), [Florida Springs Council](#) and the other groups working on springs and conservation issues. We all need to be working together as a united voice because there is so much going on.

WHY CAVE DIVERS MATTER TO CONSERVATION

Rachael: What can the average cave diver actually do? Not everybody can go to every hearing or spend their retirement reading planning documents.

Gayle: Educate people. A lot of people simply don't know what's underneath them. Sharing our stories and our videos helps. And think about how often you're at a dive site and a family comes over and starts asking questions: "What do you see down there?" "How far does it go?" "What's in there?"

Sometimes it can be frustrating when you're trying to gear up, but we need to be good ambassadors. Help them understand it. Get them interested. You never know who that person is going to become. Maybe one day they'll be in a position to make one of these decisions. Maybe they'll sign a petition. Maybe they'll make a donation or come to a meeting. We know things about what's underneath our feet that most people don't know. We need to share that.

Rachael: I think people protect the things they care about.

Gayle: Exactly.

AND, YES, SHE ACTUALLY LIKES CAVE DIVING TOO!

For all the discussion of hearings, water policy and conservation, Gayle is still, first and foremost, someone who really likes going cave diving. She moved to CCR in 2023, although she laughs at the idea that a rebreather immediately made diving easier.

Gayle: I'm at around 220 hours now, and honestly, it took that long before I got to the point where I felt like I wasn't spending the entire dive doing

instrumentation. Finally I could think, “Okay, I’m actually enjoying some of the dive now.”

Rachael: That’s important to me. I dive because I enjoy diving. If I’m not enjoying it, I might as well go fishing.

Gayle: Exactly.

Rachael: So what’s your favorite cave?

Gayle: Oh my gosh. I really like Eagle’s Nest. And I really like Alachua/Mill Creek. I love Telford because Telford is like a completely different cave every couple hundred feet.

Rachael: What is it about Eagle’s Nest?

Gayle: Just the sheer size of it. It’s so unique. It’s daunting.

Rachael: And Mill Creek?

Gayle: The first time I dove it, I felt like I was going down into the basement, then up into the attic, through another passage, then down and up and down and up, and every section was more beautiful than the last. It was just so unique.

Rachael: Out of all of these incredible experiences, what is your absolute favorite dive?

Gayle: It’s always the next one.

“WE’RE SO BLESSED TO BE HERE”

Toward the end of our conversation, Gayle came back to the subject that has threaded through nearly everything else we discussed. Florida’s cave diving community has access to something extraordinary. People travel from around the world to dive these systems. Gayle has met divers from Iceland, Russia, China, and far beyond the United States who came to North Florida because of what exists underneath it. That, she believes, carries some responsibility.

Gayle: I don’t see people traveling here from all over the world because we have data centers. These springs and these systems are invaluable resources. We have to be the people willing to speak up for them so they’re still here for future generations. We need to support the organizations doing the work. We need to show up. We need to educate people. We need to be good ambassadors. We are so blessed to be here. And if we don’t take care of it, who’s going to?

Rachel McCarthy is a cave diver who frequently contributes to Underwater Speleology.





A baobab tree on the way to Madagascar's Aven Cave. Photo by Guy Bryant.

Cave Diving Madagascar

Exploring One of the World's Last Great Underwater Frontiers

by Guy Bryant

Some dive trips begin with years of planning. Mine began with a text message from cave diver Marissa Eckert while I was floating on the surface of the Celebes Sea between dives at Sipadan Island in Malaysian Borneo.

"Would you be interested in cave diving in Madagascar?"

Sixteen years earlier, Amy Sturkey and I had visited Madagascar to scuba dive the reefs around Nosy Be. Although the reefs were spectacular, what fascinated me even more were the towering limestone landscapes dotted with sinkholes filled with crystal-clear blue water. Ever since that trip, I had wondered what lay beneath their surfaces. Now, I finally had the opportunity to find out.

Our six-person expedition, organized through the [Madagascar Cave Diving Association](#), would spend two weeks exploring flooded cave systems in southwestern Madagascar. After crossing the Atlantic, connecting through Ethiopia, and meeting the rest of the team in

Antananarivo, we flew to Toliara, where our heavy dive equipment had already begun its own two-day journey by truck over rough four-wheel-drive roads. From there, we crossed the Mozambique Channel by boat to the small fishing village of Anakao, which became our base camp for the first half of the expedition.



Dan Logan and Martijn Heemel dive in Aven Cave. Photo by Guy Bryant.

Our first dive was Aven Cave (Vitany), a spectacular sinkhole famous not only for its crystal-clear water but also for the fossil remains of Madagascar's extinct giant lemurs, elephant birds, crocodiles, and other prehistoric animals.



Sherpas helped move our gear over the rough terrain. Photo by Guy Bryant.



Entrance to Aven Cave. Photo by Guy Bryant.



Ashley Kissick swims in Malamanzanga Cave. Photo by Guy Bryant.



Anjanamba is Africa's longest-known submerged cave. Photo by Guy Bryant.

Descending into warm 81°F (27°C) water with visibility exceeding 100 feet, we found beautifully sculpted limestone passages, endemic blind cavefish, and fossils resting undisturbed on the cave floor. It was an unforgettable introduction to Madagascar's underwater world.

Over the following days we explored Mitoho and Malazamanga Caves. Mitoho is considered sacred by local communities, and we were reminded that these caves are far more than dive sites, they are places of deep cultural significance. Malazamanga, by contrast, revealed enormous underwater tunnels nearly 100 feet wide, among the largest passages I have ever dived.

The expedition nearly took an unexpected turn when I discovered that my fins, mask, hood, and knife had accidentally been left behind after one dive. Fortunately, Marissa generously loaned me her own equipment, allowing me to complete what became one of the highlights of the trip.

Midway through the expedition we relocated to the remote Mikea Forest, home to Anjanamba Cave, the longest known submerged cave in Africa, and Andakatamivola Cave, one of the most beautifully decorated underwater caves I have ever seen.

Before entering Anjanamba, village elders performed a traditional blessing ceremony asking the cave spirits to watch over us, a first in my more than five decades of cave diving. It was a powerful reminder that we were guests entering places that have held cultural significance for generations.

If Anjanamba impressed us with its immense size, Andakatamivola amazed us with its beauty. Brilliant white flowstone, delicate soda straws, towering columns, and pristine formations filled chamber after chamber. I have been fortunate to dive many decorated caves in Florida, Mexico, and elsewhere, but Andakatamivola belonged in a class of its own. Every few feet, someone stopped simply to admire another breathtaking room.



Our guide Tsoa Rajaobelison and Marissa Eckert at Malazamanga Cave's entrance. Photo by Guy Bryant.



Andakatamivola amazed us with its beautiful white flowstone, delicate soda straws, and pristine formations. Photo by Guy Bryant.

Our final days returned us to Anjanamba, where we continued exploring enormous borehole passages and intricate side tunnels before beginning the long journey home. As with every successful expedition, the caves were only part of the experience. The rough roads, boat crossings, remote villages, baobab forests, local guides, and remarkable hospitality of the Malagasy people all became part of the adventure.

When people ask what made Madagascar so special, I find it difficult to point to a single cave. It was the entire expedition, the logistics, the remoteness, the sacred traditions, the extraordinary geology, and the realization that vast portions of Madagascar's underwater world remain unexplored. Even today, there are passages still waiting to be surveyed, fossils waiting to be studied, and discoveries yet to be made. For a cave diver, that spirit of exploration is becoming increasingly rare.

Guy Bryant is chronicling the early days of cave diving in the Southeast US in his forthcoming book [Cave Diving: Back in the Day](#). He is the author of several books, including [The Education of a Cave Diver](#) and the [Illuminated Springs](#) series. Guy is an avid photographer and a lifetime member of NSS-CDS.

EXPERIENCE — HOW DO YOU MEASURE IT?

by Fred Stratton

Many cave divers have done them — parking lot meetups with a new dive buddy. Perhaps you were introduced to each other by a mutual friend. You may have met online, at an NSS-CDS Workshop or Conference, or at a dive shop. What follows is usually a question inquiring as to your full cave instructor, length of time diving, number of dives, number of cave dives, or all of the above.

While each of these questions gives you a data point, they are just that - numbers that tell a partial story. It would be a stretch to call someone who earned his or her full cave rating 20 years ago and has 40 post-training cave dives an active cave diver. I recently dived with a young lady who earned her full cave rating just this past spring and has since racked up over 40 legitimate cave dives. We are not talking about a series of 30-minute traverses to Olsen Sink and back to rack up numbers. You know what I'm talking about.

Earlier this year, the NSS-CDS reiterated its longstanding policy of requiring 100 post-full cave training cave dives, earning members their Abe Davis Safe Cave Diving Award, to dive in the Cow Springs cave system. Although this policy was and is in place to help conserve this fragile cave, a somewhat—shall we say—spirited discussion erupted on the NSS-CDS Facebook group. While many members firmly supported this policy, a vocal few took issue with it. Some reasons included:

- I haven't logged my dives in years, but I have the dives.
- I dived caves with an "Intro to Cave" card for years and none of those dives count. That's not fair.
- I don't like paperwork so I haven't filled out the Abe Davis application.
- The number of dives isn't proof of in-water skill.

I can't help you with the first two. On the third point, completing the Abe Davis application takes about five minutes if you log your cave dives. Once complete, have an NSS-CDS instructor complete the bottom

half. The instructor then forwards your application to the Awards Coordinator. It's that simple!

The fourth point certainly is valid so we'll drop anchor here.

There's a saying that "practice makes perfect." Is that always so? What if your cave training was mediocre? Practicing poor technique only engrains it, making it harder to correct. Cost and expediency should be the last two considerations when choosing a cave diving instructor, but that's a subject for a future article.

So what do you propose qualifies a dive as a quality experience, something more than a number in your logbook toward a numerical goal? Is it the length of a dive? That is a variable determined by your gas strategy (generally the Rule of Thirds or Fourths for a siphon or other factors), your gas consumption rate (RMV), depth, flow, and propulsion skills. Two-hour open-circuit dives in the Yucatán are common, while a 45-minute OC dive in Manatee Springs at normal flow is quite an achievement.

What are the components of a cave dive? Is it the act of breathing while submerged in a cave? Does it include everything leading up to the dive, including analyzing and labeling cylinders, gas matching divers with dissimilar cylinder volumes, and a structured pre-dive check at the surface? If you are still with me, would you agree that a cave dive is the dive itself, bookended by pre-dive planning and the post-dive debrief? I would argue that logging one's dive with comments summarizing the debrief further engrains the experience.

Frederick the Great (no relation) wisely asked "what is the good of experience if you do not reflect?" Gareth Lock puts a modern spin on it: "Experience without reflection is just repetition." Does your post-dive debrief consist of "bro, that was AWESOME" or is it more substantive? "That was awesome because my balance, buoyancy, and trim felt right today. My propulsion was relaxed and efficient. Our team awareness and communication were effective. I could have cleaned up my jump spool a bit better. Thanks for Z-ing the excess line."

NATIONAL SPELEOLOGICAL SOCIETY, INC.

affiliated with the American Association for the Advancement of Science

cave diving section

The Abe Davis Cave Diving Safety Award

Abe Davis is America's first known cave diver. Like countless cave divers who would come later, Davis was fascinated with Little River Springs in Florida. However, living previous to the War for Southern Independence, Davis did not have the use of face mask, scuba or powerful lights which would later make extensive exploration of underwater caves a reality. He had to be content to swim into the flooded entrance while holding his breath. His efforts are the earliest known instances of a person entering an underwater cave in the Western Hemisphere and are duly recorded in the Live Oak, Fla., *Independent Post*.

In late 1977, the executive committee of the Cave Diving Section of the National Speleological Society, Inc., decided to create the Abe Davis Cave Diving Safety Award in honor of America's first known cave diver. This award is to be presented to any American cave diver (or foreign cave diver if a member of the Section) who has demonstrated a genuine dedication to cave diving safety as evidenced by the successful completion of at least 100 cave dives while using scuba.

The first of these awards will be presented at the start of the Section meeting (open to the public) during the 10th NSS Cave Diving Safety Workshop, Saturday, December 30, 1978 at 8:30 p.m. It is perhaps fitting that the inception of this award will be in the year that cave diving is celebrating its 100th anniversary. It was March 27, 1878 that Ottonelli made the first cave dive without having to hold his breath, entering a cave in Vaucluse, France.

By making the award available to all American cave divers, not just Section members, it is hoped that the award will have an unifying influence on the American cave diving community. The award will also provide novices with more positive motivation to plan and execute their dives as safely as possible while they are in the relatively high-risk area of their experience—the first 100 cave dives. Further, by encouraging the novice to keep records of his diving activity to apply for the award, he will also be indirectly motivated to be more methodical in his dive planning and analytical toward his dive performance, thereby making his cave diving safer.

Finally, when presented with proper ceremony at Section functions, the positive public relations aspect of the award is considerable. Heretofore, there have been no records as to the number of cave divers or the number of their annual dives, which gives rise to uninformed detractors who claim that cave diving is highly dangerous, not being aware of the enormous amount of cave diving activity in Florida. The Abe Davis Cave Diving Safety Award will substantiate that the highly publicized accidents in cave diving are the exception, rather than the rule. It will give the cave diving community another positive statistic . . . the number of cave divers who have made more than 100 cave dives.

Then there is the opportunity to practice what we learned in class. Skills performed in class yet never practiced are perishable. Remove your mask during decompression. Practice clean stage bottle drop offs and pick ups, adjusting buoyancy as required. Have you towed or been towed since you became a Cave DPV pilot? Share gas, deploy a backup light, use your wet notes. Easy skills, right? Can you maintain position and team awareness while performing them? Do you swap roles (Diver 1, 2, 3)? I took the Diver 2 role for several months to shoot video. As a result, my line work got rusty. Rotating roles gives everyone the opportunity to stay sharp.

The Human Diver provides its DEBrEF debrief format, which includes discussing what individual team members did well, what the team did well, what individuals and the team as a whole may improve upon, and how to do it. Instructors I respect utilize this format to great effect. This period of reflection can take a few minutes or 30 minutes. I'm recalling a dive during my NSS-CDS Cave DPV course. I'll admit that yes, I was the subject of much of the post-dive learning that day!

INDIA YOUNG

India Young was a prominent woman in American cave diving during the sport's formative years in the late 1970s and early 1980s. She applied her significant talent and energy in the areas of safety, education, conservation, organizational development, and cave access.

India was serving as chair of the NSS-CDS Awards Committee when the Section established the Abe Davis Safe Cave Diving Award in 1978. She became the NSS-CDS Chairwoman in 1980, leading the Board of Directors which included Tom Cook, Sheck Exley, Wes Skiles, and Forrest Wilson.

She also organized workshops, wrote about cave diving for the public, and participated in the 1981 NSS-CDS "Women in Cave Diving" panel alongside Sheck Exley, Shannon Heinerth, and John Zumrick. Dale Sweet recorded the discussion, which you can watch [here](#).

Young was credited as one of the editors of the 1982 NSS Cave Diving Manual, an important early reference documenting the equipment, procedures, decompression practices and safety philosophy being developed by the cave-diving community.

Taking time to debrief every dive, whether it is a simple run up the gold line or a multi-jump, triple-stage, two-mile upstream trip with backup scooters, deepens the experience through discussion and reflection.

The *American Heritage Dictionary* defines experience as "active participation in events or activities, leading to the accumulation of knowledge or skill," and "the knowledge or skill so derived." Your level of "active participation" in your own cave diving is up to you and your teammates. I think Fan Ping says it best. He strives to "be water." In that elusive yet noble pursuit, we live in the moment and move toward a safer, more confident and enjoyable state.

These thoughts lead up to 1979 when India Young wrote an article unveiling for membership the Abe Davis Award, the first of which were awarded in December 1978. Reprinted here for your reading pleasure, I particularly like how India explains the NSS-CDS's motivation to honor Mr. Davis and the positive results this program would reap. Those reasons still apply 47 years later



India Young (1981). Photo by Dale Sweet.

At a time when reactions to cave diving deaths often involved closing access, India joined others to protect or restore access to cave systems. Ginnie, Peacock, and Little River all faced closures during the 1970s, but thanks to their persistent work, access to sites was preserved for later generations of cave divers.

From Guy Bryant's forthcoming book: [Cave Diving—Back in the Day](#).

Recent Cave Diving Safety Awards

by Fred Stratton



ABE DAVIS AWARD FOR 100 SAFE CAVE DIVES

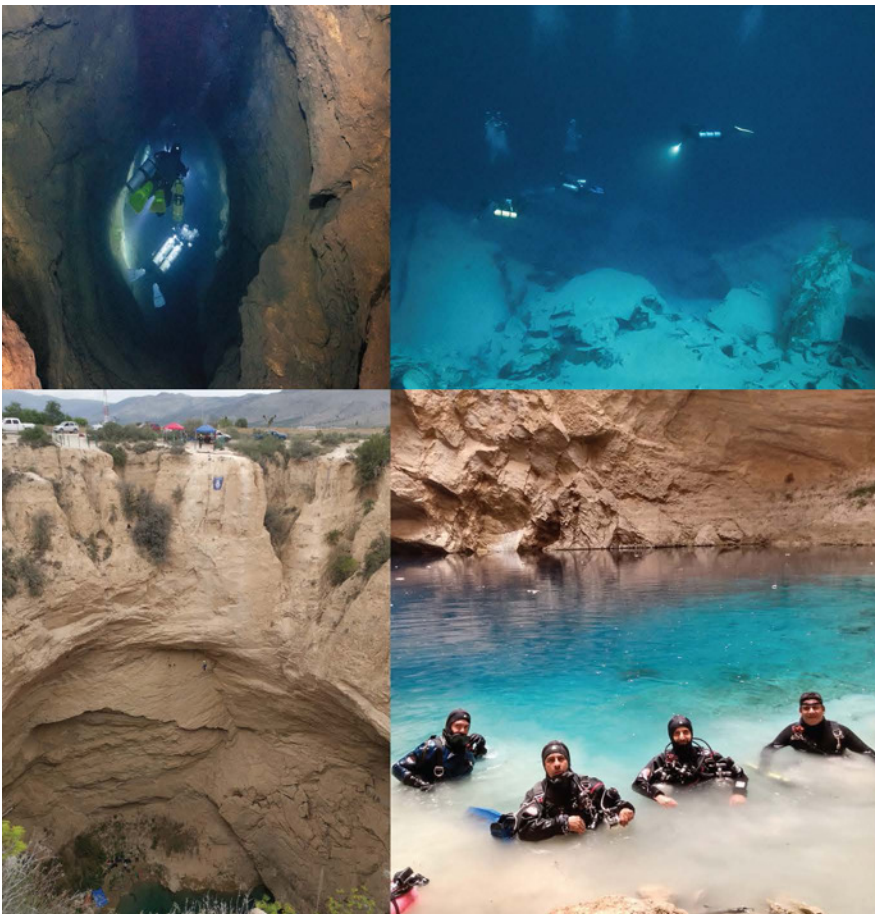
HENRY NICHOLSON AWARD FOR 500 SAFE CAVE DIVES:

Chip Breyars

Robert Traynham

Gayle Orner

Fred Stratton



NORTHEAST CAVES IN MEXICO EXPLORE CHALLENGE DISCOVER

- Clear deep waters
- Pristine caves
- Unique geological formations
- Caves to explore and discover
- Guided by local experts (OC and CC)

Two areas:

- 1- **Tamaulipas** (Cd. Mante area)
7 different caves up to 890 ft. deep
- 2- **Nuevo Leon** (Galeana area)
3 different caves up to 300 ft. deep

Contact:

jorge@rangoextendido.com / luis@rangoextendido.com
www.rangoextendido.com



COW AND EDWARD SPRINGS' NEW WAIVER PROCESS

This is an update to the membership on a new waiver process for Cow and Edward's Springs that includes the ability to reserve access to Cow Springs up to seven days in advance. Each team member will complete their individual waiver on the day of the reservation.

It has long been the policy to allow up to 4 teams of divers access to Cow during a day. This had not been actively enforced, and in reality in the last year there have probably only been a few occasions where more than 4 teams had been at Cow during a day. We previously had no real way to enforce this.

Everything that we do at Cow and Edward's is done with an eye to balance access with preserving the caves. We wish to ensure that our members are able to fully enjoy the beauty and majesty of the cave systems we manage far into the future.

An additional waiver module will be implemented to allow instructors to register a student or a member that they are diving with. This allows a person who does not meet the experience requirements to dive the caves with an instructor or for an instructor to teach advanced sidemount in upstream Cow or all other levels in downstream Cow.

The process is simple and intuitive, but John Rutledge will be posting a simple walkthrough.

If you have issues or questions, please feel free to reach out to John Rutledge or myself.

Sincerely,

Steve Dalcher
Program Director NSS-CDS

FROM THE MIDWEST WINTER WORKSHOP STORY TO FOLLOW IN DECEMBER



Photos: Damon Shy / Richard Christie / Chad Dalton / Jon Lillestolen / Josh Cooper / Fred Stratton

FROM THE MIDWEST WINTER WORKSHOP STORY TO FOLLOW IN DECEMBER



Swimming Against the Tide: The Battle to Save Yucatán's Caves

— by Fred Stratton

The cave diving community has expanded greatly in the past 30 years and yet remains a niche group within a niche of the scuba industry. Only a sliver of humanity has visited the underworld, the vast networks of dry and flooded caves that honeycomb the Earth beneath our feet.

During the NSS-CDS 2026 Winter Workshop at Underworld Tulum, we had the great pleasure of meeting and interacting with Roberto Rojo who goes by the lyrical name Chibebo. He presented a story not unlike other heroic figures. Exploring caves as a biologist interested in this largely unexplored part of the ecosystem, he was struck simultaneously by the beauty of the caves and their degradation by human ignorance and indifference.

Chibebo established [Cenotes Urbanos](#) several years ago with the goal of exploring, mapping, observing, studying, and ultimately protecting these underground wonders. He has grown the organization from a small band of enthusiasts into an army of over 800 members who eagerly volunteer for the cause.

As of February 2026, he and his enthusiastic fellow cavers and cave divers had discovered nearly 300 caves within the urban areas of Tulum and nearby Playa del Carmen and have produced and shared 185 maps. They share these maps and related scientific observations and findings with academia, industry, and public officials to raise awareness of these beautiful, vulnerable, and indispensable components of the Yucatan ecosystem.

Cenotes Urbanos is also a training academy, having conducted over 50 courses in safe caving techniques as part of its mission to train a new generation of caving enthusiasts, urban explorers, and scientists.

Chibebo knows well the power of media, having spent several years as a TV host. He and his crew have made well over 200 media appearances, maintain a website, and are active in social media. Capturing what they call “redignifications,” — cleanup of polluted caves—over 60 such projects shine a positive light on their efforts and help dissuade people from treating these beautiful cenotes as landfills.

Studying cave flora and fauna is also part of their mission with 12 such projects concluded or ongoing. Relationships with a growing network of scientists help build synergy between academia and citizen scientists.

The Cenotes Urbanos project began when Chibebo was director of the Playa del Carmen Planetarium, a space that also houses an exhibition on natural history, karst, and Mayan culture. Among all the kids who visited the Planetarium, one stood out as very special: Talismán Cruz.

One day, Talismán told Chibebo that he had gone into a cave in the city with his friends and that at one point, “something moved at the back of the cave!” So they ran out, thinking there was a monster inside.

When Chibebo heard this, he realized the kids were entering caves without the proper equipment, so he encouraged them to go back with him to properly explore the cave and map it out.



Roberto “Chibebo” Rojo



Cenotes Urbanos documents what we're losing.



Underground Rivers Reserve, and work on it is currently underway.

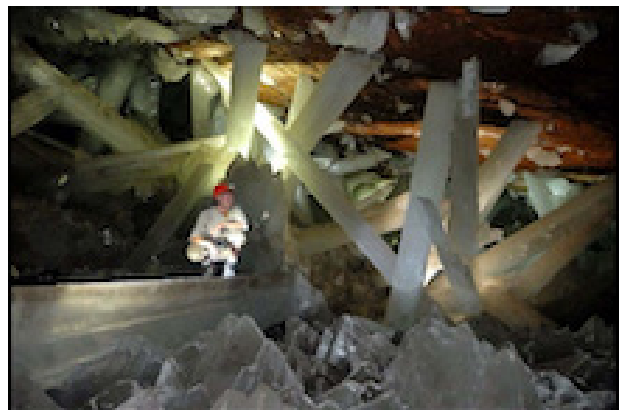
The government has yet to address the preservation of the surface area, but it's a great start. And it all began with some children who went in to explore a cave.

Chibebo concluded his powerful presentation to the packed house of attentive members with a moving, poetic call to action.

Karst is not solid.
It is living geology.
It dissolves.
It moves.
It breathes water.

When we drill into it, when we inject steel and concrete into it, we are not building on rock. We are intervening in a dynamic system that we barely understand.

Exploration today is not just about distance or depth records.



They went, and the kids were thrilled and hooked, begging to do it again. With more than 300 caves to explore in the city and a group of enthusiastic young people, it was a great recipe for creating something positive. So they started inviting their friends. Then their family members joined in, followed by their neighbors—and that's how the urban caving and citizen science project was born. In the cave the children first entered, they discovered that a monster did indeed live there.

We now know that this cave has the world's largest population of Yucatec blind eels (*Ophisternon infernale*), a very little-known species... and Talismán is now a young man studying biology in the state capital, as he wants to study the "monster" of the cave.

Cenotes Urbanos's goal is to protect all the caves on the Yucatán Peninsula through science outreach, citizen empowerment, and the building of social ties, so that the local community becomes informed, vigilant, and active. They have worked with all social stakeholders, primarily seeking to develop public policies to achieve the goal of conserving underground systems.

A year ago, Cenotes Urbanos presented two conservation initiatives to the Mexican federal government: an Underground River Nature Reserve and a surface protection area to safeguard one of the last healthy rainforests in Mexico. These initiatives would thereby preserve the important biological corridor that exists today and ensure connectivity among the rainforest, the caves, and the reef.

The proposal was for an area of 252,300 hectares. The government responded positively, expanding the area to 3,000,000 hectares! This will be the Great



A diver swims among the pilings girding Tren Maya.

It is about responsibility.

Because if the people above ground do not understand what lies beneath them, it will not survive.

The story of Talismán Cruz and Cenotes Urbanos is about the power of connection.

If we can build communities that love their caves, then caves will have defenders long after we are gone.

We are not only explorers. We are witnesses. And what we witness obligates us. If our maps stay in our drawers, caves remain invisible—and invisible systems are easy to destroy.

The future of cave diving is not only about pushing line. It is about building alliances above ground so that the places we love are still there for the next generations of explorers.

We are not just cave divers or cavers. We are Guardians of the Aquifer.



What's Acceptable?

Posting guidelines for NSS-CDS social media sites (Facebook, TikTok, and Instagram)

From time to time, people get upset when their well-intentioned social media posts are rejected. Volunteer moderators spend a lot of time reading and approving these posts. Please use common sense and observe the ground rules below. For chapter and verse, see the administrators' guidelines on Facebook. <https://www.facebook.com/groups/24323559345/about>

In brief:

Stick to CDS-related content. All posts must be related in some way to organization's values. These include underwater cave conservation, study, exploration, and education for cave diving safety, skill, and awareness.

No direct promotions or ads. Don't advertise products for sale, open spots for upcoming classes, direct links to websites, links to business websites and social media pages, YouTube channels, etc. Moderators may approve posts that highlight sponsors and donors including those offering prizes for CDS events.

- NSS-CDS instructors are encouraged to post comments and pictures of their students engaging in NSS-CDS-sanctioned courses or programs.
- Posts may include images watermarked by or credited to the original photographer. Videos may give credit to the videographers and content. No image or video may contain direct links to business social media pages, websites, channels, or products.

Code of Conduct: Be civil. The CDS has zero tolerance for any form of harassment, bullying, defamation, insults, derision, or negative connotations.



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NSS-CDS Committees Need Members

There's always plenty to do at NSS-CDS. One great way to become more involved with the Section is to sign up for one of the committees or subcommittees listed below. Share your special skills, meet other cave divers, and possibly gain a dive buddy or two.

If you're interested or want more information, please contact [Fred Stratton](#).

COMMITTEES AND SUBCOMMITTEES

Communications

- a) IT Subcommittee: [Jennifer Dillaman](#), Coordinator
- b) Website Subcommittee: [Kevin Stiegler](#)
- c) Social Media Subcommittee: Justin Reams, Coordinator
- d) *Underwater Speleology*: [Barbara Dwyer](#), Editor

Membership

- a) Awards Subcommittee: [Fred Stratton](#)
- b) Elections Subcommittee: Kelly Jessop
- c) Workshop/Conference Subcommittee: *ad hoc*
- d) Fundraising Subcommittee: VACANT

Safety

- a) Accident Analysis Subcommittee: Charlie Roberson, Coordinator. Doug Ebersole, Lamar Hires, Frauke Tillmans, Larry Meyer, Vince Ferris
- b) Line/Markers Subcommittee: Ken Sallot, Coordinator. Michael Kutnya, Kyle Martin, Justin Judd, Chris Brock, Jim Wyatt.

Training: [Chris Brock](#), Training Director

Science

- a) Geology Subcommittee: Pati Spellman, PhD, Coordinator
- b) Biology Subcommittee: Thomas Sawicki, PhD, Coordinator. Marin Hawk.
- c) Conservation Subcommittee: Chelsea Dinon, Coordinator, Marin Hawk Patricia Spellman, PhD, Emily Sustarich, John Sustarich, Angela Teal.
- d) Cave Cartography Subcommittee: Jason Richards, Coordinator, Alex Brett.

Cave Access

- a) Properties Subcommittee: [Steve Dalcher](#), Coordinator
- b) Landowner Relations Subcommittee: TBD

Property Managers

- a) Cow Springs: John Rutledge
- b) Edward's Spring: Tom Johnson
- c) School Sink: Bob Beckner
- d) Mill Creek Sink: Andy Pitkin, Charlie Roberson

ADVERTISE IN UNDERWATER SPELEOLOGY

2026 ad rates are as follows:

CDS Supporter for \$350 per year:

- Four 1/4 page color ads in four consecutive issues of UWS
- 10% discount on any additional advertising in UWS
- Listing as a CDS Supporter in UWS and the website
- Prices adjusted for larger ads:
- 1/2 page \$550/year
- Full page \$750/year
- 1/4 page on inside front or back cover \$450/year
- 1/2 page on inside front or back cover \$700/year
- Full page on inside front or back cover \$950/year

Per-Issue Pricing

- \$100 per issue for a 1/4 page ad
- \$150 per issue for a 1/2 page ad
- \$200 per issue for a full page ad
- \$150 per issue for a 1/4 page ad on the inside front or back cover
- \$250 per issue for a 1/2 page ad on the inside front or back cover
- \$350 per issue for a full page ad on the inside front or back cover

CDS Instructor Ads:

- \$100 per year for a 1/4 page ad

For specs and more information, please contact Ad Manager [Nancy Winfree](#).

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