

THE DEATH CORAL CAVER

NUMBER 8

DECEMBER 1998





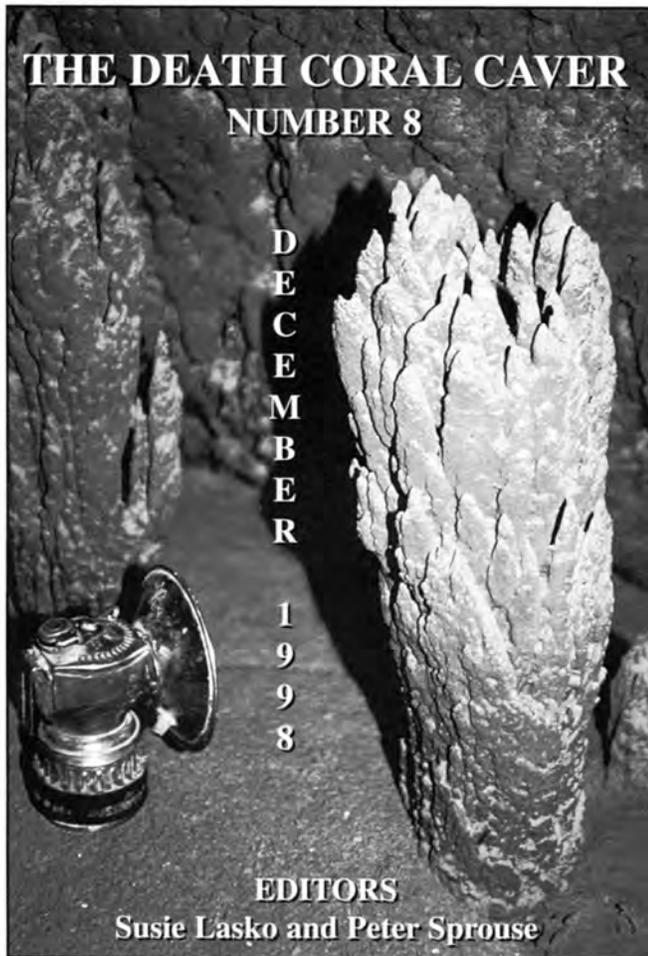


photo by Terry Raines

ASSISTANT EDITORS

Miriam Murtuza and Rae Nadler-Olenick

DESIGN AND PRODUCTION

Susie Lasko

OFFICERS

President: Peter Sprouse

Board of Directors: John Fogarty, Troy Lanier
David McKenzie, Dale Pate, Peter Sprouse

The *Death Coral Caver* is published by the Proyecto Espeleológico Purificación, a non-profit organization incorporated in the State of Texas. The PEP is dedicated to the study and exploration of the caves and karst of the Purificación Karst Region in the states of Nuevo León and Tamaulipas, México. Articles from the *Death Coral Caver* may be reprinted in other not-for-profit publications with proper attribution. Any material relating to the Purificación karst is welcomed for publication. Membership in the PEP is available to interested individuals who share the project's goals of careful caving. Annual dues are \$15 per year for individuals. Corporate or institutional memberships are \$100 for a five year term. Members will receive newsletters as they are published and may vote in elections of the Board of Directors.

Proyecto Espeleológico Purificación
P.O. Box 8424 Austin, Texas 78713 USA

EDITORIAL

The logging trucks roaring by were a bit disconcerting. These weren't the mid-size trucks I was used to seeing with short logs stacked sideways on the bed. Rather these were full-size semi trucks loaded with complete trees. They seemed to be coming off the gravel mountain road in an endless stream. On the side of the cabs I could see the name of a plywood company up on the border, presumably where these pine trees were headed. This was not our beloved Purificación karst, not yet anyway, but rather Chihuahua in the Sierra Madre Occidental. It wasn't on karst either. What happens when karst is clear-cut? Visions of passages and entrances plugging with sediment come to mind, of rapid soil loss and of clear streams turning brown. Visions of balanced ecosystems tilting away from rare and delicate cave fauna.

Fortunately, this is not happening yet, for the tree cutting at Purificación remains as it has always been, selective and low-key. The logging roads are still too steep and twisty for large trucks, and the legacy of the community-based ejido system remains in most areas. But things are changing in México, and the oil revenues of the past may be a long time in returning. Unlike some of the other mountainous areas, Purificación has not yet been named as a protected area by the government.

And why should it be considered special, among the many other forest and mountain areas? Most people have only seen what it looks like on the surface. They haven't heard their voices echo off the high walls of the Netherhall, or followed the distant murmur of water to stand on a balcony over the grand horseshoe bend of the Nile. Emerging into the sharp brightness of the Infiernillo entrance after a week of exploring new territory, you know there is a whole vast world on the underside of the coin. As cavers, we have that knowledge. But what to do with it? Nothing, is the standard procedure. Keep a low profile, and hope the world doesn't notice the caves, and thereby ruin them. Often this strategy works, or at least postpones change. But ultimately civilization moves in, and then we have to choose whether or not to step up to defend, and thereby reveal, the world we know. Peter

PHOTO CREDITS

FRONT COVER: Charley Savvas sets a rebelay with the Hitachi hammerdrill after the final lead climb in Sótano de San Marcos. 1998 photo by Peter Sprouse

INSIDE FRONT COVER: Bernhard Köppen descends Tug-O-War Well in Sima Chupacable. 1997 photo by Peter Sprouse

INSIDE BACK COVER: Bernhard Köppen displays the cost of true dedication after reaching the bottom of Sima Chupacable. 1997 photo by Susie Lasko

BACK COVER: Cornish caver Pete Hambly prepares to measure the depth of Pozo de Cornualles. 1997 photo by Peter Sprouse

FOLD OUT: Tug-O-War Well, Sima Chupacable. 1997 Photo by Peter Sprouse

TABLE OF CONTENTS	
Sotano de San Marcos	2
Winter '97 Expedition	6
Trip Reports	16
A Canuck's Perspective	21
PEP Membership	21
Cave Descriptions	22
Speleometry	28
Acknowledgements	28



Vertical beds of chert alternate with limestone in the Chert Room of Sótano de San Marcos.

SOTANO DE SAN MARCOS

by Tim Stich

Photos by Peter Sprouse

In 1984 Charles Fromén took Peter Sprouse and crew to Sótano de San Marcos at the southern end of the Purificación area. What they found was impressive, clean-scoured passages, interesting folds in the bedding planes and many good leads that would need checking in the future. It was our job, on the spring break trip of 1998, to push those many leads. The map of the cave was tantalizing with unusual twists and turns in the passages and more dome leads than we could push in a week.

We all converged at the Peter and Susie's house before noon on March 18. The gray and red Power Wagon bus got a thorough cleaning in the driveway, and our small group of cavers, Susie Lasko, Peter Sprouse, Charley Savvas, Maria Tehrany and I piled into the metal beast. We successfully lobbied

Susie for an ice chest and this too was added to the complement of essential gear. This was to be my first bus trip, and I was eagerly looking forward to spacious seating and long naps in the dull South Texas flatlands as well as relief from the usual driving chore. Happily, it was even better than I imagined. In San Antonio, we picked up our insurance and Linda Palit. Upon arriving in Reynosa, we exchanged dollars for pesos and got entry visas.

In the morning we met with the Conrado Castillo comisario, Mario Pineda, in Padilla, then with Juan Ledesma in Victoria. We visited with Dr. Paco García, a professor of biology at Victoria Tech, and gave him a map of Sotanó de San Marcos showing the location of the sumps where he might find cave fauna.

On the way up the road to our destination, Charley spotted some trucks across the ravine. It turned out to be Jean 'Creature' Krejca, Dean Hendrickson, Tom Illife, Steve Taylor, Jim Brown, and others at Las Peñitas springs west of town. They were checking a short municipal water supply cave for catfish. Jean showed us the survey notes of Ojo Encantado with some impressive passage dimensions. Then, some of the divers with her started kitting up to dive the spring. Saying goodbye, we cruised west up the mountain, stopping briefly at Altas Cumbres and peeking into Sótano de Altas Cumbres No.1. At La Reforma we met with Anastasio Urbina and Pedro Pecina Medina, the comisario. Some mention was made that the trip might not happen because of problems with permission. Helpfully, Pedro said we should talk to the environmental director in Jaumave, so off we went. The environmental director, Arabella Farach, was mainly concerned with the looting of flora and fauna in the valley. Clearly that wasn't our lot, so she gave us her approval and things were good again for the trip. Peter got the key to the gate accessing the fields to the north, and we set off for San Marcos around nightfall. The old road was abandoned and overgrown and at times we had no road at all. But in the end, we were able to drive to within about three kilometers from the cave. We camped next to a dusty stock tank near the mouth of the canyon. A bit into the night, some federal game wardens came by, having been notified of our presence by Arabella. Peter talked to them by the fire our guides had made near a Joshua tree.

Early in the morning, we awoke to find that Anastasio's son Rogelio had arrived from La Reforma to help us carry gear to the cave. This was fine since Peter had negotiated a good wage for the work they would be doing. I crammed my PEP pack with gear, a fleece blanket, a foam pad, a small jacket, a stove and assorted foodstuffs. I was going to do the one-night cave camp without a sleeping bag. The hike up to the cave through some nasty brambles and cactus took an hour or so. Upon arriving at the entrance to San Marcos, Anastasio took Peter 200 meters up the arroyo and showed him a cave which he named Cueva de Anastasio. It was a steep 50 meter scramble up the right wall of the canyon. The cave was generally walking-sized with a blackened ceiling. There were vampire bats in it and some pictographs at the entrance. It went about 70 meters to a belly crawl. He also showed Peter a tiny hole in the arroyo. Anastasio said that it blows air and steam and that at times water sinking 2000 meters upstream spurts out there.

Back at San Marcos, Charley and I started rigging the entrance drop; I carried some bolt gear while Charley did the actual drilling. The 60-meter drop just inside the entrance was rigged with four rebels. We all quickly descended the pit with our dangling duffles. Just a short distance from the bottom of the drop was a room with a gravel floor. This was home.

After setting up our camp, we split into two teams. Susie, Linda, and Peter would work leads on the near side of the second drop, while Charley, Maria and I would head for the bolt traverse at Flat-rock Canyon.



Thin sheets of chert slice through the main passage.

Unfortunately, Maria was complaining of an unknown ailment that included a fair amount of nausea. When we entered the crawlway above the 15-meter second drop, it became painfully clear that Maria was not well. Not being one to complain, she still insisted on coming along on the bolt traverse, but at the bottom of the second drop she thought better of that idea and made her way back to camp

to rest. Pressing on, Charley and I hauled our over-stuffed cave packs through the passage leading to the windowed balcony above Flatrock Canyon.

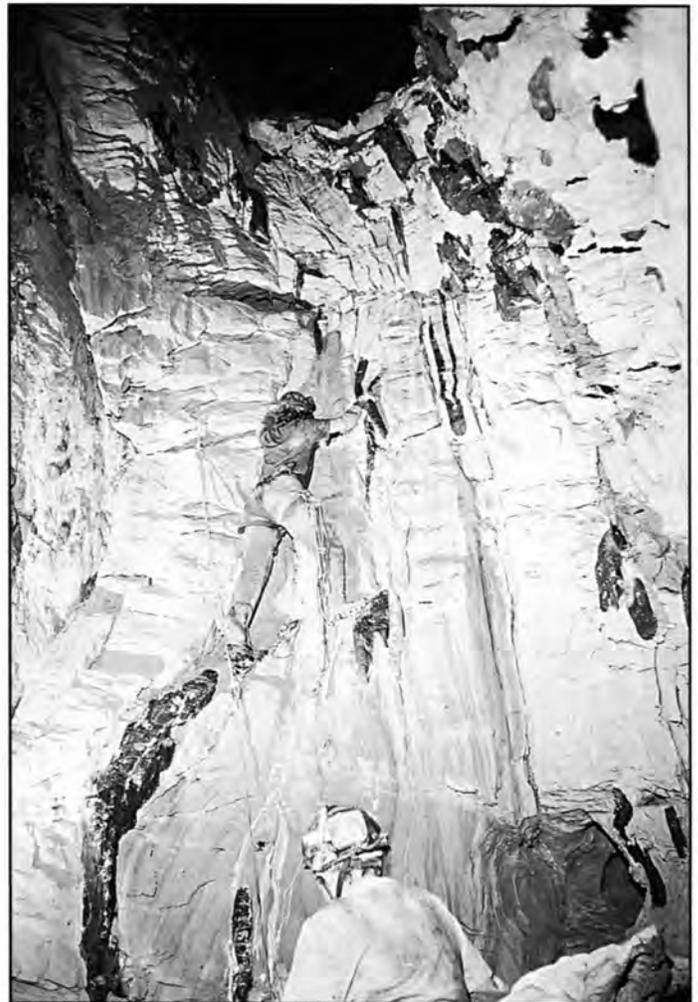


Charley joins Tim to push the new extension beyond Flatrock Canyon. Bolt traverse can be seen on the right wall.

On the other side of the pit was the lead, a dark hole at the same level as the window in which we stood. Charley, armed with his cordless power drill, put in 14 bolts spaced about 1.2 meters apart. I belayed Charley during this climb with a full size rack, which was less than elegant. About an hour and a half later, he was on the opposite window ledge rigging a rope down to the floor of the pit. A hole in the floor went into blackness and the rest of Flatrock Canyon. I rappelled to the bottom of the pit and then climbed up the rope Charley rigged to join him. Once up the other side, we went over the saddle between the previous pit and another one. A short, sporting free-climb above led to a continuation without our rigging more rope. The handholds were plentiful but brittle, and several broke off as I climbed the 4 meters over the gaping pit. Charley and I then went up a tricky traverse into a new room

not more than a few meters from the climb-ups. A huge ceiling towered above, and yet another hole in the floor showed more possible leads. It was around one a.m. so we headed back to camp to get dinner and some needed sleep.

Peter, Susie and Linda first went to the drop in the Guano Express. Upon entering this passage there was a noticeable rise in temperature, likely due to a lack of airflow and the presence of a vampire bat roost. Susie drilled a bolt to descend the 12-meter drop. As Peter expected, it led to a sump, a diveable one. No fauna were observed in the water except for two bats that panicked and fell in. Returning to the main passage, the team headed farther into the cave. At Moaning Rock Dome they thought the climbing lead looked good, so Susie decided to have a go at it. Linda belayed while Peter shot photos. Susie made it up and the rest of them followed.



Linda belays Susie up the unexplored Moaning Rock Dome.

The next climb looked good as well, so Peter gave it a try and got partway up, but he left it for another time with more gear.



Susie sets an anchor in the vertical beds of Moaning Rock Dome.

the mountain pass, and it was a slow drive down to Cd. Victoria. We decided to stay at Hostel del Encantón for the night, even though they had no hot water. Avoiding the too-gringo 70's decor of Daddy's restaurant near the hotel, we found another aesthetically-pleasing restaurant still open at that late hour.

For me, the combination of old pals, the bus, the cave and everything else made for one of the best trips I have ever been on. We surveyed much booty. We left much booty. Nobody hurt their booty. We all did our part despite evil food poisoning and blood sucking bats. We all still seem to be able to tolerate the sun and mirrors are continuing to reflect our images. Our tooth length and skin tone are not unusual.



Cow Crawl near camp in Sótano de San Marcos

On March 21, we awoke and checked each other for vampire bat bites. To my mild disappointment, no one had gotten bitten, at least no one admitted it, so the trip report wasn't going to be as unusual as I had thought. Maria stayed in camp, hiding from the bats under sleeping bags, while the rest of us headed for Flatrock Canyon. Linda, not feeling well, turned back there, and the rest of us went on up to the high lead. Peter grinned and came up with a name for the farthest chamber we had explored: the Hall of the Blood-Sucking Smurfs. I belayed Charley on another bolt climb that went straight up. We reached a collapse area that was too dangerous (to me) to dig from underneath, so I let Charley do it. He dug and then affirmed my opinion. Susie and Peter got the survey caught up, then we headed out. We all packed up camp and filtered up the big drop.

Anastasio and Rogelio were waiting for us at the entrance. We arrived back at the bus after dark and drove them back to La Reforma. Thick fog set in on





The El Abra Formation is exposed on the ridge-top at Pizaña Pass. Sima Chupacable is formed in this same homogenous reef limestone. 1998 photo by Peter Sprouse

WINTER EXPEDITION 1997

A Beginners Guide to Honeymooning with the PEP

by Pete Hollings and Jill Taylor-Hollings

A wise man once told us that there are two essential ingredients to a successful honeymoon:

- 1) Do not take your parents.
- 2) Make sure your sleeping bags zip together.

So, as we headed south this December, it seemed we were doing everything wrong. Then again, the same man said that you can choose your friends but not your relatives. Clearly, he had never heard of the PEP and the extended family that centers around Austin, Texas. So flouting convention, we decided to spend our "official" honeymoon down in México. This idea was especially impressive considering that Jill had never been caving before or even met any cavers.

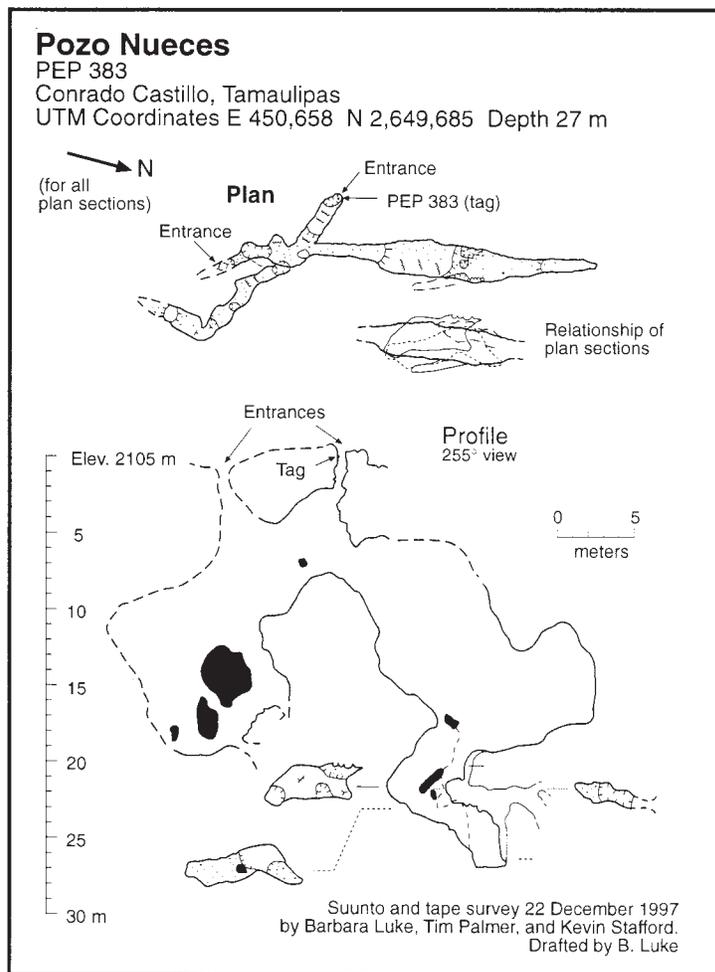
Following tradition, most of the family rendezvoused in Austin at Mother and Father's house (a.k.a. the home of Susie Lasko and Peter Sprouse) before heading down to the PEP caving area in México. This year, the house was more full than usual due to the large number of international cavers who had taken up temporary residence. Even so, Mother had reserved the "honeymoon suite" for us and had even gone as far as to stock it with a few items essential for newlyweds.

Most of us spent Friday, December 19, shopping and watching Charley Savvas install the new 'pumpkin' (rear end) on the Great Pumpkin, his orange Power Wagon bus. By evening, everyone was nearly ready, but in order to speed things up Father decided we should split into mini-convoys. We loaded our stuff into Brother Kevin's truck and headed south with Bev Shade and Barbara Luke. Despite nearly losing each other five minutes after starting, we eventually straightened everything out and headed south. We crossed the border at Reynosa and made our way up into the Sierra Madre Oriental, arriving in Conrado Castillo late on Saturday afternoon. Gill Ediger, Bernhard Köppen, Jean "Creature" Krejca and Vivian Loftin had arrived a couple of days earlier and were already at work modifying the amazing new extension to the PEP fieldhouse. Soon after we arrived, Bill Mixon pulled up with the British contingent (Dewi Lloyd, Katrina Hawkins, Tim Palmer and Pete Hambly) and, of course, Silly the Saluki.

On Sunday morning Gill took us on an entrance orientation tour which fortunately coincided with the arrival of the Great Pumpkin and its cargo of cavers. Within a few minutes of arrival, Charley was putting on his cave gear and joining Bev, Kevin, Bernhard, Viv and Creature on a trip to the bottom of Cuchilla to map some of the leads above the latest 'terminal' constriction and enlarge the Hurricane Crawl. The rest of the Pumpkin's passengers were Canadians Dale Chase and Bill "Carlos" Nasby; Americans Melonie Alspaugh, Scott Scheibner and Cyndie Walck; as well as the Irish cousins Patrick Brady and Stephen Mulhall. Peter, Susie and Daniel Green from Canada followed behind in the Trooper.

The next day, caving began in earnest as our master builder (Gill) needed more lumber to complete the renovations. A couple of trucks headed up towards Revilla to check a few leads. Jill and I, along with Scott and Bev, followed Father on a trek up the hills and down the valleys in order to check a lead he had identified on the aerial photos. Unfortunately, this proved to be a shadow. However, the cavers we left scattered behind us had better luck. Barbara, Kevin and Tim mapped Pozo Nueces in a karst pinnacle near the border between Tamaulipas and Nuevo León, while Creature, Katrina and Viv mapped a small pit below Revilla, Cueva de la Araña Verde. We continued up to Revilla in our quest for lumber but were only able to rummage for scraps that could be used to plug the gaps that had appeared as the new boards on the field house dried. Back at camp we learned that Charley, Dewi,

Pete Hambly and Melonie had mapped two pits across the valley from Conrado Castillo on the La Canoa hillside, Pozo de la Gran Araña Blanca and Pozo de Barbie Bailando. In addition, two teams headed into Entrada del Viento Alta where Susie, Dan and Bernhard tackled a lead climb which led to new passage that soon became wet and too tight. Meanwhile, Cyndie, Steve and Patrick mapped some leads at the top of an old, fixed rope. While all this was going on, Dale and Carlos poked around in a dig in Entrada del Viento Baja, stopping when they encountered roots.



We had two main objectives on Tuesday. While half the group headed off to the Valkyrie River to map some leads identified earlier in the year, nearly everyone else headed into the Brinco entrance and down to Batwing Boulevard to continue pushing this extremely promising lead. Dewi, Katrina, Melonie and Pete Hambly went as far as the World Beyond for a photo trip, while Charley, Tim, Kevin and Dan tackled a series of lead climbs above Batwing. They eventually turned back at a point where the passage changed from vertical to a 45° ramp. Viv, Barbara and Bernhard surveyed after

them, completing a loop up and down the two dome-branch leads found on the Camp VII trip in 1996. The Valkyrie River crew made their way through the French Entrance, past the Attic Room (the highest point in the system), on to Kerrplunk and through the very awkward (for a Hollings-sized individual, anyway) Grimbly Thrutch into the Valkyrie River.

awhile before leaving it going-but-small, in order to check a more promising lead farther upstream. This passage, the Embouchure Passage, had been identified by Peter on an earlier trip but not pushed since he dropped the hammer that was needed to remove some cave cancer. With some hammering and a lot of digging, Susie was able to get through a mud-filled crawl into nice canyon passage.



The Valkyrie River: Its source is still unknown.
1997 photo by Peter Sprouse

We made our way downstream through a couple of nipple-deep wades until we reached the sump. Here, a brief, low-air-space duck took us to the start of the sump bypass where Cyndie took Steve and Patrick to one lead, while Creature, Bev and Scott tackled a virgin crawl. Cyndie's lead started at a hole in the floor which they descended on a hand line and led to a low, wet crawl that they mapped for 70 meters before stopping at a low airspace. Creature's crawls also pinched out but were close enough to the other group that they could hear them moving around below. Peter, Susie and I returned to the Valkyrie River and took a few photos before heading into a side lead. We surveyed for

With some more digging. Father was through and later I was able to follow. We mapped the passage to a sand-filled crawl before turning back at a going passage on the other side. The trip out was not a whole lot of fun for me, as I soon discovered that occasional soccer games in Saskatoon were insufficient preparation for a 13-hour cave trip. Still, we all made it out safe and sound.

Jill: Well, like most people, I thought that my first trip to México would involve a beach, endless margaritas and a mariachi band. However, the amazing range of geography, flora, fauna and interesting people made this much better than

running into other gringas during shopping excursions. As an archeologist, which is also a sub-discipline of anthropology, it was interesting to look at two different cultures - Caver and Mexican. The first one is a unique breed, often known to be easy-going people, that will shed clothing with abandon. A caver is very adventurous, enjoys the outdoors, and is often known to drink muchas cervezas around a campfire with other individuals of that culture. They honor their pioneering elders (Gill and Bill) and listen to them for advice. On the other hand, they foster their 'children' and teach them about their culture (at least Mother really seemed to enjoy teaching me). Cavers offer a rare and privileged initiation rite, typically involving the loss of flesh (only if you are in tight quarters or are clumsy like me).

Now, the other culture that we encountered was Mexican, of course. The border guards, armed drug police, quiet villagers, and a rather friendly English-speaking doorman in the Saltillo yuppie bar all presented different sides of Mexican society. Having never visited the country before but having taken two classes in Español, I was able to understand many of the conversations that took place, so, I volunteered to go with Cyndie to visit the villagers in Conrado Castillo for a bit of public relations. For an anthropologist, this was an interesting opportunity to experience a different culture (not quite as exciting as the participant observation of the cavers, but close).

The PEP Christmas trip was also interesting because of its mix of people from the U.S.A., Canada, England, Wales, Ireland, Germany and Texas (Texas is a country too, isn't it?). My anthropological training soon picked up on the various stereotypical language that we all used: Howdy y'all; Eh?; Wellies; Glynffwhydillyum; Weh nid moore beer; and Hi de Hi, Hi de Ho (corresponding to the places mentioned above). Given the various languages, not just English and Spanish, it became rather difficult to understand each other sometimes. Then, there is the linguistic variant of the caver: sump; lead; pozo; cueva; mud f#!k (don't look that one up in the dictionary); abseil; prussik; and 'smallbutnottight'.

A very confusing group of similes also converged during the PEP Christmas camp (keeping journalists on their toes): BILL Mixon, BILL Nasby, BILL Russell; GILL rather than JILL (not Gillian); and of course SILL-y the Saluki...confused? More often, though, Dan was Tom (even though we didn't have a Tom on this trip), Stephen could be Patrick, Cyndie was Susie and Susie sometimes Cyndie. The three Peters were also a bit confusing, but not a patch on the four-Peter trip into the Angel's Staircase two years ago.



Jill Taylor-Hollings at the entrance to Cueva de la Aprendiza. 1997 photo by Susie Lasko

The conjunction of tired cavers and Christmas Eve made for a very lazy day, although Susie did manage to take Jill on her first trip into the goat-filled Apprentice Cave. Dewi and Charley led Tim, Peter and Katrina to re-examine a possible resurgence near the state-line monument that had been the site of an abortive dig a couple of years ago. However, they never made it that far and instead worked on another dig. This led to a short drop, which they left undescended. Dale, Patrick, Steven, Bernhard and Melonie trekked across the valley to drop Pozo Abajo de la Peña, which Dale had located earlier. Melonie returned early, which proved to be the smart thing to do, as the others got thoroughly lost when they followed the sound of cow bells across the hillsides.

For Dale, Bev, Cyndie, Melonie and Dan, Xmas Day was spent mapping the remainder of the leads in the bottom of Cuchilla. Just when they thought they had them all wrapped up and the only place to go was the terminal dig, Dale spotted a small side lead leaving Bev with one last chance to avoid numerous mud hauling trips. Charley, Bernhard and the Brits returned to the lead of the day before, Pozo Weihnacten (German for Xmas), and dropped the pit but were unable to push the cave any farther. Instead, they headed up towards their original target and dug their way into Cueva Avispa Araña Viuda Negra to the top of a short pit which they were unable to descend due to lack of rope. A third crew (Father, Mother, Barbara, Bill and others) headed up to Cuauhtémoc in another quest for lumber and to explore pits. Peter, Patrick and Kevin mapped two pits in the "Wonderland" area south of the sawmill. Pozo de Alicia was 43 meters deep, and next was Patrick's first virgin pit, dubbed "Patricio Gana Alicia" (16 meters). Meanwhile, Barbara's team mapped a 30-meter pit north of the sawmill, Pozo Brad.



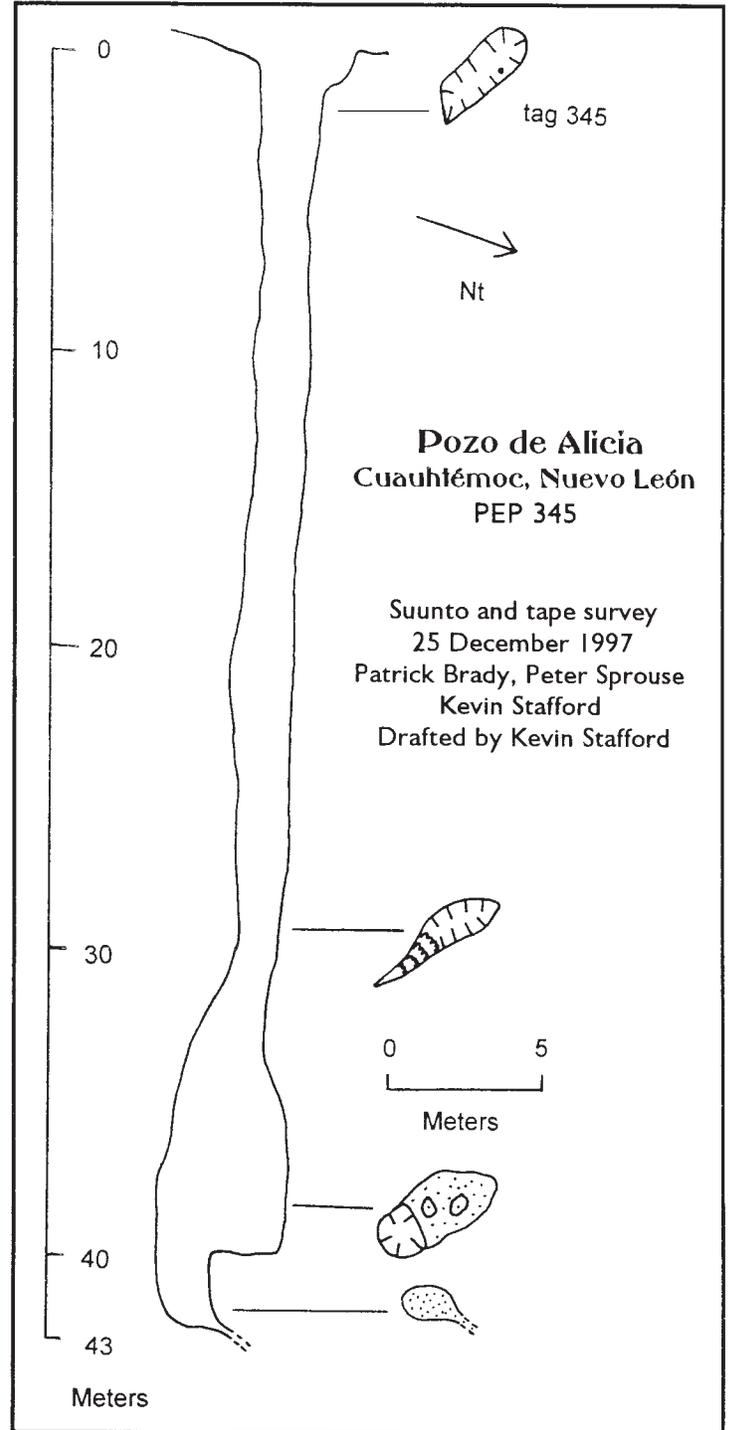
Irish caver Patrick Brady ascends Pozo de Alicia.
1997 photo by Peter Sprouse

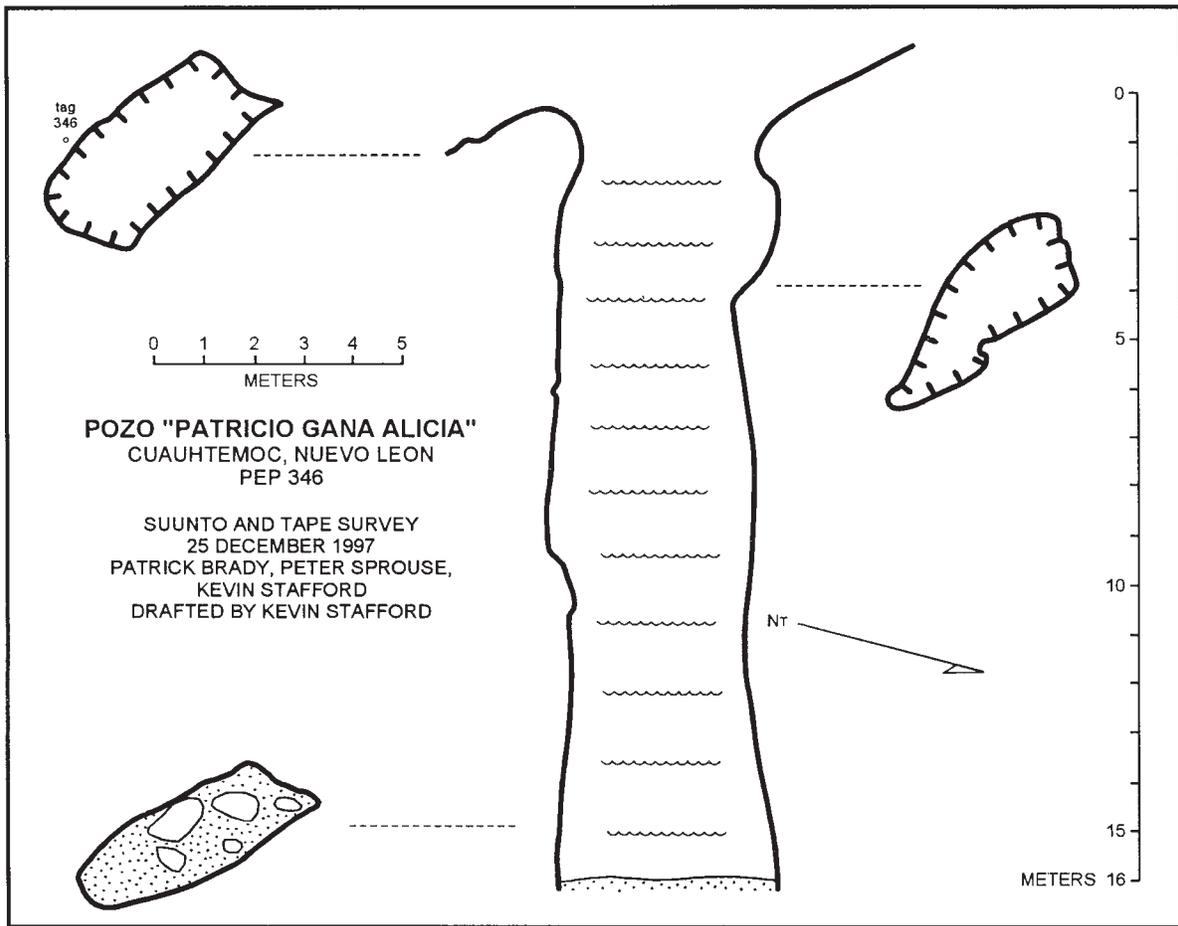
As everyone gathered back at the fieldhouse for the Xmas party, we came to appreciate the true value of the new extension. The alcohol flowed and food was consumed, while the group got louder and louder, enjoying a varied medley of songs in a confusing array of languages. Perhaps the most impressive aspect was the Irish magic coat which seemed capable of producing an endless supply of what, for lack of a better word, we will call beer (it was Coors for God's sake!). Grandpa Gill eventually closed the party down at 2:00 a.m.

Despite the over indulgence of the night before everyone was up fairly early on Boxing Day (or St. Stephen's Day, depending upon your cultural origin). We had the vehicles about 80% packed when David Ledesma, a local villager, invited some of us over to his house for lunch to celebrate his daughter Heidi's birthday. While the men enjoyed an appetizer of Mescal and Coke, the ladies made a start on the freshly-slaughtered pig products. We wad-

dled back to the trucks, having eaten too much, and headed off for the Tinajas Valley, the site of our second week of caving.

As we traveled west over to the valley the clouds rolled in and the weather turned nasty, leaving those outside the trucks scrambling for warm clothes. While we pitched camp and Dale kept himself warm by opening up a small drafting hole a few meters from his tent, it started to drizzle. So despite the roaring fire, nearly everyone was in bed by 8 p.m.





Canadians Dale and Carlos work on a sinkhole dig at the Tinajas camp. 1997 photo by Susie Lasko

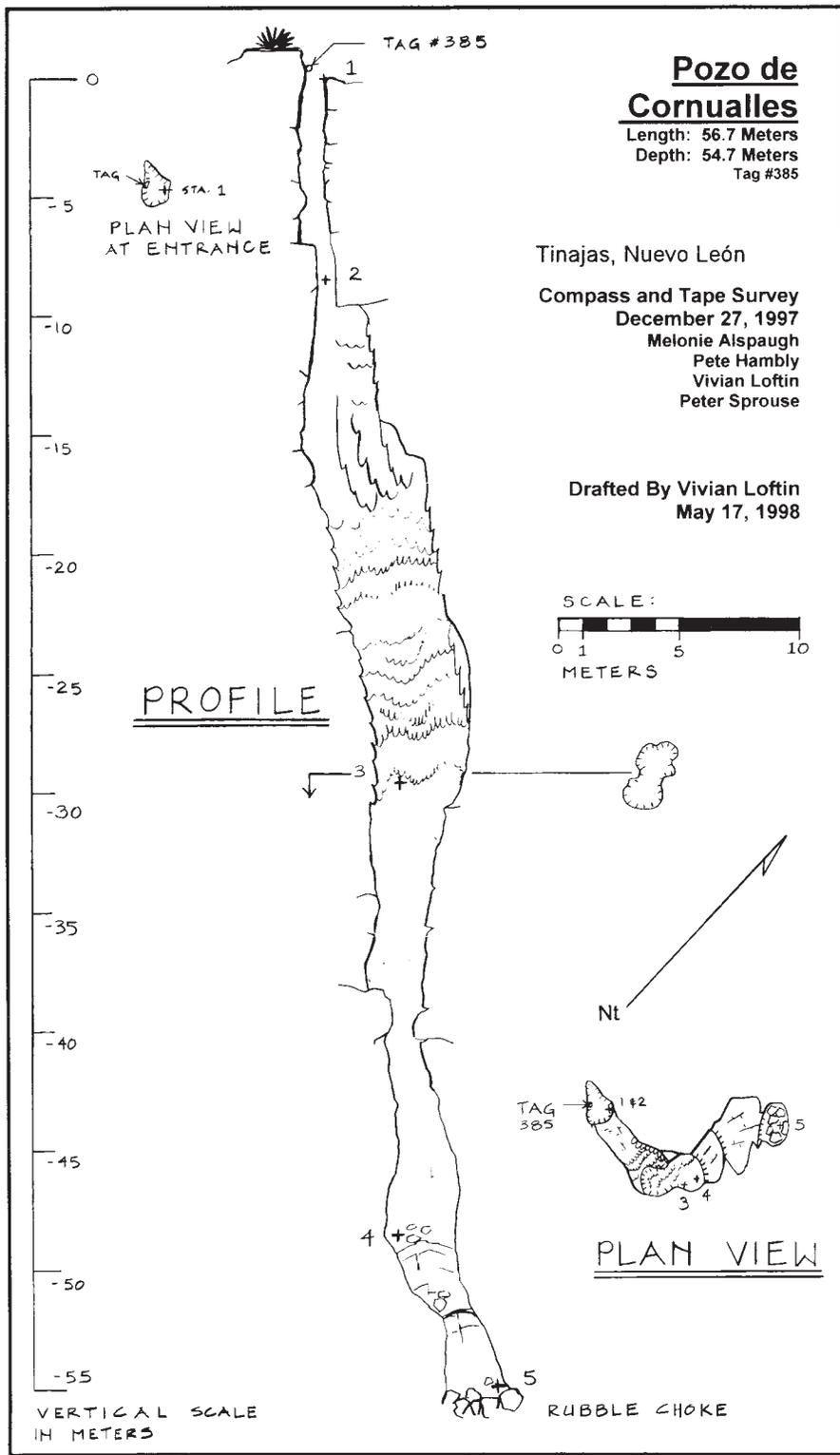
We awoke on the 27th to the beautiful sight of frost-covered hill-sides and the promise of better weather. The first order of the day was to continue the exploration of Sima Chupacabra, so Charley, Bev and Bernhard loaded themselves up with ropes, drills and assorted metal ware and headed off, closely

followed by two survey teams consisting of Creature, Steve and Kev, and Barbara, Katrina and Tim. They managed to get most of the way down the second big drop but were left hanging in space when they ran out of rope at -250 meters. Two other teams led by Father and Auntie Cyndie dropped a couple of pits up near the abandoned Sofia Mine

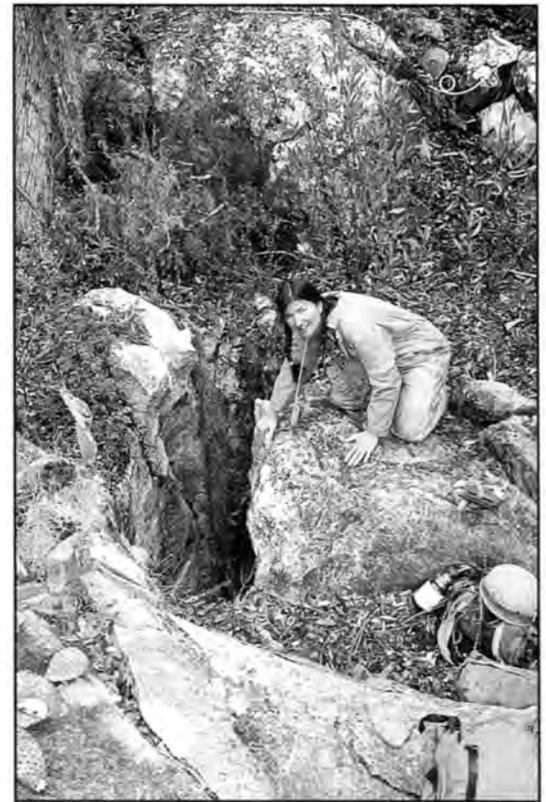


Pozo de Cornualles is a natural pit adjacent to a large mine shaft. 1997 photo by Peter Sprouse

above the village. One of these, Cornish Pit, was only 50 meters deep but another, Pozo del Lantrisco, was mapped to over 100 meters with a possible dig at the bottom. Jill and I comprised the low land recon team which trekked north along the valley. Here we located a number of small pits no deeper than five meters.



me on a trip to the hillside near the Sofia mine with the hope of locating a couple of pits that had been found by Bill Russell but never mapped. We never did locate them, but we did have the pleasure of watching Kevin get stuck in a three-meter deep hole while Cyndie managed a sub-meter survey shot at the entrance to Lantrisco. The lumberjack crew (Dale and Carlos) spent the day on a long hike to an arroyo visible from camp. This contained no caves and they found nothing on the ridges along the way. Back at camp, the family was finally completed with the arrival of Cuzzin' Troy Lanier, Chris Casselli and Christy Rogers.

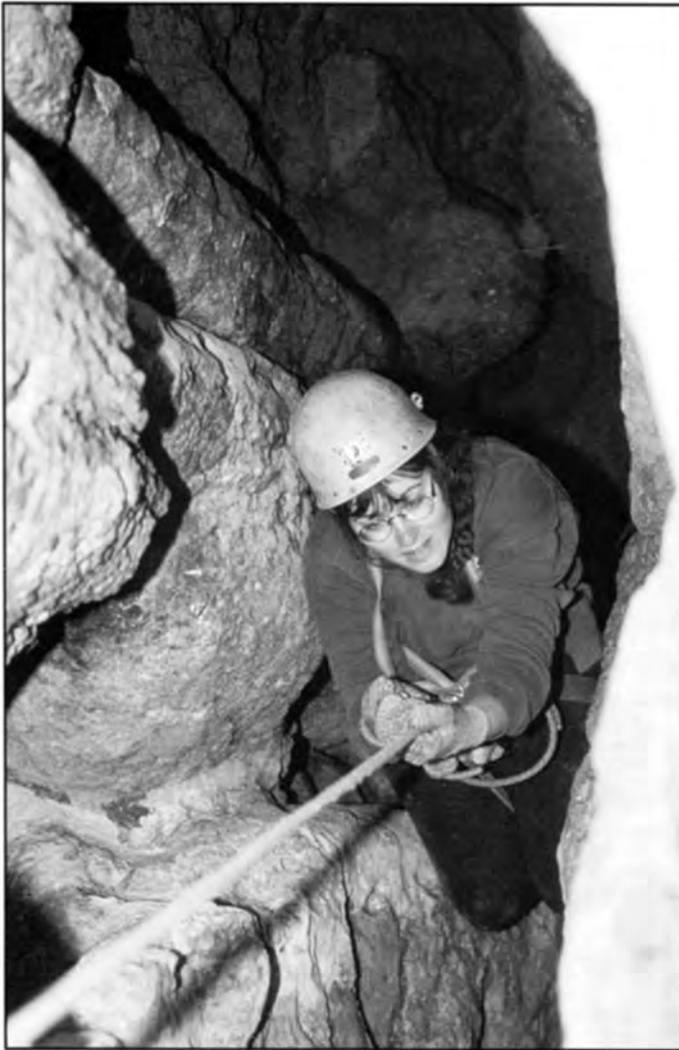


Cyndie checks out Pozo del Lantrisco, an inconspicuous pit that went over 100 meters. 1997 photo by Peter Sprouse

The next day the same push-team returned to Chupacabra with Mother, Father and Creature taking over the survey. Due to the amount of rope being swallowed by the cave, it was becoming known as Chupacable. The survey team reached a ledge at -340 meters, while the push team dropped another 50-meter drop into a muddy canyon leading to yet another drop. Despite being tired and sick, Auntie Cyndie bravely led Steve, Tim, Pat, Kevin, Jill and

On Monday the new arrivals headed into Chupacable along with Melonie and Kevin in order to get a feel for the cave and refresh their vertical skills. Meanwhile, Dan persuaded Scott and Dale to return to Lantrisco to work on the dig at the bottom of the 100-meter shaft. With the aid of pulleys and 3:1 advantage, they were able to remove a large obstruction. This led to a 50-meter pit with no obvious way on at the bottom. Father led a group of us on an-

other hillside quest for pits. While Barbara and Katrina dropped a virgin 20-meter pit, Pozo Chicletas, Dewi impressed us all with his ability to impale himself on every available cactus. However, perhaps Dewi's finest moment was when he became trapped under a rock in Pozo Sin Pat. The pozo was named Sin Pat after Dewi requested Pat's help to free himself, even though Pat was back in camp. In fact, Pat, Susie, Cyndie, Bill and Jill had mapped Pozo Cerveza, a 16-meter pit close to camp. Susie and Tim then mapped Pozo del Epidote, which had been discovered by Charley who classed it as a dig, although Carlos and Dale had found it undiggable. That evening Troy pulled out his guitar and regaled us with the Rebelay Blues.



Jill climbs out of Pozo del Epidote, a plugged pit in a large arroyo. 1997 photo by Pete Hollings

The following day the customary Chupacable push-and-rig team returned ready to scoop booty in the borehole they were sure to find and which Cyndie, Susie, Pat and Steve planned to survey.



Steve stands over the entrance to Chupacable. 1997 photo by Susie Lasko

Dan led Carlos, Barbara, Dale and Tim back to Lantrisco to survey the new pit while the rest of us headed back up the hill to relocate the pits Charley had found and maybe find some other ones we had heard about. We left Troy, Melonie and Creature to map Tiro Limón, which was only 13 meters long. Peter S., Kevin and Christy wandered farther up the hill and relocated Sima de las Malas Mujeres, which had originally been dropped by Bill Russell and Charley a couple of months earlier. Peter rigged the pit and the rest of us surveyed. Peter then went to rig another small pit nearby, Pozo Ponchado, which was named in honor of another of Dewi-cactus incident. Mujeres proved to be a beautiful pit with a 50-meter free hang down an awesome shaft. The only down side was watching the rig point, a large tree, sway alarmingly as everyone climbed out. We surveyed Ponchado and then ran a surface survey down to Tiro Limón.

As it was getting dark, Father went to find the Tiro Limón crew which was now working at Tiro Chocolate, another pit Dewi and Katrina located. We joined him shortly thereafter and settled down around a fire at the entrance while the cave was mapped. The team was slowed by the fact that Creature was not feeling too great, a casualty of the same bug that had been bothering Viv all week.

The Chupacable push-crew was back at camp and looking distinctly muddy when we returned. The cave had flattened out, but it had sumped in the process, the sump itself being on the cleaner side of a liquid mud duck affectionately know as the Mud F#*k. The survey crew returned at dawn, having stopped the survey this side of the mud.



Patrick passes the final rebelay in Sima Chupacable. 1997 photo by Susie Lasko

On Wednesday, Dale, Tim, Dan and Carlos headed into Chupacable to de-rig while Melonie and Chris took some photos in the entrance series. Susie and I gave Jill some vertical training and then took her to Pozo del Epidote where she descended her first pit. Father returned to the same area as the day before with Kevin, Christy and Barbara. They

mapped three more pits, the longest of which was 25 meters. While the rest of us settled down to welcome in the New Year, Gill, Bev and Bernhard earned hero points by returning to Chupacable to help the de-rig team carry rope back to camp. Even more importantly, perhaps, they took beer to the tired cavers. New Year's Eve would have made an excellent anthropological study, had Jill been so inclined, as the Irish continued teaching Susie and Cyndie the fine art of ordering beer in Ireland and the rest of us got pleasantly drunk to the sounds of the PEP band.

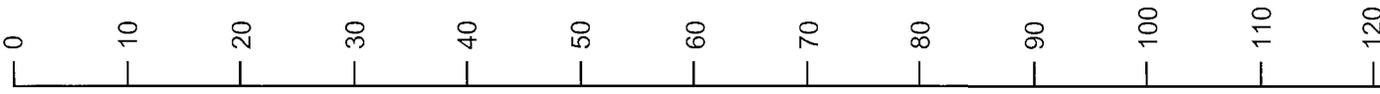
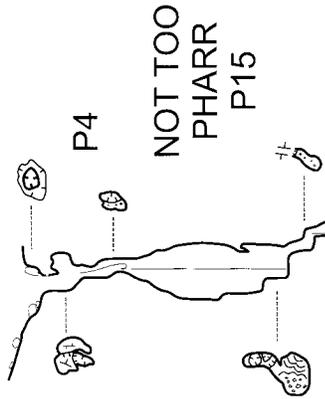
The deep caving and late night party left many people looking for projects around camp on New Year's Day. Consequently, we saw the mapping of Pozo Stela. Bev led a crew to map a small pit near the site of the old sawmill, Cueva del Montón de Madera, which not surprisingly was sawdust choked. While Creature's crew mapped small pits along the road near camp, Cyndie, Bernhard and Charley returned to Chupacable to remove the restriction at the top of the first big drop. They were accompanied by Jill for surface support. Meanwhile, Father, having tired of wandering the hill-sides aimlessly, arranged for Oscar, one of the locals, to show us some pits. The first of these was named Pozo Sin Sexo (see cuzzin' Kev for an explanation), where a 15-meter entrance drop led to a steeply-dipping rubble slope in a winding canyon to another drop. It took seven "interesting" deviations to reach this point, so we decided to return another day with the hammer drill. Kevin and Christy then surveyed Pozo de Dos Ojos, a short pit originally dropped by Bill and Charley. Katrina, Dewi and Susie had perhaps the best lead of the day, a horizontal cave north of camp, Cueva de Katrina, that they mapped to a restriction. They returned later that night to enlarge this and were able to squeeze into a sizable room with a lead in the floor.



Susie Lasko slides into the entrance to Cueva de Katrina. 1998 photo by Peter Sprouse



ENTRANCE



SIMA CHUPACABLE
 POTRERITOS, NUEVO LEON

PEP 360

SUUNTOS AND TAPE SURVEY
 27-30 DECEMBER 1997

PATRICK BRADY, KATRINA HAWKINS, SUSIE LASKO,
 JEAN KREJCA, BARBARA LUKE, STEVE MULHALL,
 TIM PALMER, PETER SPROUSE,
 KEVIN STAFFORD, CYNDIE WALCK

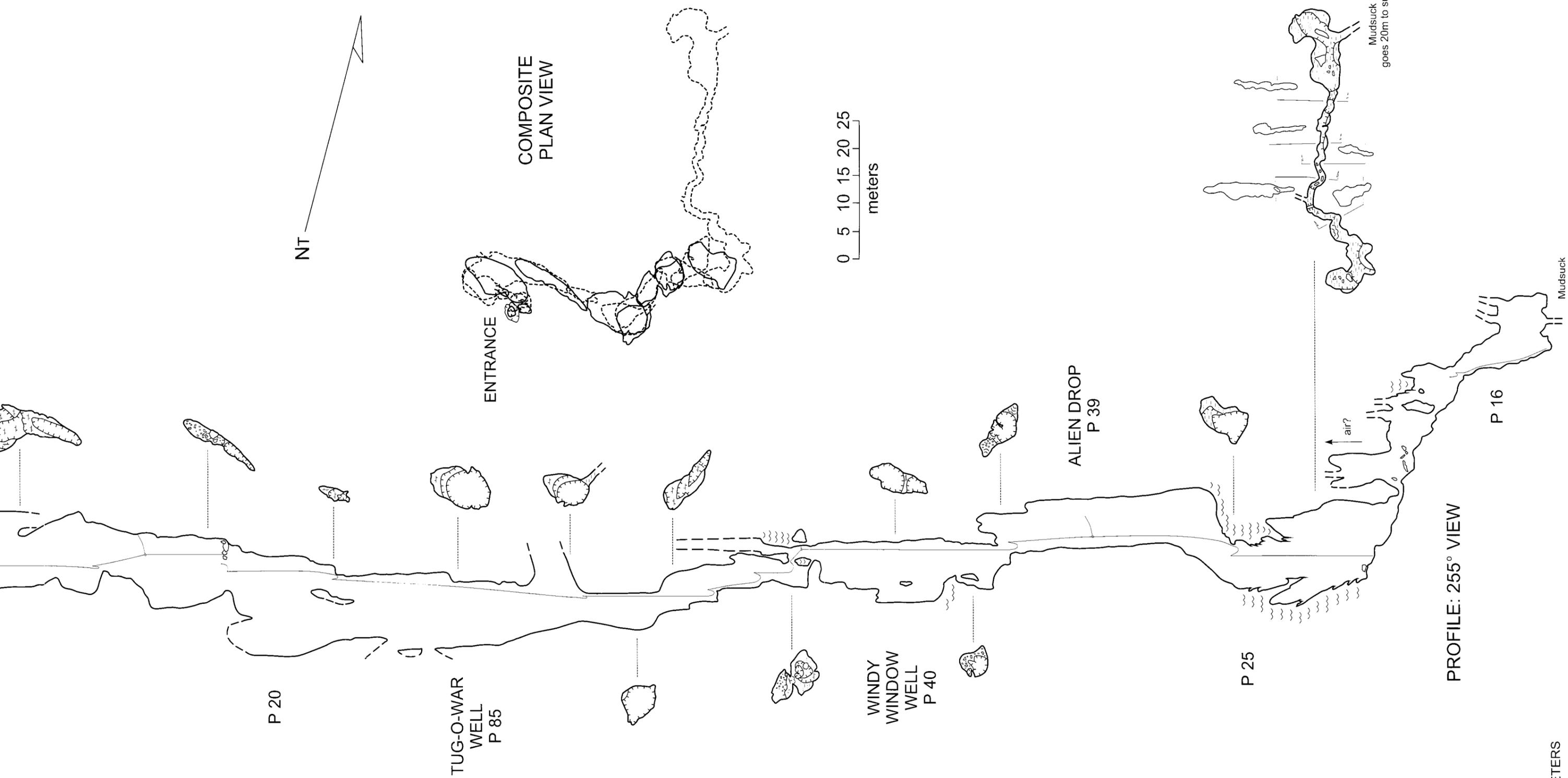
DRAWN BY CHARLEY SAVVAS
 AND PETER SPROUSE

LENGTH: 486 METERS
 DEPTH: 402 METERS

PROYECTO ESPELEOLOGICO PURIFICACION



130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 402 METERS



NT

COMPOSITE
PLAN VIEW

ENTRANCE

0 5 10 15 20 25
meters

ALIEN DROP
P 39

WINDY
WINDOW
WELL
P 40

P 20

TUG-O-WAR
WELL
P 85

P 25

PROFILE: 255° VIEW

P 16

Mudsuck
goes 20m to sump

Mudsuck
goes 20m to sump

air?

On Friday it was time to split up our happy little group. The Great Pumpkin was Victoria bound as it began its Chiapas Odyssey with nine riders. Gill headed back to Conrado Castillo with Barbara on a quest for lumber, while the rest of us prepared to traverse the new road across the mountain to Zaragoza. Despite this being one of the better roads I have traveled on in the Purificación area, it still took about six hours to drive the 30 miles to town. On arrival we invaded the only restaurant in town with enough chairs to seat us all and proceeded to drink their entire supply of Coronita, while they figured out what on earth they were going to feed 17 noisy gringos. We then relocated to the only hotel in town, where Mother and Father had arranged the honeymoon suite for Jill and me. Now I do not know about you Americans, but where we come from you don't share the honeymoon suite with your parents...strange!! Although all the bars in town were closed and we were unable to entertain the locals with our antics, Bev did manage to whet their appetites when she left her truck in neutral, allowing it to roll down the hill. There it was, up on the sidewalk and surrounded by kids fascinated by the cow skull tied to the fender.

The rest of our trip was spent touring in Zaragoza and Saltillo, as well as visiting one of the deepest gypsum caves in the world, Pozo del Gavilán. I will not relate all these non-caving activities but a few highlights need to be recorded for posterity: the culvert race in Zaragoza, initiated by Bev but jointly won by Dan and Bernhard after Bev injured herself entering the culvert; Susie and Steve setting off bottle rockets on the edge of the gypsum sink while the rest of us wondered if the shock wave would cause the isolated flake they were standing on to fall off; Mother's piano duet with a Saltillo lounge act, accompanied by the rest of us on various percussion instruments, a classic; but perhaps best of all, reports from a Saltillo disco that a gringa had been beating the local youths at pool while a certain German was the recipient of numerous marriage proposals, as well as some other offers not normally made by young Mexican girls. Truly this was an anthropological delight (I cannot write it down fast enough!....Jill).

Then it was time to return to Austin where, after a few short hours of sleep, we boarded a plane for Saskatoon, which in our absence had been covered by that nasty cold white stuff. For me it had been the perfect honeymoon: good caving, great company and good...well, beer, anyway. For Jill it had been an introduction to the delights of México and

a chance to meet my other family. It was an experience she is looking forward to repeating. Thanks to everyone, especially Mother and Father, for making it such a great trip.

New caves surveyed on the December 1997 PEP expedition:

Tag #:

- 324. Pozo Abajo de la Peña
- 345. Pozo de Alicia
- 346. Pozo "Patricio Gana Alicia"
- 347. Sima de las Malas Mujeres
- 353. Cueva del Sendero
- 356. Pozo de la Gran Araña Blanca
- 357. Pozo de Barbie Bailando
- 358. Pozo Weihnachten
- 359. Cueva Avispa Araña Viuda Negra
- 360. Sima Chupacable
- 365. Pozo Dos Ojos
- 370. Cueva de la Araña Verde
- 371. Pozo del Lantrisco
- 372. Tiro Limón
- 373. Tiro Chocolate
- 374. Pozo Muy Importante
- 375. Ultimo Pozo del Año
- 378. Cueva Cerveza
- 379. Pozo del Epidote
- 380. Cueva Montón de Madera
- 383. Pozo Nueces
- 384. Pozo Brad
- 385. Pozo de Cornualles
- 386. Pozo Hambre
- 387. Pozo Sin Sexo
- 391. Cueva Adentro de la Peña
- 392. Cueva Cabeza de la Muñeca
- 394. Pozo de Tom
- 395. Pozo Bozo
- 396. Pozo Stela
- 400. Pozo de la Carretera de Carillo
- 401. Cueva Cabeza de Martillo
- 402. Pozo del Rollo
- 403. Pozo del Burro Malo
- 404. Pozo Chicletas
- 405. Pozo Sin Pat
- 406. Cueva Pino Solo
- 408. Pozo Ponchado
- 415. Cueva de Katrina
- 422. Cueva del Escorpión



SOTANO DE LA CUCHILLA

DATE: 3 – 9 May, 1998

PERSONNEL: Daneille Bilyeu (Tx), Dan Green (Canada), Chris Neumann (Tx), Bev Shade (Tx).

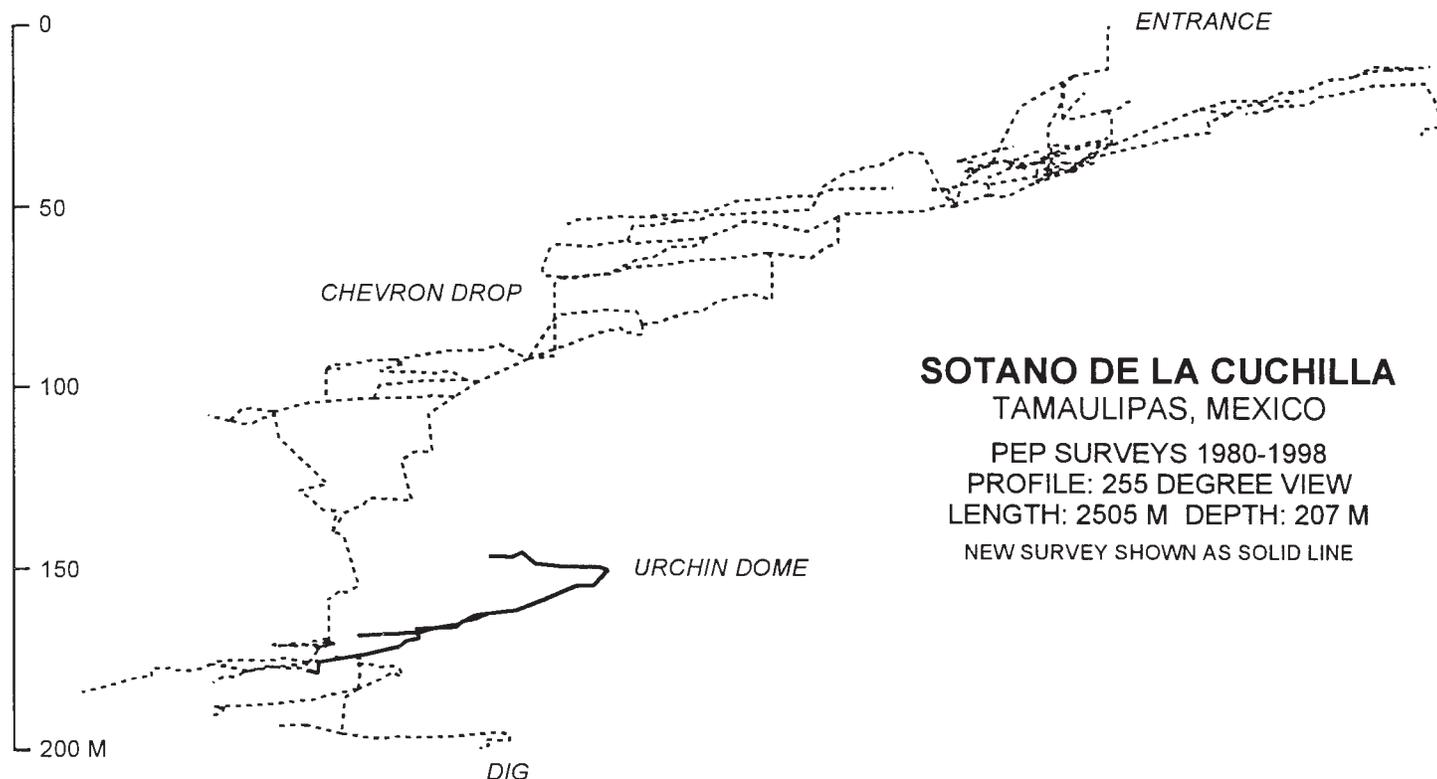
REPORTED BY: Bev Shade

Following an ugly week of finals for the spring semester, the four of us departed from Houston shortly after noon on May 3. Although we did not arrive in Conrado Castillo until noon the following day, we still got underground. We spent the evening on a trip through Brinco, down to the start of the Canal, to familiarize everyone with the area and not

give the impression that ALL PEP trips are dig trips. We had noticed that the mountain was very dry and water levels within the cave were also lower. The pool at the base of Flowstone Falls in Brinco was several feet lower than normal, exposing muddy walls and a long-lost Chouinard carabiner.

Tuesday, Wednesday and Thursday were spent pushing leads in the new section of Sótano de la Cuchilla. The first lead we checked went, and we spent all three days there. This lead was noticed during the previous Christmas expedition on the way out. It begins as a hands-and-knees crawl but quickly opens into a standing-height room. We surveyed 177 meters of new cave, much of it walking passage. Unfortunately, we also made 25 meters of progress UPWARD! Dan climbed up a lead we named The Urchin Dome, which is now the only spot past the Hurricane crawl that requires vertical gear. We also discovered a bypass around the rope which used to drop into the Orca Battleground.

This Urchin Dome provides access to more walking passage (the Kelp Annex) above and parallel to the original passage. On Thursday, due to time constraints, we left this upper level with two going leads: another dome, which requires climbing gear, and a crawl, which is easily passable. Due to this new find, which has created yet more leads, we did not even get to the dig at the current bottom of the cave. However, Dan checked the far side of the lake, past the Zurich Squishies, which did not go.



We de-rigged the cave completely on our way out Thursday night, removing the ropes which have been fixed rigging for the past several years and were showing serious wear from all the mud.

We drove back to Texas on Friday and Saturday, staying in Ciudad Victoria. Everything went amazingly smoothly even though it was the first vertical caving and surveying experience for half of our group. They learned that knee-deep mud, slimy ropes, gnarly crawls and twelve-plus hour days equaled productivity and a lot of fun. Cuchilla still calls!

OJO ENCANTADO

DATE: 13 March 1998

PERSONNEL: James Brown, Dean Hendrickson, Jean Krejca, Steve Taylor and others.

REPORTED BY: Steve Taylor

Living up in the great corn desert of Illinois, I don't get many opportunities to go caving. Naturally, I was excited to find myself among the list of participants in a week long cave biology trip to northern Mexico. At the Austin airport I was met by Jean 'Creature' Krejca and California sump diver James Brown. We loaded my stuff in the truck and got on the road for the border.

Once we were south of the border, James drove like a maniac, with me co-piloting and Creature sleeping soundly in the back. We passed through Ciudad Victoria and over a mountain pass along the eastern front of the Sierra Madre. Hairpin turns were punctuated with white crosses and burning candles next to demolished railings from too-recent accidents. We finally got to the bottom of the mountain on the other side, where we turned off onto a dirt road to the small town of La Reforma, which was to be our base of operations for the next several days. We met Anastasio, our esteemed guide-to-be, and we moved our sleeping gear into his house. Tom Iliffe and the rest of the Galveston crowd (three of his students) had already shown up, but they were off at another site, some 30 kilometers away, doing a dive in the big spring at Río Guayalejo, where they collected isopods and mysids from an underwater cave. We decided to hang out and wait for Dean Hendrickson's truck to show up from Austin. We set up camp on the side of the road and in the well-swept dirt yard. Later, Dean and his two sons showed up, along with two college students from Ciudad Victoria, Celene and Fernando. Their teacher, Paco, collaborates with Dean in research.

In the morning we organized gear and eventually

loaded everything into the trucks for our first foray into the desert. At the next little town down the highway, San Antonio, we turned off of the pavement to drive a long time on dirt roads. At about the fourth town, El Carrizo, we located the head honcho, who agreed to take us to that day's cave, presumably only a short walk from the town. The cave is supposed to be the resurgence of a major cave system, Cueva del Tecolote, which is in the mountains above the cave. With the head honcho in the lead and Anastasio taking up the rear, we headed down dry washes and over low, sun-baked ridges. Acacia, lechuguilla, agave, ocotillo, Spanish bayonet, and a bunch of plants I don't know graced the trail side.

Finally we got to the cave. The entrance is a dry spring resurgence, some 10 meters wide and 5 meters high. A boulder-strewn dry stream bed leads from the cave to the dry Río Chihue nearby. After a little snooping about, it was decided that rope would be needed. Creature, Jaime and I geared up, and I was first down the drop. After a 6-meter rappel, I was back in horizontal passage which shortly led to a second drop, more significant than the first. Further poking about revealed an exposed free climb that could replace the first drop. Creature did this climb and checked out the second drop. We decided that we needed to de-rig the first drop and use the longer, 38-meter rope for the second drop. Jaime, still above, then re-rigged the first drop with our shorter rope and soon joined us above the second drop. We fussed about for a while before coming up with a suitable rigging for the second drop. Creature went down first, then me and Jaime.

Part way down were some very large bones embedded in the wall. Among them was a femur which was much larger than any cow femur I've seen. Furthermore, the morphology was different; it was rather expanded proximally and very heavy in construction, suggestive of a slow moving, ground inhabiting species. Back in the US, I discussed the bone with several people, including a paleontologist, and now believe that it was a Pleistocene giant sloth femur.

The other notable thing about this drop was the river of vampire bat guano. The upper part of the rappel was more or less a free drop, but the bottom half was a slick, steeply-sloping trough full of slimy black vamp-poop. At the bottom, with just barely enough rope to land comfortably, we were on the steeply-sloping banks of a very disgusting looking sump pool. Guano, organic debris, and even a few dead bats made this an unpleasant spot. Jaime decided it was too mucky to dive in, besides which we'd have to go all the way back to the trucks to get

tanks. We collected a few inverts and an accidental surface fish before surveying our way out of the cave, derigging as we went. We set only 11 stations and then, at the entrance, discovered PEP tag 118. The cave, named El Sótano, had already been mapped! We hiked back to the town of El Carrizo, loaded into the vehicles and drove back to La Reforma, where the Texas A&M Galveston group was just showing up.

The next day, the plan was to check out a cave spring just outside of the town of Plan de Ayala, and then to hike up to another spring which was rumored to be diveable. The whole crew got loaded up and drove through San Antonio and on to Plan de Ayala. While the 'elders' of our group were seeking permission to check out the spring, I collected some bugs in the pig-inhabited mud around a cistern on the town square. Soon we were making the short walk down to the cave spring. I was quite happy to collect a variety of bugs from the spring run and creek, but the others were disappointed, as the site was not at all diveable, and the small cave (1-meter diameter) was walled off in the twilight zone as part of the town's waterworks. We drove off down several long dirt roads, gradually approaching the base of a mountain range. From here, we would go on a long hike to the rumored spring with a dive at it. We commissioned a burro to carry SCUBA tanks and some other dive gear. The hike took us down a road then cut off into the woods and down into a dry stream bed, which we crisscrossed several times. Then we cut steeply up a mountain, gradually picking our way along a narrow trail through dense, arid scrub and cacti to the top of the ridge. We descended into a rugged, dry canyon with a dry, boulder-strewn streambed bounded by steep walls. Soon we came to where there were large live oak trees and beautiful crystal clear water with tropical vegetation adorning the shores. We were hot and tired, and several of us poured water over our heads. Most of us secretly wanted to stop here, but we still had a long way to go. We trudged on, past strange calcified rimstone dams, and finally got to the source of the water -- the spring. The spring was disappointingly small, with no dive prospects. Jaime put on his gear anyway and rooted about head first in the spring -- no go.

The next day was the first of two days of our most significant excursion. We drove a long distance on obscure dirt roads till we were nearly at the base of the hill that leads to Trejo Canyon, where the cave of interest is located. Our sixty-year-old guide, Anastasio, had been there once when he was ten and a second time about ten years ago with

Charles Fromén. Apparently the only access to the cave is a long hike up the mountain, then a very steep descent into the canyon. We had commissioned three burros to haul caving supplies for 12 people up to the top of the ridge. The steep descent into the canyon is too extreme even for Mexican burros, so we had to haul the gear down ourselves. The hike to the top of the mountain was long and hot. Barrel cacti, palmetto, sotol (a yucca-like plant), mesquite, ocotillo, and even cycads adorned the path, along with much exposed, moderately weathered limestone. When we finally reached the rim of the canyon we were all impressed by the remoteness and the awesome, wild beauty of the view. Looking across the canyon it was easy to see that in many places the steep canyon walls gave way to sheer cliffs as they approached the bottom. Complicating matters, there had been a major fire only 15 days earlier. It had swept through this area, devastating all life forms and creating a situation where we would basically be hiking down an extreme slope through something reminiscent of a fireplace with burnt cacti, yucca and loose talus. The ground was covered with 10 centimeters of ash, and most rock outcroppings were cracked and broken from the heat.

We gradually picked our way down the slope. Several members of our party began to get quite concerned. This was pretty steep and unstable stuff. Almost at the bottom there was a vertical climb down through a narrow joint to finally reach the bottom of the canyon. A short hike up the dry riverbed, bottomed with massive boulders and an occasional gravel bar, led us to the cave entrance, an inviting hole leading down into the unknown. We had arrived at Ojo Encantado! Anastasio was concerned that we needed to treat this place with great respect, saying it was a very spiritual and sacred place. Many of our party already felt that way without his prompting. Throughout our stay there, I found it easy to keep the sacredness in mind.

The next morning, Creature and I surveyed the cave up to the beginning of the pooled water. This consisted of perhaps ten survey stations before breakfast. After breakfast Jaime suited up to dive the cave. During the last two visits to the cave, it was reported to almost immediately sump. However, on our visit the cave seemed to have significant air over the water, and falling water could be heard off in the darkness. Jaime returned with cirrolanid isopods and a report of going passage with rimstone dams. We decided to survey on through the water. The water was not unbearably cold (though it was a bit of a shocker), and we swam the first pool, setting sta-

tions and mapping happily along. We surveyed through a side passage which was a dry upper bypass, then we saw more mainstream passage with rimstone dams. We climbed up an exposed 3-meter rimstone dam. Several shots more, and we were out of time, but not cave. It was a going 5-by 8-meter stream passage. Virgin borehole!



Ojo Encantado. 1998 photo
by Jean Krejca

we said our good-byes to Anastasio the next morning and drove north over the winding mountain pass. Near Ciudad Victoria, at the Las Peñitas city water supply in the bottom of a canyon, is a small cave adjacent to a dry creek bed. Here, Jaime got troglobitic cirolanid isopods and mysid shrimp while diving the sump. Creature and I surveyed out of the cave with some help from one of the Galveston cave divers.

While we were mapping this cave, Peter Sprouse and others showed up in his Power Wagon bus and chatted for a while before continuing on their way to Sótano de San Marcos. When they left, we poked about a bit, until Creature found an iron trap door in the dry gravel streambed that led down through a cement and tile box into a subsurface gravel stream. We collected troglobitic terrestrial isopods from very moist, decaying driftwood that was above water level, stygobitic (phreatobitic?) aquatic isopods on submerged pieces of wood, and an amblypygid. The aquatic isopods may constitute a southern range extension for the genus and could easily be a new species, as could the terrestrial ones.

The climb back out of the canyon was a long one. Finally, we got to the top, where we were met by burros. Loads were reorganized and we began the long trek down to the trucks. Creature and I did the last part of the hike in the dark without flashlights (all packed on the burros) or moonlight. Several cacti made their presence known to us. Stiff and sore,

CONRADO CASTILLO

DATE: 17 - 23 October 1998

PERSONNEL: Chris Casselli, Mike Davis, Aldo Dyer, Michael Hardin, Paul Heberling, Michael Hernandez, Jeb Hepler, Will Ikard, Becky Jones, Troy Lanier, Jon McClure, Mel McKetta, Bill Mixon, Christie Rogers, Charley Savvas, Missy Stratton, Stuart Tallichet, Jeremy Wells, and Cathy Winfrey.
REPORTED BY: Troy Lanier

The weekend of October 17th saw tremendous flooding in the Texas Hill Country with rain in San Antonio approaching 40 centimeters in some places. One of two hurricanes in the Pacific, coastal moisture from the southeast and a stationary front from the northwest all contributed to this phenomenon. This happened to be the same weekend as the Texas Cavers Reunion in Uvalde, as well as the weekend that our expedition was to leave for a week in Conrado Castillo -- from the reunion! Some of our group couldn't even make it to the cavers reunion due to highway closures, and stories of Saturday night's flood at the reunion will be repeated for years to come. After a difficult stream crossing between Uvalde and San Antonio, our group convened in San Antonio and headed South. The rain would never stop.

The road to Conrado Castillo had been affected by the rains with deep ruts and flowing arroyos. As we headed up the mountain on Monday afternoon, the fog limited visibility to about 15 meters, with nighttime visibility even worse. The field house was a welcome sight.

Tuesday morning found three crews caving. The first crew; Mike D., Becky, Cathy, Mike He., Jon, Mel, Will, and Paul; went to relocate Grietas de las Flores. After finding the appropriate arroyo and a few entrances without tags, they decided upon one that had the most promise. Some of the new cavers in the group got their feet wet and their ascending gear broken in on the initial tight drop in this cave. A second crew; Troy, Bill, Chris, Mike Ha., Missy, Aldo, Jeb, Stuart and Jeremy; went to Brinco. Given the nature of this trip, this group rigged some of the climb-downs and *brincos* as the crew headed to the Dressing Room and the Helictite Passage. Lots of water was heading down through the Chute, and water could also be heard at Traverse Pit. A third crew, Charley, Christie and Kevin, set off to relocate a sink into a cave that had been named Dragon Antler and to finish some rigging in Cuchilla in preparation for a Thanksgiving push.

Mike and Becky's crew along with Charley and Chris, went to Cuchilla on Wednesday, spending a full day heading down and up the seven drops. The group rigged one spot that has been causing a few folks some consternation. As expected there was a lot of water in Cuchilla, and the bottom was sumped.



Paul Heberling in Sótano de Cuchilla.
1998 photo by Chris Caselli

Upon leaving the cave it was again near zero visibility, thereby making the trip back to camp difficult. Troy and Bill's crew joined Cathy, Kevin and Christie to begin the survey of Dragon Antler. Two teams surveyed out through 2-meter diameter stream passage, leaving tight passage at the end of the survey. One four-meter drop was rigged through

a waterfall. This cave has good water flow (in the rainy season), and had minor airflow when Kevin first located the cave two weeks earlier.

On Thursday the rain had still not stopped, and some concerns were noted that the roads would be getting worse in addition to the streams getting deeper. Many of the participants of this trip were high school students who had already missed a lot of school in order to go on this trip. Missing Monday was not an option, so the crew decided to be conservative and head down the mountain one and a half days early.

As stated, many on this trip were high school students. These students had been training for this trip for two months, and they performed almost flawlessly as they negotiated hanging rebelayes and cold/wet surveys. Many thanks to the adults who respected the abilities of these students, helped lead the trips, drove their vehicles and ultimately made the trip possible. Training and inspiring new cavers is a must if the sport is to maintain its present ethos. These cavers have paid their caver dues.

SOTANO DE LA CUCHILLA UPDATE

DATE: 22-27 November 1998

PERSONNEL: Vijay Iyer, Bev Shade, Eddie Yonemoto

REPORTED BY: Bev Shade

We left Houston on the 22nd and reached Conrado Castillo on the 23rd. Once there, having misplaced the lock combination to the fieldhouse, we practiced ropework and napped until Ediger and the Austin people showed up.

The next day, Eddie, Vijay, Justin Shaw and I went into Cuchilla where we re-rigged the entrance and the Drip Drop ropes, the latter of which had a hanging knot. Other than that, the cave was totally rigged from an earlier trip. Because we found the Hurricane Crawl to be very wet, we started siphoning the biggest pool. After waiting for an hour or two, we realized that it would be many hours before the siphon would make a difference in the water level, so we went back to camp.

On November 25, Eddie, Vijay, and I went into the Historic section of Brinco, then on to the base of Flowstone Falls. The following day the three of us went back into Cuchilla, and were happy to see that the siphon had vastly improved the major pool. Of course, we all got completely wet anyway, in the next several puddles. We continued working on the dig in the lowermost part of the cave (past the Unbearable Squeeze). This dig seemed much better in my memory than in real life. It also lost glamour by not appearing to open up anywhere in the foreseeable future, and having bad air. Thus, after an hour or so of digging in that slime hole, we abandoned it for a couple of holes that Eddie had found. These new holes proved to be better prospects than the other dig because they had air flow. We dug on the larger hole for several turns apiece, but when we started falling asleep at our work, we decided to go home.

In retrospect, the second lead we worked on does not look that promising because it was situated in some eroding recent conglomerate. The third lead, which we did not investigate thoroughly, is of more potential interest, as it leads directly into bedrock and also has more airflow. However, it is a small hole (maybe 20 cm diameter), so will require some real effort to make it passable. Before we work on that lead, I think that it would be better to push the high leads beyond the Urchin Dome, as they might bypass the Hurricane Crawl.

PEP MEMBERSHIP



photo by Charley Savvas

CAVING SOUTH OF THE BORDER ~ A CANUCK'S PERSPECTIVE

I found caving in México to be quite difficult.

There are too many distractions above ground. The weather, the scenery, and the food all conspire to make me forget my intention to go underground everyday. I owe my original introduction to México caving to my good friend Dale Chase. He told me about these fine folks down in Texas who chase caves in México during the winter. I'm a "stay-at-home" kind of guy, but my curiosity got the better of me and I found myself in an underground camp in Purificación. The caving was fantastic, no doubt, but I was still reeling from the culture shock that hit me when we drove into this country. As a result, I had to return the following year and again this past winter to sort it all out.

Now, I have to admit, I am hooked on the México experience. I am a fortunate fellow, for I live on the north end of Vancouver Island, and virgin caves are never more than an hour away. But what draws me south is more than just the large, warm caves that

México has to offer. I find myself fascinated by the people, the vegetation and the scenery. It never ceases to amaze me that when I'm in México, I'm still on the same continent as my homeland.

Another great moment in my life that was a result of my México experience was my introduction to the Dodge Power Wagon, come to life in Charley's orange bus. Travelling the mountainous back roads of rural México, this automotive marvel from the good old days is in its element. Blown tires, engine fires and broken axles - not a problem. No air conditioning or power windows for us. Want to experience freedom? Well then, climb up on the front fender for a ride, or hop off and jog on ahead for some exercise as the truck slowly ambles up the mountain. Its mere presence daunts border guards and awes the local villagers. Needless to say, I'm now the proud owner of one venerable, old Power Wagon, and it's being readied for México as I write. See you there!

Bill Nasby a.k.a. Carlos



PURIFICACION AREA CAVE DESCRIPTIONS

Contributions by: Melonie Alspaugh, John Fogarty, Dan Green, Katrina Hawkins, Pete Hollings, Jean Krejca, Barbara Luke, Tim Palmer, William Russell, Peter Sprouse, Kevin Stafford

Faunal lists compiled by James R. Reddell

GRIETA DE LAS MOSCAS PEP 30
 Revilla, Tamaulipas
 Length: 20 meters Depth: 14 meters
 UTM coordinates: 452,692 E 2,644,925 N

This cave is located 2800 meters southeast of Revilla at 2390 meters elevation. It is on the east flank of the ridge in an area of steep, structured karst. Grieta de las Moscas consists of a dirt-filled fissure with lots of gnats. This cave was located and sketched on 2 November 1979, by Peter Sprouse and Terri Treacy. (PS)

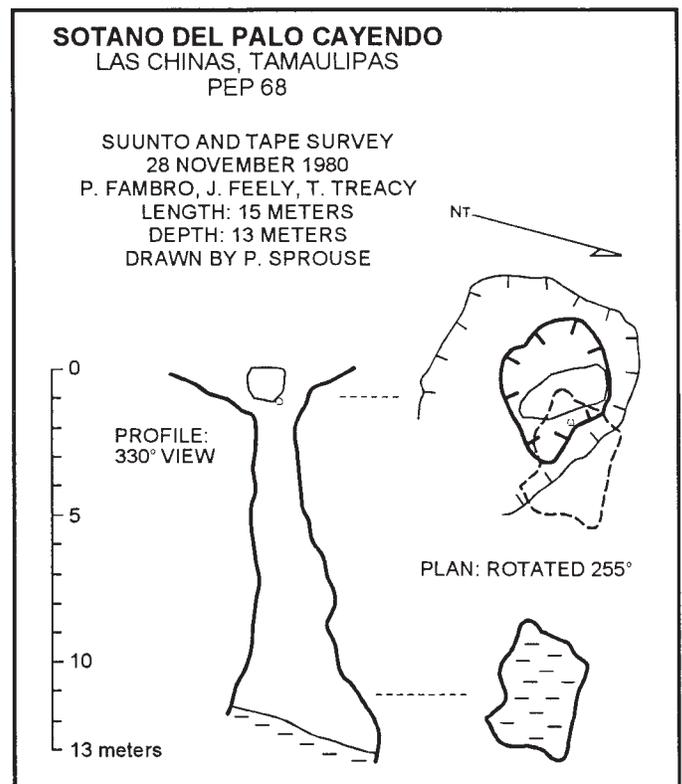


SOTANO DEL PALO CAYENDO PEP 68
 Las Chinas, Tamaulipas
 Length: 15 meters Depth: 13 meters
 UTM coordinates: 455,403 E 2,637,218 N

This pit is located 2300 meters south-southeast of Rancho Nuevo, about 500 meters south-southeast of the fire tower. The entrance is at 2760 meters elevation. A boulder lies across the entrance of the pit. It is a 12-meter free drop to the floor, which is a mud plug. This pit was explored and surveyed on 28 November 1980, by Paul Fambro, Jim Feely, and Terri Treacy. (PS)

POZO DE TRES HALCONES PEP 309
 La Pascuala, Tamaulipas
 Length: 12 meters Depth: 10 meters
 UTM coordinates: E 453,645 N 2,643,200

Halcones is located 5200 meters southeast of Revilla at 2517 meters elevation. It is on the east side of a ridge among several other pits. The entrance is wide, about 6 by 10 meters, and it drops 11 meters to leaf fill. Susie Lasko, Miriam Murtuza and Travis Greig mapped this pit on 2 July 1995. (PS)

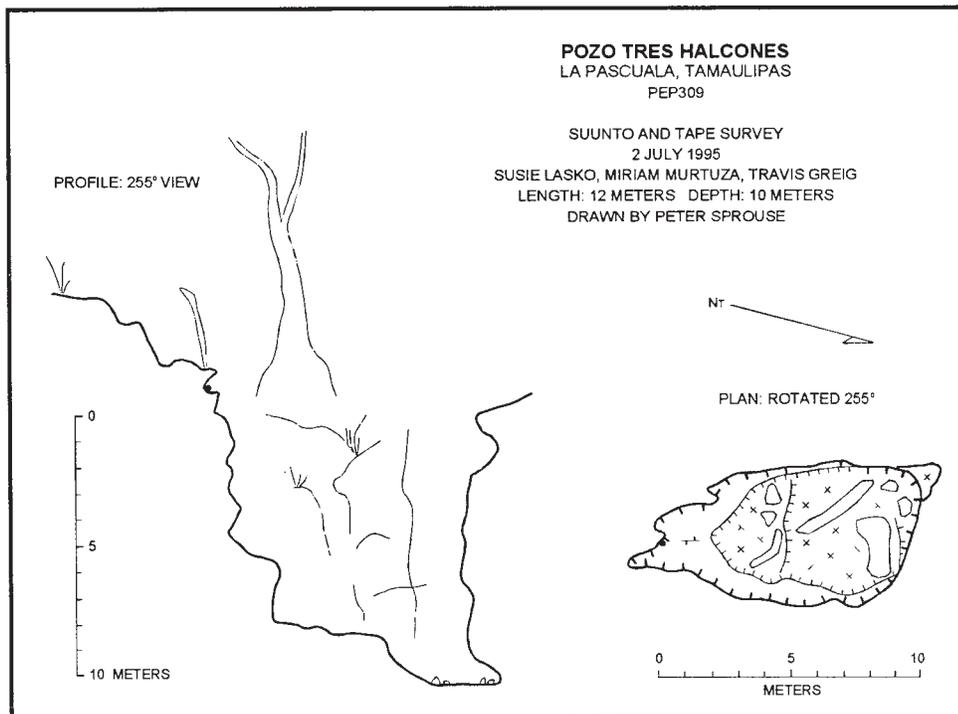


POZO FLOR DE MAYO PEP 323
 Flor de Mayo, Tamaulipas
 Depth: 72 meters
 UTM coordinates: 452,420 E 2,645,740 N

This pit is located 2800 meters southeast of Revilla in the high valley known as Flor de Mayo. The entrance is situated at 2360 meters elevation in a wide sink just north of Cueva de las Columnas. The sink funnels into a 72-meter pit. The floor is flat rock, gravel, and silt, with no way on. This pit was discovered on 8 April 1982, by Peter Sprouse and mapped on 29-30 June 1997, by Troy Lanier, Alyssa Lowe, Barbara Luke, and Miriam Murtuza.



Jim Feely rappels into Sótano del Palo Cayendo. 1980 photo by Paul Fambro



POZO PUERTO RATON

PEP 343

Cuahtémoc, Nuevo León

Length: 26 meters Depth: 25 meters

UTM coordinates: 452,525 E 2,642,510 N

Ratón is located 2000 meters south-southeast of Cuahtémoc. It lies just west of the main road at an elevation of 2312 meters. It is a single 23-meter pitch dipping about 70° west. The walls are clean-washed limestone and flowstone. The floor has a small hole, not passable, that goes at least 2 meters but has no air. It was explored on 23 December 1996, by Susie Lasko, Barbara Luke and Jason Richards. (BL)

POZO DE ALICIA

PEP 345

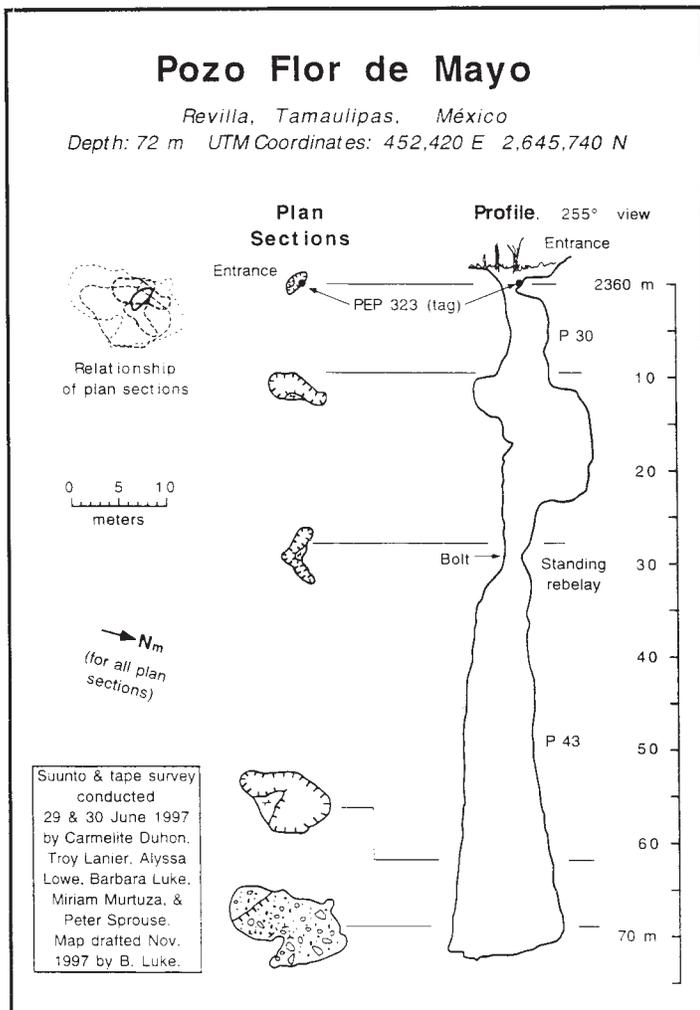
Cuahtémoc, Nuevo León

Length: 43 meters Depth: 43 meters

UTM coordinates: 452,410 E 2,642,447 N

Pozo de Alicia is located 2000 meters south-southeast of Cuahtémoc at 2285 meters elevation. It is on the south side of the Calabasa road, just west of a trail. The narrow entrance shaft drops 40 meters to a dirt floor. The south side of the floor has collapsed, creating a further 2-meter drop to a tiny drain. This pit and PEP 346 were shown to Pat Geery, Peter Sprouse and Cathy Winfrey on 29 June 1997, by local resident, Armando. It was mapped on 25 December 1997, by Patrick Brady, Peter Sprouse and Kevin Stafford. (PS)

Spiders: *Nesticus ? rainesi* Gertsch



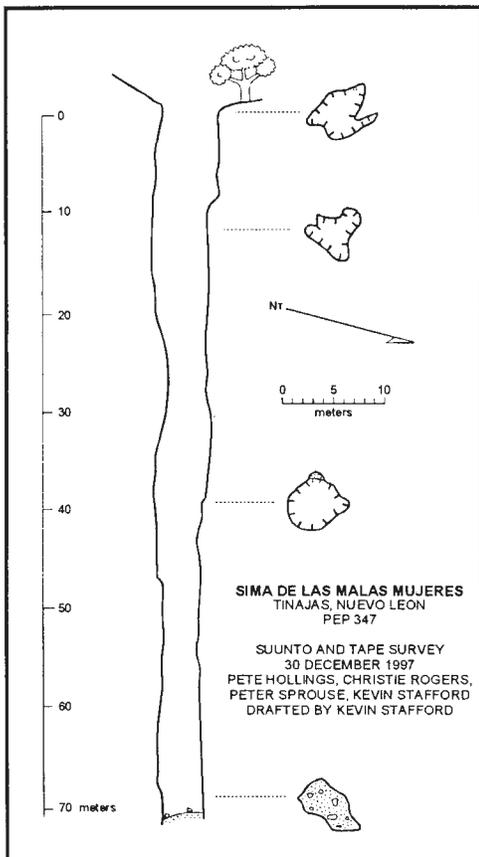
POZO "PATRICIO GANA ALICIA" PEP 346
 Cuauhtémoc, Nuevo León
 Length: 16 meters Depth: 16 meters
 UTM coordinates: 452,388 E 2,642,349 N

This pit is located 2000 meters south-southeast of Cuauhtémoc at an elevation of 2272 meters. It is on the south side of the Calabasa road, just west of a trail. The entrance measures 2 by 4 meters and is a 16-meter sheer drop to the plugged floor. Patrick Brady, Peter Sprouse and Kevin Stafford surveyed the pit on 25 December 1997. (PS)

Pseudoscorpions: Pseudoscorpionida undetermined
 Mites: Acarina undetermined
 Millipedes: Diplopoda undetermined
 Darkling beetles: Tenebrionidae genus and species

SIMA DE LAS MALAS MUJERES PEP 347
 Tinajas, Nuevo León
 Depth: 70 meters
 UTM coordinates: 441,800E 2,646,450N

Located 1100 meters east of Tinajas at 1735 meters elevation, this pit is named for a small brown and white bird called the "Mala Mujer". It is larger in diameter and appears to be more circular than other pits we have found in the Tinajas Area. The entrance is about five meters by four meters and receives no drainage from the surrounding



karst. There is a V-shaped ledge 8 meters down, beyond which the 70-meter entrance drop hangs free. The bottom is completely plugged with fill. Sima de las Malas Mujeres was shown to Julie Jenkins, Bill Russell and Charley Savvas in May 1997. Several Mala Mujer birds live in the pit, and when dis-

turbed by Charley on his way down, they flew above him making their whistling chirp. He reached the end of the rope without reaching bottom. On 30 December 1997, Pete Hollings, Christie Rogers, Peter Sprouse and Kevin Stafford bottomed the pit and mapped it. (WR & PS)

SIMA CHUPACABLE PEP 360
 Potreritos, Nuevo León
 Length: 486 meters Depth: 402 meters
 UTM coordinates: 446,119 E 2,647,979 N

Sima Chupacable is located 2200 meters south of Potreritos at an elevation of 1513 meters. The entrance, originally just a tiny hole sucking air, is situated in a small sink. A narrow, flowstone-lined climb drops 3 meters to a small room. This contains a tight 4-meter drop to the top of the second pitch, 15-meter-deep Not Too Pharr. At the bottom is a short chamber floored with gours and gravel leading to the third pitch, Well Too Pharr. The top of this pitch is very tight and had to be enlarged. This drop is the deepest in the cave at 141 meters. It opens up immediately, reaching about 10 meters in diameter, and alternates between being free and just touching the wall. The bottom of the drop has some boulders jammed in a rift, giving way to a fourth drop of 20 meters. This leads to a small ledge where a rebelay begins the Tug-o-War Well, 85 meters deep. This is initially fairly vertical, with some large ledges toward the bottom. A floor of dirt and gravel leads to a small drain, which is bypassed by climbing up to a window. This leads over a crumbly lip into the 40-meter-deep Windy Window Well. A major flowstone ledge ends this pitch and begins the 39-meter Alien Drop. A narrow, muddy ledge divides this pitch from the next one, 25 meters deep.

Here the cave radically changes character. Up to this point, it is developed in a clean, massive reef. Then it turns into a muddy meander. After a crawl, the airflow that had been consistent up to that point is apparently lost up some domes. Some awkward, muddy traversing over natural bridges and canyons is required to reach the final drop of 16 meters (the ninth). At the bottom is a spacious, muddy chamber with several pools. A low-air-space, mud wallow leads to a continuation that descends another 20 meters to a sump.

The most likely resurgence for water from the Tinajas Valley is the Nacimiento de Hervores that flows into the Arroyo Luna about seven kilometers to the north, at an elevation of about 1050 meters.

Sima Chupacable was discovered on 2 April 1997, during a search of the lower Tinajas Valley by Bill Russell, Julie Jenkins, and Charley Savvas. Julie had spotted a small hole in the leaves crossed by a rapidly vibrating pine needle. She reached down and felt air flow, and several hours of digging succeeded in opening up the cave. The airflow initially resulted in the name "Chupacueva," a take-off on the famous Chupacabra myth. Charley descended the first two pitches and reported there was a small squeeze at the bottom and "major pit." Bill Russell joined Charley, and they tossed rocks through a narrow slot a bit too small to squeeze through. The rocks fell free for three seconds and then bounced out of hearing range.

The same crew returned in late May to check the third pit. The first item of business was to enlarge the narrow slot at the entrance to the pit. Enlargement went well, producing a feeling of awe as the crash of rocks falling into the pit reverberated for many seconds. Charley rappelled in, two long ropes together were not enough to reach the bottom, and Charley found himself dangling at the end of 100 meters of rope.

The next day, Charley returned with the last rope and a hammer drill. He set a bolt 40 meters down at the first rub point. Twenty-five meters farther down, another rebelay was set; somewhat further down again, Charley rappelled past what appeared to be a bad spot in the rope, so he climbed up a short distance and tied a knot that left the bad spot in a protruding loop. Crossing back down, he continued onto the third rope and finally reached a point where the pit began to angle away from the vertical. There, Charley placed another rebelay and continued on down, reaching the bottom of the shaft 141 meters below the shaft entrance, 165 meters below the surface. A Well Too Pharr.

The cave was not pushed until December when the annual PEP expedition moved to Tinajas after a week in Conrado Castillo. On the 27th three teams headed in, with Charley, Bev Shade and Bernhard Köppen going in first to rig. Barbara Luke, Katrina Hawkins and Tim Palmer mapped from the entrance to partway down the Well Too Pharr. Creature, Steve Mulhall and Kevin Stafford surveyed all

the way down to the end of the ropes at -250 meters then mapped back up to tie into Barbara's hanging survey. The rig crew continued pushing down the next day, with Bev renaming the cave "Chupacable" due to the amount of rope it was sucking in. Creature, Susie Lasko and Peter Sprouse surveyed behind in them. They quit on the muddy ledge at the bottom of the Alien Drop, 340 meters down. Charley and Bernhard had gone down the next drop to find muddy canyon passage. It wasn't looking so good.



Patrick climbs the last drop in Chupacable. 1997 photo by Susie Lasko

On 30 December, Charley, Bev and Bernhard went back into Chupacable to continue rigging and exploring. Unfortunately, the next drop led to a muddy low airspace. Bev dove through and reported that it went, much to the others' chagrin. By this time the mud had churned up and there was no airspace left, so Charley and Bernhard had to immerse themselves completely in the mud to get through. Twenty meters deeper they reached a final sump. On the way out they passed the survey team of Cyndie, Susie, Pat and Steve. Pat, who had happily

worn shorts into the thus-far clean cave, looked at the mud-encased push crew and declared that he was not going to go where they had been. The rest of the crew were easily convinced, so the section beyond the Mudsuck was not surveyed.

Tim, Dale Chase, Bill Nasby and Dan Green went into Chupacable the next day to finish the derigging, accompanied by photographers Melonie Alspaugh and Chris Casselli. Several months later, back in Germany, Bernhard went to visit his doctor with an ear ache. A large piece of mud was removed! (PS & WR)

- Leaches: Hirudinea undetermined
- Branchiobdellid worms: Branchiobdellida undetermined [symbiote of *Speocirrolana* sp.]
- Aquatic isopods: *Speocirrolana* sp. (troglóbite)
- Terrestrial isopods: Trichoniscidae genus and species (troglóbite)
- Spiders: Liocranidae genus and species
- Harvestmen: Palpatores undetermined
- Springtails: Collembola undetermined
- Cave crickets: Rhabdophoridae genus and species
- Ground beetles: *Mexisphodrus* sp. (troglóbite)
- Rove beetles: Staphylinidae genus and species
- Flies: Diptera undetermined

POZO DE CORNUALLES

PEP 385

Tinajas, Nuevo León

Length: 57 meters Depth: 55 meters

UTM coordinates: 448,326 E 2,646,161 N

This pit is located 1000 meters east-southeast of Tinajas at 1708 meters elevation. It is just north of the Sofia Mine. The entrance is about 1 meter in diameter, with a small natural bridge useful for rigging. The 55-meter drop is broken by several ledges and slopes. It ends in a choke of clean rubble, with no airflow. Benjamín Villanueva showed this entrance to Melonie Alspaugh, Pete Hambly, Vivian Loftin and Peter Sprouse on 27 December 1997. It was named for Pete's Cornish heritage. (PS)

POZO CHICLETAS

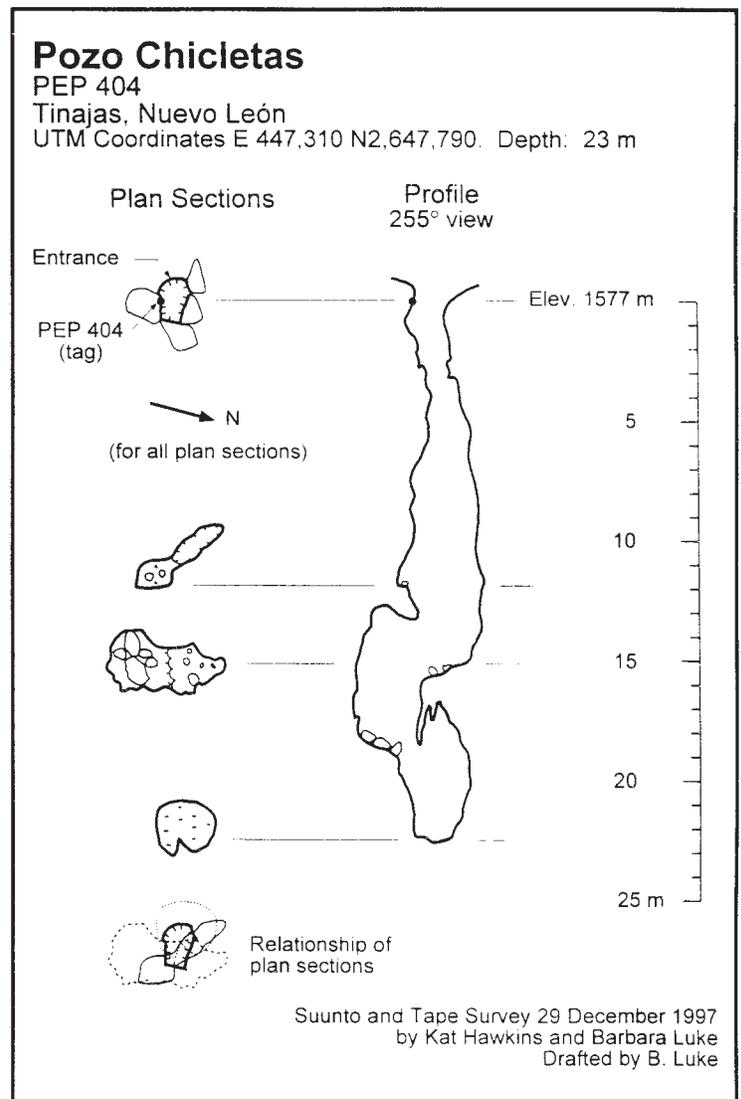
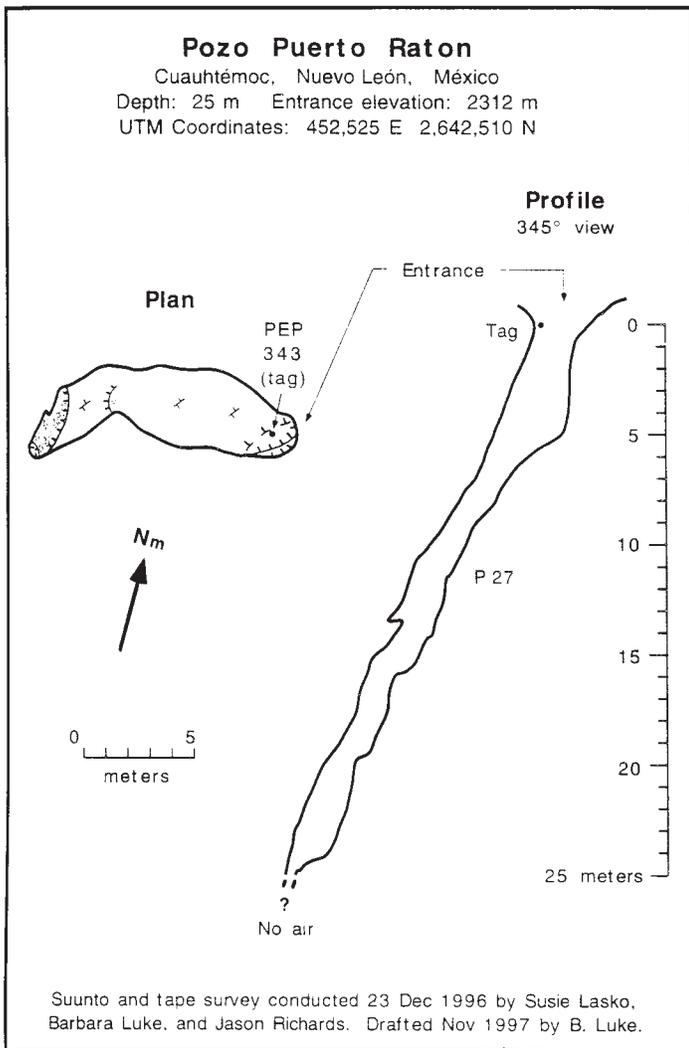
PEP 404

Tinajas, Nuevo León

Length: 25 meters Depth: 23 meters

UTM coordinates: E 447310 N 2,647,790

This pit is located 1500 meters north of Tinajas at 1577 meters elevation. The entrance to Pozo Chicletas is a narrow, vertical fissure which descends about 15 meters, opening into a room that is slightly offset from the entrance chimney. Behind a curtain of flowstone, the second and terminal room bottoms at about 23 meters in a clay-choked floor. The pit was found, explored and mapped by Kat Hawkins and Barbara Luke on 29 December, 1997.



PURIFICACION SPELEOMETRY

January 1999

Long caves	Length	Deep caves:	Depth
1. Sistema Purificación, Tamaulipas	90,470	1. Sistema Purificación, Tamaulipas	957
2. Cueva del Tecolote, Tamaulipas	32,031	2. Cueva del Tecolote, Tamaulipas	424
3. Sótano de Las Calenturas, Tamaulipas	8,308	3. Cueva de La Llorona, Tamaulipas	412
4. Cueva de La Llorona, Tamaulipas	3,540	4. Sima Chupacable, Nuevo León	402
5. Sumidero Suchomimus, Nuevo León	2,614	5. Sumidero Suchomimus, Nuevo León	317
6. Sótano de la Cuchilla, Tamaulipas	2,505	6. Sumidero Anaconda, Nuevo León	278
7. Cueva del Río Corona, Tamaulipas	2,301	7. Cueva de las Calcetines Rosas, Nuevo León	222
8. Cueva Paraíso Difícil, Tamaulipas	1,799	8. Sótano de la Cuchilla, Tamaulipas	207
9. Cueva del Borrego, Tamaulipas	1,354	9. El Hundido, Tamaulipas	186
10. Sumidero Anaconda, Nuevo León	1,246	10. Cueva Paraíso Difícil, Tamaulipas	178

**The PEP would like to thank the following
for assistance in 1997/1998:**



photo by Chris Caselli



