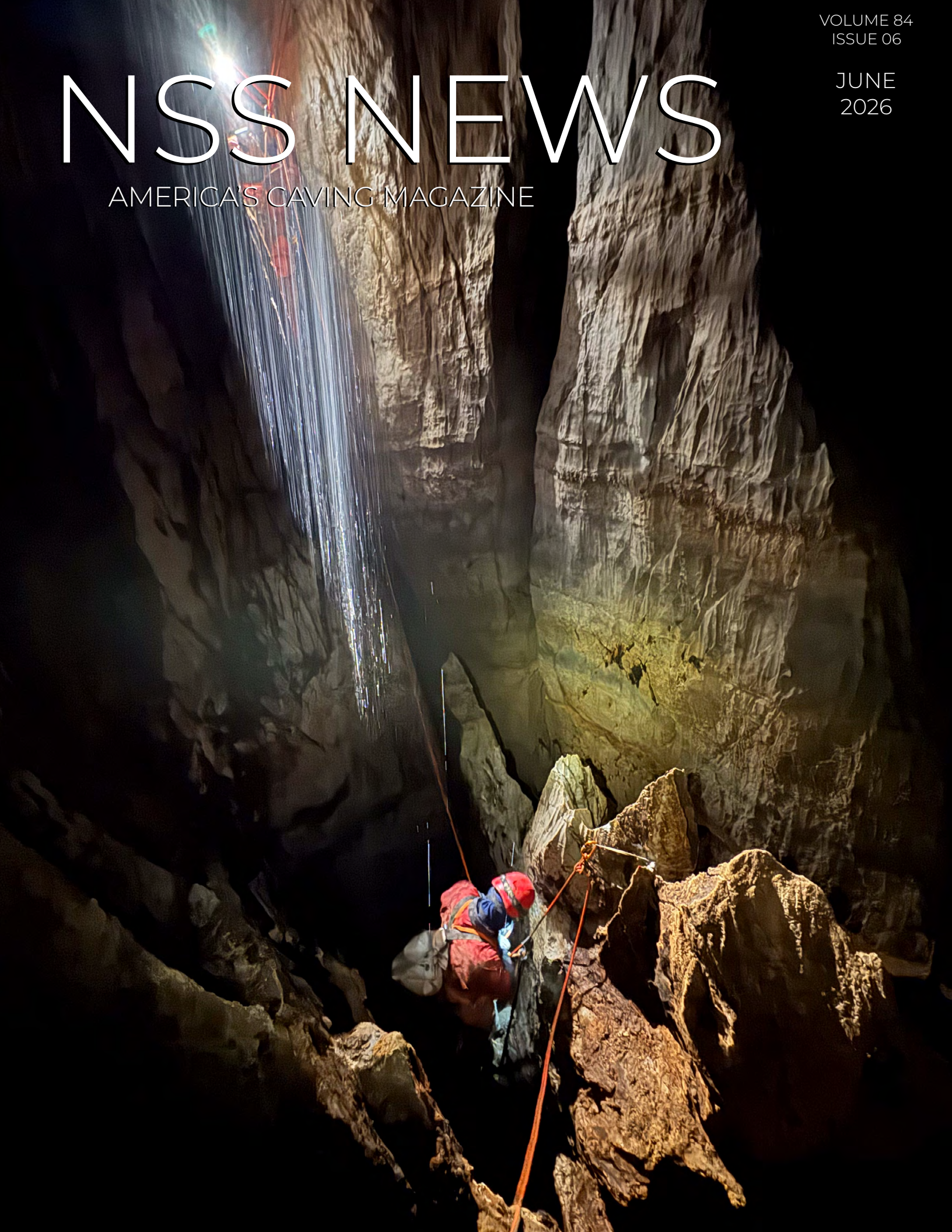


VOLUME 84  
ISSUE 06

JUNE  
2026

# NSS NEWS

AMERICA'S CAVING MAGAZINE



# NSS NEWS

AMERICA'S CAVING MAGAZINE

THIS MONTH

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**Please include "NSS News" in your subject line when e-mailing news content, to help sort it out from spam. Thanks!**

Feel free to ask questions about submitting features and photos. Style and submission guidelines can be found on the NSS website: <https://caves.org/nss-news-submission-guidelines/>

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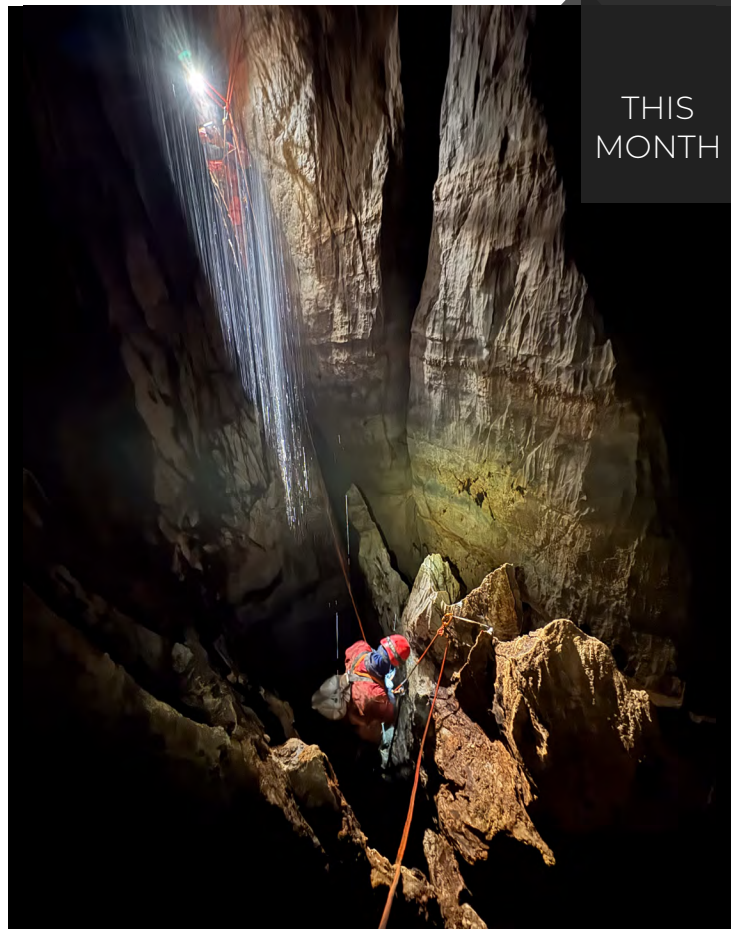
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## THIS MONTH'S COVER

Photo from Project Nimbus:  
Philip and Jordan surveying in Nimbus' Jaws passage.

Photo by Sara Fleetwood

## CALENDAR OF EVENTS

**2026 NSS Convention**  
Hundreds of Caves, Hundreds of Miles  
Corydon, IN - July 6 - July 10, 2026



The National Speleological Society (NSS) will host the 83rd Annual Convention in the lush forests and rolling hills of Corydon, Indiana.

This scenic sinkhole plain region is home to hundreds of caves that can be visited within a two-hour drive of the site, including the world's longest (Mammoth Cave) and two others among the top ten longest in the nation!

The caves of the area not only provide the thrill of adventure; but a journey through time, having served as shelters for Native Americans and hideouts during the Civil War. Prehistoric bones and antique relics can be found, along with some of the caving community's greatest lore which originates from this area.

This blend of natural beauty and historical intrigue makes caving in the Ohio River Valley an unforgettable experience.  
*We can't wait to host you in July 2026!*

<https://caves.org/convention/2026-nss-convention/>

Sept. 3 to 7, 2026

75th Annual Diamond Reunion - Old Timers Reunion  
*The Original Underground Party; Come as you were!* Dailey, WV

The year was 1950 and the NSS was only nine years old. Cavers throughout the region were busy discovering and exploring caves in West Virginia, and celebrated that by establishing an annual Labor Day weekend tradition. Long-time OTR attendees will have no trouble reaching into their personal way-back machines to draw on their own rich histories of OTRs gone by. New OTR attendees are invited to choose from any of our past themes and imagine what those past decades were all about! Themes started in 2000, but even before then, the DooDah Parades were a vast display of caver creativity. Come join the spectacle and become a part of OTR history!  
Website at: <https://www.otr.org> and <https://otr.org/2026/01/otr-themes-since-1999/>

April 29 to May 2, 2027

NSS Spring regional meeting of the Mississippi Valley Ozark Region, April 29 - May 2, 2027 at Shrine Camp, Buckhorn, MO (past NSS Convention site). Website is not up yet, but information will be available on facebook page [MVOR-MVOR.ORG](https://www.facebook.com/MVOR-MVOR.ORG)

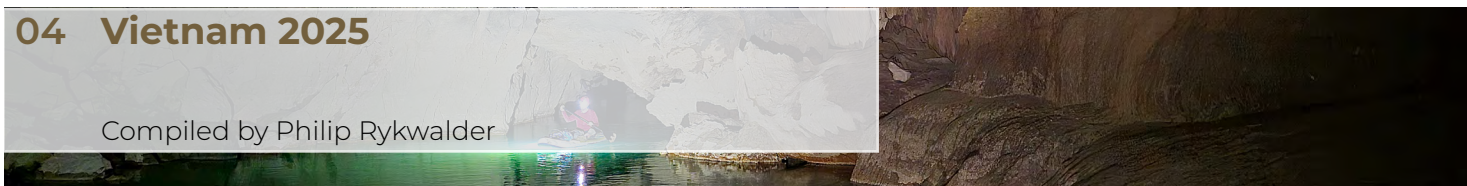


# FEATURES



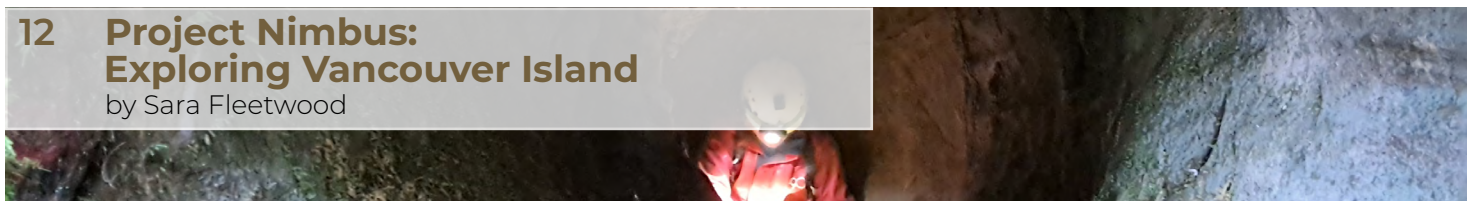
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Compiled by Philip Rykwald



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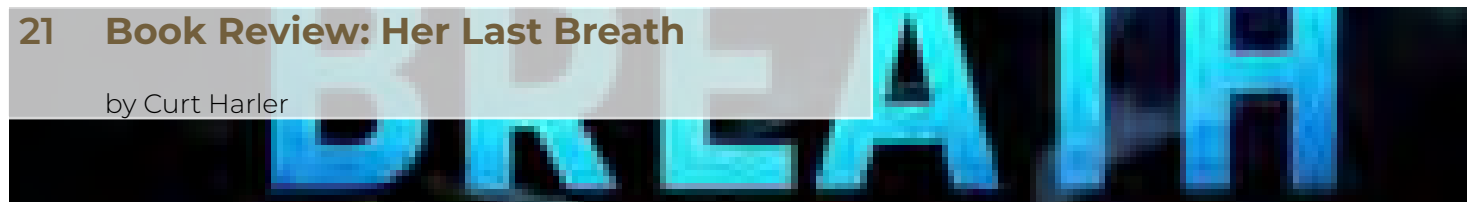
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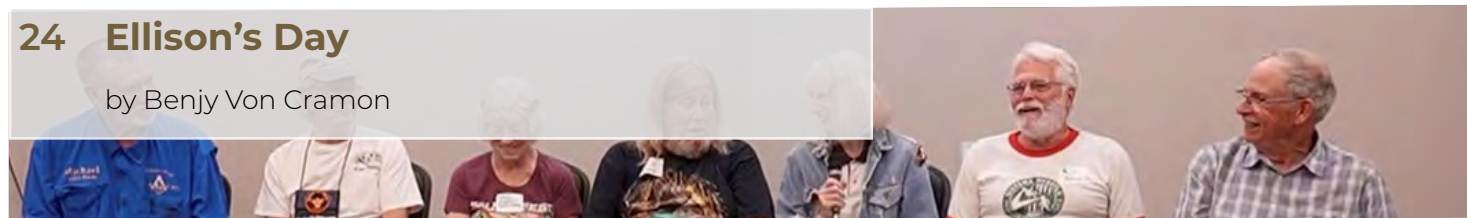
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### BACK COVER

A view out the doline entrance of Hang Nguòm Mọc. A 40m rappel leads into the 12 acre jungled room. The connection to the Confusion Room and the Gentle River is below. From the article on Page 12. Photo provided by Philip Rykwald.



## Vietnam 2025

*Compiled by Philip Rykwald*

### INTRODUCTION Kevin Dittamore

While on a 2018 Son Doong expedition, I asked one of the British cavers who lived in Phong Nha, Vietnam, if there were any local grotto groups of Vietnamese cavers. He chuckled and said, "There are no recreational cavers in Vietnam. These people don't have time to go caving. They have to work too hard, and don't have money to buy gear." I found that concept sad, and went home hoping to prove him wrong.

After much internet research on caving in Vietnam, I found a fledgling Facebook group of cavers in Hanoi. They were planning a weekend trip to a cave called Hang Sa Khao. I asked if I could join, and they were thrilled to get international attention. I joined them in April 2019, and NSS involvement in northern Vietnam has just bloomed. Idaho caver Steven Frye was "stuck" in the country during COVID, and his efforts were instrumental in securing a Memorandum of Understanding (MOU) with the Vietnam Institute of Geosciences and Mineral Resources (VIGMR). I met with VIGMR in October of 2024 to tell them my goal was to "create exciting caving opportunities for NSS Members while providing useful services to the People of Vietnam." I asked where we could be of service, and VIGMR pointed me to the newly-formed Lang Son UNESCO Global Geopark, which lacked documentation of their abundant cave resources. Three NSS teams came to Lang

Son in the spring of 2025, and what follows is a summary of their excellent work.

### TEAM I Jason Richards

In 2022, Kevin Dittamore asked me to come to Vietnam to dive a sump at Mo Ga Cave. I pushed it off for other projects. In the meantime, other explorers discovered that in certain water conditions, that sump — 100 meters into Mo Ga Cave — can be passed as a short ear dipper. This finding allowed Hanoi Caving Club members to connect another nearby cave to the formerly diminutive Mo Ga Cave, creating the Khuon Bong Cave System.

The Khuon Bong Cave System is in northern Vietnam, about two hours northeast of Hanoi. Mo Ga Stream Cave is on the south edge of a very steep karst mountain range in the province of Thai Nguyen. Khuon Bong Cave is on the northern edge of the same narrow mountain range, but resides in Lang Son province to the north. The cave crosses the provincial boundary, funneling water from Lang Son to Thai Nguyen below the mountain range. In 2023, a combined British and Vietnamese team was given one day by the Thai Nguyen government to push the pseudo-sump at Mo Ga Stream Cave to survey the cave. But the provincial leadership insisted that the full rescue and safety apparatus of the Thai Nguyen government wait at the cave entrance

until the team returned. The team conducted a speed survey of 1.9 km of cave along the main cave river, producing a rough map outline of the river passage, but completely missing the walking connection and vertical part of the cave leading to Khuon Bong Cave.

Soon after this first mapping trip, the Hanoi Caving Club cavers managed to connect Mo Ga and Khuon Bong through a passage shown on the map as a possible sump, creating the Khuon Bong Cave system. Soon after, they began running commercial trips into both caves, bringing tourists down the fifty-three-meter entrance series and out through the ear-dipper pseudo-sump and out a lower entrance in appropriate conditions.

In February 2025, the weather is cold and rainy in Vietnam, and the hotel at Mo Ga, which in the summer is a popular tourist spot, was empty. Naturally, our small team of Vietnamese and American cavers expanded to fill all available space. Operating out of the hotel for daily trips made this trip seem luxurious compared to the living conditions of later teams. We were allowed to enter the cave through the pseudo-sump at Mo Ga on the first day. However, that afternoon, a Thai Nguyen government official met us in the cave at the first dry spot to let us know that we would only be allowed to exit the cave at Mo Ga, not to enter there. This meant that we would have to travel around the mountain by taxi and

negotiate the upper entrance series to start our trips every day.

On the second day, we taxied to Khoun Bong, where we met the family of Tran Tu — a local entrepreneur turned cave guide — who would act as our guide and government liaison. His family (which included our daily taxi driver) graciously allowed us to use their house as a jumping-off point for the daily short walk to the cave. We split our survey effort into two teams: Chrissy Richards and I were one team, and Pete Johnson, Kristine Ebrey, and Trang Ha, a Vietnamese caver, were assigned to Pete and Kristine to do front sights. She would get cold due to the slow pace in the river passage. She attached herself to Kristine for warmth and nicknamed her team “Boring Pete and the Bear.”

The Khoun Bong entrance is a small climbdown over 10-meter breakdown pits that lead to two roped pitches of about 53 meters combined. The lower main river part of the cave is generally 30 meters wide and 10 meters high, with a shallow river running over water-worn formations. The water is warm enough that not all the team members elected to wear all their clothes at all times. There is no short-

age of large draperies and other fantastic formations, including a whole room of pure white cave turnips, and several potential leads at the tops of high formation climbs. Our guide, Tu, got quite bored with the whole prospect of surveying and would often disappear for hours to sleep in various large rimstone dams high above the floor. This happened frequently enough that he was added to the map. Tu’s family also introduced us to sticky rice and salted peanuts rolled in a leaf as caving lunch, which they insisted on sending them for us daily.

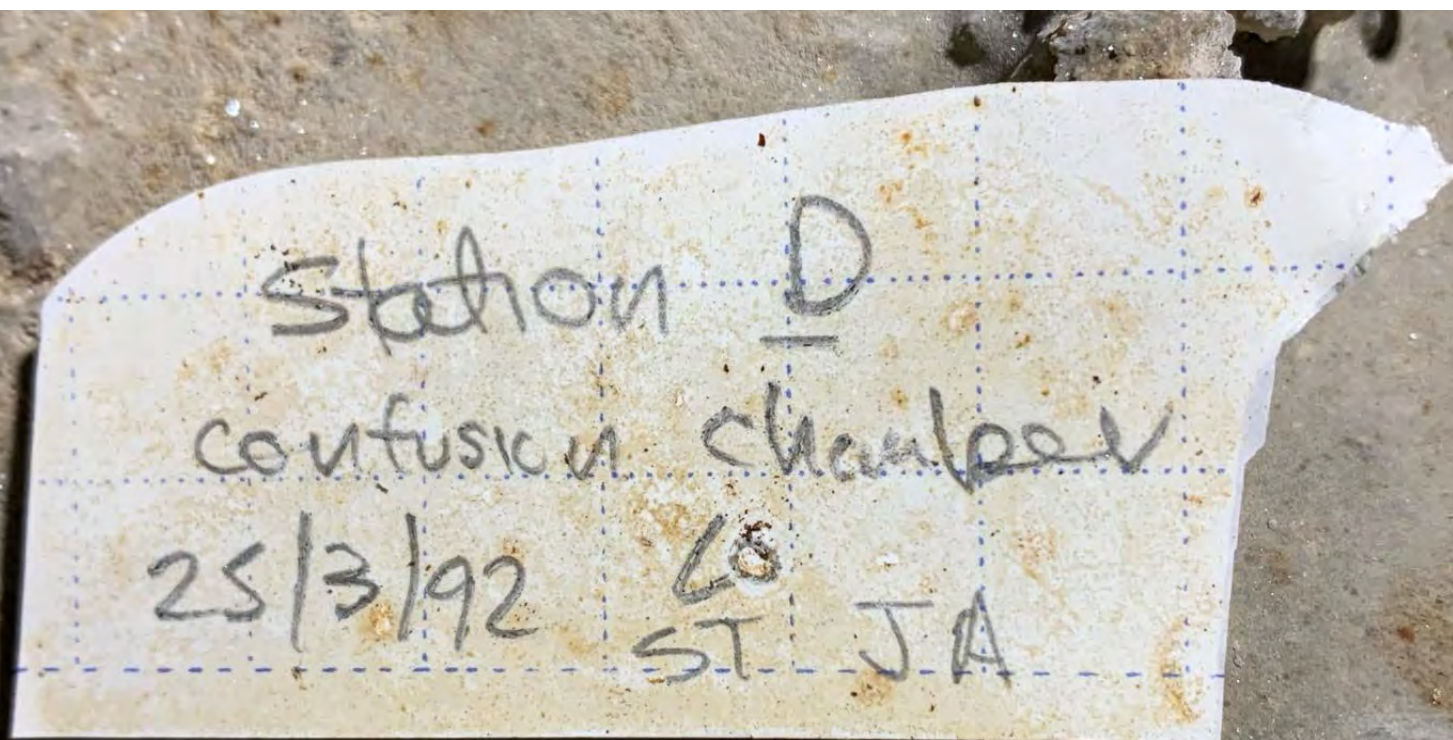
We spent nine days in the cave surveying, ultimately extending the cave to over 4.6 kilometers, adding several new loops and nearly a kilometer of new exploration to the cave. In addition, we conducted a reconnaissance for the potential of diving the true sump at the upper end of the river cave, and verified the existence of a second sump 1.2 km away, likely to increase the size of the cave even more next year.

#### TEAM II

Philip Rykwald

The goal of Team 2 was to explore Hang Nguôm Moọc (Cloudy Cave) located outside the pastoral town of Mong An

in the Lang Son Province of Northern Vietnam, just 35 km south of the Chinese border. We arrived in Hanoi before heading to the local Homestay Hương Rừng in Mong An, which was nestled in a misty valley hemmed with vegetated limestone cliffs. Barely a mile from our stay, partway up a karst tower, was the cavernous entrance to Hang Nguôm Moọc, which overlooked fields of greens, cabbage, tobacco, and rice. Our survey team consisted of Trang Ha, Kyle Lassiter, Alex Reed, Kevin Ditamore, Emily P. Davis, and me. We entered the Goat Entrance, so named for a small herd penned just inside the cave, and soon found ourselves in an enormous passage. A stream emerged from a second entrance at the base of the same hillside, only a few hundred feet away; we hoped to come out of that entrance at some point in the survey. Immediately inside the main upper entrance, the walls were swallowed by blackness, and we surveyed through a great void. The cave was hot, with bats flying around some of the larger main rooms, and there was a faint echo of water flowing deep within the breakdown. The cave hummed with life; terrestrial isopods moved through the bat guano while giant Hairy Mary centipedes skittered around feeding on whatever they could find. Large pass-



PAGE 4: CHRISSY RICHARDS AND PETE JOHNSON SURVEY THROUGH A POOL IN KHOUN BONG CAVE.  
PHOTO BY KEVIN DITAMORE

ABOVE: NOTE LEFT BY THE 1992 BRITISH TRIP TO HANG NGUÔM MOỘC. THEY REALIZED MORE CAVE EXISTED NEAR-BY BUT WERE UNAWARE OF THE LARGE DOLINE ENTRANCE THAT SITS IMMEDIATELY ABOVE THIS SPOT, WHICH THEY NAMED THE CONFUSION CHAMBER. PHOTO BY PHILIP RYKWALDER

ages and yet unconnected entrances awaited our survey books.

At the end of the day, we walked the 1.5 km back to the stay in Mong An, passing through dark fields and the quiet farm town. At our lodgings, our host welcomed us with traditional Vietnamese dishes, including delicious broth-based soups, fish, tofu, fried eggs, and stir-fried vegetables such as fern fronds, mustard greens, and cabbage. In the following days, we would journey each morning through the now-bustling, curious town, filled with smiling and waving villagers (and scores of schoolchildren excited about their new visitors!). Underground, we continued surveying ~20 m-wide and ~40 m-tall passages dotted with large chambers. Leads branched in multiple directions, one eventually tying into a large river, and above it a rising, windy canyon passage that ultimately led to a third entrance, the Banana Entrance.

Over the next few days, the map of Hang Ngườm Mọc grew. When all the dry passages were surveyed, we took to stand-up paddleboards to tackle the river passage heading east. With

the aid of the watercraft, we were able to survey 630 m in a day, thanks to several giant ~30 m shots as we floated through the impressively large and well-decorated passage. The water was deep in many places and shallow in others, requiring several portages over rimstone pools, revealing more life as we went, including yellow catfish, large bats, and a beauty rat snake. We named it the Gentle River for its peaceful meanders, large formation galleries, and large intersecting passages above that we didn't have time to explore. On the second day of the river survey, we encountered giant boulders at the base of a huge breakdown slope, halting paddle progress and resuming a dry survey into the unknown darkness extending 65 m overhead.

As Kyle entered the survey data each night, it became clear that our growing cave would likely intersect an enormous sinkhole visible on satellite imagery. We hypothesized that the giant breakdown pile had collapsed into the river, leaving a huge doline above. We asked ourselves, "Was there a connection between these two features?"

Vietnam Expeditions (VE), an adventure-tourism company led by Hanoi-based cavers (owner Mạnh Phạm Van and Guide Trần Tu), helped arrange logistics to explore the doline. Due to the scale and remoteness of the surface doline, we would need to spend the night inside it. After rappelling the 40 m entrance shaft, we immediately split up and searched the 12-acre jungle below for a way down to the river passage where we had ceased our survey just days prior. The guides from VE had found a few short drops into the breakdown at the bottom of the doline, and soon we emerged into an enormous void and the sound of water in our ears. Giant towers of flowstone and shields were everywhere, awing us on all sides. While picking our way down the breakdown slope, I found a small piece of cave survey paper on the floor signed by someone called Big Nose, which turned out to be a well-known UK caver from the 1990s. We had heard rumors of a 1992 British expedition to the area, and the paper was evidence of their survey. However, they had been unable to find the route out of this area (they called it the Confusion Chamber) and were unaware of the doline above.



TRANG HA POSES IN ONE OF THE INFEEEDING PASSAGES BELOW THE DOLINE ENTRANCE IN HANG NGƯỜM MỌC. PHOTO BY KEVIN DITAMORE

While our survey had likely duplicated some of theirs, we had connected the river to the doline.

Some mop-up work remained, but continued exploration of Hang Ngườm Mọc would have to wait for Team 3. Gentle River did connect to the large doline, but we could see another doline to the east in the satellite photos. We hoped that Team 3 would be able to continue following the river upstream in the hope of a connection to Doline 2.

### TEAM III

Peter Anderson-Sprecher

The Expedition 3 team — consisting of Alexander Odd, Peter Anderson-Sprecher, Evan Peairs, Boof Truchan, and Jennifer Jain — met up in Hanoi on April 30, and kicked off expedition preparations at a local cafe near Lake Truch Bach. There were two primary goals for Expedition 3: first, to begin the survey of Snake Cave in southern Lang Son province; and second, to continue the survey of Hang Ngườm Mọc near the village of Mong An, also in Lang Son province.

After a long drive from Hanoi to Lang Son province, the Snake Cave portion of the expedition kicked off in classic Vietnamese style, with transporting the team members and all our caving gear to the trailhead on the back of motorbikes. The trek up to the cave was our first exposure to hiking in the hot, humid jungle of Vietnam. Even the locals were complaining about the heat, and we were all dripping in sweat by the time we got to the top of the pass. Lunch was, as always, a delicious blend of sweet sticky purple rice, Xoi Tim, wrapped in banana leaves.

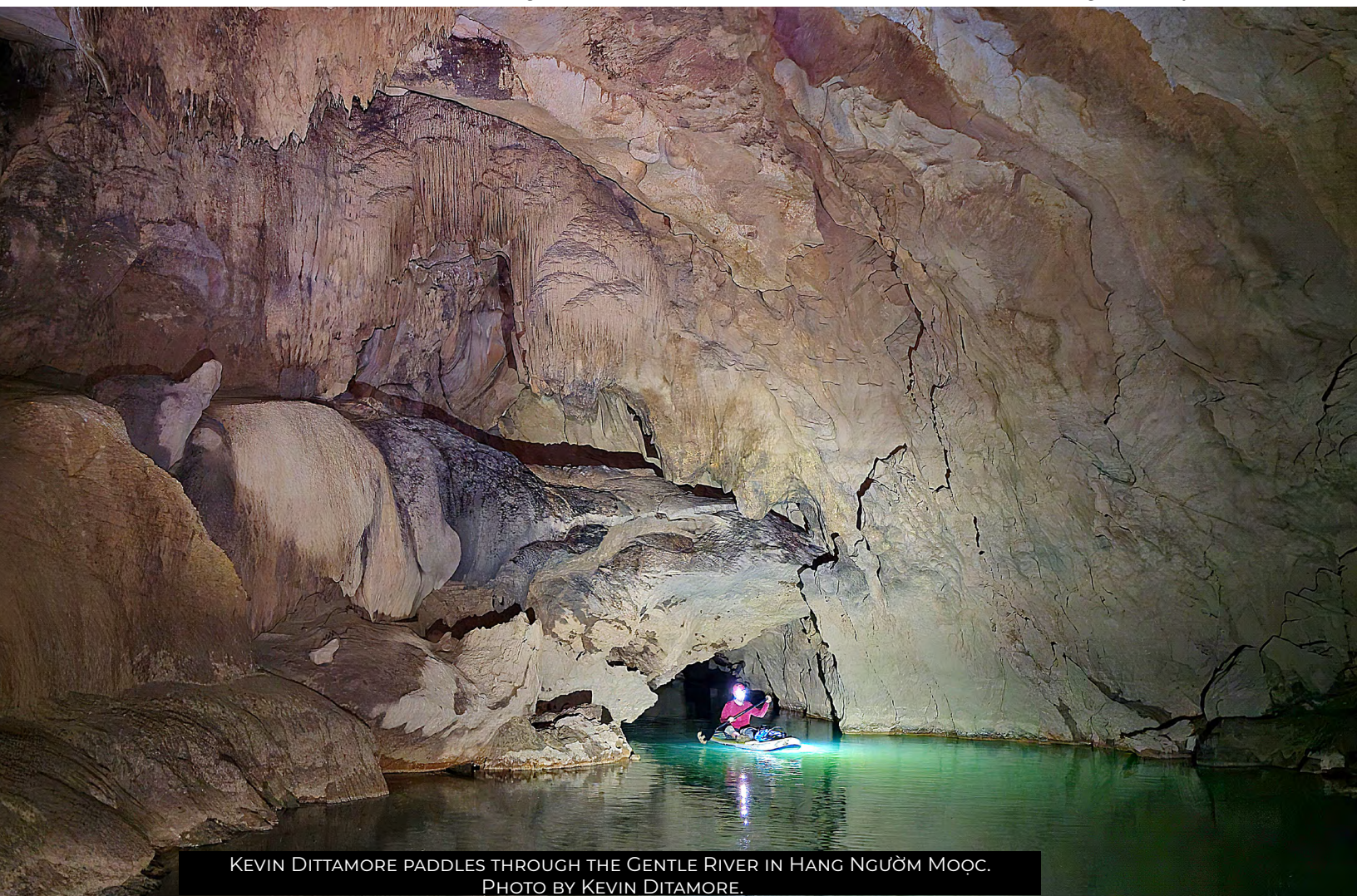
Snake Cave is so-called because historically several non-venomous snakes (specifically *Elaphe Moellendorffi*) lived in the cave and were harvested and sold by locals. Fortunately, with their dwindling populations has come increased awareness and conservation efforts.

The team camped in hammocks in the entrance of Snake Cave for three nights while conducting the survey project. The team's experience caving in Texas and California did not prepare us for the giant, well-decorated domes found

in the caves of Vietnam. We spent three days surveying only the main large chambers, most of which were over 50-meter tall domes, and other rooms with many large formations. The cave was rigged by a Vietnam Expeditions team led by Master Khanh Le and Duong Pham Duc. They also located a new second entrance in a nearby cliff face, which we later surveyed out of as well.

After completing the survey at Snake Cave, we moved to the village of Mong An to continue survey work previously conducted in Hang Ngườm Mọc, where we were greeted with a warm reception by the locals. The children, who had already come to make friends with Team 2, were eager to make new friends and playmates. We learned many new schoolyard games and did our best to show them the ones we remembered from our childhood.

The primary objective in Hang Ngườm Mọc was to attempt to find a way past the breakdown pile under Doline 1. This turned into a matter of exploring wet, low airspace crawls under the breakdown, making us finally feel as



KEVIN DITAMORE PADDLES THROUGH THE GENTLE RIVER IN HANG NGƯỜM MỌC.  
PHOTO BY KEVIN DITAMORE.

though we were in familiar territory. Meanwhile, the Vietnam Expeditions team explored upper passages above the primary river passage, which turned out to contain a large, unmapped borehole that we resolved to return to survey on a future day.

After the first two days of exploration, we took a day off caving to present to the Lang Son tourism and Geopark officials and local schoolchildren, and to accompany the park officials on a tour of Hang Ngườm Mọc. In typical Vietnamese fashion, the welcome was beyond warm — all the children from the region were there to see us, and they gave us many delightful performances of their traditional song and dance. After a video presentation from

previous expeditions, it was our turn. We focused on demonstrating some of the equipment and methods we use for safe and effective caving and exploration, and emphasizing the importance of cave conservation.

After this break, on our final day of exploration, we returned to survey the large passage above the river that the Vietnam Expeditions team had found during the previous day, which we called the Reunification Borehole in honor of the Vietnamese national holiday that took place on the day of the survey. The surveyed passage was a large 50 m by 50 m borehole extending about 500 m and bypassing a large bend in the river passage. The passages were so large that we had to frequently

limit our shot distance because of maximum range limitations on our BRIC survey devices, and the survey included several notable formations, such as the giant flowstone columns called The Twins. Numerous side canyons and passages remain for future exploration.

That evening, the expedition finished with a heartwarming performance by the women of Mong An in traditional Tay song and dance at the homestay where we were staying. We left, returning home with full sketchbooks and fuller hearts, looking forward to continuing and deepening our partnership with the Geopark and the people of Vietnam in exploring and preserving their unique underground world.



KYLE LASSITER PREPARES TO DESCEND INTO THE DOLINE ENTRANCE OF HANG NGƯỜM MỌC. PHOTO BY ALEX REED



KEVIN DITAMORE POSES WITH A FORMATION IN HANG NGƯỜM MỌC. PHOTO BY KEVIN DITAMORE

# Khuôn Bông Cave

Lạng Són - Thai Nguyen Provinces

Lạng Són Geopark

Socialist Republic of Vietnam

Cartography: 7 March-25 June 2025: Jason Richards

Survey:

2 January 2022: HL, IW, Thin

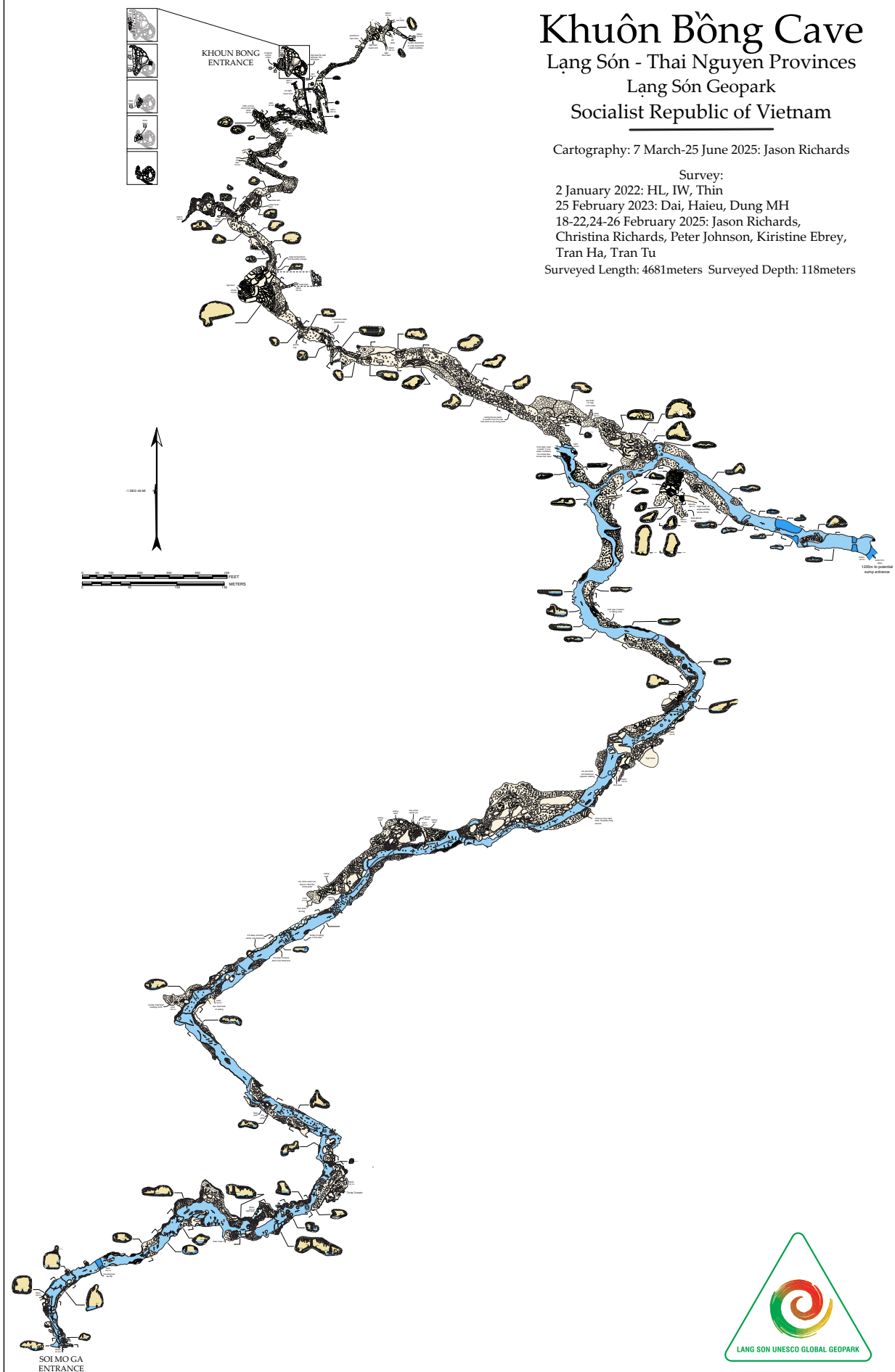
25 February 2023: Dai, Haieu, Dung MH

18-22,24-26 February 2025: Jason Richards,

Christina Richards, Peter Johnson, Kiristine Ebrey,

Tran Ha, Tran Tu

Surveyed Length: 4681meters Surveyed Depth: 118meters





Copyright © 2025 Lạng Sơn UNESCO Global Geopark

Grade 5 Survey: March-April 2025  
 DistoX2, Bric5

Cartography by Kyle Lassiter (2025)

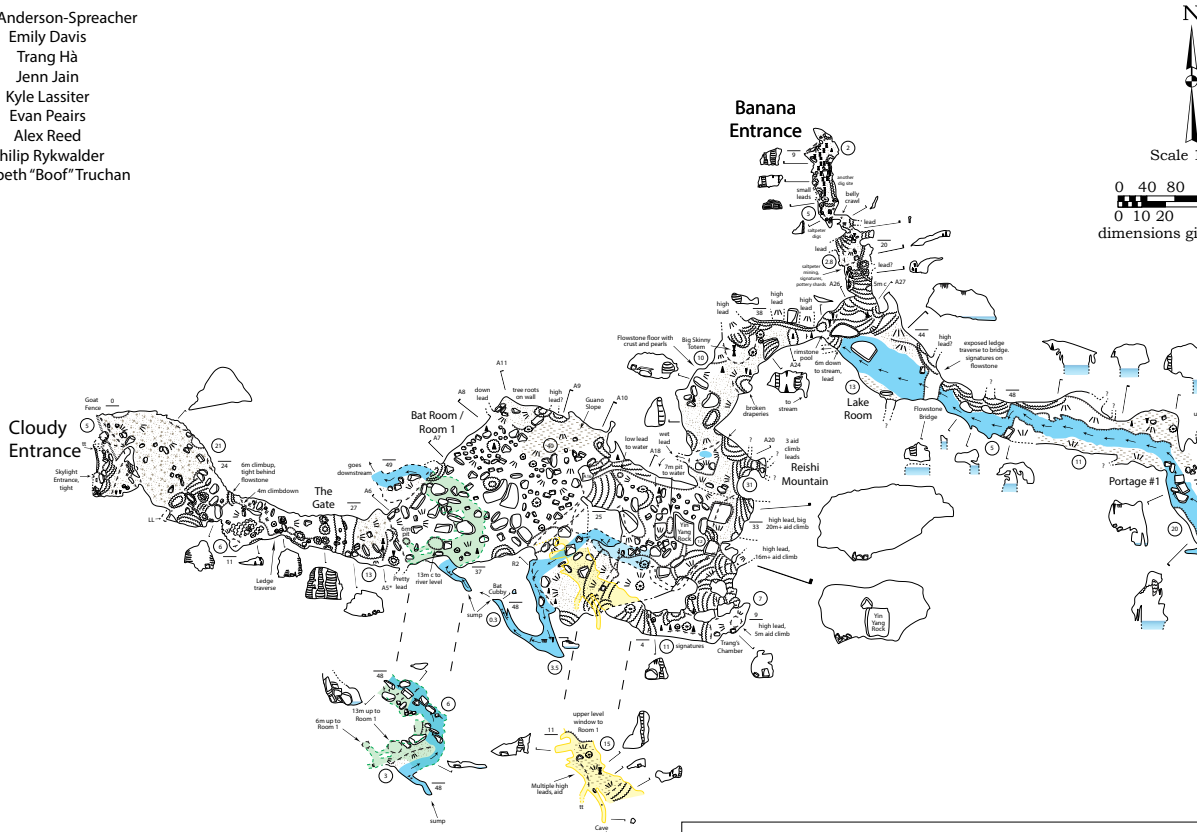
Survey participants:

- Peter Anderson-Sprecher
- Emily Davis
- Trang Hà
- Jenn Jain
- Kyle Lassiter
- Evan Peairs
- Alex Reed
- Philip Rykwalder
- Elizabeth "Boof" Truchan

# Hang Ngườ "Cloudy"

Bình Gia C  
 Lạng Sơn UNESCO  
 (Lạng Sơn Prov

Length:  
 Vertical Ex



# Thung Moóc "Cave"

Commune,  
D Global Geopark  
vince, Viet nam

3926m  
tent:149m



**unesco**

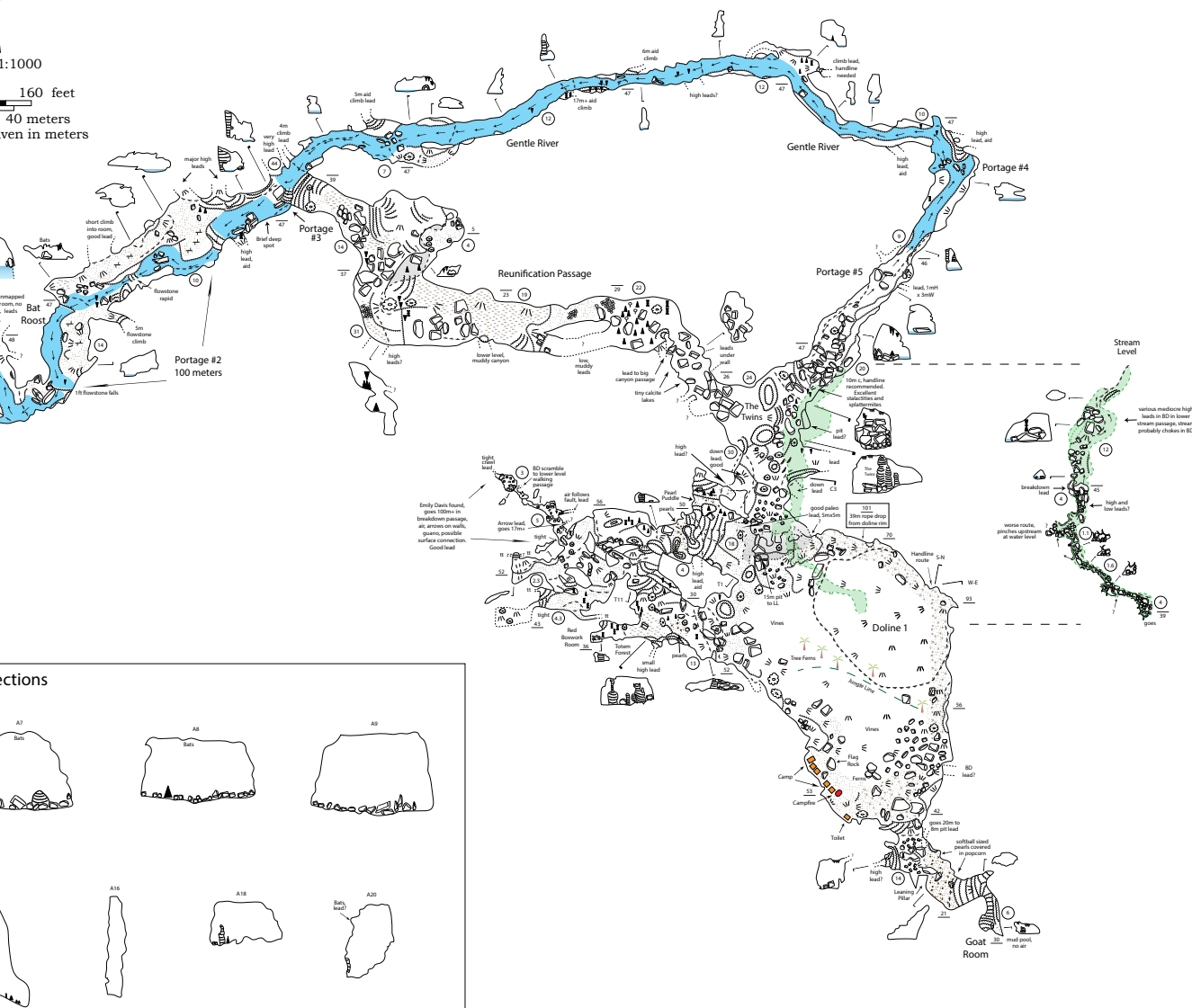
Global Geopark



**Lang Son**

UNESCO GLOBAL GEOPARK

1:1000  
160 feet  
40 meters  
even in meters



Legend			
	Passage Walls		Stalactite
	Indeterminate walls		Stalagmite
	Underlying passage walls		Column
	Pit/Ledge		Soda Straws
	Ceiling change		Popcorn
	Slope		Cave pearls
	Flowstone		Bedrock
	Drip line		Gravel/cobbles
	Breakdown		Sediment/sand
	Boxwork		Mud
	Shield		Stream
			Pooled Water
			8°C
			Climb height
			Underlying passage
			Overlying passage



## Project Nimbus, Exploring Vancouver Island's Coastal Karst Nestled Within an Old-Growth Forest

by Sara Fleetwood

*Team: Philip Schuchardt, Jordan Trebett, Katie Graham, Chelsea Power*

*Sponsors: The National Speleological Society and the Vancouver Island Cave Exploration Group*

*Trip Dates: April 26 – May 3, 2025*

We were headed to a remote cove on Vancouver Island, only accessible by boat, where we'd identified 17 karst features nestled within an old-growth forest using high-resolution aerial LiDAR. Among these features, seven were high-priority targets, likely to be significant cave entrances, including one with an estimated depth exceeding 30 meters — potentially one of the deepest known surface pits on the island. Given the ecological sensitivity of old-growth karst, we knew this fragile, biodiverse ecosystem was worth exploring.

The nearly six hours of driving and ferry rides to get to the marina had been smooth sailing, except for losing the bearing buddies on the boat trailer near the pass. Just as we pulled into the marina, we noticed smoke coming from the boat trailer's wheel. It turned out we had lost the bearing, and the wheel had nearly fallen off. Fortunately, we were still able to get the boat in the water, leaving the wheel as a problem for a day when the marine store would be open.

We began loading up the boat for the

first shuttle of people and gear. Upon donning our red Jacques Cousteau-inspired hats that Jordan's mom knit for us, we were ready to set off. Mid-ride, I learned to navigate using Navionics to help Jordan avoid shallow water as he drove the boat. The waves were worse than he had anticipated, around 1.5 meters. The 18-foot speedboat heaved and smashed violently in the waves, compressing our spinal columns. Wanting blind faith in his boat, Jordan told the crew that the conditions were better than he'd expected. When we arrived at our cove, Chelsea and I unloaded the boat of gear onto the shore.

It was high tide, so we left the gear behind and set off into the woods to scout for a suitable place to set up camp. Meanwhile, Jordan headed back through ocean chop for the second round of gear and team members, setting up a couple of prawn traps along the way. After hiking for a few hours, we were unsuccessful in finding an ideal campsite. The landscape was too karsty, with undulating terrain covered in decaying logs and thick ferns that we postholed through. Eventually, we began retreating to the beach. Walking the shoreline, we discovered a creek flowing into the ocean, where we were guaranteed to have freshwater. This spot had potential campsites, good ocean views, a sea breeze to keep the bugs away, and a clear line of sight for Jordan to keep an eye on his boat.

We knew the group would have doubts

when they arrived, given how marginal the tent spots were at the campsite we selected. Nonetheless, we began moving our gear over. Sure enough, as soon as they arrived, Philip headed up into the forest to search for a better location, only to reach the same conclusion that we had: our spot along the beach was the best option. We unloaded the second round of gear, leveled a few spots for tents, and set up tarps for the inevitable rain we knew was sure to come, given the time of year.

Chelsea and Jordan had set up their tent on the beach, believing it was above the high tide line. That theory was proven wrong around 11 p.m. when, rocked gently awake by the ocean waves, Chelsea dreamily muttered, "I don't think we're floating," to which Jordan, patting the tent floor sleepily, replied, "... we are definitely floating." They woke up to their inflatable sleeping pads and tent floor floating on the frigid ocean water around them. It had been a king tide, making an area that was seemingly safe to sleep below the tidal zone. For a brief moment, Chelsea noted that the water inside their tent was glowing with bioluminescence, then began the frantic relocation effort.

They carried their tent, fully assembled, out of the tidal zone to a lumpy, slanted spot in the woods they'd eyed earlier in the day but had deemed too uneven to use without leveling. The next morning, Jordan summed it up with, "Play stupid games, win stupid



The team when we first found the entrance to Nimbus. Counter-clockwise: Philip Schuchardt, Jordan Trebett, Chelsea Power, Katie Graham, and Sara Fleetwood. Photo by Philip Schuchardt.

prizes.” They then spent the morning leveling the makeshift campsite they’d made do with after the midnight dip. Meanwhile, Philip and I woke to discover that the ocean had come right up to the edge of our tent as well.

After working on further camp improvements, we turned our focus to the day’s goal: finding the path of least resistance to the 30-meter pit identified with Philip’s LiDAR, located about 400 meters up from camp. As we’d discovered the previous day, the old-growth karst forest was slow going. It took us nearly five hours to travel just three kilometers, roughly 600 meters per hour. Along the way, we navigated a tangle of pixie-stick-like fallen logs, pitted karst, and a maze of benchy cliffs.

Despite the terrain, it was a beautiful, sunny day, and as we climbed higher, glimpses of the ocean appeared through the trees. At one point, Katie and Philip split off to check a canyon lead that didn’t go, but in the process, they discovered a six-foot-diameter old-growth tree growing in the streambed. Meanwhile, Jordan, Chelsea, and I continued hiking toward the 30-meter pit. When we reached the entrance, it was more magnificent than we’d imagined: massive, with waterfalls pouring in, surrounded by moss, ferns, and

towering old-growth cedars and hemlocks. We named this cave Nimbus, after the project.

It was immediately clear that we’d need a rope, and with daylight fading, the crew regrouped at the big pit and began making our way down the mountain to camp, hoping to find a better route than the way we’d taken up. Along the way, we stopped to check out a few more pits, and Chelsea found a phreatic tube entrance. Continuing down the mountain, Katie found a swampy route that was far faster than side-hilling over large fallen trees.

That evening, after returning to camp, Jordan and I headed out to check on the prawn traps. We’d caught about two pounds. We removed the heads and brought the rest back, enjoying them later by a fire on the beach.

The next morning, we awoke to rain. We’d planned to spend the day on administrative expedition tasks: Jordan and Philip would return to town to repair the boat trailer bearing, while Chelsea, Katie, and I would stay behind to begin establishing a trail up the mountain in hopes of shortening the travel time to the cave.

Fortunately, the sea was calmer than on

the first day. In town, Philip and Jordan were able to pick up a bearing from the marine store and retrieve the wheel from a local who had kindly offered to take it home and clean it up. Back at the marina, they worked on replacing the bearing in the rain. It turned into an all-day affair, but despite the cold and wet weather, they managed to get the trailer repaired.

Meanwhile, we worked on finding and flagging a better trail to the caves we’d discovered on Sunday, cutting down the travel time significantly. We were a bit limited in tools: one member had loppers, another a handsaw, and the third rotated between flagging the trail with green flagging tape and swatting ferns with their trekking pole like an old granny. A machete would have made a far better tool than the trekking pole, and any other color of flagging would’ve been more ideal, probably why the green tape was free in the first place. We’d had large ambitions for the day, not only planning to clear the trail, but also to rig the entrance of Nimbus. However, the day wore on, and like the others, we were soaked. We ended up stashing our rope, SRT kits, and vertical gear in trees halfway up the mountain before heading back down to camp.

After a fairly demoralizing Monday,

we were ready and motivated to get moving. Our new trail made the first half of the hike smooth sailing, and we continued making improvements to the second half as we went. Katie and Chelsea returned to the phreatic tube entrance, where they quickly discovered that the entrance goes two meters into a tube before dropping roughly 12 meters. Since the only drill was with the other team, they headed over to join us at Nimbus, where the three of us were still in daylight surveying, given the large size of the entrance.

After getting past daylight, we found ourselves in beautifully scalloped white marble, streaked with fine grey veins, which made for a stark contrast to the volcanic cobbles. After the enormous entrance, the passage dropped into a second large chamber, which choked out at a chert or dyke band. At the bottom, a small crawl-through hole opened into a canyon. From here, we split into new teams: Chelsea and I headed into an upper phreatic tube,

while Philip, Jordan, and Katie explored the canyon below.

The upper tube eventually ended in a boulder choke and sumps, so we turned back to rejoin the others in the canyon. Initially, Jordan chimneyed partway across a 30-meter-tall marble rift, which they named Loudoun Canyon (after the Loudoun Canyon in the Pacific Ocean). The passage seemed to continue with air leading to another tube, but the floor kept getting lower beneath them and the walls wider, so they descended to the bottom. There, they quickly reached a pit that led into a stark, clean-washed streamway passage.

Jordan rigged the pit and, after rappelling down to the active streamway, Chelsea and I began surveying upstream while the other team headed downstream. Upstream ended in another sump, but we noted a few B- and C-level leads on the map before joining the others. After scaling the wall to

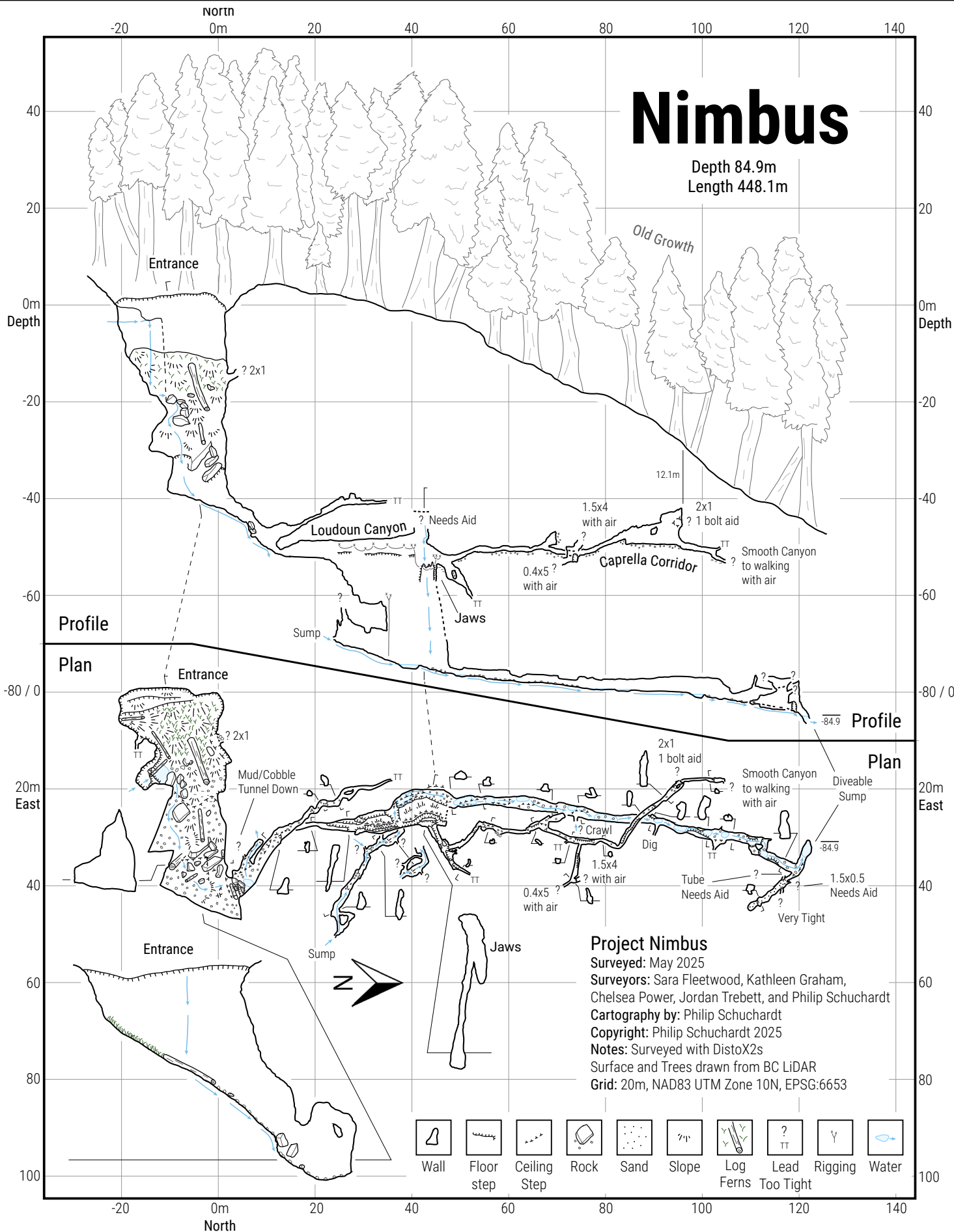
avoid a deep pool, Jordan, Philip, and Katie soon found themselves planking over the low streamway while surveying. Eventually, the passage opened up slightly, only to sump again. They marked some B-level climbs to return to later.

We surveyed a total of 324.7 meters that day, and we were back on the surface just after midnight. After two hours of struggling down the faint mountain trail, we got back to camp around 3 a.m. With the high tide fully submerging our usual route along the beach, we were forced to bushwhack through the forest or wade through the shallow waters to reach camp. Jordan packrafted over to check on his boat, which was still safely anchored.

Because we got to bed late, we decided to take a rest day. We slept in and woke up to a sunny, bluebird day and a light sea breeze. The plan was to boat over to a natural hot spring. On the way, we checked the prawn traps, which were



The crew unloading gear from The Seaweed II. Photo by Sara Fleetwood



full, and had a nice lunch at the boat ramp of prawns, chips, and pita. At the coastal hot springs, hot water drains over a small waterfall into three rocky tide pools that get progressively cooler until they reach the ocean. We stayed until early evening and blasted “Barrett’s Privateers” by Stan Rogers on the way back. We stopped and caught two rockfish, which we cooked up for dinner back at camp. None of us could remember a more magical rest day.

On our third day hiking up the mountain, we were having an easier time: postholing through fewer logs and starting to memorize our route through the foliage. Chelsea took a tumble while walking across a five-foot-diameter old-growth log, falling a couple of meters into the underbrush below, but somehow emerging unscathed. With each trip, our trail became more defined; we hoped eventually we would be able to follow it without relying on GPS. Once we were near the caves, we split up: Chelsea and Katie headed to the phreatic tube entrance, while Philip, Jordan, and I went to Nimbus.

At the phreatic tube entrance, Katie rigged the entrance drop using concrete screws, and Chelsea began the survey. Katie set two deviations and used the entire 25-meter rope to descend. At the bottom, she immediately called up to Chelsea to grab the Petzl Push they’d left on the surface. There was another drop. Katie rigged the second pitch, a four-meter drop, and then called up, “Shoot, do you have a knife?” “No,” Chelsea replied. There was another drop, and they only had the one Petzl Push. They shot a few legs and splays before Katie jugged out of the cave to grab her knife to cut the rope.

Chelsea, meanwhile, was troubleshooting TopoDroid and sketching as Katie returned. The cave corkscrewed in on itself, making it a challenge to draw for Chelsea, who hadn’t done much sketching in vertical caves. After the second drop, they noted a promising tube lead, and Katie rigged and rappelled down the third drop.

*“Midway down the third drop, Katie reached the bottom of the rope, but not the cave floor. ‘Can you throw me some webbing?’ she called up. I tossed some down, and she tied it to the end of the rope. A moment later: ‘Oh no, I think it ends down here!’ Disappointingly, I rappelled down to finish drawing. At the bottom of the third rope, Katie mentioned she wanted to collect a soil sample, so she jugged up to grab her collection tubes while I continued sketching.*

*Sitting alone at the bottom of the pit, I*

*noticed a fist-sized crack around a block of chert in the wall. Curious, I reached in and felt a draft. Excited, I began digging out the block. It started to break apart, but I realized I’d need a better tool. I yelled up to Katie that I had found a drafting dig. Then I spotted another way in. After a quick dig and a squeeze, I was behind the chert wall in a steady passage a few meters long, ending in a muddy dig that was drafting. We surveyed to the new dig and decided to come back the next day with a gad bar. We left our gear in the entrance and hiked our way back to camp.” - Chelsea Power (R)*

They named the cave A Winkle in Time, a play on words referencing a wrinkle: a type of sea snail on the island with a chiral shell, much like the cave’s downward spiral and the book *A Wrinkle in Time*.

Once Philip, Jordan, and I traveled through Nimbus to Loudoun Canyon, Philip started rigging the 11-anchor traverse along a series of nice ledges. The ledges eventually ran out near a promising infeeder dome, where water was flowing through sharp, bladed marble spires that we named Jaws. One side dropped 25 meters into the mainstream canyon, and the other into a five-meter pit. The blades looked like shark teeth made of marble.

Rigging the traverse through Jaws took some time. Philip lashed one of the fins with a 30-centimeter alpine draw. On the other side, the ceiling dropped down, likely connecting to the crawlway in the main passage. The ceiling

channel makes a hard right there, and Philip traversed into it to place the final anchor.

After rigging, we began surveying the upper component into Loudoun Canyon. The ceiling component dropped into a too-tight fissure after about 20 meters. Luckily, there was another way on, in a phreatic tube with nice scallops and air drawing inward. We followed it to an intersection, still feeling air draw inward. We continued forward and got into walking phreatic passage with old dome inflows. This lead is probably a one-bolt aid climb. We surveyed several shots past this point.

The passage narrowed into an upside-down teardrop shape. We scooped about another 20 meters and noted that the passage appears to continue as walking passage with air blowing out of it. It was 11 p.m., and we’d set a turnaround time of midnight. We caved back to the intersection and surveyed three more shots to another intersection where air was blowing up a walking passage and coming out of the downstream passage. It seems there were converging airflows from three directions entering the walking passage. We exited the cave at midnight and made it back to camp around 4 a.m., right at high tide.

Having returned to camp at a reasonable hour the night before, Katie and Chelsea were up and moving relatively early. They had stashed their gear in the cave entrance and thought we were all heading back up. Philip explained



Chelsea in Nimbus’ marble passage.  
Photo by Sara Fleetwood

that the Nimbus team had returned very late and was planning a rest day. But, feeling bad about the miscommunication and curious to see A Winkle in Time, he decided to join them.

Chelsea, Katie, and Philip arrived at the cave around 2:30 p.m. It was typical coastal rainforest weather: rain began falling hard during the hike up, and they geared up outside the entrance in the downpour. At this point, what we knew of the cave was that it was a paleo-phreatic infeasible that spirals down three short pitches. There wasn't much airflow in the entrance, since the outside air temperature was about the same as the cave air, though it had been drafting noticeably on warmer days.

Chelsea and Philip descended the first two drops and began surveying a nicely shaped tube. They ended at a bold step across a canyon, with a loose-looking block spanning the gap, deciding it would need a single bolt to make it safe. The bottom of the canyon was filled with round cobbles. The top of the passage seemed to continue into a mostly-filled, sediment-choked tube with an opening at the top, a solid lead for the future.

Katie, meanwhile, went to the bottom of the cave to dig. She made short work of a cobble plug with the gad bar, breaking into a streamway. It sumped downstream but continued upstream. Katie came back up to share the good news. They derigged the ropes, removed the concrete screws, and were back to camp around 8:30 p.m.

Meanwhile, Jordan and I explored further up the inlet, first stopping to pull up the prawn traps. We'd gotten enough prawns for dinner, but not quite as many as the previous day. We boated up the inlet into a bay where we tried fishing, but the current was too strong, and we were quickly soaked from the heavy rain.

We headed back to camp, where Jordan made miso soup to warm us up, and I made pineapple and Spam in the pan. Time passed quickly, and before we knew it, the rest of the team returned to camp from A Winkle in Time.

The next morning, groggy from a few nights of minimal sleep, I woke up around 9 a.m. Everyone was sitting out in front of the tent on the rocks, enjoying the sun. We began packing up camp and loading the boat with the first round of gear. Chelsea, Jordan, and I set off a little before 11 a.m., and a few hours later, the rest of the team arrived. Once all the gear was packed into the cars, we picked up the trail-



Jordan hiking in the old-growth forest. Photo by Sara Fleetwood

er, grabbed food and beer at the local brewery, and went straight for the ferry.

This project aimed to establish a foundational inventory and map of the cave system, laying the groundwork for future scientific discoveries in the region. Beyond the immediate objectives of cave discovery and karst mapping, this research held broader theoretical and practical significance. Aerial imagery revealed helicopter logging of old-growth forest near some of the identified cave entrances. Mapping the extent of the karst and cave systems is critical for guiding conservation efforts and protecting the remaining old-growth habitat. With continued logging pressures in the region, fieldwork like ours plays a vital role in documenting and protecting British Columbia's karst ecosystems.

A secondary objective was to analyze the underlying geology to assess the depth and extent of the cave system. The alignment of the detected entrances suggests cave development along a narrow exposure of bedrock, possibly within a previously unmapped marble unit. Although regional geological maps indicate that 15 of the 17 features lie within the Karmutsen Formation — predominantly composed of basal-

tic volcanic rocks — field observations from this expedition suggest otherwise. The caves appear to be developed in marbleized Quatsino Formation limestone (Triassic in age), which has undergone recrystallization but shows limited structural deformation. The entrance to Nimbus Cave is located at the contact between the marble and the overlying basalt. This contact suggests that lava from the Karmutsen Formation flowed over the limestone, leading to contact metamorphism and marbleization. Despite the massive nature of the marble, bedding appears to dip shallowly (approximately 15 degrees) to the east-northeast. Preliminary LiDAR-based analyses indicate that these cave systems may reach depths of 150 to 385 meters and could potentially interconnect to form a multi-kilometer system.

We surveyed two caves, Nimbus and A Winkle in Time, both of which contain continuing passages. With 15 LiDAR-identified features still left to investigate, there remains significant work to be done in the area. We hope to return within the next year to continue the project. We would like to thank our sponsors, the National Speleological Society and the Vancouver Island Cave Exploration Group, who helped make this trip possible.



# SOCIETY NEWS

## NSS Board of Governors Election Results by Anna Pearce, Nominating Committee Chair

We are proud to announce and congratulate Derek Bristol (CO), Jim Minie (TN), and Julian Benson (NY), who were elected to serve as Directors of the NSS. Their leadership and vision will help guide our organization forward and further strengthen our mission.

In addition, the nominating committee and the Board of Governors (BoG) have decided on an appointed candidate.

We are excited to announce and extend our congratulations to Matthew Kok (WI) on his appointment as a Director of the NSS. We are confident that his leadership, experience, and dedication will further advance the mission and vision of our organization, and we look forward to having him join the Board.

## Understanding the Appointed Director Process by Anna Pearce, Nominating Committee Chair

In recent years, the National Speleological Society (NSS) has undergone a structural reform intended to strengthen governance, improve operational efficiency, and ensure sustainability amongst volunteers long-term. One of the more significant changes of this restructuring is the makeup of the Board of Governors. Prior to this change, four directors were elected during the election period; however, with the restructuring, only three are elected, and one is now appointed. With these changes, I would like to provide clarity on how the appointed director role is filled, why it exists, and how we hope to improve the process moving forward. While elected directors continue to be the foundation of member representation, the addition of an appointed director provides the opportunity to target specific needs that may not necessarily be addressed through the election. For instance, if the BoG has a board member rolling off with a deep knowledge and understanding of Robert's Rules of Order and strategic planning, the nominating committee may place emphasis on those skills during the search in order to fill gaps that are critical to the organization.

The appointed position is not intended to invalidate democratic procedures, but rather to complement them. This change ensures that the Board remains well-rounded, balanced, and qualified in addressing the needs of the Society. As with elected directors, the appointed director has equal responsibilities and expectations and contributes to governance, strategy, and organizational oversight.

## Current Appointment Process

The process for appointing a director is as follows:

- The nominating committee identifies areas where additional expertise or perspective would be beneficial. Board members rolling off, and the skills and experience they bring to the table are also factored into the decision.
- Prospective candidates are discussed internally, with consideration given to their experience, alignment with the NSS mission, and ability to contribute in a meaningful way.
- In some cases, informal recommendations from members may also be considered.
- Following the election results, the committee also reviews any candidates who ran but were not elected. If any are considered a strong fit, they are added to the candidate pool.
- All potential candidates are first asked if they are interested in serving in this capacity. If so, we request a submission of both a professional and caving resume.
- The committee uses a ranking matrix to assess each candidate. With Special emphasis placed on skills such as:
  - ◎ Strategic planning
  - ◎ Prior board or governance experience
  - ◎ Financial management
  - ◎ Other skills or expertise that support the Society's mission and long-term success
- Upon independently reviewing candidates, committee members meet to discuss evaluations and narrow the field to two finalists.
- The committee then asks the Board to follow the same ranking process with the two finalists. Upon discussion, a decision is made together with the Board and the nominating committee.

## Opportunities for Improvement

As with any growing organization, we understand that our existing process can be strengthened. Feedback and engagement from membership is welcomed and encouraged. We value and appreciate our members' interest and involvement and remain committed to transparency and ongoing improvement in our governance practices.

## New NSS Office Staff Strengthen Our Mission by Annette Engel, Executive Director



Please join me in welcoming the NSS's newest full-time employees! These individuals are integral to helping me, in my role as Executive Director, improve organizational efficiency, grow membership and volunteer experiences, and expand NSS events and community engagement. Everyone will be at the 2026 Convention, so please introduce yourself and make them feel welcome!



**Michelle Kesler is the NSS's Office Manager.** She oversees daily administrative, communication, and financial operations at the NSS Headquarters in Huntsville, Alabama. The position combines the responsibilities of office management with bookkeeping, including managing accounts, transactions, collections, and deposits.

Michelle (NSS #75835) worked part-time as the NSS's bookkeeper for two years before transitioning into this new position. She has more than 10 years of bookkeeping experience, but more importantly, a strong background in office management, vendor and customer relations, inventory control, operations, and regulatory compliance. Her employment history spans small businesses and nonprofits. Michelle is originally from Utah and moved to TAG 25 years ago. She loves to be outdoors, hiking, water skiing, and traveling.



**Russell Quinn is the NSS's Membership Community Manager.** This position will help the Society meet strategic goals centered around fellowship, membership, and volunteerism. Russell is responsible for the daily NSS membership operations, including the Bookstore, as well as membership re-

newals and general membership needs. He will also work on developing recruitment and retention strategies to improve member satisfaction and engagement. In reimagining this position for the NSS's future, Russell will also coordinate volunteers, a long-needed role for the NSS.

Russell (NSS #76000) brings more than 15 years of experience in human resources leadership, learning and development, and operations. He recently moved to Alabama after living in Nashville. He has a Business Management degree from the University of North Alabama. Throughout his career, he has worked across a variety of industries, including technology, music, and healthcare, developing expertise in building and leading programs that support both employee and volunteer engagement. In addition to his professional experience, Russell holds certifications in change management, human resources, and grant writing.



**Nadya Poon is the NSS's first Event and Engagement Manager.** This is another important, long-needed, and strategic position for the NSS. Nadya's work will involve helping Convention volunteers organize and run Conventions each year, with a portion of her salary coming directly from each Convention's budget. She will also organize and standardize public engagement and educational outreach for the Society, including events held at the NSS Headquarters, at caver events throughout the year, and conferences where the NSS is a participant and/or sponsor.

Nadya (NSS #75950) is an Alabama native and long-time event curator, having managed everything from small community gatherings to large-scale conventions of over 2,000 people. She has had an extensive nonprofit career in both Birmingham and Atlanta, with almost a decade of experience. Her skillset includes vendor coordination, site planning, youth services, volunteer management, content programming and marketing, and overall event logistics. She is passionate about creating events that are fun, foster connection, and create shared memories within her community.

## BOOK REVIEW: SHAPES AND VOIDS

Book By Veronica Chiarini and Jo De Waele, published in Bologna, Italy, 2025. 136 pages, ISBN 978888897003.

On the cover, this book is subtitled “A caver’s handbook for ‘reading’ caves.” Compared to other books that try to provide an overall picture of karst, the formation of caves, and their contents, it is a more slender volume and more likely to be carried along on travels than its predecessors.

Hill and Forti’s seminal work on cave formations, *Cave Minerals of the World* (1997 second edition), was an encyclopedic and scholarly reference book that attempts to describe virtually every known type of speleothem and cave mineral. It was less of a guide to things like overall cave formation processes; rather, it focused more on what came after. My own contribution to a guidebook on cave formations, *The Virtual Cave* (2018), was similarly encyclopedic but focused more on supplying the best possible photos of each type of cave formation with a simplified explanation.

This new book, however, is organized more along the lines of Palmer’s excellent *Cave Geology* (2007). Both first discuss karst and cave formation, the factors that determine the overall patterns of caves, and provide details on such things as speleogens. *Shapes and Voids* also has an excellent section on condensation corrosion and the many effects that it has on cave walls and existing speleothems. Both books approach speleothems in a more narrative style based on their overall mechanisms of formation. So we have sections on formations deposited via degassing of calcite-laden acidic waters (i.e., flowstone, draperies, stals, etc.), evaporites (where deposition results from actual evaporation of incoming water), and subaqueous deposits such as occur in pool basins. This approach is a logical alternative to the encyclopedic approach and lends itself more to something one will pick up and read to gain an overall understanding. At just 136 pages, *Shapes and Voids* is easily read in a few hours, compared to a bit over 400

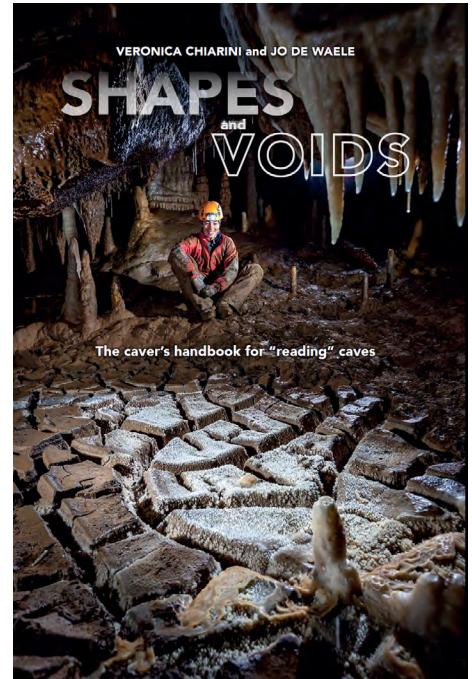
large-format pages in the Palmer book.

Though far briefer in its text, *Shapes and Voids* gets into some fairly heavy-duty descriptions of cave and speleothem formation. This is no surprise, considering that Dr. De Waele is a full professor in geomorphology and also teaches a course in speleology. For instance, we learn that soda straws typically have an inside diameter of five millimeters and that this also defines the typical thickness of draperies. For rimstone dams, we learn that “while the height of the dams will be greater on steep surfaces, the planimetric size of the pools will be inversely proportional to the slope of the substrate on which they grow. In very steep areas, the edge of the pools facing downstream will have a more convex shape....”

A great strength of this book is the selection of full-color photos that the authors obtained from 40 different cave photographers from all over the world. I contributed 10 myself and am in good company with names such as Chris Howes, Philippe Crochet, Kevin Downey, Rainer Straub, and many others whose names you’ll recognize if you follow international exploration or have purchased Speleo-projects calendars.

Overall, I think this is a delightful volume to introduce the world of caves to those new to the sport, but it is of value to even the most seasoned caver. I can see it doing well at showcave gift shops.

My main critiques are more about what’s not included versus what is. There are quite a few formations that are described but not pictured, such as boxwork, chandeliers, calcite rafts, folia, pool fingers, dogtooth and nail-head spars, etc. When it comes to speleothems, a photo is truly worth a thousand words in understanding what we are talking about. Second, while described as a “handbook,”



there is no index, table of contents, or easy way to look something up, unless you know enough to figure out which section to look it up in based on its basic etiology. Most important terms are in bold, and a glossary with those terms might have been useful as well. Some terms could have been explained much better, or even with a diagram, such as “antigravitational erosion” or “heterogenous fracturing.”

And a minor quibble indeed, but whoever translated the book from Italian perhaps invented a whole new term (corbelled stalagmites) for the phenomenon typically called splattermites (or in Palmer’s book, bladed stalagmites). Wikimedia Commons has several dozen images listed in this category, whereas the “corbelled” term only returns human-made arches when googled.

**Reviewed by Dave Bunnell.**

List price 20 Euros, available from both Speleobooks and the NSS bookstore.

## BOOK REVIEW: HER LAST BREATH

Book By Taylor Adams, ISBN: 978-0-06-339413-1

### Easy Reading Caving Fiction:

Cavers naturally give the side-eye to best-sellers that are set in caves; there are just too many ways for a writer to mess up. They can get the vocabulary wrong. They frequently sensationalize. They are just plumb out of their depths.

*Her Last Breath* is a murder mystery/thriller by Taylor Adams. It is set almost entirely in a fictional cave in the Pacific Northwest. You might remember Adams from his best-selling book *No Exit*, made into the 2022 movie of the same name starring Havana Rose Liu and Danny Ramirez.

Adams obviously visited the lava tube caves at Mount St. Helens and an unnamed underground river cave in Mexico (Rio Secreto?) as part of his homework before he sat down to write. Still, as one might fear, Adams gets several things wrong in the book.

For starters, he over-dramatizes 18-inch crawlways that even my fat butt can negotiate. Cyalume sticks provide great lighting. Yet he gets a lot right. The book is meant to be a page-turning thriller and not a speleological dissertation. So if one can excuse things like the semi-miraculous appearance of a rope in a newbie's bag at just the critical instance, it is a good read — even for cavers. On the upside, he does toss in a few standard caving jokes and quotes (“Cavers rescue spelunkers”). Most importantly, and to his credit, he directly quotes the NSS on basic safety protocols.

*Her Last Breath*, published in March 2026.

**Reviewed by Curt Harler**

\$30 US, \$39 CDN

Available on Amazon, in bookstores, and in libraries



### Cave Poem of the Month

#### The Ballad of Minnie Mag

By Debora I. Runyon

On a mapping trip one Sunday morn,

The legend of Mighty Minnie was born.

White in light-

And brave in cave-

By a trick of fate, she was left, forlorn.

There loomed a deep fault; the rock was unstable.

And it caused her to roll in a crack, unable

To be reached by arm-

Away from harm-

And lost her forever in this caving fable.

Her switch turned on; her batteries bright;

She mellowed the dark into day from night.

Without further endeavor-

She'll stay there forever-

Buried in guano from rats, bats, and mites.

If only we'd asked Mr. Lang Brod

To give us assistance in our doleful ode.

To sketch a quick map-

To wade through that crap-

To save Minnie from that deep, dark abode.

# SPELEAN SPOTLIGHT

## OF MICHAEL MANSUR

BY APRIL GOCHA



### How did you first get interested in caving?

*Mike:* It all began in 1968 — I was 14 years old, and my father asked me to go see a cave in Vermont where I grew up. I remember holding a carbide light in my hand and going into this cave that wasn't very long, but it certainly got me interested. I used to look at sites like Carlsbad Caverns and dream about being out there. Then in the 1970s, I found some guys considering starting a Vermont cavers' association. I hooked up with them and started getting involved in local cartography and exploration around Vermont. Eventually, I became more involved as far as purchasing equipment and learning vertical. In 1986, I participated in the Carlsbad Caverns Restoration Field Project Expedition and learned how to do restoration. The following week was the 1986 NSS Convention in Tularosa, NM. Although the convention was a huge rain-out, I met a couple of guys from Texas, including Bill Bentley, and they kind of took me under their wing. We went to a little diner in Tularosa, and they ordered burritos. Being naïve about the cuisine, I said, 'What's a burrito?' — for 40 years, I've been hearing that joke! That trip got me going, and I started coming out every year for the expedition.

### You founded and now lead the Cave Formation Repair Project — how did that get started?

*Mike:* I started doing more caving projects, including survey trips and a helium air flow study in Lechuguilla, in addition to projects with the US Forest Service. They asked to do an impact assessment of heavily traveled caves. We came up with criteria for how to assess damage and impact from human activity, and I came up with a color code system for the assessment map. The purpose was to show the current state of these caves, and the maps informed ongoing restoration projects. After two years, I went back to the caves and did another assessment. This time around, the color coding on the maps revealed that the damage had significantly shrunk, showing how important it is to do restoration work. It was a very dras-

tic change, which was great to see.

I took a break from caving in the early 2000s because my wife and I bought a piece of land and built a home, which was destroyed by a fire a few years later. I didn't start caving again until around 2015. Aaron Stockton, who was a Cave Specialist with the US Forest Service, asked if I could repair a stalagmite that had been broken for about 10 years. I said I would give it a shot and contacted Jim Werker and Val Hildreth-Werker to find out how to do the repair. I took a couple of people with me on that first trip into the cave on June 2, 2018, and we drilled a hole into the formation and put a steel bolt and epoxy in it. That was really successful, so the Forest Service found more stuff for me to do. Some caves had major damage, with several hundred broken formations. I had various projects going on throughout that first year, and when Aaron asked me what I wanted to call the project, I came up with the Cave Formation Repair Project (CFRP).

The next year, the Park Service asked me to repair some more broken formations. One was a formation that broke when a kid had thrown a rock at it from the visitor trail. The formation was 19.36 feet off the ground, and the piece was 33 inches long and broken into two pieces. I thought that if we could get up to the formation, we could probably fix it. I had been inventing various tools to make the repairs; the most famous of which is the Stalactijack — a spring-loaded PVC-and-stainless-steel device that you can place under a broken formation to support it during repair. We drilled holes in the two broken formation pieces and put in a stainless steel bolt to secure them together. I made a 13-foot-long Stalactijack that was 0.75-inch all thread and bolt enough to reach the ceiling. It needed to be stiff enough to reach the floor, so I used rigid metal conduit so that it wouldn't bend. We used an extension ladder to bring us up close to the ceiling. I drilled a hole in the ceiling and coupled the formation using the Stalactijack, and we used guy wire to secure it to the visitor trail railings. The cover

of one of my books shows us on that extension ladder, reaching up, making the final connections.

### Any particularly memorable cave repairs?

*Mike:* In 2017, we repaired a broken formation in Carlsbad Caverns caused by Brad Pitt's crew during a photoshoot for GQ magazine. One of the crew members hit a four-foot-long stalactite and broke it. It was originally repaired by someone else, not CFRP, but unfortunately, it failed and broke again. It was an important repair because it's on the main route for visitor tours, right above the trail, and it's a talking point. So CFRP tried the repair again — instead of just epoxying the broken formation back together, we drilled holes in every section and put in stainless steel rods to fortify all the joints really well.

### Can you comment on the project's impact?

*Mike:* In 2024, we actually completed the 1000th repair in the Queen's Chamber in Carlsbad Caverns. That was a huge deal — who'd ever thought that we would get that far?!

I've taught people across the country to do repairs, and I also host a repair workshop at the annual NSS Convention. In the workshop, people learn the process for doing repairs so they can do them on their own. I use wood and concrete formations that I've made and assembled in workstations so that participants can use the devices I invented and see how they work. It's so delightful to see people get involved with cave repair projects.

In last year's workshop in New York, one woman was really interested in broken formations. About a month later, she emailed me to say she's a filmmaker and is interested in making a documentary about our project. We had originally planned it for November 2025, but in October, I slipped and fractured two vertebrae in my neck on a caving and canyoneering trip in Australia. So we had to reschedule filming. We rescheduled and completed filming in March 2026. That was quite an honor.

### How did you discover what would work to repair cave formations?

*Mike:* They are all born from necessity. I have an associate's degree in mechanical technology and worked at Intel for 16 years, so I have the background and ability to fix things. In fact, my father and grandfather were pretty much inventors themselves. Each process, like repairing a stalactite or a soda straw, requires a different level of support, so I just came up with different ways that would work and was determined to make it work mechanically. The first stalactite repair I did was in Little Manhole Cave for the Bureau of Land Management. It required supporting an approximately two-pound formation about three feet in the air. People used to do this with things like bungee cords, but I knew that bungee cords contain dye that can stain the formations. So it had to be something like stainless steel or PVC. I changed the shower curtain at home and noticed the retractable spring-loaded curtain rod. I thought that could work in a cave, so I made a piece in my workshop and played around with it. One was an all threaded, and another was spring-loaded. The all thread took too long to thread up and down; the spring-loaded version could be set up and brought down in seconds.

Before I invented the Speleclamp, people would hold broken formation pieces in their hands to drill them, which is not very safe. So I devised the Speleclamp, which clamps any-sized piece in place using stainless steel and PVC, so you can safely drill the formation. If you have two short pieces, you can put them in a Speleorack so that gravity holds them in place while they cure. The Speleocup is a smaller version used like a stainless steel wire or rubber bands to hold a broken formation in place. The Speleorake is used to rake broken formations out of water, so that became speleofishing.

### You've dedicated a lot of yourself to caving — what does caving give back to you personally?

*Mike:* The satisfaction of seeing human impact become non-existent again, or at least nature healing itself. There have been many times that we've repaired a formation and came back to see a drip at the bottom of it. It is so hugely satisfying that the formations are recovering. And sharing that information so people can go do their own projects, I think, is so necessary, because so many people notice damage and just say, 'Oh, something's broken, too bad, so sad.' We can make a difference and heal it or repair things so that new visitors can see such beauty. It is so satisfying to see younger people learn something and

generate that enthusiasm that I've had over the years. I'm going to be 72 years old in a couple of months, and I want to have some means of passing this along.

### Are there any cave repair projects that have stumped you?

*Mike:* Nothing yet. The hardest are the ones far off the ground, like in Carlsbad Caverns, and formations that are really huge, like over 100 pounds. But I'll find a way, even if I have to use a hydraulic jack. The epoxy has a bonding strength of 3000 PSI — the surface area of a formation, maybe a foot in diameter, is hundreds of square inches, so the epoxy plus vertical stainless steel bolts provides a lot of strength. I haven't tested anything over 60 pounds to see how long the epoxy lasts, but I know a 55-pounder we did in 2019 is still up in Spider Cave.

### Do different cave environments require different materials?

*Mike:* We started with a recommended Buehler product used by museums as an archival epoxy. But it requires a completely dry environment, has to be tightly pressed together, and takes a long time to cure. And the average person could not afford that product for cave repairs, because it costs \$450 for just a gallon of epoxy. I'm also a woodworker, so I have an epoxy that I use on wood for salad bowls, pepper grinders, and pens. Once it's cured, it's

safe to handle in any form, so I started using that epoxy in caves. It cures much more quickly (within an hour), is moisture-resistant, and is only \$10 on Amazon. So I've used that product successfully for about seven years now. We also use Super T superglue for quick repairs and smaller formations. I built a device called a Soda Straw Stand with a little pin that holds the formation in place while it cures. Another device we're using from good 'ole Amazon is a butane heater to help accelerate curing. It works like a charm — you put two superglued pieces together, place this heater about an inch away, and in ~15 seconds, you can fix a soda straw. It's wonderful. People are carrying that in their packs now, the butane heater and a small tube of Super T, because it works so well to fix smaller formations quickly. I've had these epoxies vetted, and both are considered environmentally inert (stable) and pose minimal risk. I've tested them outside a cave, when there are lots of insects around, to make sure the fumes are not toxic.

### If caves could speak, what do you think they would say to you?

*Mike:* 'We feel rebuilt, we feel rejuvenated, we feel ready to face humanity again!' I just love that seeing a drip coming off a cave formation is its way of telling us thank you — it's like a cave kiss.



FILM AND SUPPORT CREW HEADING TO THE MUSIC ROOM IN CARLSBAD CAVERNS

# ELLISON'S DAY

BY BENJY VON CRAMON

To a caving audience, Ellison's Cave on Pigeon Mountain in the heart of TAG needs no introduction. What does require attention is how we go about preserving this key piece of caving history. To that end, historian (and historic) Marion O. Smith wrote *The Exploration & Survey of Ellison's Cave, Georgia*, in 1977. To that end (and then some), Mike Fischesser updated the book in 2023, inviting many of the early explorers to contribute their stories and adding lots of photography and a large map — an incredible effort that culminated in a fantastic reunion at the Historic Entrance.

And then came Ellison's Day, which felt historic in itself. The Bank of LaFayette Community Center was packed. Having seven of the original explorers in one room, each in turn detailing how it worked back then, cavers quietly networking to organize their assault on such a significant discovery, we all knew it — how lucky are we to be here.

And how lucky were those early explorers to be there. From Bill Steele's comment on both sides of that equation, "It was great to reminisce out loud, and say that participating in the exploration and mapping of Ellison's Cave in the late 1960s into the 70s propelled me into a lifelong interest in leading cav-

ing projects, especially Proyecto Espeleológico Sistema Huautla, a vast cave system in Southern Mexico I first heard about while caving in Ellison's Cave, Georgia."

When someone cut the lights, we all stepped into a time machine, absorbing the dated look of the photography from the original Ellison's slide presentation. Alan Padgett can tell a story, so you can imagine what he did with this particular one: a cave dreams are made of, discoveries that shaped the trajectory of many young, spirited lives in a land called TAG.

Luckily, you need not imagine, a front row seat is yours to view the event in its entirety.

Visit the website [<https://sites.google.com/view/ellisonscavehistory/home>] to learn all things Ellison's Cave History, get information on where to buy the updated edition of Marion's classic book, and view the Early Explorers panel discussion.

In this age of TikTok videos and Facebook reels, many will question if anyone has the attention span to endure nearly three hours of anything, no matter how interesting the content. Don't believe it. If it's good, people don't watch the clock. I'm surely not alone in saying how the time flew experiencing Ellison's Day. Cavers know what a special thing it is, certain grotto meetings, other events when cavers share their passion. This was more than a panel discussion, more like a family reunion of sorts, a truly organic exchange between caving buddies to remind us what's yet to be savored, as much as knowledge of amazing caves, and that is our shared experiences underground.



June 29, 2024, Annual Meeting of the GSS - seven of the original explorers of Ellison's Cave share with a packed house (from left to right): Mike Hicks, Ron Aycock, Della McGuffin, Jim Wilbanks, Dianne Cousineau, Bill Steele, and Allen Padgett.

# The Exploration & Survey of Ellison's Cave, Georgia

The Exploration & Survey of Ellison's Cave, Georgia was first compiled, written, and published in 1977 by Marion O Smith. This edition, by Mike Fischesser, is an update to the original version. Marion Smith's original text is included, in its entirety, and includes pictures and stories from cavers and surveyors both past and present.

Available through NSS Book Store:  
[ellionscave.org/nss](http://ellionscave.org/nss)  
and  
Inner Mountain Outfitters:  
[ellionscave.org/imo](http://ellionscave.org/imo)

Photo by Jacob Lieber

# REMEMBERING — CHARLES MALIN NEISWENTER

## A CAVER'S TRIBUTE

NSS number 63491 is OFF ROPE.

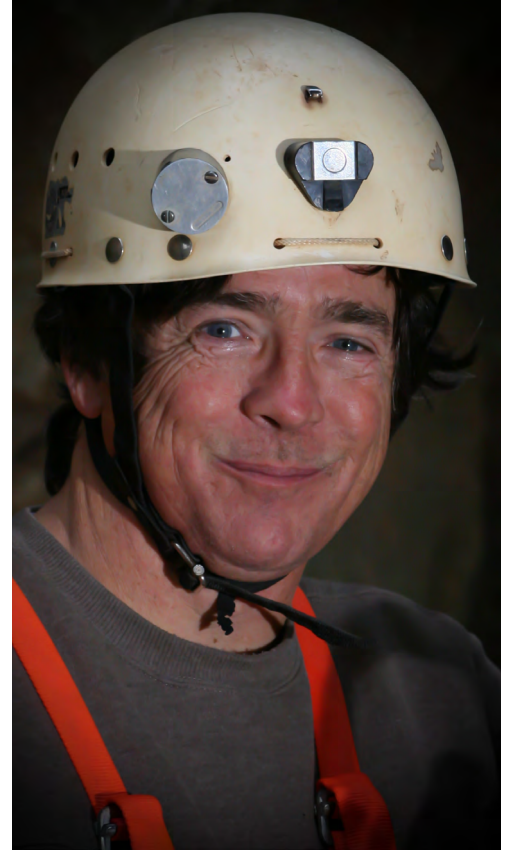
Mr. Charles Malin Neiswenter, age 65, of Dallas, Georgia, passed away on Saturday, January 3, 2026, at Wellstar Paulding Hospital.

A relatively new caver yet very active, Charles was born on August 2, 1960, in Brooklyn, New York, to Mr. George Henry Neiswenter and Mrs. Louise Mary Cullen. He was a proud veteran of the United States Navy. He worked as a ground system engineer for Viasat. He was a loving husband, father, grandfather, brother, uncle, and friend.

Charles entered the caving world to fulfill his soon-to-be wife's adventurous and outdoor conservation enthusiasm. He quickly became integral in the missions of the Gadsden Grotto and the NSS. Since 2010, he served as the

Grotto vice chair and secretary/treasurer. Charles was an active contributing member of the NSS, SCCI, Alabama Cave Survey, and the Georgia Cave Survey with a PADI open water diver certification. With the background of Stephen's Gap double waterfall, Shanon and Charles were married in 2013 on rope in full tuxedo and wedding gown.

Charles is survived by his wife, Shanon Neiswenter; son, Collin Randall Neiswenter; son, Daryl Morgan Neiswenter; daughter, Brittney Richey (Michael Murkerson); grandchildren, Izzabeya Huff, Lillian Murkerson, Kenneth Murkerson; brother, Eric Neiswenter; brother, Fred Neiswenter (Cheryl); brother, George Neiswenter (Brenda); sister, Susan Neiswenter; nieces and nephews; other extended family and friends also survive.



## 2026-2027

### Charles W. Maus Fellowships in Karst Studies

Doctorate Fellowship	\$20,000
Master's Fellowship	\$10,000
Undergraduate Scholarship	\$6,000



A broad range of karst and cave related research is considered for funding.  
All applications are due on or before the June 1, 2026 deadline.

Information on how to apply for graduate fellowships and undergraduate scholarships may be found at [www.caveconservancyfoundation.org](http://www.caveconservancyfoundation.org)

804 - 798 - 3432



The Cave Conservancy Foundation is accepting grant applications to support cave and karst related research, conservation, and educational projects.

Large grant applications must be submitted before the March 1 or October 1 deadlines.

Grant requests for less than \$1,000 may be submitted at any time.

Information on how to apply for grants may be found at [www.caveconservancyfoundation.org](http://www.caveconservancyfoundation.org)

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If your grotto or region is looking for great caves to explore in the Virginia area - look no further! RASS Grotto can offer a complimentary place to camp in Bath County, VA - where more than 100 caves are located within an hour's drive. We support cave conservation and education. Some COVID restrictions still apply. Contact Richie Ellison at [rellison1120@gmail.com](mailto:rellison1120@gmail.com)

The Richmond Area Speleological Society (RASS) supports cave conservation, education and research by offering grants to assist projects aligned with these goals. To receive a grant request application please email us at [rass-grants-committee@googlegroups.com](mailto:rass-grants-committee@googlegroups.com). Applications reviewed quarterly.

**New WV Cave Books:** Bulletin 28 — The Caves and Karst of North-Central Greenbrier County, WV by William Balfour, Bert Ashbrook, Gregory S. Springer, & George Dasher; June 2023, 198 pages, 214 caves, 57 maps, 106 photos. \$30 color. Bulletin 29 — The Caves and Karst of Central Greenbrier County, WV by William Balfour, Gregory S. Springer, & George Dasher; January 2024, 242 pages, 208 caves, 96 maps, 170 photos. \$30 color. Contact: WVASS, Attn Nick Schaer, 13 Sleepy Creek Rd. Hurricane WV 25526

Complete cave photography outfit: Sony Alpha 6500 camera with Sigma 18-50 f2.8 lens, charger, extra battery. Camera instruction book by David Busch. Two Godox TT685 II strobes and radio remote slave unit. Very good condition. All fitted in foam in waterproof Pelican box 13.5x12x6 inches. All for \$800 + postage. Dick LaForge, [dick.kathy@yahoo.com](mailto:dick.kathy@yahoo.com).

Personal Collection of cave items for sale in part or all. Bill Cotrofeld, NSS 3986L. 150+ books; 200+ vintage cave postcards; 100 vintage cave brochures & booklets; some souvenir items; 20+ carbide lamps; early battery headlamps. Ask for a complete list of items. PO Box 235, East Arlington, VT, 05252. 802-375-6782, 10am-6pm.

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June 2026

