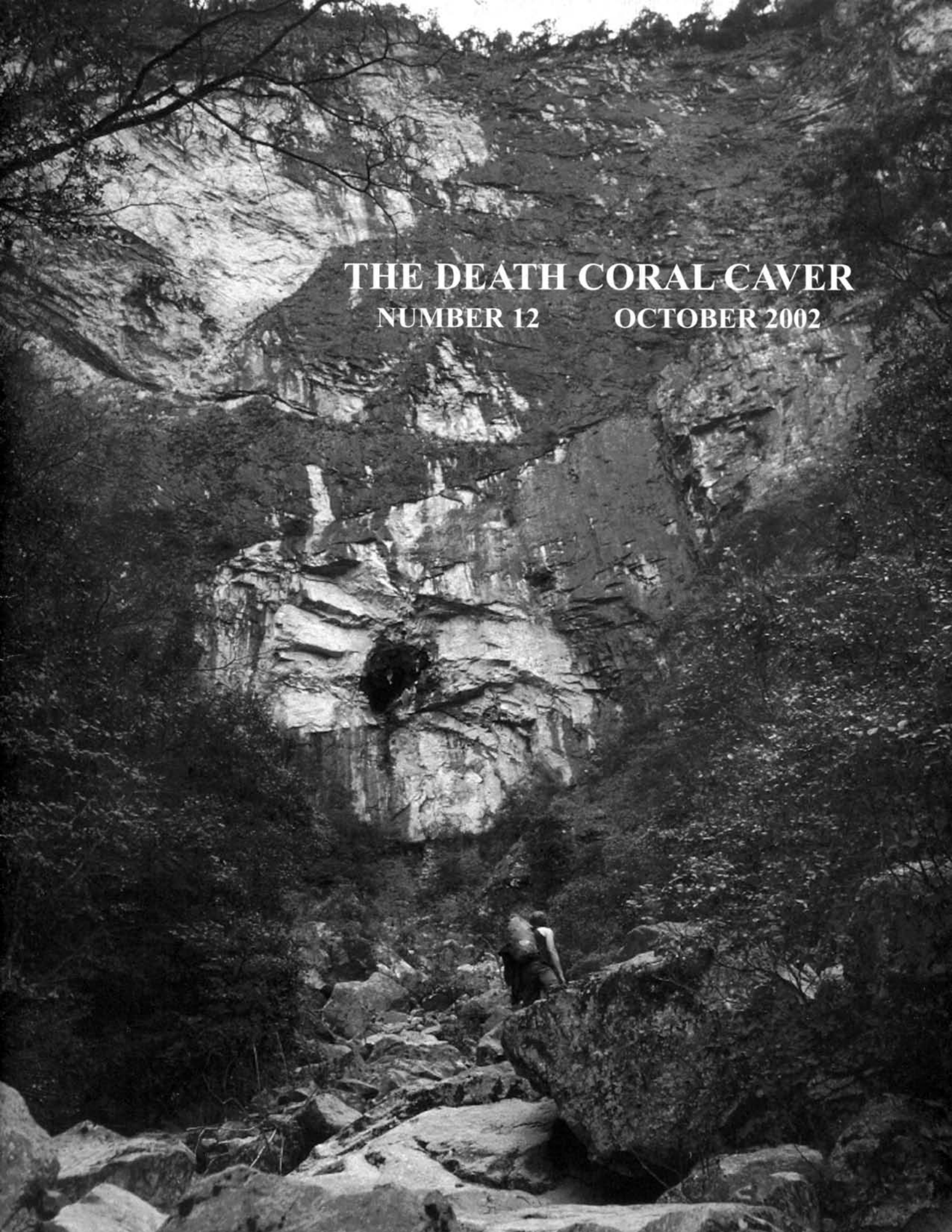
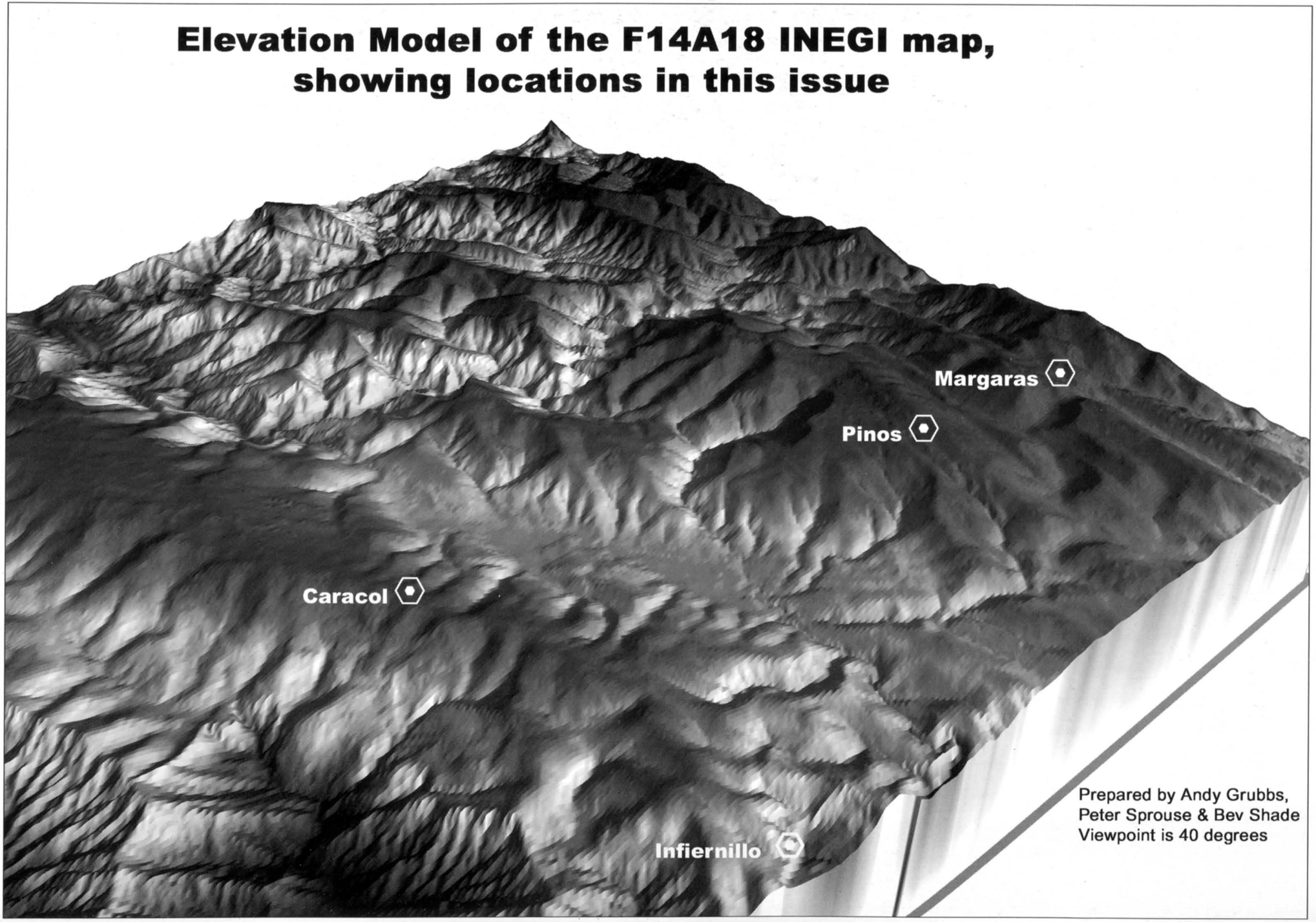
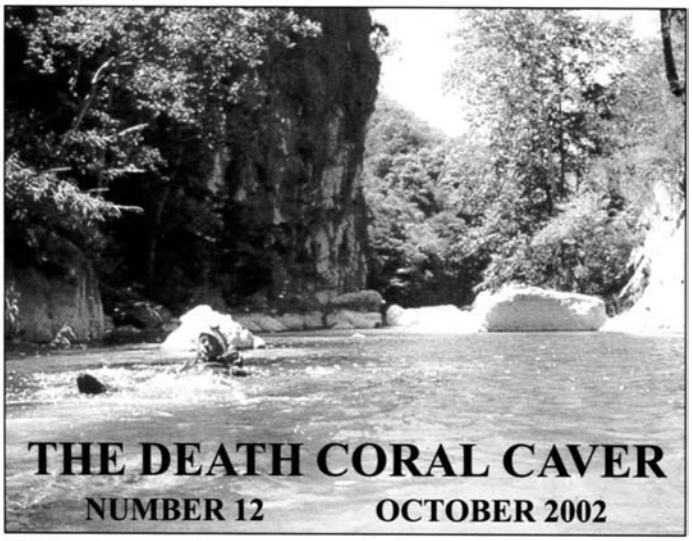


THE DEATH CORAL CAVER

NUMBER 12 OCTOBER 2002


Elevation Model of the F14A18 INEGI map,
showing locations in this issue
Margaras
Pinos
Caracol
Infiernillo
Prepared by Andy Grubbs,
Peter Sprouse & Bev Shade
Viewpoint is 40 degrees



Infierno Canyon *Michael Denneborg photo*

Dedicated to the exploration, study, and conservation of the caves and karst of Purificación

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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. Members will receive newsletters as they are published and may vote in elections of the Board of Directors.

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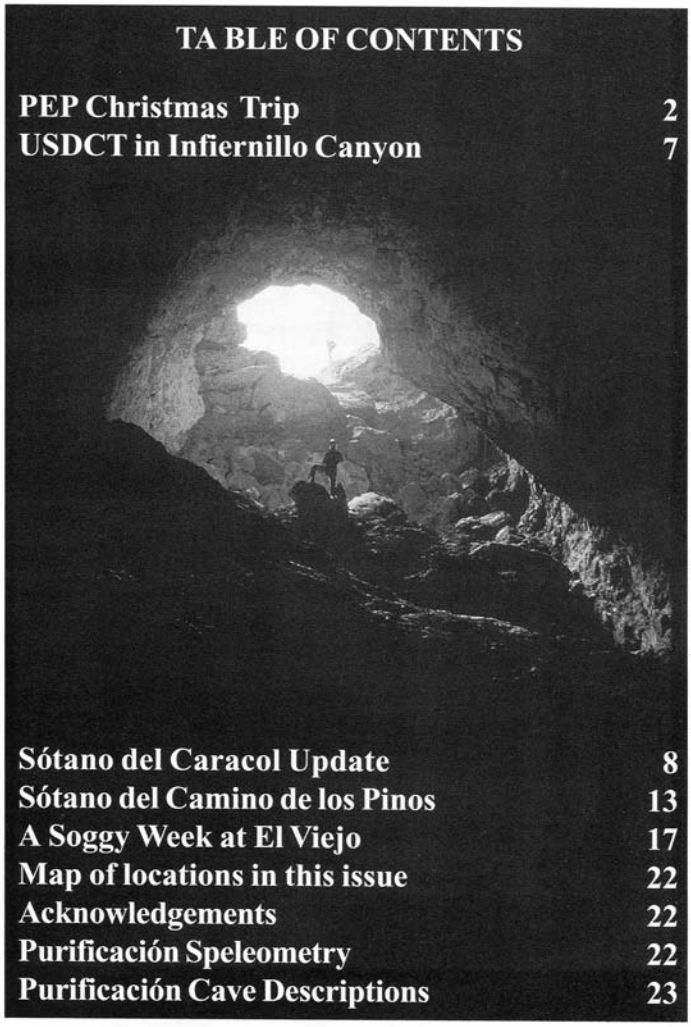
Editorial

I am pleased to announce that Bev Shade is assuming the presidency of the Proyecto Espeleológico Purificación. Bev began her caving career ten years ago, checking pits in the high karst around Las Chinas. Since then she has participated in and led many expeditions to the area. I can't think of anyone better qualified to lead the project on to future discoveries. Although I am stepping down from the presidency, I'll remain active in all aspects of the project. Maybe I'll even find some time to work on the map of Sistema Purificación...

Peter Sprouse

TA BLE OF CONTENTS



Infiernillo Entrance *Bev Shade/Bill Stone photo*

Front Cover: Resurgence lead at El Niño. Photo by Peter Sprouse

Inside Cover: Elevation model showing locations discussed in this issue

Back Cover: Terri Whitfield rappelling in Suchomimus. Photo by Peter Sprouse.

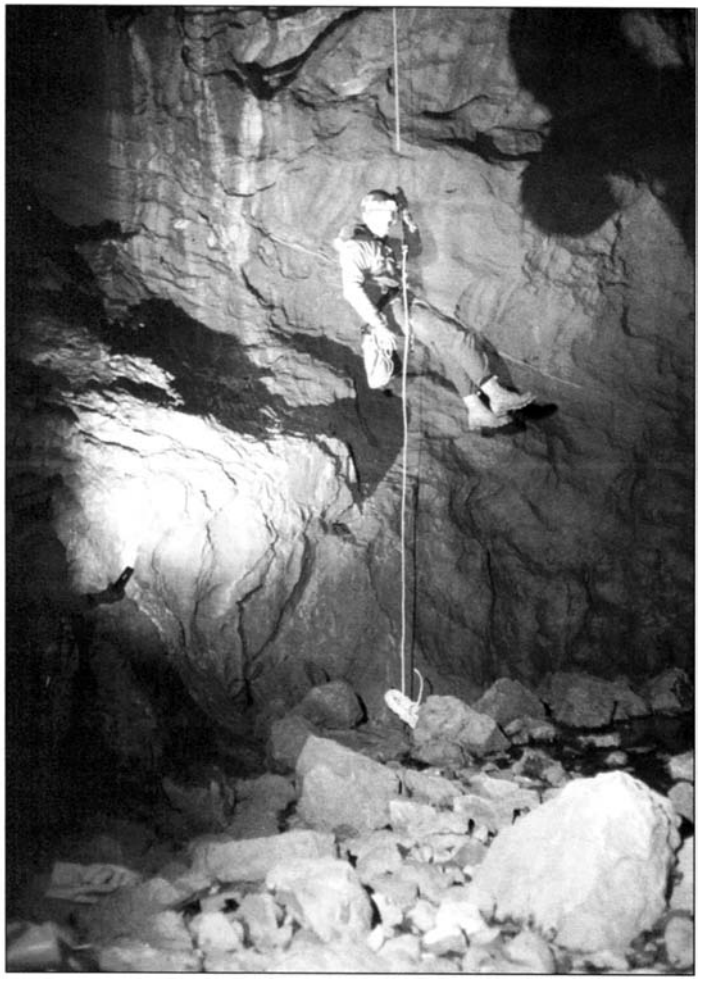
Inside Back Cover: Looking up the 90 meter Salto del Viento drop in Caracol. Bev Shade/Bill Stone photo.

PEP Christmas Trip 2001-2002

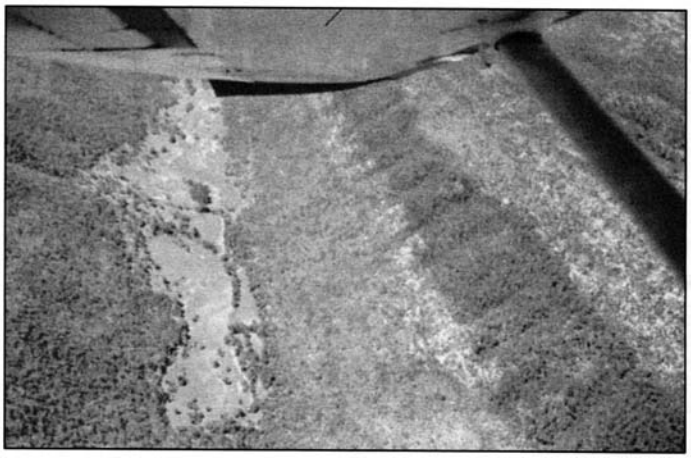
by Terri Whitfield

"Licencia, por favor." The Policia del Camino glared sternly at Charley.
"No hablo español," Charley replied flatly.
"Su licencia," insisted the police officer.
"What?" was the reply.
Frustrated, the officer reached into his pocket and fished out his own drivers' license and showed it to Charley,
"LICENCIA!" He gestured toward the little card that he held inches from Charley's face.
"Oh," said Charley, "nice picture."
"Dame su licencia," the officer demanded once again.
"No," was the final reply.

Altogether we were stopped three times by the highway patrol on the way down to Zaragoza, Nuevo León for the Proyecto Espeleológico Purificación 2001 Christmas trip. The stops turned out to be nothing major, just long enough to determine who we were and what we were doing, then we were sent on our way. The longest delay we had was getting a car permit for Charley's 4Runner. We crossed at an out-of-the way, dusty little border town east of Laredo named Roma. We arrived in Zaragoza on 22 December in time for dinner, meeting up with Bill "Carlos" Nasby, and his crew, Dale Chase and Pat Shaw, who had spent the week up in Real de Catorce, along with José Antonio Soriano, who they had picked up in Zaragoza. We had a large group for dinner at the Cocina Económica, located off the main square. Peter Sprouse, Libby McConnell, Gil Mojica, and Terri Whitfield were traveling in one truck, Charley had two Brits with him in his truck, Jenny Pinder and Andy Lewington, and then there was Carlos' crew. We were to meet up later with Jonathan Wilson and Barbara Luke, who were traveling together, and Bev Shade, who should have been half a day ahead with her crew coming all the way from Minnesota. With her were Nick Johnson, Matt Kramer, Mark Halverson, along with Aldo Guevara, who they had picked up in Victoria. A day or two later, we were to be joined by three cavers from Arkansas: Matt Covington, Elizabeth Dunn, and Josh Ross.



Pat at the base of the entrance drop of Suchomimus
Peter Sprouse photo



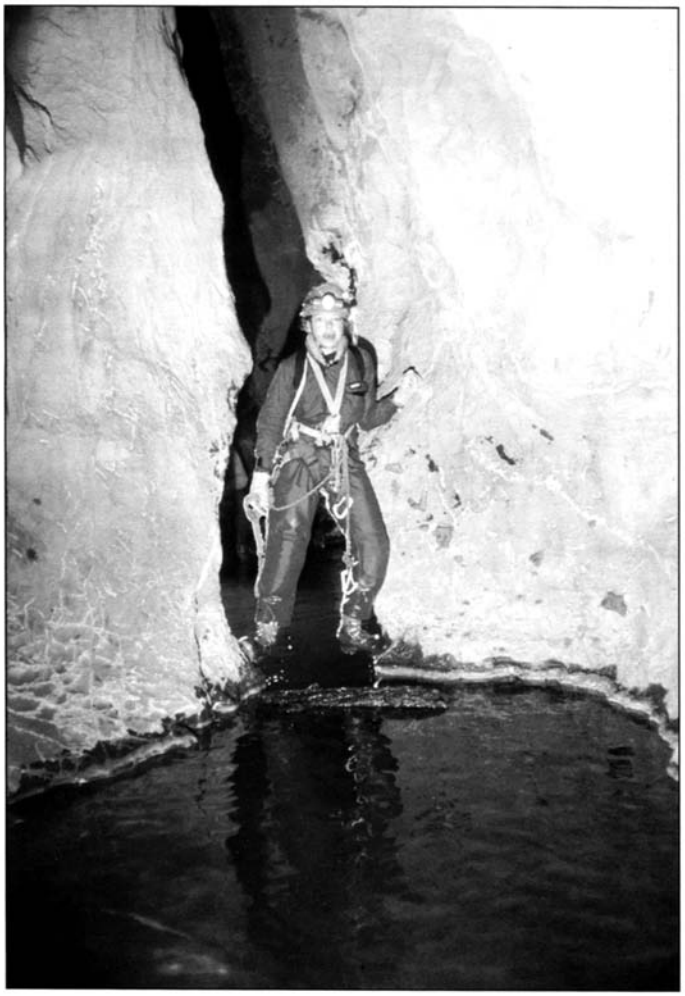
Shale contact along the east side of Cuchilla la Travesia
Bev Shade photo

Sitting at the head of a mountain valley, Zaragoza collects the springs as they run down from the mountains and channels them into the series of cascading waterfalls called *El Salto*. We got rooms for the night at a small hotel north of the square. The next day Carlos' crew headed up the mountain early, stylin' in his fully restored Dodge Power Wagon. The rest of us slept late and got on the road around noon after a leisurely breakfast and a brief stop at the local market for fresh foods and tequila. On the way up the mountain we came upon Javier Rosales, one of our local acquaintances, who was leading a couple of burros carrying his wife, two small kids and various items acquired during their day at the Zaragoza market. Realizing they still had another five kilometers to walk up to their homestead in La Escondida, we offered to take some of their load up the mountain, but they were content to continue on in their usual way, taking the ancient foot trails up and around the steep switch-backs.

When we got to the high pass of La Escondida, we stopped at Cleofas Rosales' place for refrescos. From there we finished our descent to Cretaceous Park, and settled in to our camp. Well after dark we saw lights coming up the mountain and

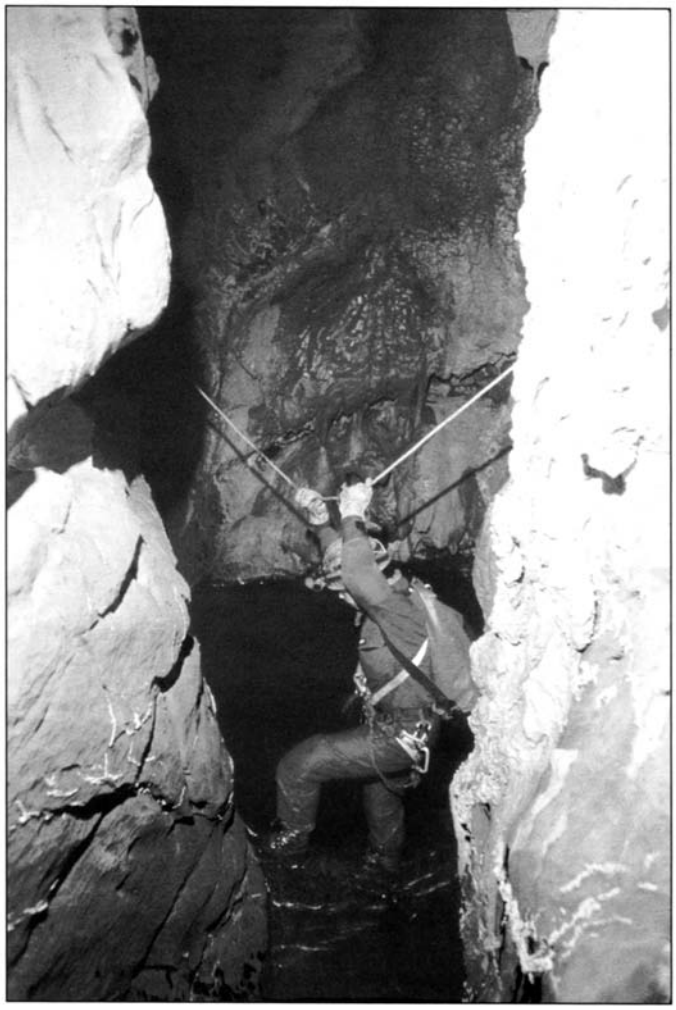
Andy squeezes through the second major restriction in Suchomimus
Bev Shade photo

heard Bev's crew on the radio. "We are one kilometer south of . . ." The rest of what we heard was only static. We had expected that Bev would have arrived at camp before us. We tried to regain contact by radio, but she must have driven down into a valley and did not reply. Realizing that she was now close to camp, Soriano and I hiked out to the fork in the road that was marked with flagging tape, but could easily have been missed in the dark. Soon, lights appeared and Bev's Toyota came humming around the bend.



Terri above a pool in the entrance series of Suchomimus
Peter Sprouse photo

Bev told her story with a smile; she had a fifteen-hour delay due to an auto accident that occurred as she was wandering around lost near the town of Doctor Arroyo. Nick, driving Bev's truck, was attempting to make a left turn off the highway and made the mistake of signaling. One should take special care when making a left turn anywhere in Mexico as there is a custom of using the left turn signal as a sign that it is OK to pass. The driver pulled out into the passing lane just as Nick was turning, ramming straight into the side of the driver's door. The police and insurance companies were called, Bev took the blame, and, fifteen hours later, they were on the road again. Finally, Bev's Toyota drove into

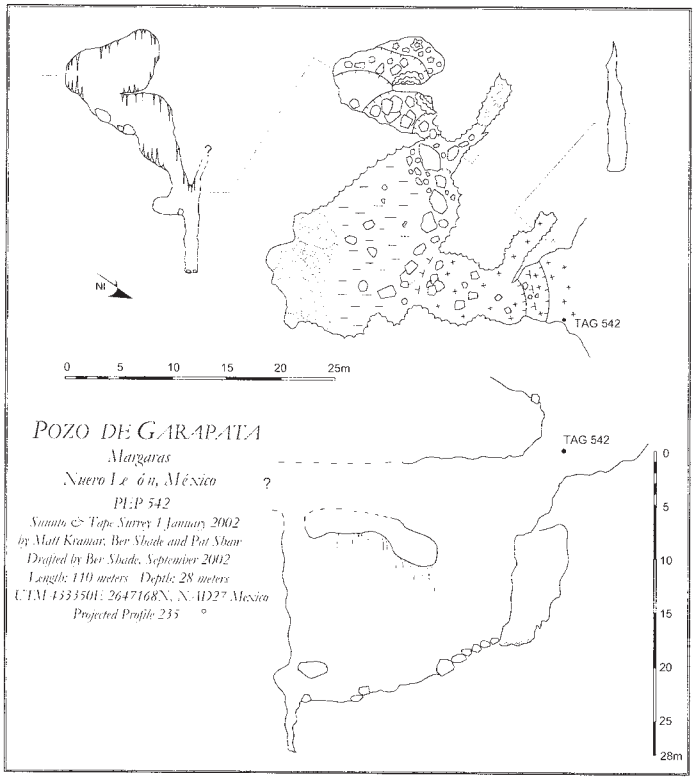


Traversing a pool in the entrance series of Suchomimus
Peter Sprouse photo

camp, followed closely by a second Toyota with Mark, Matt and Aldo.

Next day, Bev, Nick, Matt, Aldo and Charley went into Sumidero Suchomimus, the main entrance to Sistema Cretácico, and rigged to the bottom of the Jungle Gym using brand new 10-millimeter Cancord polyester rope for both the 80-meter entrance drop and the 100-meter drop that makes up the Jungle Gym.

Carlos, Soriano, Jenny and Andy went to push Cueva Pterodactilo, a lead Carlos had worked in the year before, but it soon pinched. Dale, Mark, Pat, Libby, Gil, Peter and I took a reconnaissance hike north along the contact, visiting the known entrances. When we looked at the blowing hole just above Pink Socks, Dale got excited. He crawled in and was stopped at a con-



striction, but could see a shaft going down. He vowed to return the next day with tools to help shave a path through the rock. Then Pat, Dale and Mark went to check a small pit that Peter had seen between Pink Socks and T-Rex, but it was only 9 meters deep. They surveyed this one and called it Cueva del Pastor.

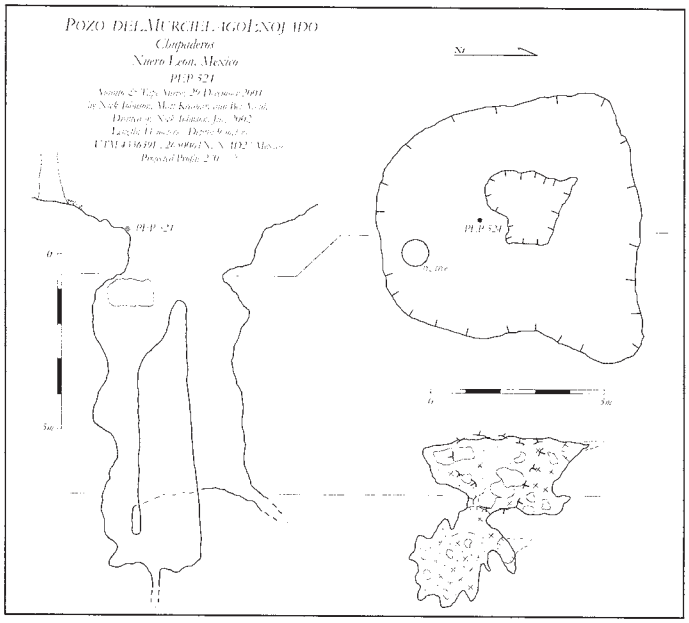
The next day, Barbara, Andy, Jenny, Aldo, Soriano, Peter and I drove to the small village of Garza. Using the GPS unit to guide us, we hiked over to an air photo resurgence lead. A 2-kilometer hike/bushwack in the fog brought us so close we could hear the water flowing below and almost feel the spray. But we could not drop to the stream for lack of rope. We returned to the car and drove back to camp, somewhat disappointed but looking forward to our return.

The day after Christmas, Dale, Matt, Mark, Gil, Barbara and Libby went back to Dale's blowing hole near Pink Socks. They were calling this one "Satan's Parallel Bedroom." One more day of banging got them in. They squeezed through the Bunny's Butt Crack before the third pitch dropped into known passage, the Big Room in Pink Socks. Meanwhile, Pat, Aldo, Peter and I went in to the Jungle Gym in Suchomimus, taking photos. We crossed three or four rebelays before reaching the pool below the 80-meter entrance drop. The clear, cascading pools beyond were beautiful and very cold, so most of us wore furry suits under our cave suits. Although most of the pools were only waist deep, there were two deep ones that needed a traverse line. Our group, taking photos, was in for five hours. The push team, consisting of Charley, Bev, Nick, Jenny, Jonathan, and Andy, went to the bottom of the cave to work on leads. On the way the group checked out potential climbing leads. Jonathan scrambled up a crumbling dirt ledge, approximately 15 meters tall, in one of the big rooms but did not find anything worth pursuing. There were a few dark crevices in the ceiling, but the rock in the chamber looked very rotten. He did manage to get down with a little excitement and no broken

Pat Shaw gets ready to enter Cueva de Garapata
Peter Sprouse photo

bones, but sadly left behind Charley's bolt hammer. Andy and Jenny headed back while the others mapped the lead at the end. After a bit the passage split; the right lead went to a sump and the left lead went to a breakdown choke. In several places Charley could climb up through the breakdown, but eventually needed bolts to continue. They mapped the passage leading down to the sump, but did not survey into the breakdown mess. After eighteen hours, Charley and Jonathan came out into the cold, dark night, napping by a fire lit near the entrance until morning, when Nick and Bev made it out. Suchomimus was de-rigged the next day by Carlos and Soriano.

Pat, Mark, Matt, Aldo, Barbara, Dale and Peter went back to the canyon west of Garza, this time with good weather and a great view. They did a fifteen-meter rappel to a crystal-clear flowing stream, then, hiked upstream past the boulders toward a prominent cliff-side entrance. This looked quite promising, but would need a 25-meter aid climb to get into. They checked the source of the stream, 250 meters to the east, but it just seeped from a large flowstone skirt at the contact. They got back to camp after dark to find that Matt Covington, Josh Ross and Elizabeth Dunn had arrived.



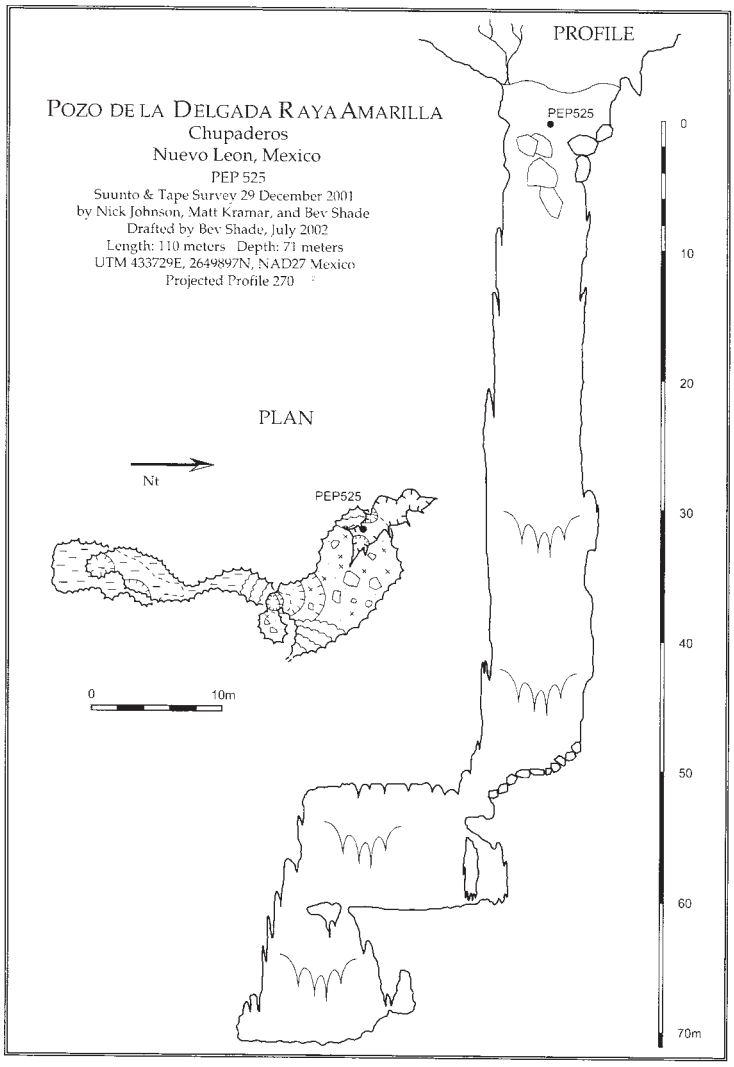
On Friday, we packed up camp and moved south to Chupaderos. It was a three-hour drive to our new camp. Peter did a short hike before dark and found three small pits, one blowing air.

The next day, six teams went out looking for caves. Matt C., Aldo, Elizabeth, Peter and I looked for caves in a saddle in the mountains east of Margaras. We found three, mapping two of them. The first, Pozo Primero, went down two pitches to a dig. Passing that, a second dig got us through to a tight pitch-head needing a bolt. The second, Chiquito Pozo Grande, dropped 15 meters into a large chamber on a fracture. Charley and Jonathan led teams on the Cuchilla la Travesia shale contact, but found nothing. Carlos worked north of them and found one cave that ended. Barbara, Dale and Pat mapped a few shallow pits. Bev, Matt K. and Nick mapped one by the road that went 75 meters deep, (Pozo de la Delgada Raya Amarilla), and another smaller one within sight of camp, (Pozo del Murciélago Enojado).

The following day six of us drove down toward lower Chupaderos and up a valley to the west. Bev, Nick, and Matt K. hiked west toward La Escondida, but found only sinks. Pat, Peter and I hiked north along a contact toward the Forja caves (see DCC1). Some of the shale arroyos sank into nice head walls, but were plugged. The last one was plugged as well, but nearby was a blowing crack and an open pit. We left it for later and headed back to the truck. Only 60 meters north of the truck, we found a 20-meter pit, but had to save it for later, as it was getting late. Charley, Matt C. and Elizabeth went back to Pozo Primero, but it ended after the next drop. Jonathan, Aldo, and Mark walked up high on Cerro Chupaderos with old Pablo Gallegos, finding a number of pits, including one maybe 100 meters deep. Carlos, Soriano and Gil hiked back up to the Cuchilla la Travesia, this time finding some large pits. Barbara went downhill from camp with Dale, Andy and Jenny to push a cave in a large sink by the road that became known as "Cookie Monster". It was a tight meander with good air, until they needed tools to enlarge a constriction.

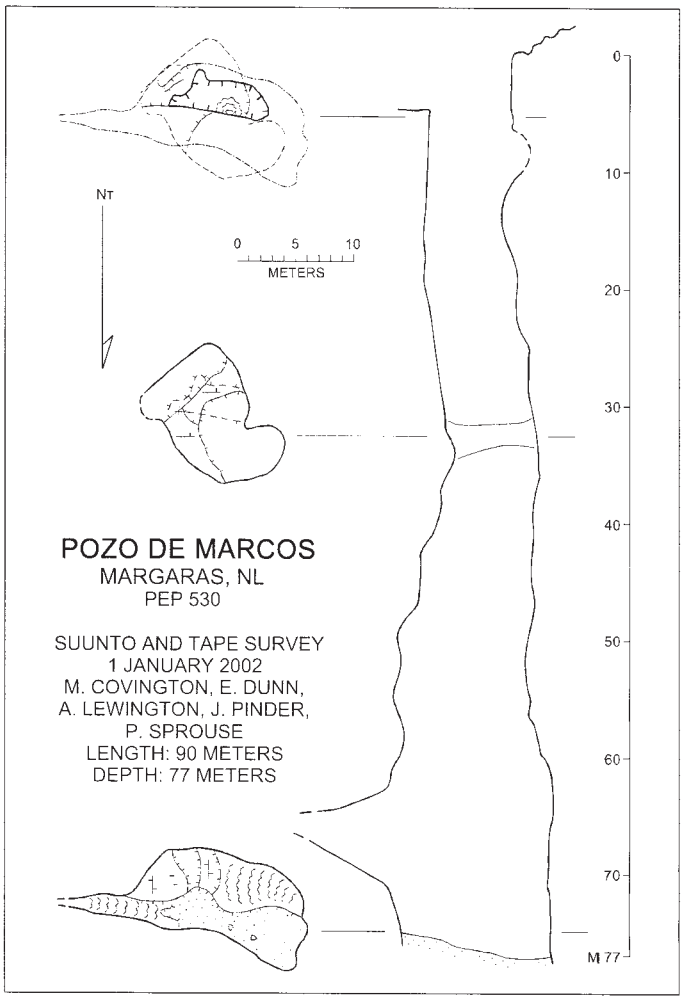
The next day Matt C., Elizabeth, Aldo and Peter worked the area just down slope from camp, mapping five caves and pits. Pozo de la Llama went to a second pitch of around thirty meters blowing air, but two hours of digging on the pitch-head revealed it to be too narrow to even consider enlarging. Pozo Nazca also pinched but could be seen to open up with pools below. Dale, Jenny and Barbara returned to Cookie Monster, and enlarged it somewhat, but not quite enough to get in. Bev, Matt K. and Nick mapped one pit in a field above camp, Pozo Soltero. The entrance to Soltero is very tight, and the cave is basically just one drop. Thus, the survey could be done with only one person in the cave (soltero). The cave did have some beautiful bedrock fins at the base of the drop.

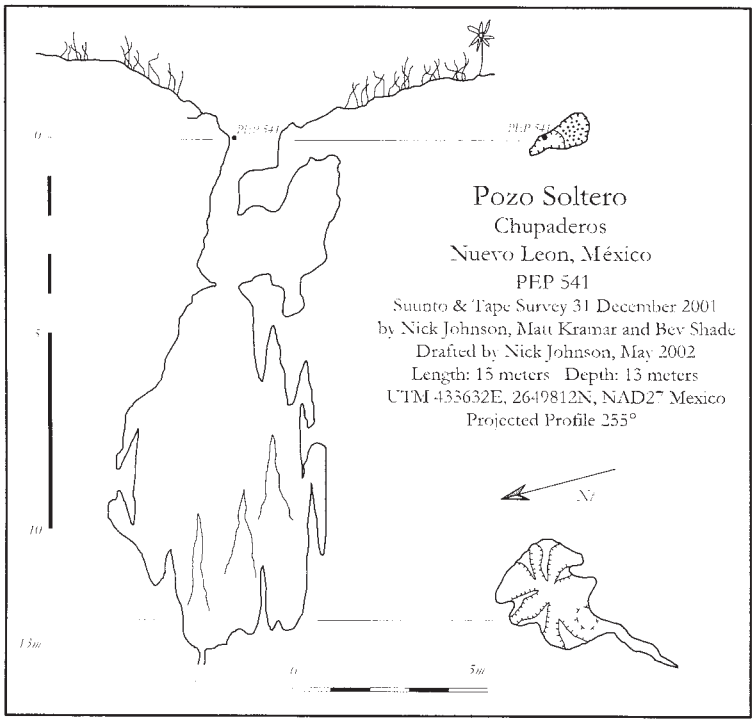
Matt Kramar rigs Pozo de la Delgada Raya Amarilla
Bev Shade photo



On New Years Day, Dale and Charley went back to Cookie Monster Cave and hammered enough to get through, but it soon narrowed to a canyon that was too tight. A large crew went back up Cerro Chupaderos to check out Jonathan's pits. They re-opened an old road that wound up the hill to a flat, open sink where we could park the trucks. From there they walked steeply up the mountainside to the first pit. Bev, Pat and Matt K. did this one, Pozo Garrapata. It was 29 meters deep, but didn't go. The entrance drop contained several large logs that had apparently been dropped into the cave by accident. The large room in Garrapata had several cold-looking bats, some messy areas that looked like pack rat nests and lots of gnats. The way to the second, deeper pit led across a high pass with spectacular views and then up a rugged karst field in El Abra limestone. Andy rigged on in while Jenny, Matt C. and Peter surveyed. Pozo de Marcos went 72 meters deep to a dirt floor.

The following day most everyone gonked, but Dale, Soriano, Mark, Barbara, and Matt K. hiked over to Toribio to look at a cave that local resident Jaime had told them about. "Cueva del Padre" turned out to be a large shelter. The next day, Dale, Barbara, Mark, and Soriano returned to Toribio to look for a resurgence cave they'd been told of at the north end of the valley, but lacking a guide they had no luck. Jonathan, Bev, Nick, Jenny and Andy hiked south of Margaras to look at more contact leads, but they didn't pan out. Charley, Matt C., Elizabeth and Josh went back to the valley east of Margaras and mapped three more shallow pits. Carlos, Pat, Matt K., and Peter went back up to the contact on Cuchilla La Travesia to look at three arroyo entrances found previously. Matt and Peter took the first one, Pozo Escaner. It went down two drops and ended. So they went to join the others at the second cave, a nice arroyo entrance. Peter and Matt went a short distance in and called to them down a 17-meter drop. They suggested that they help them map the cave, which they were calling Cueva Ranita. Peter and Matt mapped a lead to the right that quickly led to a drop into the same chamber where Pat and Dale were.



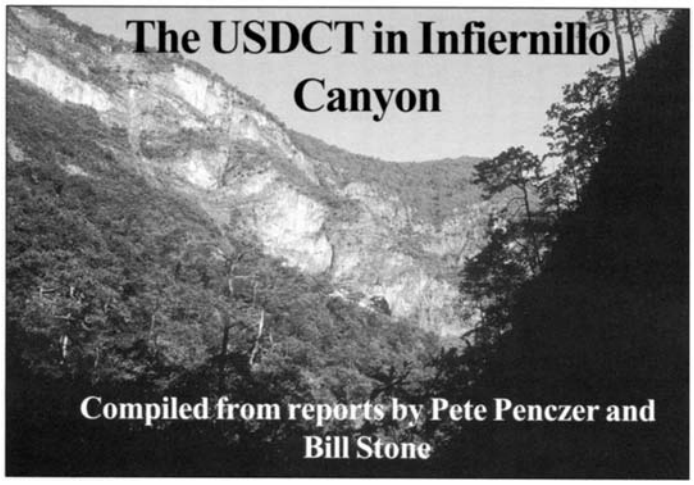


They grabbed an extra rope and went down a second 17-meter drop, which led downstream to a low crawl, but saw no sign of Carlos and Pat. Back at the rope they heard them through a crack in the wall. They had pushed their lead south to a climb taking air, then mapped down stream to a sump. Meanwhile, Matt and Peter mapped up a canyon infeeder. This climbed rapidly to a tiny hole to the surface, the Salida Ranita. Back on the surface they located the hole in the next arroyo.

On 3 January, everyone packed up camp and drove back down to Zaragosa in time for a great late lunch. Most people took time to visit El Salto and enjoy the waterfalls and the trout farm. The next morning groups took off in several different directions. Most people headed back to Texas, while Bev and Nick headed south with Soriano, with a plan to take him back to Mexico City. However, they only got as far as Real de Catorce, when the drive shaft fell off of her truck. Soriano wisely decided to continue to Mexico City by bus.

PARQUE CRETACICO 2001

Una expedición al "Parque Cretácico", cerca de Zaragoza, NL, completó la exploración del Sistema Cretácico, con 6065m de longitud. También hicieron una prospección de la zona de Margaras, encontrando varios pozos con profundidad menos de cien metros.



Looking north in Infiernillo Canyon, the anticline shelter cave is visible in the center of the photo, while Cueva Bolas de Nieve lies to the left of that shelter cave, hidden by a ridge *Bev Shade/Bill Stone photo*

In mid-December, ten cavers left Austin bound for the Purificación area: Mike Frazier, Randy Macan, R.D. Milhollin, Mark Minton, Karen Olson, Monte Paulsen, Brian Pease, Pete Penczer, Bill Stone and Rob Stone. The following are excerpts from a trip report by Peter Penczer published in 2002 in the Potomac Caver, titled "Snowballs in Hell". There are also some editorial comments based on descriptions by Bill Stone.

Our first base camp was a flat spot where the logging road dead-ends into Infiernillo Canyon. We arrived at about 5 PM and Mark Minton and Bill Stone dropped the tailgates on their trucks and set up a tarp in case of rain. Most of us slept in tents, but Mike Frazier and Randy Macan, both from Colorado, used an updated version of the Vietnam War-era tent hammock, which seemed to work well.

We weren't far from Cueva de Infiernillo, the lower entrance to Sistema Purificación, which opens into the upper end of Infiernillo Canyon. On a previous expedition, Bill spotted two holes downstream on the canyon wall. If one of these holes connected to Sistema Purificación, it would dramatically extend the depth of the cave. The primary goal of our expedition was to investigate those two holes.

The next day was Christmas Eve. Monte Paulson, Karen Olson, Bill and Rob Stone, and I finished cutting a trail up to the two holes in the cliff face, hacking our way through the jungle with machetes (the trail had been started by the previous expedition). One of the holes turned out to be an anticlinal archway and nothing more than a shelter. The other was essentially a vertical fissure that was stuffed with broken rock. There was a hole about twelve meters up the cliff face, and another hole about five meters above that. Over the course of the next several days, Bill Stone and Mike Frazier climbed up to the two holes in the vertical fissure. Frazier reached the lower hole using rock-climbing techniques, and then Stone climbed to the upper hole by aid-climbing. Finally, Frazier reached a third hole by traversing horizontally from the upper hole.

Neither of the two upper holes went anywhere, but the middle hole was actually the entrance to a short cave. Mike and Randy explored it and named it Cueva Bolas de Nieve after some formations that look like snowballs. They seemed to be cave pearls evenly covered with popcorn, and were perfectly spherical, with no flat spot. They were lying in dry rimstone pools in the floor, and the largest was about three inches across. No one had ever seen or heard of such a formation, and they might be unique to this cave.

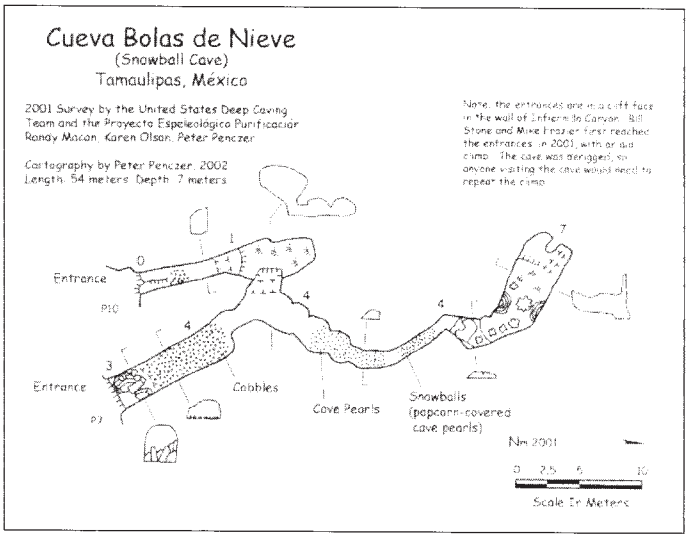
In the following days, I mapped the cave on two short, separate trips. The first day, I showed Karen Olson how to survey. On December 28, I finished surveying Cueva Bolas de Nieve with Randy; the total length of the cave was 54 meters. The passages were very dry, dusty, horizontal, and mostly crawlways.

We spent seven days at our Infiernillo Canyon base camp, and every day small groups went off looking for caves, but we found very little. On the first day, December 24, Mark Minton, R. D. Milhollin, and Brian Pease found a large resurgence about one-half mile from base camp, and about 500 feet lower in elevation. The resurgence was an excellent swimming hole, with a pool about 6 meters by 12 meters, and at least 6 meters deep. It was fed by a high waterfall, and had numerous rocky promontories from which one could jump into the water.

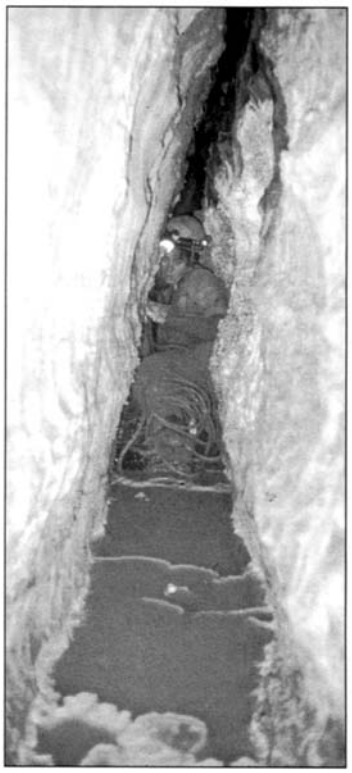
Bill Stone reports that two caves were also explored east of the Infiernillo Entrance. One cave had previously been spotted by Bill Nasby: it went about 100 meters to a sump. The second was a fissure about 300 meters east of this small cave that blew warm air, but was not enterable. The three tag numbers that correspond with Bolas de Nieve and these two caves are 462, 504 and 534, although it is not known which tag was placed at which feature. Unfortunately, no UTM locations could be measured for these features, as the GPS reception in the canyon was poor.

On December 27, the entire group spent the day at the swimming hole. We also took a day off for a tourist trip to Cueva de Infiernillo. After a week at Infiernillo Canyon with no big discoveries, we decided to pack up camp and move to another area.

They moved camp to Lenadero. The rest of their trip is described in Mark Minton's article on the exploration of Sótano del Camino de los Pinos (DCC 12, pp. 13-15).



CAÑON INFIERNILLO
El equipo USDCT revisaron el Cañon el Infiernillo, buscando nuevas entradas para pasar el sifón al fondo del Sistema Purificación. Solo encontraron varias cuevas chicas.



Bev in the Fools' Crawl
Bill Stone photo

Sótano del Caracol Update March 2002

by Bev Shade

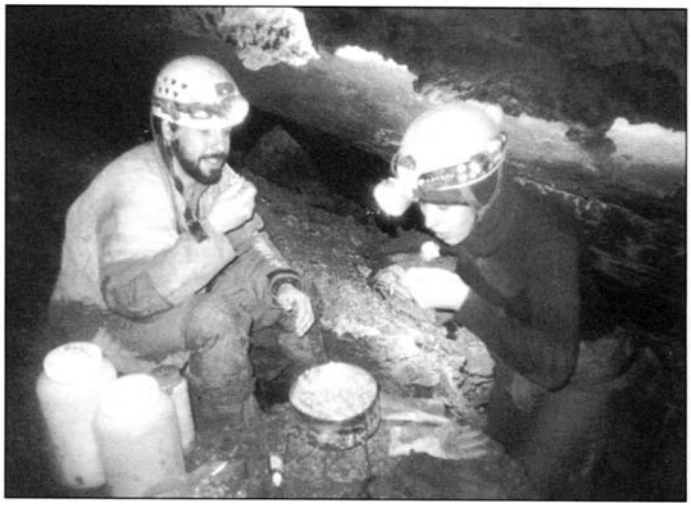
Participants: Melanie Alspaugh, Yvonne Droms, Bart Hogan, Mark Minton, Philippe Sénécal, Bev Shade, Jim Smith, Bill Stone.

A team of 6 left Austin (TX) on March 22. With a detour into Ciudad Victoria to pay the PEP field house rent, we arrived at the Caracol campsite midday on Sunday, March 24. By evening on March 23 we had set up camp in the Purificación karst of the Sierra Madre Oriental in northeastern Mexico. We were planning to continue the exploration of Sótano del Caracol (Land Snail Cave). Caracol was discovered about 15 years ago by Mark Minton and William Russell. They and others pushed the narrow parts in the upper part of the cave to a surprising 90 meter pit, followed by several more significant drops (including a 45 meter pit), to an apparent dead end by the fall of 1998. During the spring of 2001, we spent about two weeks in the cave. We found a going lead and pushed the cave from 323 meters long and 232 meters deep to 677 meters long and 282 meters deep. The cave doubled in length and got 50 meters deeper. When we left Caracol in April 2001, we had several interesting leads with airflow and were excited to return. That trip is described in detail in *Death Coral Caver #11, AMCS Activities Newsletter June 2001* and *NSS News August 2001*.

Sótano del Caracol has inspired continued interest over the past 15 years because of its potential to form an upper entrance to Sistema Purificación. A connection between these caves would add approximately 400 meters of depth to the system, rivaling the deepest caves in Mexico.

On this trip, we returned to our sucking leads (that is to say, leads with airflow) at the bottom of the cave. When we reached the cave on Sunday, we set up camp and immediately sorted gear and began rigging the cave. Philippe and Melanie took turns rigging with Bill and Jim in two teams. Previously, the cave had been rigged for light travel: with the 2001 discoveries and high expectations for this trip, the rigging was modified to accommodate lots of heavily burdened cavers. On Sunday, rigging teams reached the top of the 90 meter drop.

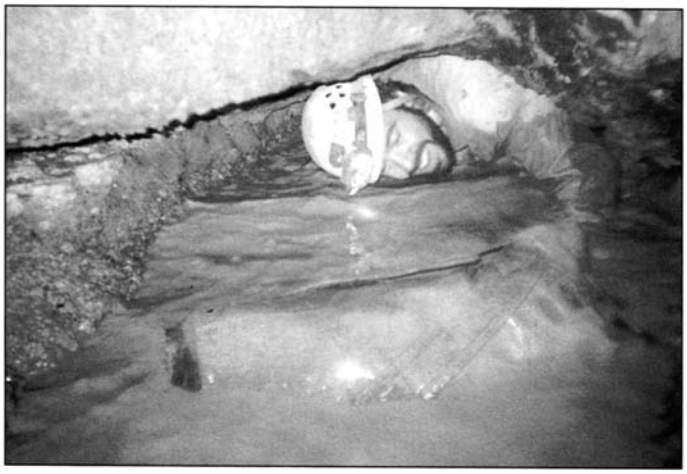
On Monday we rigged to the beginning of the water crawl at the base of the 45 meter drop, and this crawl was bailed



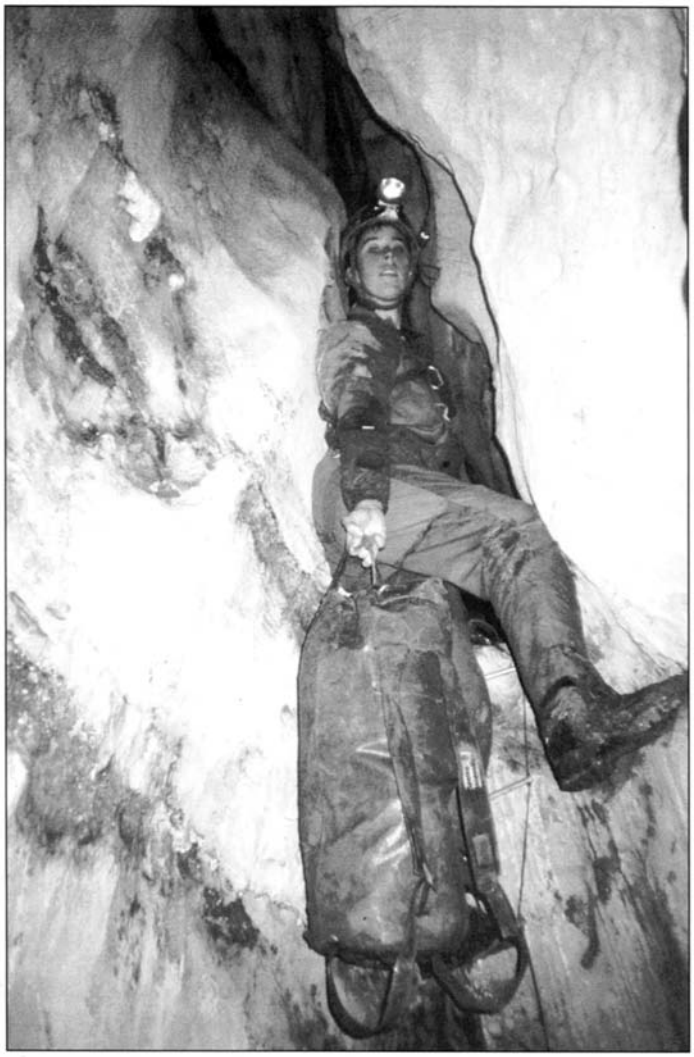
Bev and Bart in the 3 day camp *Bill Stone photo*

and enlarged. After all of this activity, Tuesday was a rest day.

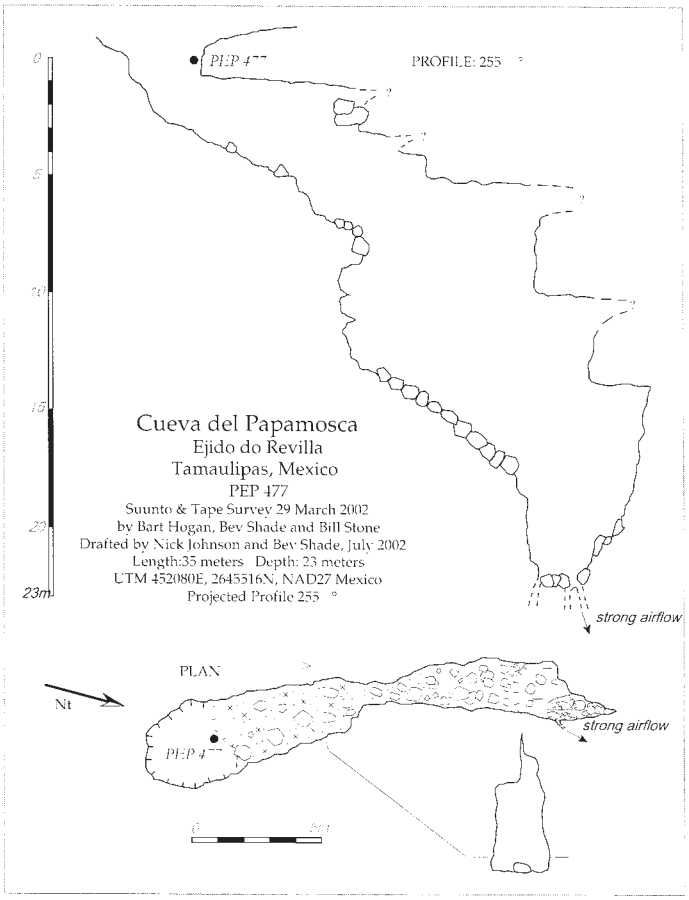
Everyone entered the cave again on Wednesday, to dig more in the water crawl, to put in several cable ladders in the lower part of the cave, and to try to bypass the worst section of the Fools' Crawl. The bypass was unsuccessful – exploration would have to continue through this very unpleasant 50-meter-long crawlway. Upon this realization, Bart, Bill and I decided to make something productive of the day. We continued to the end of the previous year's exploration and began surveying into last year's most promising lead: a breakdown-floored room (B+) above the B- room (all of this being somewhat like a B movie: sub-par). We found several leads in B+ and also returned to the down-trending slot found in 2001. This narrow slot carried the active cave stream,



Bart slides out of the water crawl *Bev Shade photo*



Bev on a cable ladder between the water crawl and the Fools' Crawl
Bill Stone photo



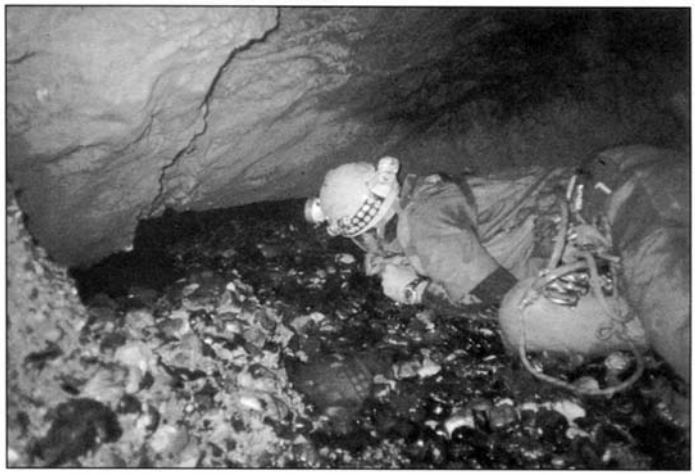
so it was an enticing lead, but very tight, in a way that could be tough to get out of. I went past The Slot to a drop and decided that one wall of the constriction could be hammered enough to allow others to pass. We exited the cave early Thursday morning.

On Thursday, March 29, Melanie and Philippe went to the Fools' Crawl and hauled equipment and further tweaked the rigging. On Good Friday (March 30), several cavers prepared for a lightweight bivy camp to push the leads beyond B-. Bart, Melanie and Philippe all went ridgewalking and found several leads. One (Cueva del Papamosca, PEP 477) was later surveyed by Bart, Bill and I to a length of 35 meters, to a constriction in the debris in the floor with good airflow. Despite the strong airflow, this lead was not pushed. The depth of breakdown and fill in the cave would require moving a lot of dirt and rock all the way out of the cave just to clear out the lead.

On Saturday, Bart, Bill and I went into Caracol for a planned three-day camp. Camp packs could not be larger than normal packs because of the numerous tight spots, so everything was as Spartan as possible. Ultimately, we ended up setting a very lightweight campsite in the B+ Room. B+ is one of the very few campable spots in the cave, and only holds a few people, but does have access to two different water sources.

We set up camp, then went for the most promising lead: the narrow down-trending slot. We used Bart's wedges and feathers in hammer drill holes to successfully split off a bulge on one side of the slot, which made it marginally passable for everyone. Unfortunately, we lost one of our SDS bits into a small but very deep flowstone gour below this restriction.

On Sunday (April 1), we surveyed all the passages below The Slot. On the other side of The Slot, the cave looks very similar to the narrow linear passages above the 90 meter drop. It went about 40 meters farther, dropping 20 meters, down three short drops to a small gravel and water sump, where we found a 5cm long colorless centipede. One parallel fissure connects to the main fissure in several places, but did not yield new leads. Jim



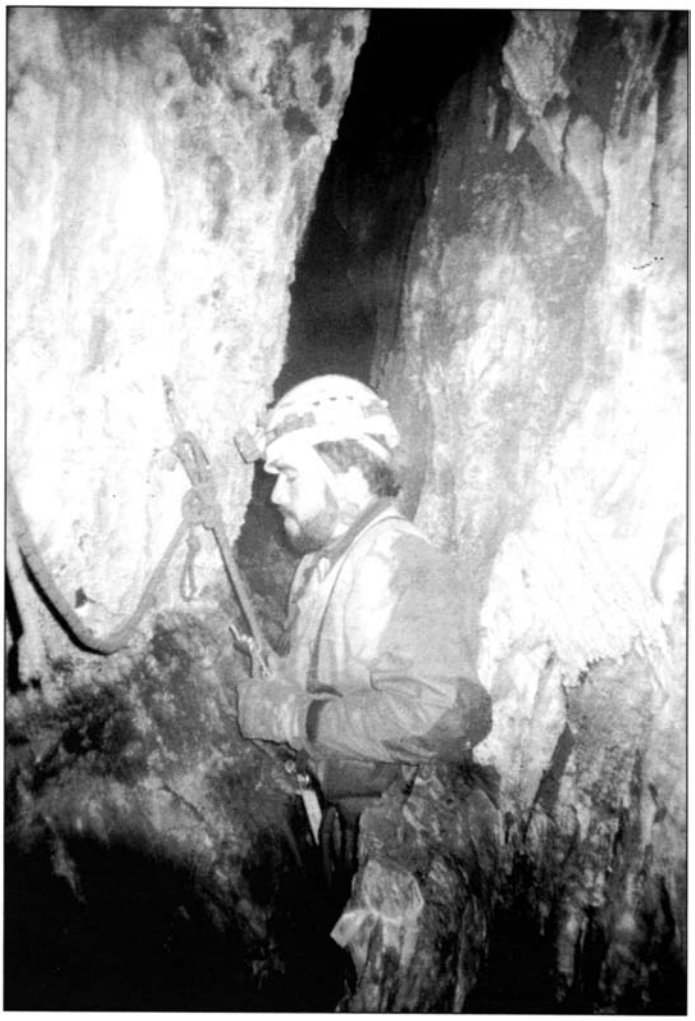
Bev peers hopefully into the terminal sump in Caracol
Bill Stone photo

came all the way down to the slot to check on our progress and also report on pig vandalism in camp. Since it was April Fools' Day, we hoped the pig attacks were a joke. Jim also started the long haul out with the gas drill. The gas drill had been useful in rerigging and in our failed attempt to bypass the Fools' Crawl. The gas drill is much more efficient than the battery powered drills. Since the gas drill is large, we took a smaller battery drill on to camp.

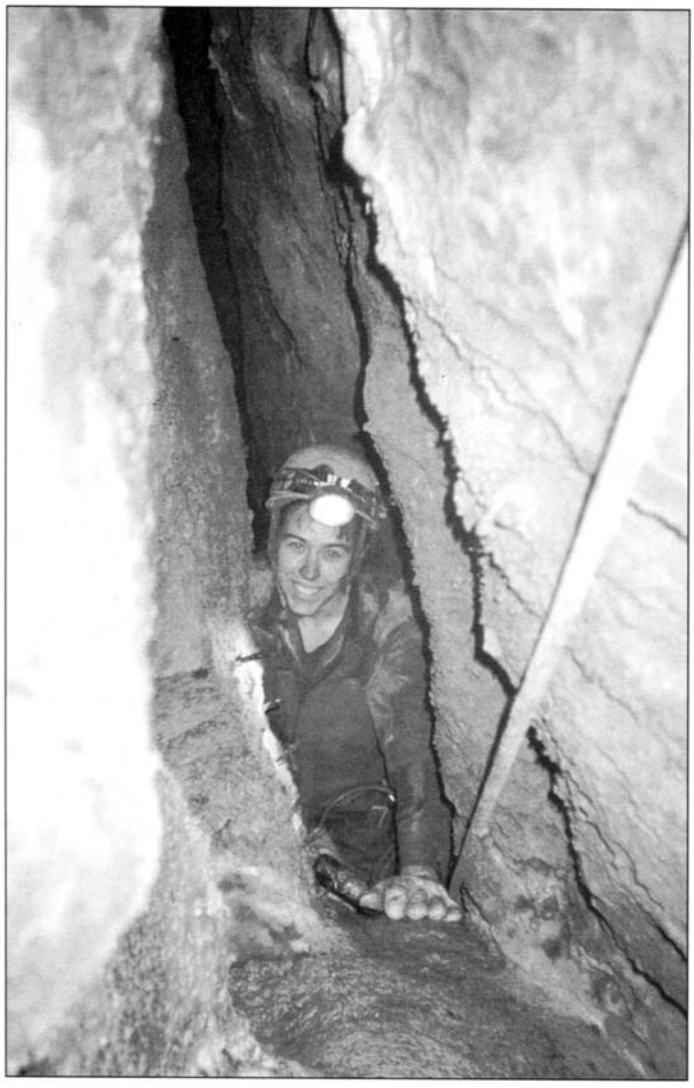
Melanie and Philippe also came in on Sunday for a day trip to push leads and find out if they should continue the camp on Monday. The camp team had not found any promising leads, so they decided not to continue the camp. Melanie and Philippe pushed several leads in the B- room, to no avail.

Late on Sunday, the camp team wrapped up survey in leads in B+, including one roughly horizontal crawlway that continued in the direction of the cave beyond the sump, but became very tight. This lead has the best airflow and location of anything found on this trip, and the map shows that this lead clearly extends beyond the other explored passages.

We also surveyed down into our water source, which comes from a different source than the main cave stream. "Main" may be a misnomer, since this infeeder carries a similar amount of flow to the stream coming from the surveyed upper parts of the cave. The camp water supply was located at the bottom of a fracture in the B+ room, and required a careful climbdown of about 7 meters to reach the water. This water is probably coming from a higher infeeder, which is shown on the map profile. We surveyed from B+ up a small dry stream passage, which eventually reached a clean washed active dome room. The room had two parallel domes about 10 meters tall. The domes appear to be connected at the top and a passage may lead off to the southeast. The rock in this room is in good shape and would be an easy place to lead climb, except for the logistics of getting gear there. This infeeder is higher than the rest of this area – at about 240 meters depth, compared to the terminal sump, at 301 meters depth. This lead probably carries water from another entrance.

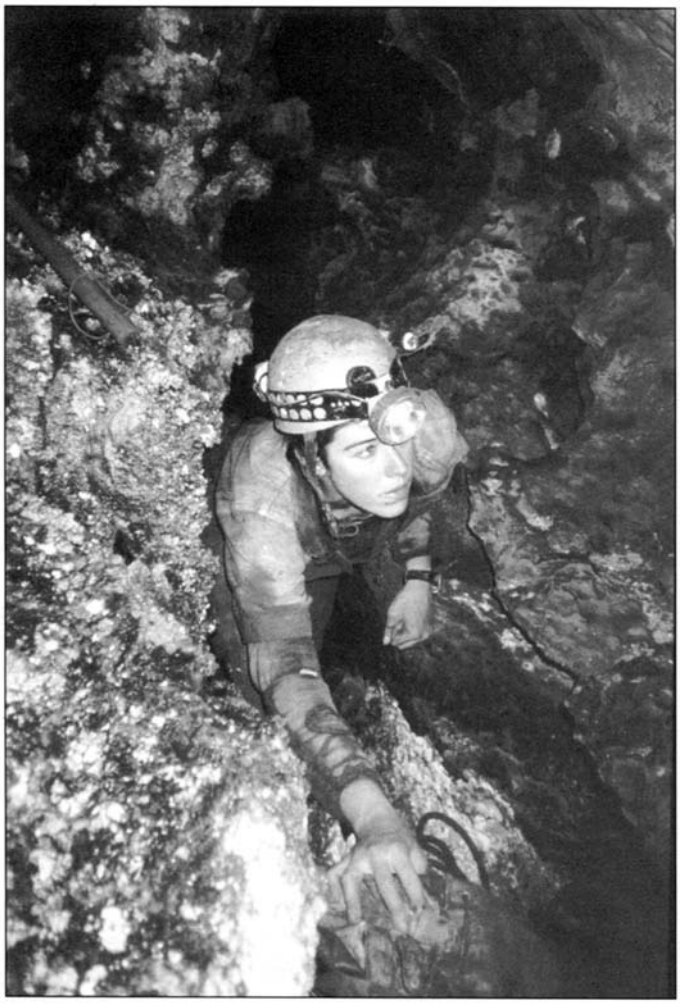


Bart at a drop below The Slot *Bev Shade photo*



Bev on the far side of The Slot *Bill Stone photo*

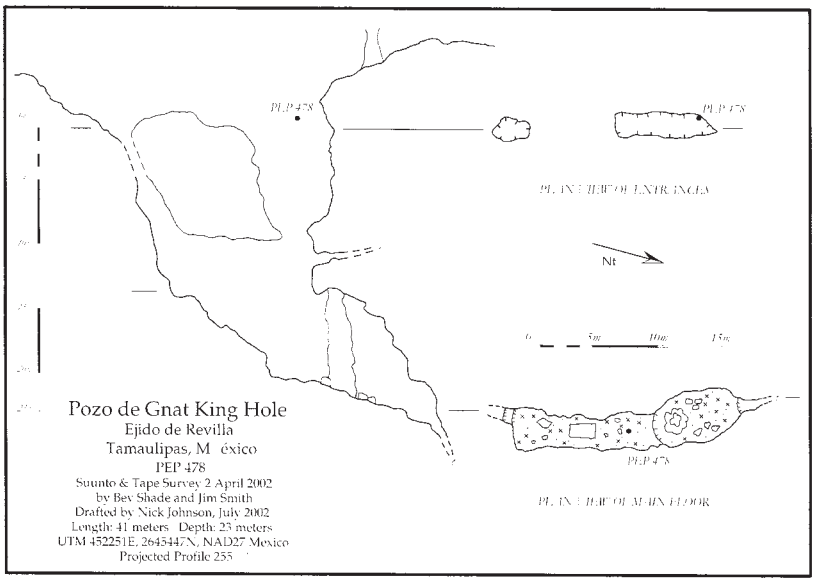
We packed up camp and exited the cave carrying all loose gear on Monday, to find that the remaining two members of our team, Mark and Yvonne, arrived during the cave camp. They wisely opted to wait for reports from the camp before rushing to the bottom of the cave, and instead continued to improve rigging higher up in the cave, and look for new caves on the surface. Their activities throughout the following week are detailed in Yvonne's trip report in the NSS News (*Exploring High in the Sierra Madre Oriental*, August 2002, vol 60, no. 8, 224-230). Upon returning to the surface, we also learned that the pig attacks were



Bev emerges from the Fools' Crawl *Bill Stone photo*

not only real, they were continuing nightly. While Jim had put together an impressive Lord of the Flies array of spears, the pigs were undaunted. They totally demolished Bart's tent in search of very tasty brownies and also spoiled two big tubs of food. Luckily, we had way too much food.

Another survey trip went in two days after the camp to survey a lead that Philippe had found during their trip on Sunday.



A slot in the roof of the last drop before the Fools' Crawl led to several upper level passages. These passages are formed in a bedding plane parallel to the lower passages. The roof of this upper level (named the French Inquisition, since it had been found by Philippe and was sort of unpleasant) was a bedding surface that contained a wealth of fossils – both in number and variety. One clean well-decorated room was not surveyed, because the survey team got covered with a sticky clay mud. Philippe explored the room and reported that there were no obvious leads out of the room, nor airflow. All other leads in the French Inquisition were pushed to reasonable limits; there was no compelling

From left to right: Bart Hogan, Bev Shade, Bill Stone, Yvonne Droms, Mark Minton, Melanie Alspaugh, Philippe Sénécal, and Jim Smith stand next to Caracol's main entrance. *Bev Shade photo*

airflow in this level, although it obviously connects to the lower level at several places. Philippe exited the cave first, carrying gear. Bart, Melanie and I began derigging, and got all of the ropes to the base of the 90 meter pit. The derigged ropes were all tied together and to the end of the pit rope, so that they could be easily pulled up from above. The next day, Bill, Jim, Mark and Yvonne finished derigging.

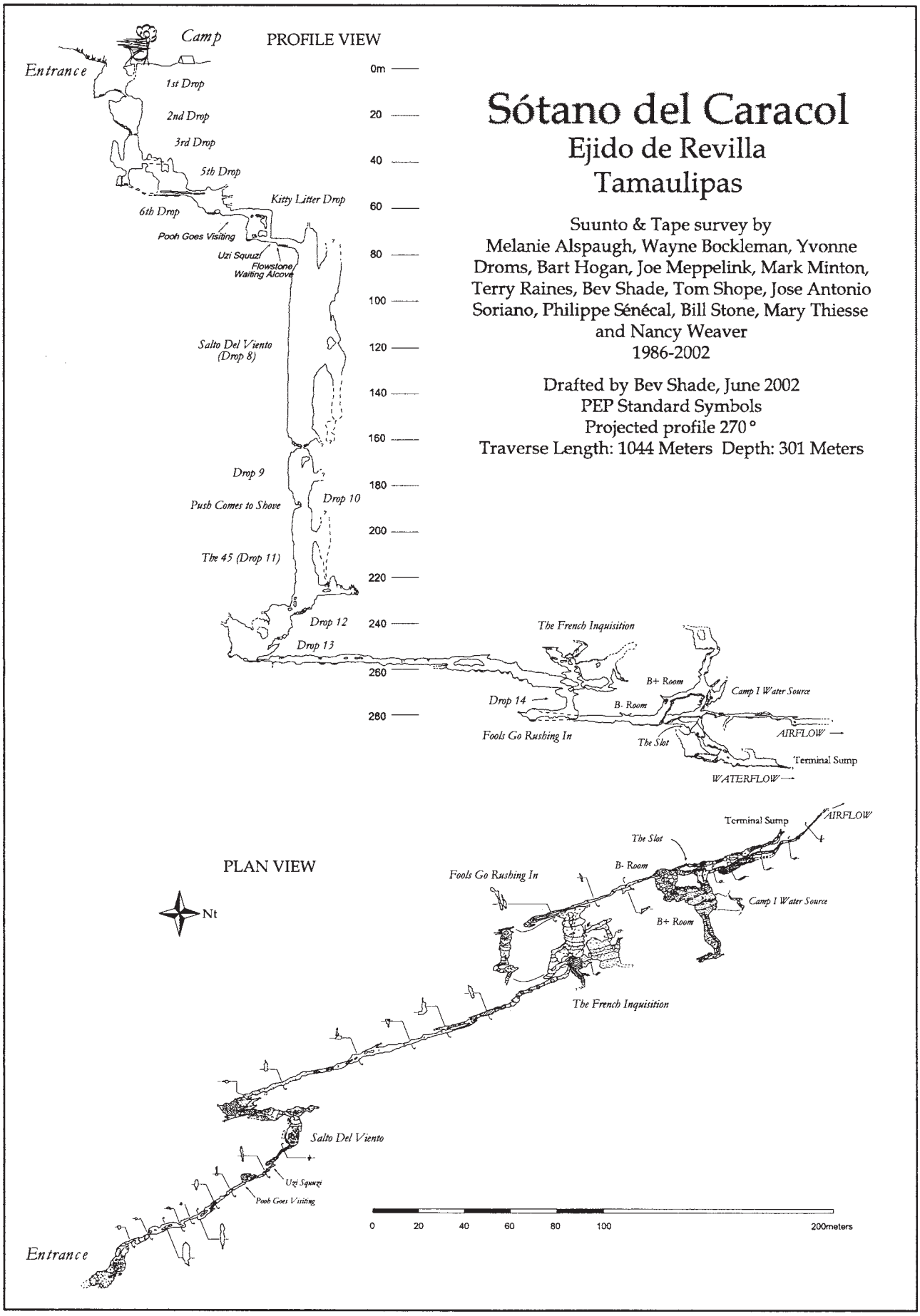
In all, we pushed the cave to 301 meters deep and 1044 meters long, almost doubling the length again and adding 20 meters of depth. There is still noticeable airflow in the bottom of the cave, but it is not completely clear where it is going.

Aside from working in Caracol, the group also explored and mapped three small pits (Cueva del Papamosca: PEP477, Pozo de Cojin de Alfiler: PEP483, and Pozo Gnat King Cole: PEP478), and rediscovered a number of caves. Cueva del Papamosca has a lead with airflow, as described earlier, but neither of the others have promising leads. Pozo Cojin de Alfiler is thoroughly described in Yvonne's News article.

Jim, Melanie, Philippe and I departed for the states on April 5, while the rest of the group moved west to look for some more caves. Their continued exploration of Sótano de Camino de los Pinos is described in Mark Minton's accompanying article in this volume (Death Coral Caver #12).

CARACOL 2002

En marzo 2002 se instalaron un campamento en Sótano del Caracol, casi doblando su longitud a 1004m. Llegaron a un sifón unos 20 metros abajo del término anterior.


PROFILE VIEW
Camp
Entrance
1st Drop
2nd Drop
3rd Drop
5th Drop
6th Drop
Kitty Litter Drop
Pooh Goes Visiting
Uzi Squuzi
Flowstone Waiting Alcove
Salto Del Viento (Drop 8)
Drop 9
Push Comes to Shove
Drop 10
The 45 (Drop 11)
Drop 12
Drop 13
0m
20
40
60
80
100
120
140
160
180
200
220
240
260
280
Sótano del Caracol
Ejido de Revilla
Tamaulipas
Suunto & Tape survey by
Melanie Alspaugh, Wayne Bockleman, Yvonne Droms, Bart Hogan, Joe Meppelink, Mark Minton, Terry Raines, Bev Shade, Tom Shope, Jose Antonio Soriano, Philippe Sénécal, Bill Stone, Mary Thiesse and Nancy Weaver
1986-2002
Drafted by Bev Shade, June 2002
PEP Standard Symbols
Projected profile 270°
Traverse Length: 1044 Meters Depth: 301 Meters
The French Inquisition
B+ Room
Camp I Water Source
Drop 14
B- Room
AIRFLOW
Fools Go Rushing In
The Slot
Terminal Sump
WATERFLOW
PLAN VIEW
Nt
Terminal Sump
AIRFLOW
The Slot
B- Room
Fools Go Rushing In
Camp I Water Source
B+ Room
The French Inquisition
Salto Del Viento
Uzi Squuzi
Pooh Goes Visiting
Entrance
0
20
40
60
80
100
200meters

Sótano del Camino de los Pinos

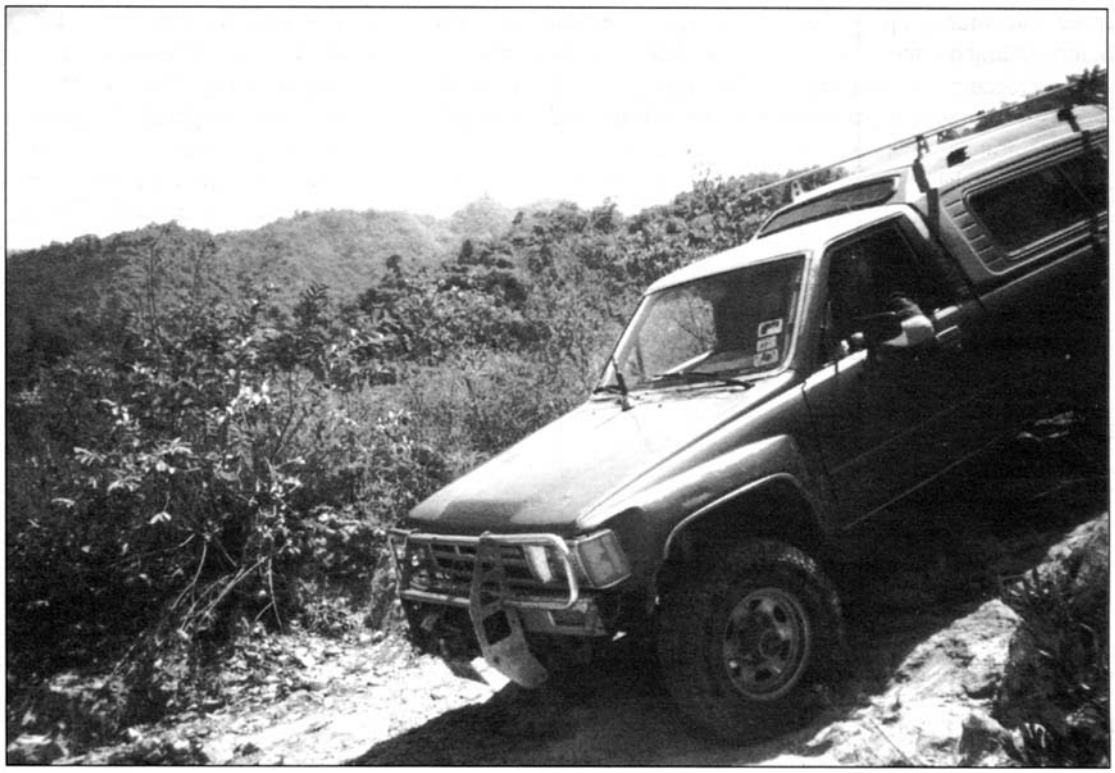
by Mark Minton

In the early days of our work at Sótano de Caracol and in the Tinajas Valley in the '80's, William Russell noted a series of three closed sinks shown on the topo map (Casas Reales, F14A18) at 2700 meters elevation, south-southwest of the settlement of Leñadero. These remained an enticing lead for many years. Finally, over Thanksgiving of 1997, Nancy Weaver and I decided to drive across the newly completed trans-sierra road from east to west, emerging at Zaragoza. Along the way, we checked out Leñadero and, to our surprise and delight, the side road continued past and climbed all the way to the top of the mountain, delivering us to a beautiful alpine meadow on the edge of the first sink. After a very cold night (-8° C), we checked the area around the meadow briefly, finding a few small pits and the first sink to be flat-bottomed with no leads. A forest fire had apparently recently burned large areas of the mountaintop, and we surmised that the old road had been reopened in the course of fighting the fire. The area seemed uninhabited, although there were livestock, and we found the remains of two very old saw mills. Time constraints prevented further reconnaissance, but the area looked promising. Unbeknownst to us at the time, a couple of earlier reconnaissance trips had also been made around Leñadero, but nothing significant was found.

The lead sat idle until January 2002. After a week of relatively fruitless checking for caves north, east, and west of Infiernillo in hopes of bypassing the main sump (see *The Texas Caver*, 2002), our group was ready for a change, especially with clouds rolling in and temperatures dropping. Mike Frazier (CO), Randy Macan (CO), R. D. Milhollin (TX), Mark Minton (and my white shepherd Luz) (NM), Karen Olson (MN), Monte Paulsen (MD), Brian Pease (CT), Pete Penczer (VA), and Bill and his son Rob Stone (MD) comprised the team. We drove all day through alternating thick fog and clear blue sky, depending on elevation. From Infiernillo camp around 1000 meters elevation we climbed to over 1850 meters above Los Caballos, then plunged down into Arroyo Luna dropping back to 1400 meters. From then on it was all uphill, arriving back at 1850 meters at the turnoff to Leñadero. The side road seemed in much worse condition than it had five years earlier. Halfway up the final mountain we hit a literal log jam; forty *trozos* were laid out across the road. They were apparently salvaged from the burned area higher up, and looked as though

Bill admires a lacy remnant of a former floor, seemingly floating in mid air but acutally suspended by one corner, near the bottom of the fourth drop in Sotano del Camino de los Pinos *Yvonne Droms photo*

they had been abandoned for quite some time. It would have been easier to pitch them over the side of the road, but, with considerable effort, we carefully stood them on end, leaning them against the uphill berm so they could be easily retrieved should the loggers return. By late afternoon, after a bit of route finding and clearing of fallen trees, (love that chain saw!), we arrived at the same spectacular campsite in a llano at over 2700 meters elevation, a mile higher than where we started! Again the temperatures fell way below freezing at night but the days were beautiful. For several days we saw the lower elevations completely socked-in, with only the top of El Viejo sticking up above the clouds, while we remained blissfully in the clear.



Mark and Yvonne on the way back home from Pinos *Yvonne Droms photo*

We divided into three or more groups each day and fanned out across the area. The sinks were checked first, but all were filled and not cavey-looking. Monte and Karen followed the sinkhole valley for 3 kilometers down to where it began descending steeply becoming the headwaters of Arroyo Luna, but again it wasn't very cavey. The eastern ridges yielded a few karst cracks and shallow pits, but nothing went far. Up the valley, to the north and to the west, looked better with some large wooded sinks, but again only shallow pits were found. At the end of the first day Pete, RD and I crested the highest ridge and made radio contact with the Stones who were slightly to the south of us on the same ridge. We rendezvoused and began descending on a very old road in a remnant pine forest that had been spared from the fire. Almost immediately RD spied an entrance just above the road and we hurried over to drop rocks. It sounded deep and looked like a real cave rather than just a crack. A 25-meter drop down a flowstone-covered wall led to a large, steeply sloping room with a narrow fissure at the bottom leading to a pool with stream gravel. This looked worth checking further, so we gladly left the ropes and hurried back to camp with the news.

The next day four people checked the new cave while others continued searching the hills. The Stones and I found the deepest pit in the area so far, a 70-meter blind drop we called Sótano del Madroño (PEP 536). The bottom contained a lot of organic matter and a rich sampling of fauna including salamanders, crickets, spiders, amblypygids, isopods, flatworms, rhadine beetles, termites, flies, and mosquitoes. Nothing else significant was found. RD's cave, dubbed Sótano del Camino de los Pinos, initially appeared to pinch out at the bottom of the fissure off the entrance room. Backtracking up the slope, Brian discovered a side canyon with airflow, hidden behind formations. It led down short drops and climbs to a larger, decorated area that looked more promising. Brian, Monte, Pete, and RD carried the survey down this route, to a well-decorated room. Since some people favored leaving the area to tour some of the known larger systems in the Purificación area, the team exited and called back to camp on their radio to see if the rest of the group might now favor staying. Upon hearing of going passage with air, the decision was unanimous to stick around for the last couple of days.

After another very cold and frosty night, Brian, Monte and I had to leave early. It took us six hours to drive the 30 miles to the base of the mountains. Meanwhile, the seven remaining cavers formed two teams to push and survey in Pinos, unfortunately, only 10 meters beyond the previous end of exploration, the cave ended in a flowstone choke. It only took a couple of shots to link the surveys. Shades of Ghar Parau! Everyone scrambled high and low looking for a continuation. Bill Stone had his spent carbide stored in a waterproof PVC-coated pack, and when he opened it to get a high-powered flashlight, BOOM! The spectacular blast sent a shimmering blue light around the room and blew Bill's shirt to tatters, in addition to scorching his face. Pete gave Bill his water, then climbed down into a large pothole to get more. Brian had said this hole didn't go, but Pete saw a low, wet belly crawl and decided to check it out anyway. It immediately opened up into a very muddy, descending crawl and stoopway. After 50 meters he came to a deep drop. The others were heading out with Bill and Karen when Pete returned with his news and a huge grin. They de-rigged, leaving the usual last-day good lead.

Around the campfire that night Pete and Mike began taunting each other about the lead, and Pete noted that they weren't actually leaving until morning. Mike called his bluff, and before they knew it they were packing their bags and selecting

ropes for a midnight push! Bill said he'd give them until five AM before calling out the cavalry. The two hiked back up to Pinos in the subfreezing darkness and quickly rigged back down to the lead. Pete's pit turned out to be a nice, free 26-meter drop, which belled out at the bottom. A breakdown collapse soon required crawling over slabs, getting them totally muddy. Another 50 meters of walking passage brought them to a slot and another drop of 20 meters. At the bottom Mike cut the tail off of this, their last rope. Only a short distance further another pit consumed this last piece of rope in a 15-meter drop. In only 15 more meters, they had to stop at yet another drop, their seventh, estimated at 15 meters deep. The cave was dropping fast, but was also very muddy in between drops. Tired but elated at having a going lead, the intrepid pair de-rigged the longer ropes and staged the shorter ones, returning to camp just before five am, right on schedule. They even managed to get a couple of hours of sleep before breaking camp and heading down the mountain for home. Although they didn't survey, they estimated the cave to be 150 to 200 meters deep. Not bad, and considering the elevation the potential looked great.

A return trip came in April, after a push on Caracol crapped out in yet another hideously narrow slot at -300 meters (see previous article, pp 9-12). Most of the team left for the States, but Yvonne Droms, Bart Hogan, Bill Stone, and I decided to give Pinos another look, and to survey the previous scoop. To our surprise the logs we stood up beside the road last January were gone, and the beautiful llano we had camped in was now fenced off. Nevertheless, there was still no sign of anyone living up on the mountain above Leñadero. This time we drove all the way up to the cave on the old ridge road, camping in a nice pine-oak grove only a stone's throw from the entrance. There are some interesting old ruins on the road at this point. A half-buried circle of flat stones, maybe a meter and a half in diameter, and a couple of trenches partially lined with rocks. We have no idea what these obviously man-made features were, but they bear no obvious connection with the cave. The weather was considerably milder in spring than it had been in winter. A hummingbird was active in the entrance, and buzzed us periodically as we got on and off rope.

We rigged the entrance with a redirection to get a better hang, and also re-rigged most of the known drops with rebelays to make them safer. Even so there were several incidents with rockfall that were a bit too close for comfort. The rock is very corroded and not to be trusted without vigorous pounding. Airflow was only moderate from the upper part of the cave down to Hindenburg Hall, where Bill's explosion had occurred, but steadily picked up as we went deeper. We were soon very aware of the ubiquitous mud, which made doing anything an ordeal. We installed approach lines at the tops of several of the drops, to add to the safety of getting on and off rope, while slipping and sliding. At the bottom of Pete and Mike's last drop there were some unusual hexagonal calcite crystals up to 10 centimeters long growing out of a ledge. The drop that had stopped Pete and Mike was 20 meters deep, with a less muddy, but narrow bit of passage at the bottom. At the next corner the entire cave became inclined at a steep angle and mostly too narrow to fit through. At the widest spot we rigged our last rope and only Yvonne slithered down the awkward 12-meter slot. The airflow had picked up dramatically by this point. At the bottom, the passage split with both directions carrying air and getting too narrow to negotiate easily. We decided to call it a night and began surveying out. The mud made it interesting trying to keep the book clean and instruments and tape readable. Fortunately there were a few small pools of water to wash things off periodically. Yvonne made several trips back and forth, moving our packs ahead while the other three of us surveyed. This shuttle service made it much easier for us to move quickly and keep our hands a bit cleaner. Climbing the drops was a real ordeal, as every piece of gear had become a ball of mud. Cams required "thumbing" in order to hold, and didn't always hold even then. Finally we tied into the old survey at Hindenburg Hall and headed out. It had rained during the night, (probably when we noticed the increased airflow), but by the time we emerged just before dawn it was clear and beautiful. We got cleaned up and ate a little while watching the sunrise before crashing after a very satisfying 17-hour trip.

Sótano del Camino de los Pinos turned out to be only 150 meters deep, including our new finds, a bit less than originally estimated. The cave is somewhat of an enigma, with its entrance nearly on top of the ridge, and no catchment to speak of. There are no arroyos leading to it, and no sink at the entrance. Nevertheless there is flowstone lining one wall of the entrance drop almost all the way down. It seems like the current entrance is part of an older system that formed when the surrounding land was much higher, and has subsequently been eroded away. The passage is heading east-northeast, and currently ends at about the same elevation as the sinkhole valley floor, and should be just emerging from under the ridge. It will be interesting to see which direction the cave goes from here. If it drains to Arroyo Luna several kilometers away, the depth potential could be in excess of 1000 meters. With the entrance at over 2800 meters elevation, it must be one of the highest going leads in the entire Purificación area. You can bet we'll be back!

SOTANO DEL CAMINO DE LOS PINOS

En enero 2002, un grupo hizó una prospección en la zona de Leñadero, NL. Encontraron varias cuevas, incluyendo Sótano del Camino de los Pinos, que sigue 10 tiros a un estrechez a los –153m.

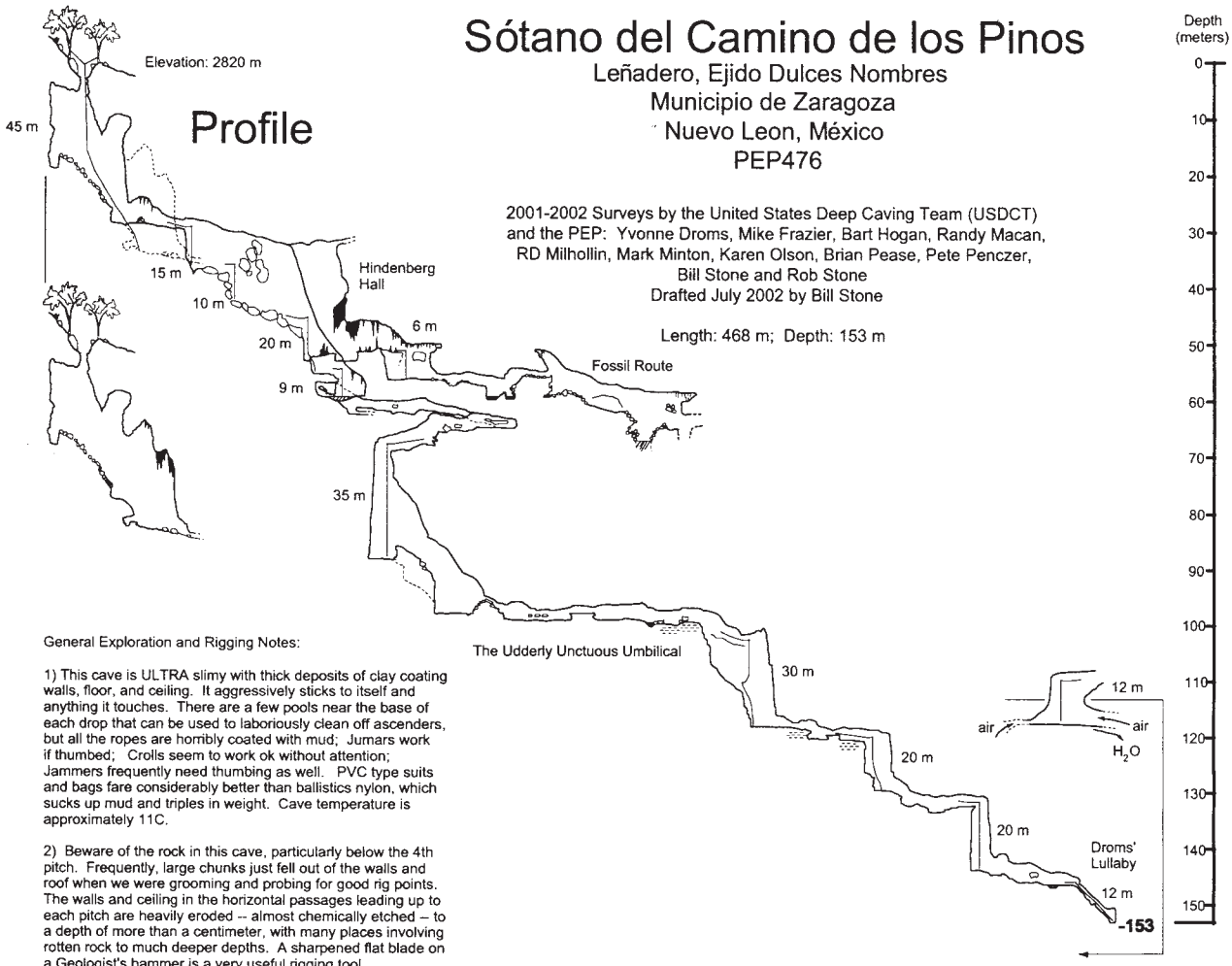
Sótano del Camino de los Pinos

Leñadero, Ejido Dulces Nombres
Municipio de Zaragoza
Nuevo Leon, México
PEP476

2001-2002 Surveys by the United States Deep Caving Team (USDCT) and the PEP: Yvonne Droms, Mike Frazier, Bart Hogan, Randy Macan, RD Milhollin, Mark Minton, Karen Olson, Brian Pease, Pete Penczer, Bill Stone and Rob Stone
Drafted July 2002 by Bill Stone

Length: 468 m; Depth: 153 m

Profile



General Exploration and Rigging Notes:

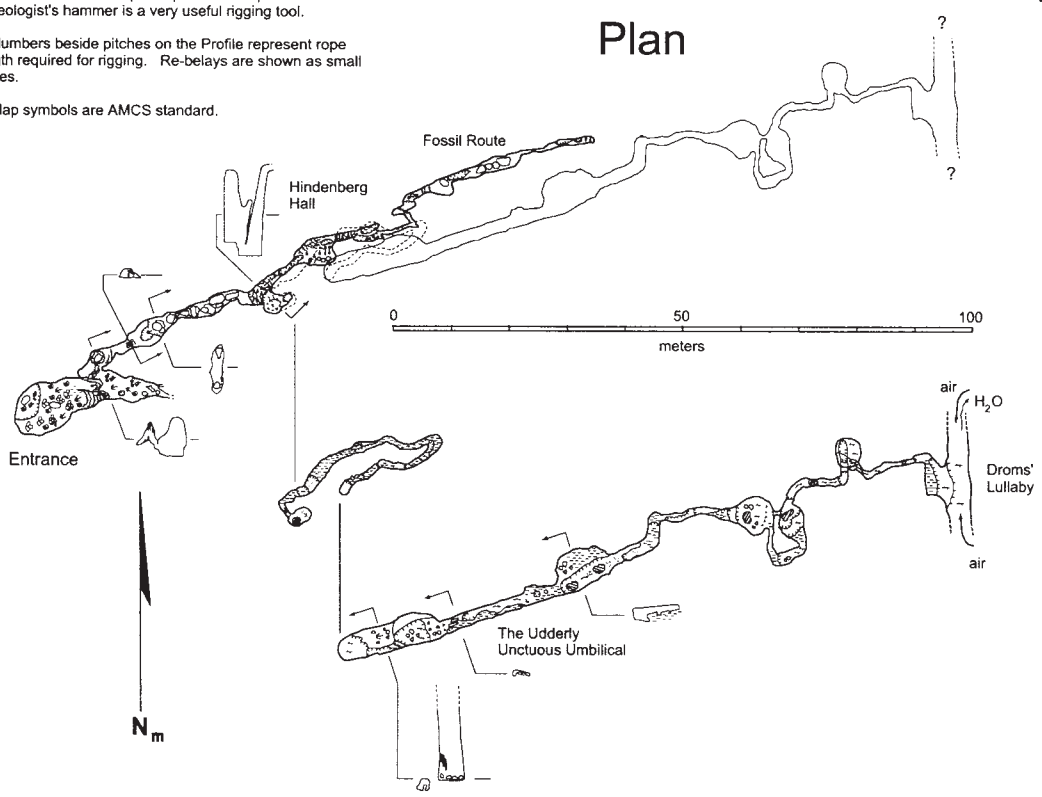
1) This cave is ULTRA slimy with thick deposits of clay coating walls, floor, and ceiling. It aggressively sticks to itself and anything it touches. There are a few pools near the base of each drop that can be used to laboriously clean off ascenders, but all the ropes are horribly coated with mud; Jumars work if thumbed; Crolls seem to work ok without attention; Jammers frequently need thumbing as well. PVC type suits and bags fare considerably better than ballistics nylon, which sucks up mud and triples in weight. Cave temperature is approximately 11C.

2) Beware of the rock in this cave, particularly below the 4th pitch. Frequently, large chunks just fell out of the walls and roof when we were grooming and probing for good rig points. The walls and ceiling in the horizontal passages leading up to each pitch are heavily eroded -- almost chemically etched -- to a depth of more than a centimeter, with many places involving rotten rock to much deeper depths. A sharpened flat blade on a Geologist's hammer is a very useful rigging tool.

3) Numbers beside pitches on the Profile represent rope length required for rigging. Re-belays are shown as small circles.

4) Map symbols are AMCS standard.

Plan

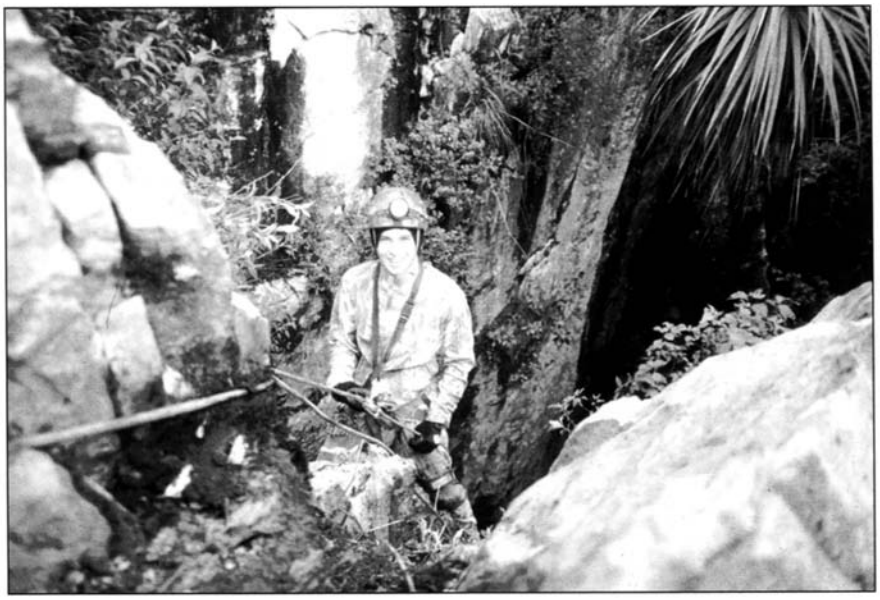


A Soggy Week at El Viejo

by Pete Hollings

"We're all going on a summer holiday, no more worries for a week or two"

With the words of the Cliff Richard classic ringing in my ears, I packed my bags in Thunder Bay, Ontario and caught a plane to Austin. I'd been living in Tasmania for the last couple of years and had missed the recent surge of discoveries in the Cretaceous park area, so when Peter Sprouse told me tales of going cave and virgin resurgences in the vicinity of El Viejo, I was hooked. I arrived in Austin late on 9 August and after a brief lesson in the art of scorpion capture at Peter's house I retired to bed, albeit somewhat nervously.



Wes rappells into Sótano del Agave Floreando *Aimee Beveridge photo*

We spent Friday sorting out the group gear, including enough batteries to power the five hammer drills to be used on the trip. As the 7 PM departure deadline loomed we waved goodbye to Charley Savvas, Bev Shade and Nick Johnson who were caravaning south with Aimee Beveridge, Geoff Hoese and Christie Rogers (they'd planned to leave at 4 PM, such is the way of PEP trips). We finally hit the road around nine with Terri Whitfield, Peter, Wes Schumacher and me in one truck and Kathy Scanlon, John Fogarty and James Lopez in the second. Our border crossing was relatively painless, with only two hours spent getting papers, perhaps my fastest crossing ever.

Around dawn, as we headed through northern Mexico, we got a call from Charley. It turned out that the Linares canyon had been blocked by a rockfall and they'd been forced to reroute. Our caravan took advantage of the warning and diverted through Arteaga while Charley took a gravel road through Rayones. By the time we were able to communicate with Aimee's truck, they were approaching Linares and by then the road was open. We learned later that the Linares mural had collapsed six weeks earlier and that the recent closure was the result of a minor additional rockfall. The four vehicles regrouped in Zaragoza on Saturday afternoon where we were joined by Laura Rosales, Gustavo Vela and Luisa Estrada, who had caught the bus from Mexico City. After some repacking to accommodate the three extra cavers and their gear, we headed up the mountain just as the rain started to fall. The road was in pretty good shape, if a little slick in a couple of spots, especially for Charley who only had street tires on his Toyota. Despite expectations that the road down to our campsite would need some work, we were able to drive down with no problems and had quickly set up enough tents and tarps to rival any of the third world's more elaborate refugee camps.

Hoya del Muerto in an unusually sunny moment
Aimee Beveridge photo

On Sunday morning (yes I said morning, an unusually earlier start for a PEP trip), Bev, Nick, James and I set off to try and reach an aerial photo lead on the top of Cerro Chupaderos above the high valley known as Hoya del Muerto. For the hike over the saddle, (a 200 meter elevation gain), we were accompanied by Peter, Wes, Aimee, Christie, Geoff, Gustavo and Luisa who planned to check pits in the valley. Once we dropped down into the valley we said goodbye to the others and headed off trail. The hike wasn't too bad to start with but as we climbed up the valley sides James slipped and impaled himself on an agave. Some impromptu surgery with a very blunt knife enabled us to remove the spine from his hand, but we were unable to remove the one in his forearm. When it was removed by a surgeon 1 ½ weeks later, James discovered that the agave spine was almost 2 cm long!

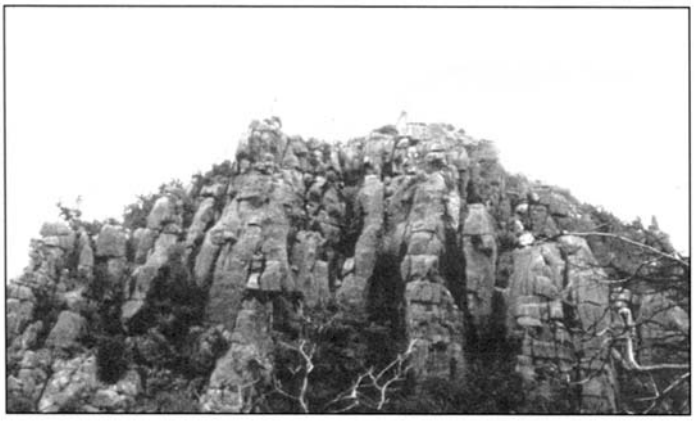
Our hike continued through some spectacular karst, but the combination of razor sharp limestone and the assorted spiny

plants meant that our progress was pretty slow. At one point I fell and slightly twisted my knee. Shortly afterwards Nick sliced his hand on some particularly sharp limestone. By 4:30 PM, with the GPS saying that we still had 1.2 km horizontally and 200 meters vertically before we got to the lead, it was decided to head down to the valley. We took the more direct route down the valley slope much to the amazement of those checking pits below, as it looked impossibly steep to them. It was, in fact, pretty steep but by pure luck we picked the only cliff-free route to the bottom. We had a quick chat with the folks in the valley then headed back over the saddle to camp just as what was to become the regular afternoon downpour commenced.

The two crews in Hoya del Muerto mapped three pits. Wes, Aimee, and Christie mapped the 12-meter Pozo del Asno Virgen (PEP543) named in honor of the fact that this was Wes' first virgin pit, while Peter, Gustavo and Luisa mapped the 12-meter Sótano Virgen de Guadalupe (PEP545) and the 30-meter Sótano de Guadalupe (PEP544).

When we hauled our weary and bedraggled butts back into camp, having accidentally stumbled on a more direct route suggested earlier in the day by Peter, where we found Charley and Kathy waiting for us. They had spent the day at Pozo Despúes de Cenar (PEP 580), where Charley had hoped to dig open a lead at the bottom. However, the cave proved to be wetter and tighter than they remembered and little progress was made. The last crew back had been working an arroyo to the west of camp. John, Terri, and Laura had mapped one 15.15-meter pit (John in particular was keen that we took note of that extra 15 cm, so maybe size does matter after all). While mapping Pozo del Madroño Deformado, John had managed to flat-rock Laura with a good-sized rock, but fortunately no permanent damage was done. The team found another 30-meter pit nearby, but discovered a PEP tag, so they called it a day and began the uphill hike back to camp, forgoing the trail in favor of a more rugged but more direct GPS-guided route.

As the week unfolded it became clear that falling rocks and off-trail treks were to become familiar aspects of hiking with John. Around the campfire that night it was with obvious reluctance that John decided not to perform surgery on the agave spine in James' forearm, and instead put a splint on his injured finger. The more blood thirsty amongst us had been hoping for some surgery in order to spice up our slide collections, only James seemed relieved by the decision.



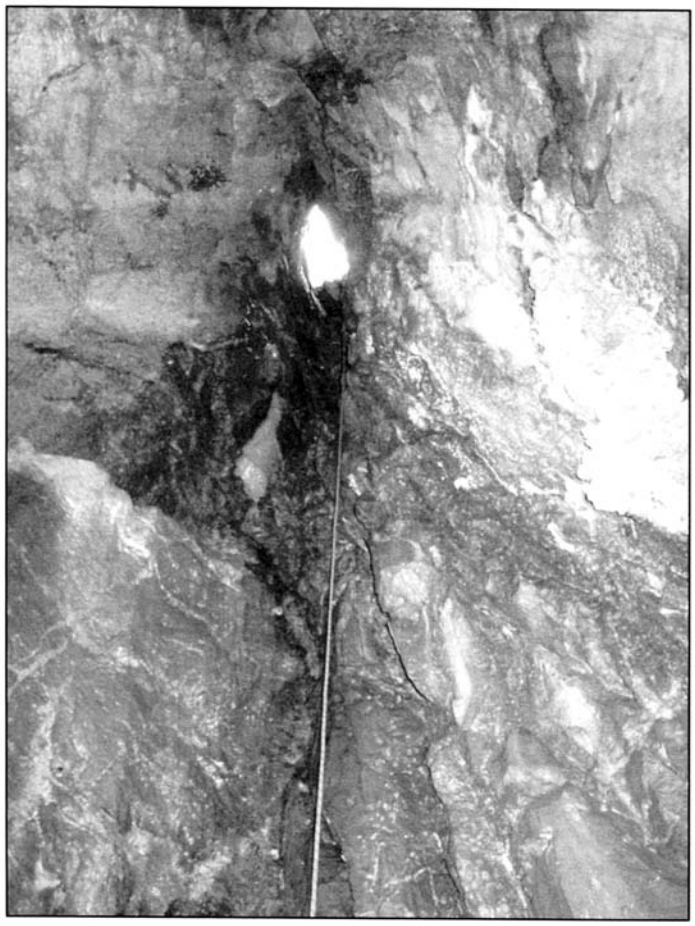
Typical bare karst found on ridges south of camp
Aimee Beveridge photo

Charley's head sticking out of a crawl in After Dinner Pit
Kathy Scanlon photo

Monday saw us reverting to the more normal PEP schedule with most of us heading out of camp around 1 PM. We left Terri and James in camp where they spend much of the day working on the road into camp, after Peter was forced to give an advance 4WD course while collecting water that morning. The plan was for everyone to head over to Hoya del Muerto to map pits identified the day before. Unfortunately our late start meant that we found ourselves getting to the leads just in time for the afternoon downpour. Aimee's crew of Geoff, Wes and Christie, soon to become known as team Asnos (their choice I should add), planned to tackle a pit which Bev had estimated at 50 meters. Sótano del Agave Floreando (PEP546) turned out to be 56 meters deep, which led to the rumor circulating camp that Bev had an oracle-like ability to estimate the depth (or *bevdepth* as it came to be known) of pits. The entrance drop ended in a large chamber with good leads. John, Laura and I wandered farther down the valley to map a log-covered pit 2 meters off the trail. The majority of rocks dropped into the pit fell for a second or so but occasionally one would fall farther. We removed the rotten logs from the entrance and I dropped into the pit. Ten meters down, I came to a rock and dirt plug with a continuation at my feet, unfortunately this was too tight and required digging so we left it for another day. As I prepared to ascend Laura advised me that a snake had fallen onto my neck, thinking she was joking I

remained calm and began my ascent (complete and utter panic being my more typical response to intimate contact with snakes). It later turned out that Laura had not been joking and a pygmy rattlesnake had briefly resided on my neck before continuing its descent into the pit. For obvious reasons, this pit was not surveyed. We hauled our gear 100 meters down the road in the now torrential downpour, quickly rigging a pit marked as a 50-meter lead on the map Peter had handed out at the beginning of the trip. A 4-meter drop onto a ledge led to a much longer drop with no obvious rig points. Happy to be out of the rain, Laura and I watched John remove some damoclean rocks from above the drop and eventually find a crack he could insert a Friend into in order to rig a deviation. With each descent we added a carabiner to the deviation in order to get the tension right but it wasn't until after the first ascent that we removed all the rub points. We surveyed out of Pozo Tootsie with a single shot of 35 meters, which caused some confusion until we realized that we had picked up the 50-meter tape instead of the standard 30-meter. During this process, Laura dislodged a rock nearly flat rocking John. She vehemently denied that it was a revenge attempt!

As we de-rigged the main drop the others passed by on their way back to camp. Charley, Bev and Nick had been washed out of Pozo Trabajoso (PEP332), an eight year old lead previously mapped by Peter, but not without some drama. A downpour started while they rigged the pit, and created a waterfall in the entrance drop that got significantly larger (accompanied by hail) as soon as



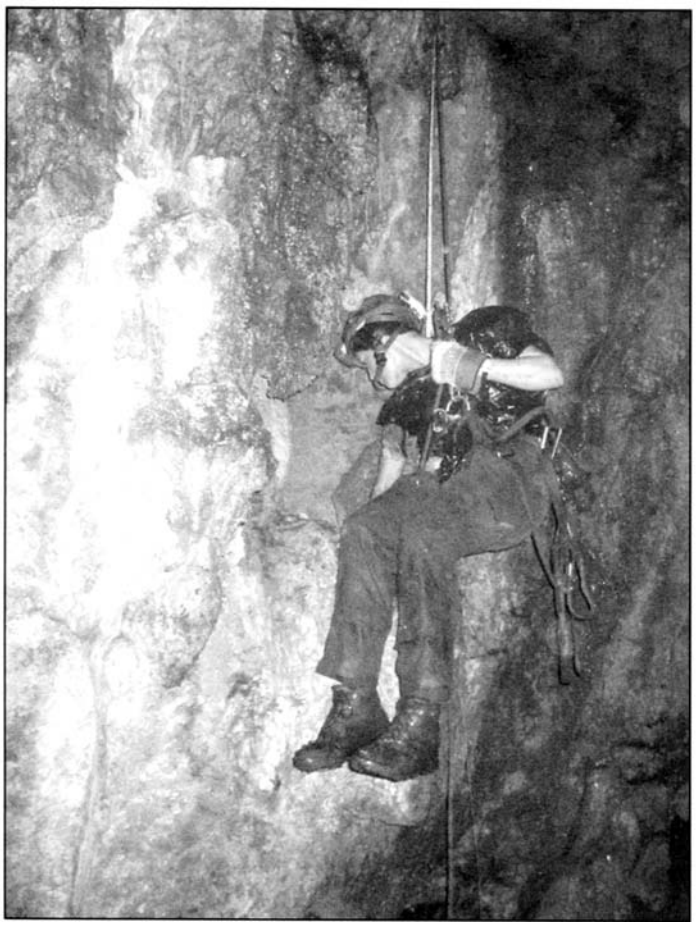
Looking out the entrance of After Dinner Pit
Kathy Scanlon photo

John is fascinated as James sets a tag on Pozo de la Perra Jaime
Kathy Scanlon photo

Charley started down the drop. Once at the bottom of the entrance drop Charley had watched the slightly too short rope disappear above his head as soon as he removed his descender. The waterfall in the entrance made communication difficult, but eventually Nick and Bev realized that they needed to re-rig the drop. After re-rigging so that Charley could get out, they stashed gear for a less watery attempt in two days. Kathy, Gustavo, Luisa and Peter had spent the day alternating between locating pits and sheltering from the rain in farmer's lean-tos. We trudged back to camp along the river that was now the trail, making it back to the fire just before dark. Aimee's crew were last into camp that night, claiming to have seen a number of burning bushes along the trail along the way home, it turned out that they had not in fact witnessed miraculous revelations but rather the locals setting fire to palm trees in order to get at the edible hearts.

Tuesday saw the founding of the El Viejo book club as many of us chose to spend the day in camp drying out and resting tired limbs. We had an eclectic mix of material ranging from Charley's welding manual to Nick's "1984". Those of us staying in camp did briefly interrupt our leisure time in order to break out the chainsaw and collect enough wood to see us through the week.

While we relaxed in an orgy of sloth and gluttony Team Asnos plus James returned to Sótano del Agave Floreando and Peter, Luisa, Gustavo and Terri went in search of pits in the vicinity of camp. Team Asnos planned to tackle a lead climb in addition to their going lead out of the main chamber, unfortunately despite carrying his hammer drill across the saddle James neglected to take any drill bits. Consequently he was forced to resort to the



Aimee in Sótano de las Salamandras
Kathy Scanlon photo

lasso method in order to ascend the 9-meter climb. Unfortunately the other side of the climb only led to a 6-meter blind pit, and the other lead out of the chamber did not go. Peter's crew opened up and mapped a narrow 26-meter blind pit that they named Pozo Luisa (PEP516) before returning to camp.

In order to beat the afternoon monsoon and the subsequent flooding in Pozo Trabajoso, Bev, Charley, and Nick took the radical step of leaving camp at 9:30 on Wednesday morning. Inspired by this, John, James, and Kathy were not far behind as they headed out to check out an area east of camp. The last group to leave camp, Team Asnos having decided on a rest day, consisted of Peter, Terri, Luisa, Gustavo, Laura, and I, who planned to walk the 7 kilometers down to the village of El Muerto checking for leads along the way. Once past the saddle we collected a rope left by Team Asnos and dropped it off at Pozo Trabajoso in case it was needed by Charley's crew, and then headed south. As we descended to the path to El Muerto we checked a couple of arroyos, which according to the topographic maps seemed to disappear, possibly at the limestone/shale contact. Unfortunately in both cases it turned out that what we had hoped might be a sink was in fact a surface waterfall. Once we got to the village we talked to the locals about a 500-meter deep pit Peter had been told about a few years earlier. Unfortunately they knew nothing about this or any other caves nearby, although they did confirm the presence of a deep pit on the top of Cerro Chupaderos. Disappointed, we turned around and started the long slog uphill back to Pozo Trabajoso.

Once we got back to Pozo Trabajoso we saw that the rope we'd left had not been used, so we settled down to wait to see how things were going. However, no sooner had we got comfortable then the rains began, so we headed to a nearby shelter where we could keep an eye on the trail. Once the rain stopped we headed back to the pit, and two hours after first reaching the pit we finally made contact with Charley. It was another hour or so before the team was back on the surface. It turned out that the top of the second drop was a keyhole-shaped slot that was pretty tight. The team had spent about an hour hammering on ledges in this crawlway. Two new stainless steel 3/8" bolts were set in the ceiling of this drop. Having discovered that the restriction at the bottom of the second drop, the going lead that Peter had seen while dangling on the end of a rope eight years earlier, was a meandering crevice that varied from about two to eight inches wide. As a crawl, it probably would have been passable, but the probability of getting wedged in a vertical squeeze with SRT gear on was daunting. Bev rigged a rebelay about 2 meters above the most reasonable-looking spot and tried to wiggle through. To her surprise, she got wedged before she even got down to the restriction! There are two bedrock curves that must be removed before this lead is passable. Based on the amount of runoff that entered the cave in the brief downpour during rigging, this cave would be best explored during the dry season. Rocks dropped through this crevice fell at least 20 meters. A 60-meter rope was lowered through the crevice in hopes of estimating depth. The rope did not appear to touch bottom, but it did not sound like the rocks fell over 60 meters, so the already damp rope may have been simply coiling in a pool of water. They added some fourteen meters to the survey and headed back out of the cave. Nick was the first to ascend but after struggling for a while was forced to admit that he couldn't get in to the horizontal keyhole passage at the top of the pitch. Retreating, he let Charley have a go and was somewhat relieved when even Charley had to struggle for 20 minutes or so and abandon his generator along the way. Rested, Nick tried again and this time managed to force his way into the horizontal slot. Thus began a very miserable hour for Nick as every piece of his vertical gear managed to get stuck at some point, his footloop even managing to tie itself around the rope not once but twice. The presence of Charley's abandoned generator did not help much either. Around the fire that night Nick was asked what he was thinking while stuck in the slot, rather than profound thoughts on his own mortality Nick confessed that he focused mainly on expletives. Back on the surface Peter was somewhat surprised that the pitch head had caused so much trouble as he remembered it as being quite roomy, proving just how selective memories can be.

Trekking back to camp it became clear that Charley's crew was not the only one having an epic trip. Once over the saddle we started to pick up James on our radios, he was sitting in a doline becoming steadily more frustrated that he could not raise John and Kathy on the radio. His increasingly expletive-laced communications provided the rest of us with many chuckles but it was the statement that they had "been off the trail for the last four hours" that first gave a hint as to what they had been through. Back at the campfire much later that night they revealed the details of their ordeal. Early in the day they had found a 23 meter

deep pit (PEP583). James had descended first and then taken shelter under a ledge as the others came down. While doing so a very heavy rock spontaneously peeled off the ceiling above him and landed squarely on his helmet, hence the name Pozo de la Perra Jaime. Fortunately the rock did not fall far and apart from damaging James' carbide lamp, it left him more or less unscathed. Having mapped the pit, the team then continued on to look for more caves. Their chosen route quickly led them into an area of razor sharp karst, agave and cat's claw acacia. With no obvious way back they were forced to spend hours stumbling through this fairly horrendous terrain. Around the fire that night Kathy was quite vehement in her desire never to go hiking with John ever again, or at least without a more detailed idea of the ground to be covered. Shortly afterward, Kathy looks up, squints her eyes, sees Ed Alexander, and exclaims, "Who's that?" Ed had arrived at about dusk, while Kathy, James and John were still clawing their way through the agave. It was an unexpected, but pleasant surprise. We had started hearing sounds in the distance of a vehicle trying to make it up the slick mountain road. Driving the Suburban was Texas caver, Ed Alexander, who had brought his family on a camping excursion, coming all the way from Real de Catorce! With him were his wife, Brigit, their daughter Mimi, her friend Carmen, and their new infant, Luke. What a treat!

With the rain making the state of the roads questionable and Peter wanting to meet with the authorities in Zaragoza it was decided to head down the mountain a day early, which meant that Thursday was the last day of caving. Team Asno, now comprising Aimee, Geoff and Kathy, headed back to finish the survey of Sótano del Agave Floreciendo and afterwards mapped another pit nearby which they named Sótano de las Salamandras (PEP547). Laura, Christie, Wes, James, and Peter also returned to Hoya del Muerto where they planned to map some pits near the house of one of the locals. The torrential rains meant they spent most of the time sheltering in the house, but they did map the 5-meter Pozo de la Uña Doblada (PEP517), named after the fact that Christie bent a fingernail. Back at camp Bev, Nick, Charley and I decided to make a water run and then go and search for more pits around camp. Unfortunately just as we got back to camp it started to rain, so instead of looking for pits we reconvened the El Viejo Book Club under the shelter of the tarps.

Gustavo enters Pozo Después de Cenar
Peter Sprouse photo

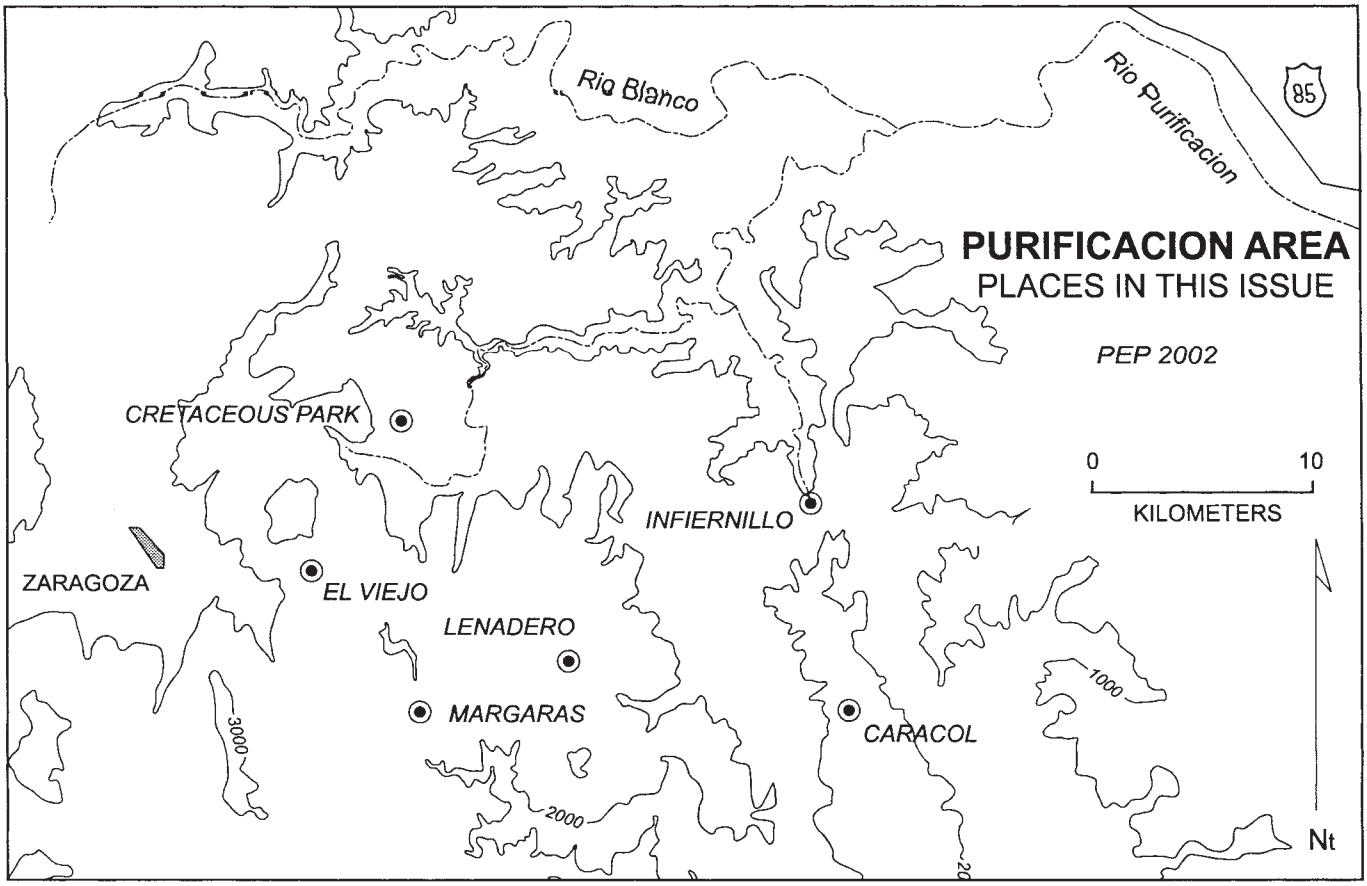
We rapidly tore down the refugee camp on Friday morning and loaded up the trucks. The road out of camp was not quite as bad as expected but still proved a challenge. We stopped briefly in La Escondida to say good-bye to the Rosales family, drop off spare food and enjoy the available refrescos. While we chatted, María de la Luz clipped flowers from her beautiful garden, which she presented to the ladies of the group. Then she mentioned that she had a nephew who knew a route up to a deep pit on top of the mountain. He had said that rocks thrown in could never be heard to reach bottom. Hopefully, on the next trip, we will be able to get the nephew to show us a better route to this exciting pit. We said our goodbye's and made good progress down the mountain, soon settling in at the Hospedaje San Francisco. With nothing better to do Peter led some of us on a quest to find some large gypsum sinks he had spotted on aerial photographs. The first of these was dirt filled but the second proved to be an impressive 300-meter wide and 50-meter deep depression with a cornfield in the bottom. We descended into the sink to check out two secondary depressions. While Bev, Nick, Charley, Wes, and James rigged up for a descent into one of these, John stayed at the lip and chatted with the local kids, who informed him that the sink did not have a cave in the bottom but that they had lost a goat in there for a few days. This was soon confirmed, (the lack of cave rather than the presence of the goat), by the team so we headed back to the hotel to run everyone through the two available showers before having dinner.

On Saturday afternoon we headed north, stopping along the way to visit a number of points of interest including the local landfill in a gypsum sink, the impressive Pozo del Gavilán, where emergency tape still could be seen from a rescue months earlier, and the remains of the mural at Linares. By 3 AM on Sunday morning I was safely tucked up in bed at Peter's house, having first carefully checked the room for scorpions.

While the summer 2002 trip may not have been the most productive in the history of the PEP, with only 265 meters of cave surveyed, a number of leads can be removed from the list and perhaps more importantly a good time was had by all. If only the other phrase from the Cliff Richard song "*we're going where the sun shines brightly, we're going where the skies are blue*" had also been true!

EL VIEJO

Explorando en los alrededores de Cerro el Viejo, NL en agosto 2002, en este expedición se terminaron la exploración de Pozo Trabajoso y Pozo Después de Cenar sin resultados notables. Encontraron varias cuevas nuevas no profundas.

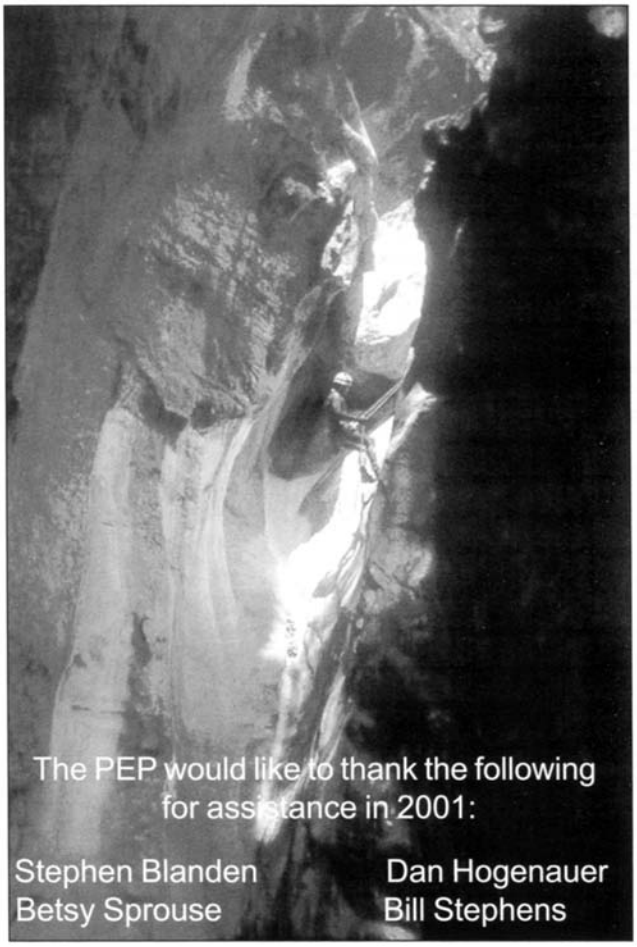


PURIFICACION SPELEOMETRY

compiled by Peter Sprouse

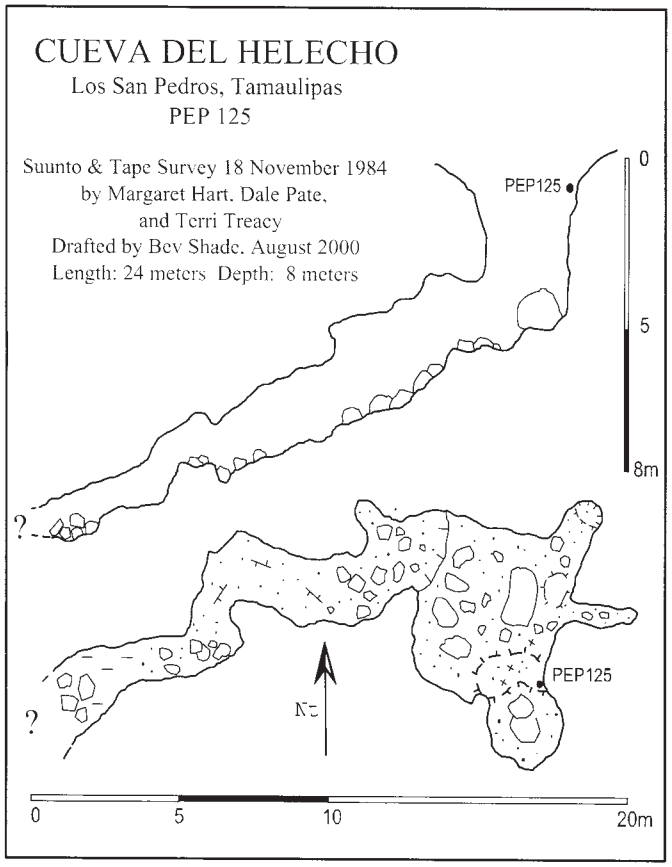
Long caves	Length(m)
1. Sistema Purificación, Tamaulipas	93,755
2. Cueva del Tecolote, Tamaulipas	36,562
3. Sótano de Las Calenturas, Tamaulipas	8,308
4. Sistema Cretacico, Nuevo León	6,065
5. Cueva de La Llorona, Tamaulipas	3,540
6. Sótano de la Cuchilla, Tamaulipas	2,716
7. Cueva del Río Corona, Tamaulipas	2,301
8. Cueva Paraíso Difícil, Tamaulipas	1,799
9. Sistema Manicomio Paralelo de Satanas, NL	1,639
10. Cueva del Borrego, Tamaulipas	1,464

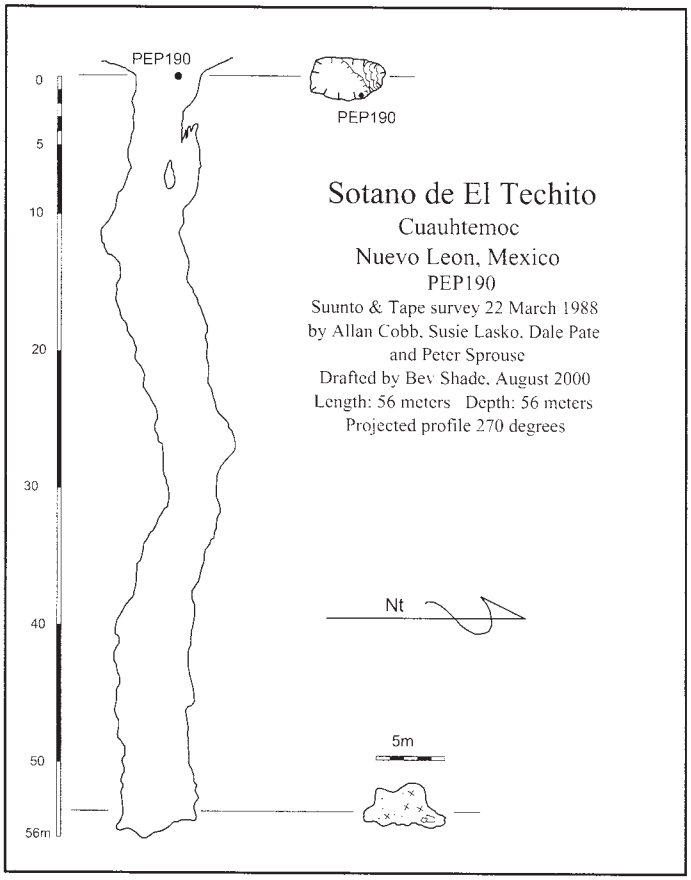
Deep caves	Depth(m)
1. Sistema Purificación, Tamaulipas	953
2. Cueva del Tecolote, Tamaulipas	424
3. Cueva de La Llorona, Tamaulipas	412
4. Sistema Cretacico, Nuevo León	465
5. Sistema Manicomio Paralelo de Satanas, NL	326
6. Sótano del Caracol, Tamaulipas	301
7. Sumidero Anaconda, Nuevo León	278
8. Sótano de la Cuchilla, Tamaulipas	207
9. El Hundido, Tamaulipas	186
10. Cueva Paraíso Difícil, Tamaulipas	178



PURIFICACION AREA CAVE DESCRIPTIONS

Contributions by Susie Lasko, Bev Shade, Peter Sprouse and Kevin Stafford
Fauna lists compiled by James Reddell
All UTM coordinates NAD27





CUEVA DEL HELECHO PEP 125

Los San Pedros, Tamaulipas
Length: 24 meters Depth: 8 meters
UTM coordinates: 462130 2639210 1455

Cueva del Helecho is located 850 meters east-northeast of Los San Pedros, at 1455 meters elevation. It is a narrow winding channel that runs roughly east-west. The floor is covered by rocks and dirt, and was choked with rocks 24 meters in. It was explored beyond this point for 40 meters to a tight tube with airflow. This cave was surveyed by Margaret Hart, Dale Pate, and Terri Treacy on 18 November 1984. The next day Paul Fambro and Peter Sprouse pushed through the rock jam to the end of exploration, but did not survey the new section. (BLS&PS)

(Cueva del Helecho, Cont.) Dale Pate collected in the cave on 18 November 1984. The following is a fauna list:

Snails: Gastropoda undetermined
Spiders: Araneae undetermined
Harvestmen: Phalangodidae genus and species
Phalangiidae genus and species (trogloxene)
Leiobunum viridorsum (trogloxene)
Millipedes: Rhachodesmidae genus and species
Slender springtails: *Pseudosinella reddelli* (troglophile)
Cave crickets: Rhaphidophoridae genus and species
Homopterans: Homoptera undetermined
Flies: Diptera undetermined

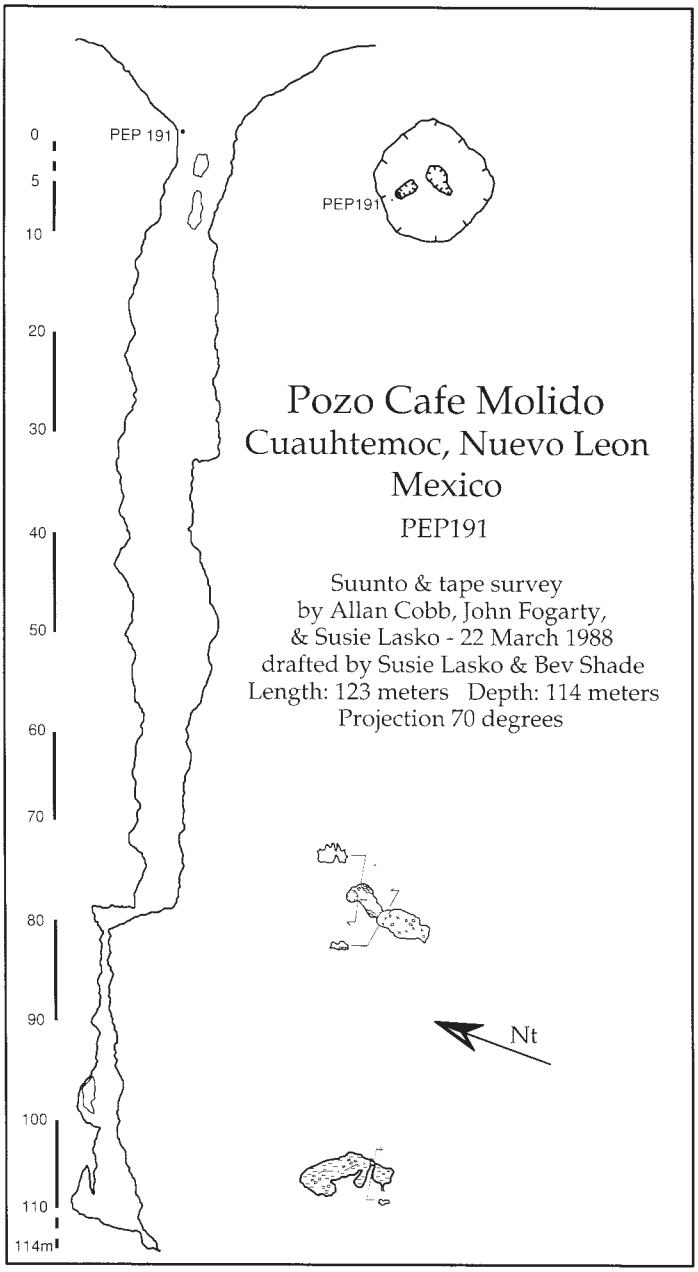
SOTANO DE EL TECHITO PEP 190

Cuauhtémoc, Nuevo León
Depth: 56 meters
UTM coordinates: 452442E 2640875N

This pit is located 2400 meters northwest of Rancho Nuevo, at 2292 meters elevation. It is just south of Puerto los Valasos, along a spur road to the right. There are three pits on the east side of the road, and this is the middle one. The entrance is 3 by 5 meters, and it drops 55 meters to a dirt plug. Allan Cobb and Susie Lasko explored and mapped this pit on 22 March 1988. (PS)

Allan Cobb collected in the cave on 22 March 1988. The following is a fauna list:

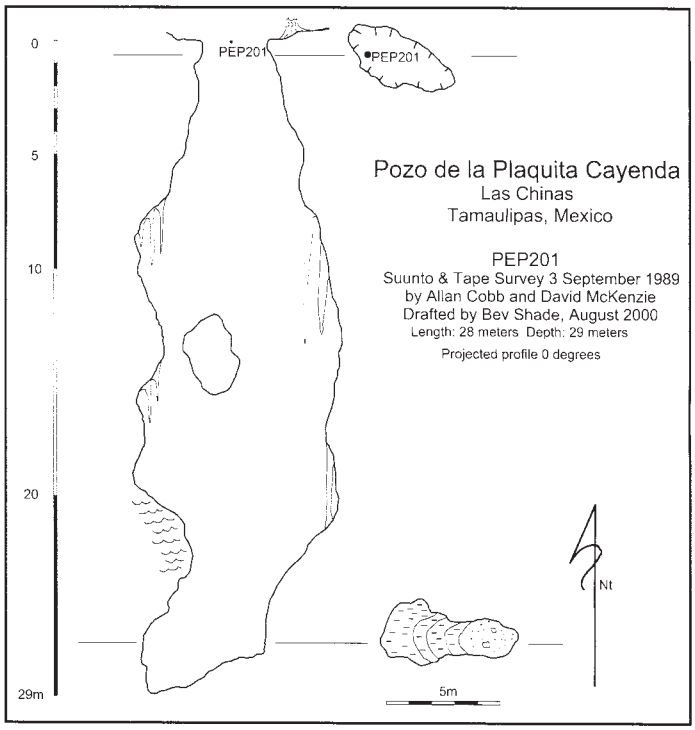
Snails: Gastropoda undetermined
Spiders: *Coryssocnemis* sp. (troglophile)
Modisimus rainesi (troglophile)
Centipedes: Lithobiomorpha undetermined
Darkling beetles: *Eleodes* (*Caverneleodes*) *sprousei* (troglophile)
Flies: Diptera undetermined



SOTANO DEL CAFE MOLIDO PEP 191

Cuauhtémoc, Nuevo León
UTM coordinates: 452420E 2640827N

This pit is located 2400 meters north of Rancho Nuevo, at an elevation of 2290 meters. It is just southwest of PEP190. It has two entrances in a 10-meter-diameter sink that join to form an 80-meter-deep shaft. A short slope at the bottom of this leads to a second pitch 27 meters deep. This ends in a digable soft dirt plug reminiscent of coffee grounds. John Fogarty and Susie Lasko checked this pit on 22 March 1988. Upon reaching the bottom of the entrance shaft, they called up for more rope, but the rest of the crew couldn't hear them. They were off on a karst pinnacle making a music video. Susie and Allan Cobb went back in that night and descended the second drop. (PS)



POZO DE LA PLAQUITA CAYENDA PEP 201

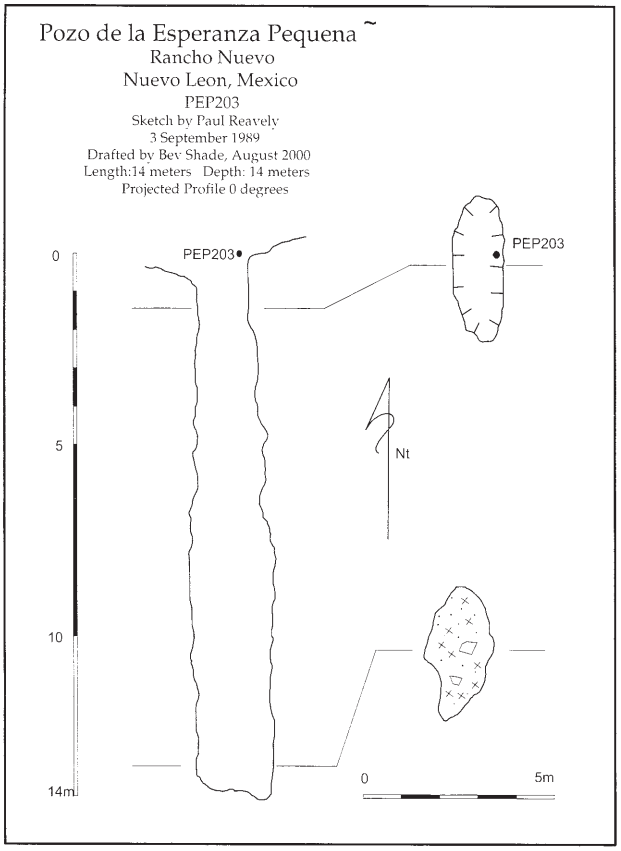
Rancho Nuevo, Tamaulipas
Depth: 29 meters
UTM coordinates: 454367E 2638520N

This pit is situated 750 meters southeast of Rancho Nuevo, along a trail at 2665 meters elevation. It is a blind 27-meter pit. Allan Cobb and David McKenzie mapped it on 3 September 1989. While attempting to install the entrance tag, it was dropped down the pit, then recovered. (PS)

POZO DE LA ESPERANZA PEQUEÑA PEP 203

Rancho Nuevo, Tamaulipas
Depth: 14 meters
UTM coordinates: 453982E 2638720N

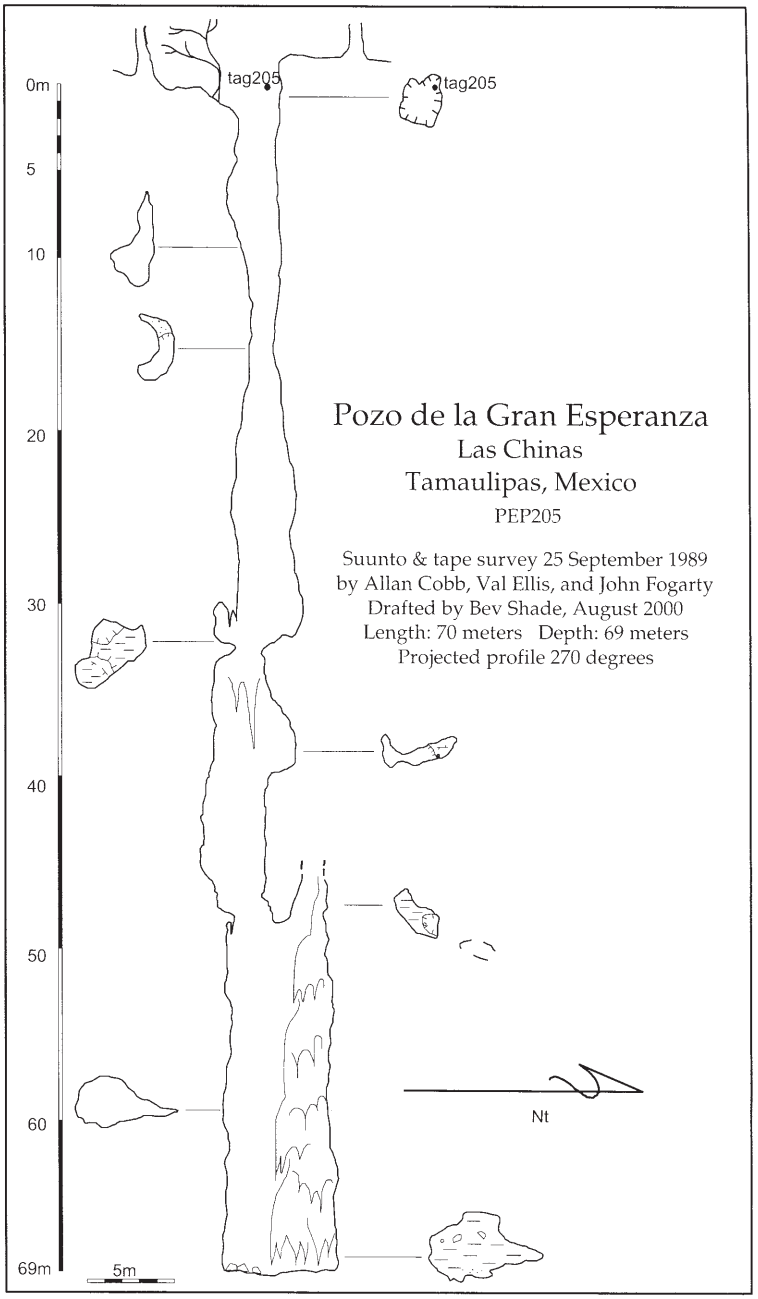
This pit is 400 meters south of Rancho Nuevo, on the east side of a road at 2627 meters elevation. The entrance measures 1.5 by 4 meters, and it is a 14-meter-deep blind pit. Paul Reavely sketched it on 3 September 1989. (PS)



POZO DE LA GRAN ESPERANZA PEP 205

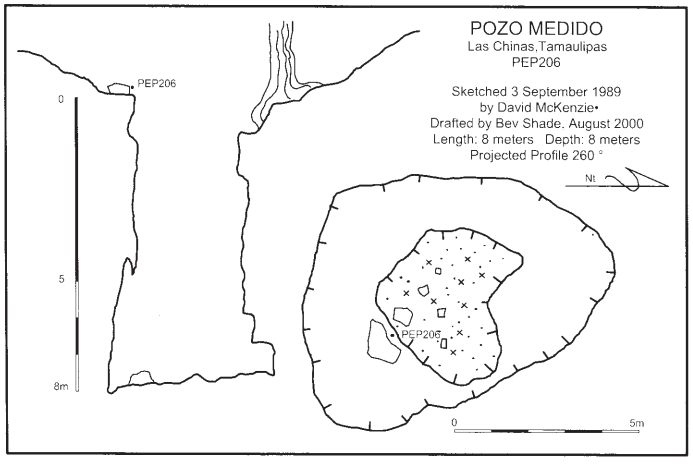
Rancho Nuevo, Tamaulipas
Length: 70 meters Depth: 69 meters
UTM coordinates: 453933E 2638466N

This pit lies 650 meters south of Rancho Nuevo, on the east side of a road at 2617 meters elevation. It is basically one shaft 69 meters deep, with numerous ledges and twists in it. This pit was shown to Peter Sprouse on 1 September 1989 by a local guide. It seemed quite deep, so Allan Cobb, Val Ellis, and John Fogarty explored it with great hopes that afternoon. (PS)



POZO MEDIDO PEP 206

Las Chinas, Tamaulipas
Depth: 8 meters
UTM coordinates: 454292 E 2638554N

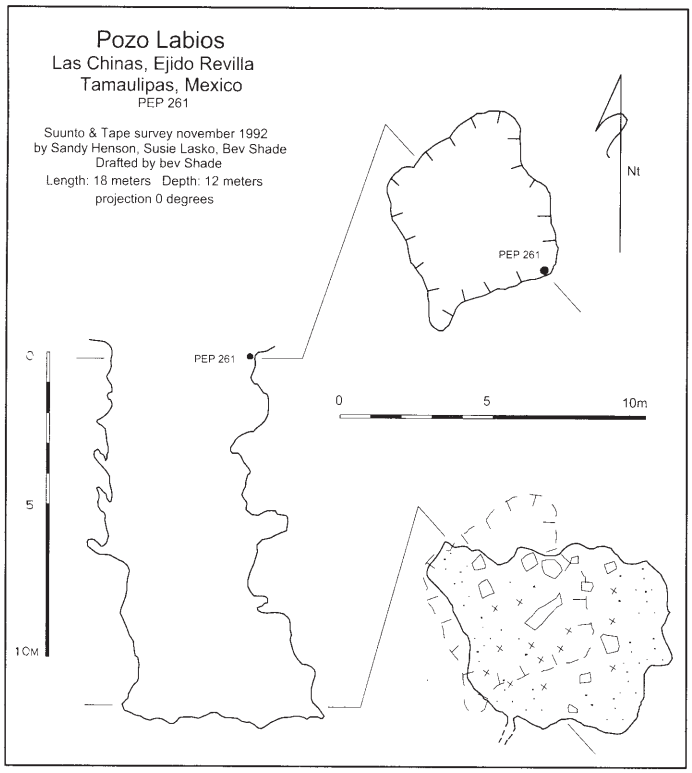


Pozo Medido is located 650 meters southeast of Rancho Nuevo, at an elevation of 2660 meters. It is on the north side of a trail from Rancho Nuevo. It is an 8-meter-deep blind pit in a sink about 8 meters across. David McKenzie sketched this pit on 3 September 1989. (PS)

POZO LABIOS PEP 261

Las Chinas, Tamaulipas
Length: 18 meters Depth: 12 meters
UTM coordinates: 454493E 2640065N

Pozo Labios is situated 1100 meters northeast of Rancho Nuevo, at 2580 meters elevation, on the northeast side of a road junction. This pit is notable for the many small ledges along the walls caused by thinly bedded limestone, prompting the name. No leads or airflow were noticed. Pozo Labios was explored in November 1992 by Sandy Henson, Susie Lasko, and Bev Shade. (BLS)



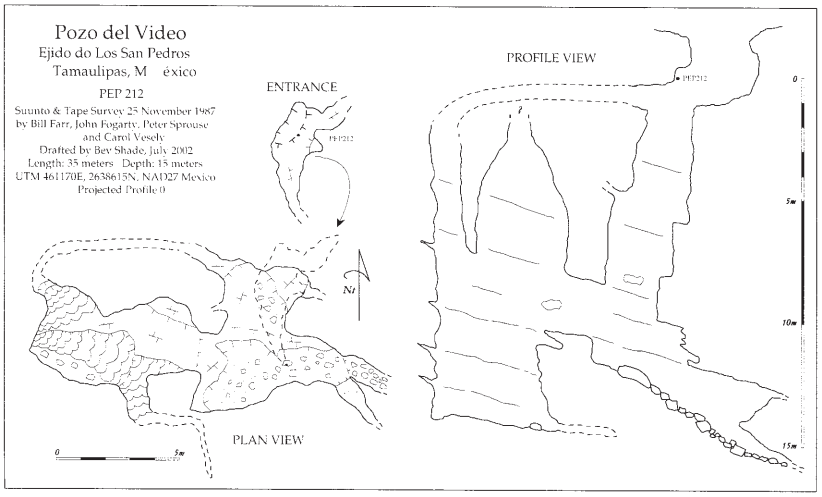
POZO SOMBRA PEP 265

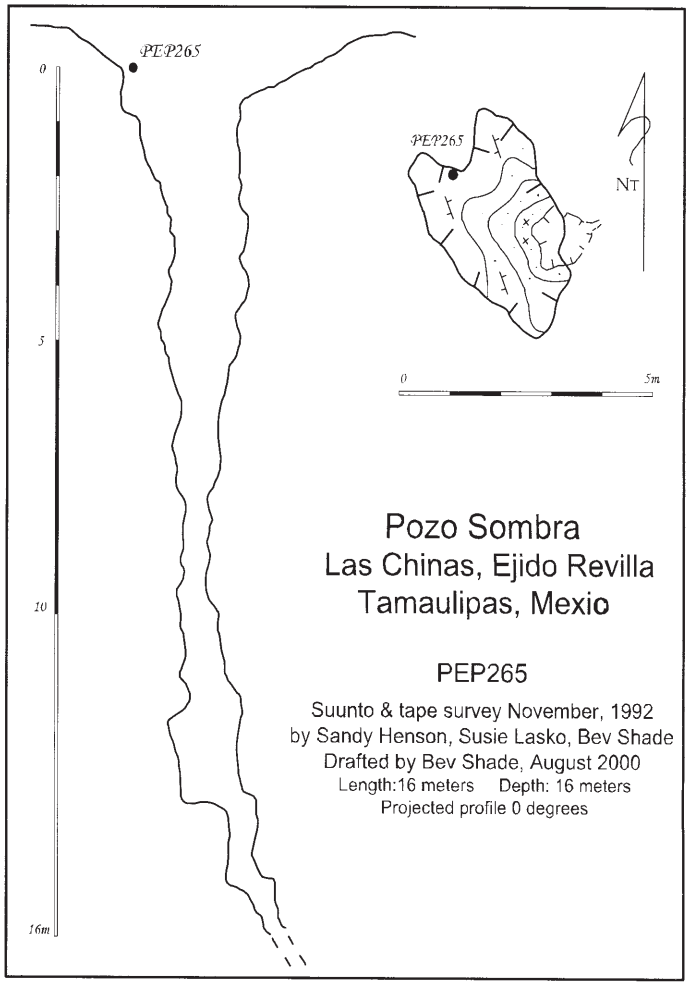
Las Chinas, Tamaulipas
Length: 16 Depth: 16 meters
UTM coordinates: 454489E 2640170N

Pozo Sombra is located 1200 meters northeast of Rancho Nuevo at 2579 meters elevation. It is on the west side of the road between La Cueva and Rancho Nuevo. The small entrance quickly narrows to a pinch, which would not even allow legs to pass through. This joint-controlled fissure cave had dirt and organic debris near the bottom, with walls of exposed bedrock. No airflow was noticed. It was explored in November 1992 by Sandy Henson, Susie Lasko and Bev Shade. (BLS)

POZO DEL VIDEO PEP 212

Los San Pedros, Tamaulipas
Length: 35 meters Depth:15 meters
UTM coordinates: 461170 2638615



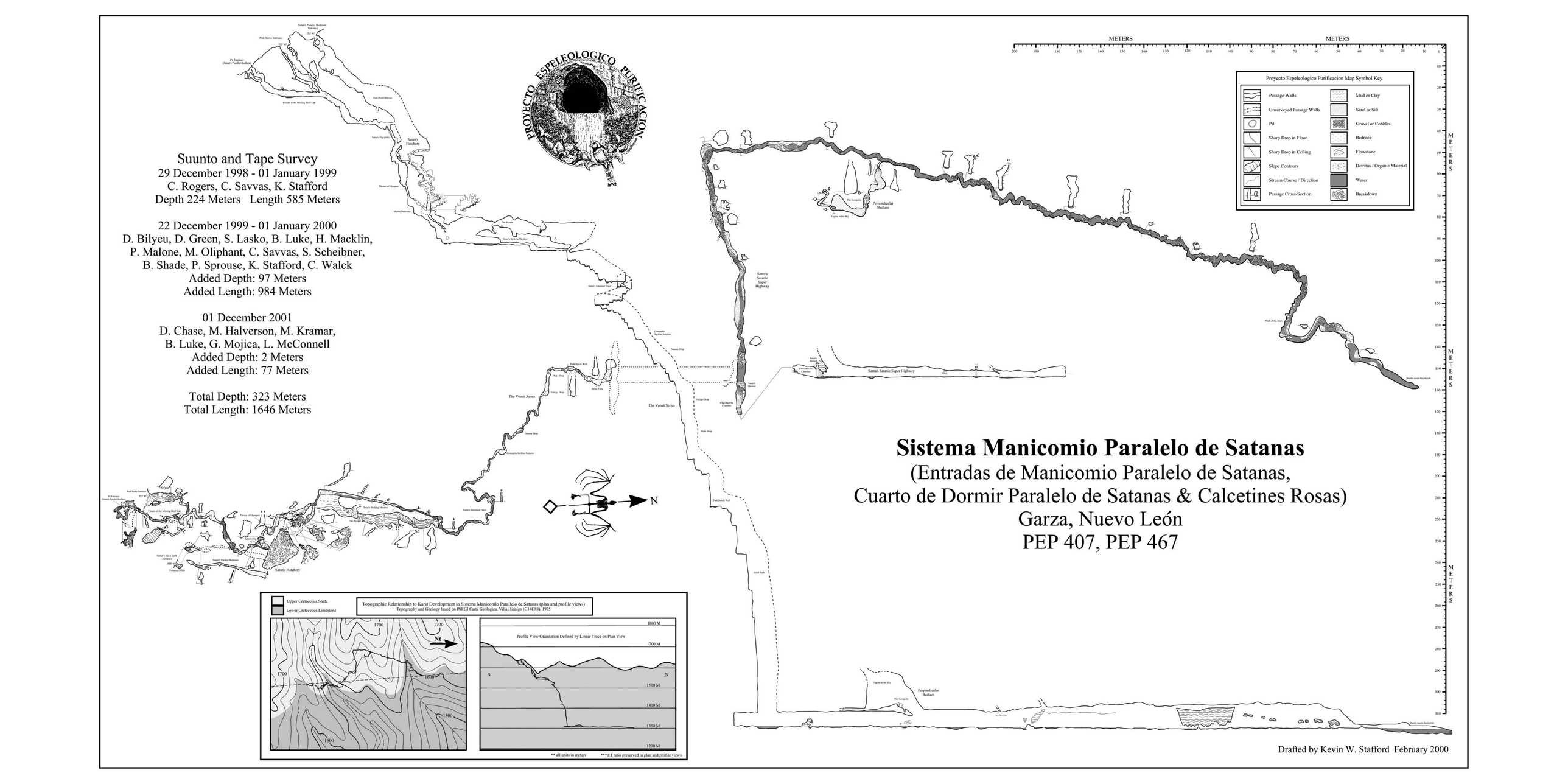


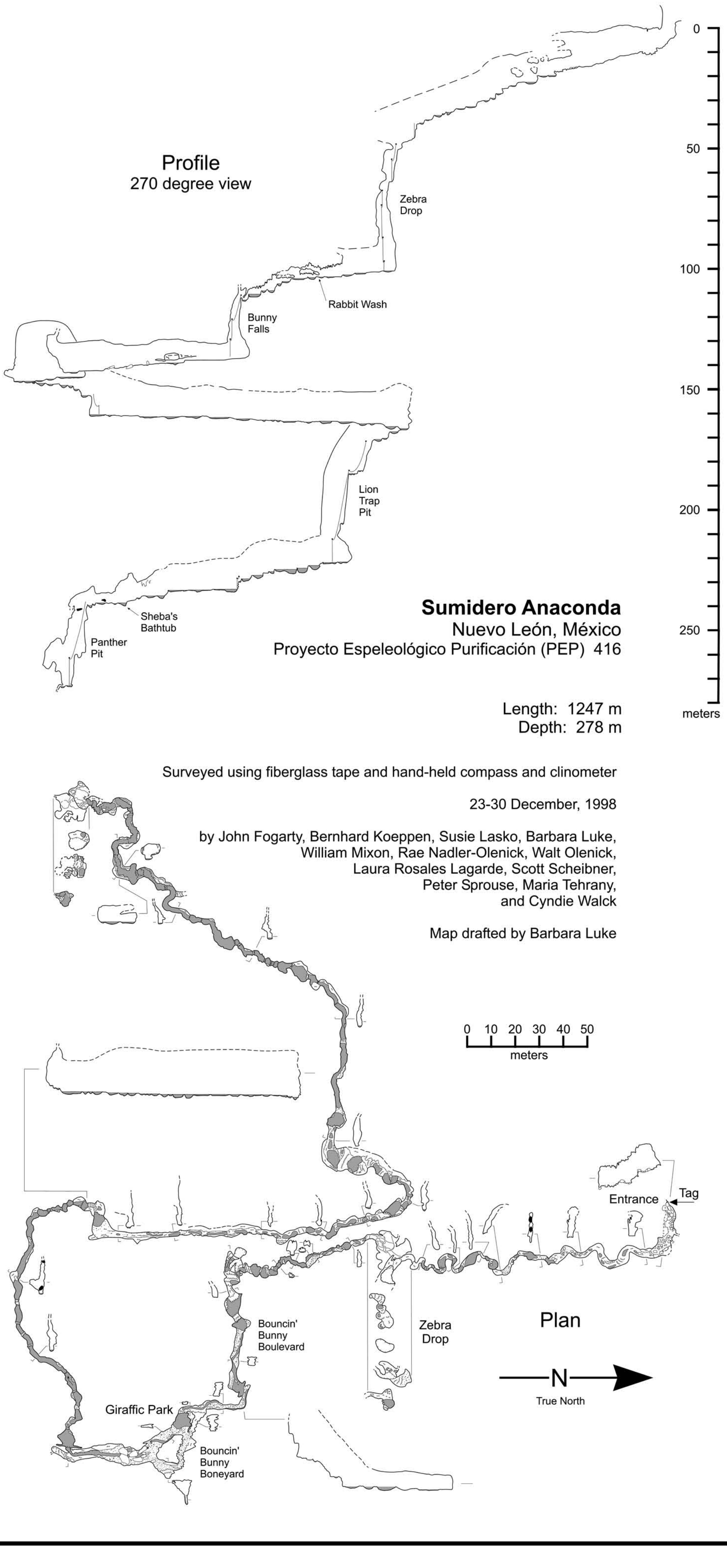
This cave lies at an elevation of 1465 meters, 200 meters south of the village of Los San Pedros, near the sawmill. It has a 9 meter entrance drop, followed by a 4 meter drop. A couple of crawls go off the bottom. It is not far from Cueva del Tecolote, and could possibly be related. Bill Farr, John Fogarty, Peter Sprouse, and Carol Vesely surveyed the cave on 25 November 1987, while Charles Fromén and George Sanders made a video of them going in. (PS)

SISTEMA MANICOMIO PARALELO DE SATANAS PEP407, 467

Garza, Nuevo León
Length: 1639 meters Depth: 326 meters
UTM coordinates: 432530E 2657533N

This cave lies 2500 meters southeast of Garza, at 1620 meters elevation. It takes the drainage of a fairly large arroyo, just below a shale contact. It has three entrances, only one of which is actually in the arroyo. This one was enlarged by digging, and is in the bank just upstream from the actual sink point, which is plugged by debris. It is a short drop into a clean-washed streamway that is soon joined by the passage coming in from the original Pink Socks entrance. Fifteen meters past that point the first drop is reached, 7 meters deep. Five more drops follow, pass-


PROYECTO ESPELEOLOGICO PURIFICACION
Suunto and Tape Survey
29 December 1998 - 01 January 1999
C. Rogers, C. Savvas, K. Stafford
Depth 224 Meters Length 585 Meters
22 December 1999 - 01 January 2000
D. Bilyeu, D. Green, S. Lasko, B. Luke, H. Macklin,
P. Malone, M. Oliphant, C. Savvas, S. Scheibner,
B. Shade, P. Sprouse, K. Stafford, C. Walck
Added Depth: 97 Meters
Added Length: 984 Meters
01 December 2001
D. Chase, M. Halverson, M. Kramar,
B. Luke, G. Mojica, L. McConnell
Added Depth: 2 Meters
Added Length: 77 Meters
Total Depth: 323 Meters
Total Length: 1646 Meters
Proyecto Espeleologico Purificacion Map Symbol Key
Passage Walls
Unsurveyed Passage Walls
Pit
Sharp Drop in Floor
Sharp Drop in Ceiling
Slope Contours
Stream Course / Direction
Passage Cross-Section
Mud or Clay
Sand or Silt
Gravel or Cobbles
Bedrock
Flowstone
Detritus / Organic Material
Water
Breakdown
Sistema Manicomio Paralelo de Satanas
(Entradas de Manicomio Paralelo de Satanas,
Cuarto de Dormir Paralelo de Satanas & Calcetines Rosas)
Garza, Nuevo León
PEP 407, PEP 467
Satan's Hatchery
The Vomit Series
Santa's Satanic Super Highway
Perpendicular Bedlam
Virgins to the Sky
The Acropolis
Hoidi Falls
Park Bench Wall
Topographic Relationship to Karst Development in Sistema Manicomio Parallelo de Satanas (plan and profile views)
Topography and Geology based on INEGI Carta Geologica, Villa Hidalgo (G14C88), 1975
Upper Cretaceous Shale
Lower Cretaceous Limestone
Profile View Orientation Defined by Linear Trace on Plan View
** all units in meters
***1:1 ratio preserved in plan and profile views
Drafted by Kevin W. Stafford February 2000


Profile
270 degree view
Zebra
Drop
Rabbit Wash
Bunny
Falls
Lion
Trap
Pit
Sheba's
Bathtub
Panther
Pit
0
50
100
150
200
250
meters
Sumidero Anaconda
Nuevo León, México
Proyecto Espeleológico Purificación (PEP) 416
Length: 1247 m
Depth: 278 m
Surveyed using fiberglass tape and hand-held compass and clinometer
23-30 December, 1998
by John Fogarty, Bernhard Koeppen, Susie Lasko, Barbara Luke,
William Mixon, Rae Nadler-Olenick, Walt Olenick,
Laura Rosales Lagarde, Scott Scheibner,
Peter Sprouse, Maria Tehrany,
and Cyndie Walck
Map drafted by Barbara Luke
0 10 20 30 40 50
meters
Entrance
Tag
Bouncin'
Bunny
Boulevard
Zebra
Drop
Plan
N
True North
Giraffic Park
Bouncin'
Bunny
Boneyard

ing a large room on the right called Satan's Hatchery. Below the sixth drop the passage lowers to a wet crawl developed on a dipping bed, Satan's striking member. This unpleasant crawl can be bypassed via a high passage in Satan's Hatchery, the room where the third entrance to the cave connects after three pitches. The cave continues down as series of splendid pitches in clean, scalloped bedrock. At the bottom of the 14th drop, the cave flattens out in out in a base-level trunk. This goes 600 meters to end in a breakdown-choked sump, with only one short side passage extending off the right along the way.

This cave system was discovered by a group of cavers on 20 December 1998, while checking sinking drainages along a shale contact that had been seen on aerial photographs. Although the stream sink itself was plugged, Susie Lasko found a tight crawl above the stream sink with a strong draft, and this was later connected to the main cave. A bit west of that Walt Olenick found an open entrance that sloped steeply down, naming it "Pink Socks". Peter Sprouse and Javier Vargas pushed this to a tight spot where a hammer was needed. A week later Susie Lasko, Scott Scheibner, and Peter Sprouse opened up this spot and dropped into a walking-size stream. Fifteen meters downstream it hit a 7 meter pit. Upstream it appeared to head back under the stream sink. Afterwards Scott, being thin, then tried squeezing into the blowhole entrance nearby. He got in two body lengths, but it then got too tight. Two days later a team consisting of Christie Rogers, Charley Savvas, and Kevin Stafford pushed down 6 drops to –87 meters. It continued through a wet crawl with strong airflow. On 31 December 1998 they returned and through the 50-meter wet crawl, an awkward affair formed on a dip that gave rise to a name for the cave, Satan's Parallel Bedlam. Then it opened up and went several ways, including deeper. They also mapped the inlet near the entrance, and got to a small exit hole to the surface arroyo, which was later opened up for use as the easiest entrance. New Year's day 1999 saw the same team back at it again. They pushed quite a bit deeper to –221 meters, stopping at the top of a 60-meter pitch with the sound of water below. They also left a big room with walking passage unchecked from the previous trip.

On 22 December 1999 during the return expedition, Charley, Kevin, Matt Oliphant, and Heidi Macklin went in to push the big room lead, Satan's Hatchery. It reconnected lower down, before the crawl. At the bottom they pushed down 3 more short drops, and it continued. On a trip a few days later, a high lead in Satan's Hatchery was opened up that provided a bypass to the wet crawl. Charley, Kevin, Heidi, and Matt were continuing to push pit series when Heidi lost control of her rappel device at a rebelay and slipped quickly down to the next bolt. Fortunately she stopped in the next rebelay rope loop without injury. This drop naturally became known as "Heidi Falls." They reached a large horizontal passage that marked the end of the 14-drop pit series. They mapped downstream a ways, and it continued.

On 28 December four teams were deployed to the bottom of the cave, one to push, two to survey, and a photo team. The survey teams leapfrogged along the mostly horizontal stream canyon. After mapping a long ways, the survey teams met the push team coming back from finding a sump. Matt Oliphant had submerged himself to feel for a way on, but the sump was boulder choked. Dan Green led a climb up a ramp over the main stream passage to reach a tall, mud-floored chamber, which his team named the "Perpendicular Bedlam Extension." This pleasant fossil stream passage connected to a narrow miserable crevice, which did not have any noticeable airflow. Danielle Bilyeu pushed this lead until it was too small, although it continued with no end in sight. The final (?) chapter on Sistema Manicomio Paralelo de Satanas came during a trip the following year. On 25 December 2001 Dale Chase, Mark Halverson, and Matt Kramar went into the tight blowing entrance near the cave and began work on enlarging it. Continuing the next day, they broke through the "Bunny's Butt Crack". After three rope drops they found that they'd connected into the big room, Satan's Hatchery. (PS)

SUMIDERO ANACONDA PEP 416

El Niño, Nuevo León
UTM coordinates: 431860E 2656140N

Sumidero Anaconda is located 3600 meters south-southeast of Garza, at an elevation of 1730 meters. It lies a few hundred meters north of Cañon el Infierno in a drainage that used to feed into the canyon. Now the drainage is all swallowed by the 13-meter wide cave entrance, which lies under a 20-meter-tall headwall. From the entrance, the cave slopes down through a narrow, winding, snake-like passage (hence the name) punctuated by pools, most of which can be negotiated without getting wet above the knee. After 150 meters the first drop of the Zebra Drop series is encountered. This 60-meter descent features fractures filled with white calcite zig-zagging across the dark limestone. At the bottom of this, large passage lowers after 25 meters to the Rabbit Wash, an unavoidable duck-under through a waterfall. Then a series of short climbs into pools leads to Bunny Falls, a 25-meter pitch. A long stretch of horizontal passage called Giraffic Park follows, only a few meters wide but with a ceiling that twists up out of sight. A stream flows actively through this section, which after more than 500 meters reaches the final drop, Panther Pit. The cave pinches out in small flowstone holes with no airflow.

Sumidero Anaconda was discovered on 22 December 1998 by a group of cavers checking stream sinks along a shale contact. They initially explored for 50 meters. The next day John Fogarty, Bill Mixon, Susie Lasko, Scott Scheibner, Walt Olenick, and Rae Nadler Olenick formed two teams to begin the survey. They descended three drops and stopped at a fourth. It was clean washed with good airflow. John and Susie continued the survey the day after, along with Laura Rosales. Bernhard Koeppen and Cyndie Walck rigged ahead, passing through the Rabbit Wash, but ran out of rope at a drop. On 26 December John, Susie, Cyndie, and Scott Scheibner went to Anaconda to continue the survey. They mapped to the top of a drop, then quit, cold and tired. It was now 712 meters long and 157 meters deep. The push continued two days later, with Bernhard and Cyndie rigging ahead while Susie, Peter Sprouse, and Maria Tehrany mapping down the next two pitches. Then they were in tall, straight canyon passage with a flowing stream. They met the rig crew coming out after they had run out of rope, again. A 12 meter pit got them to the top of an impressive 30 meter pitch. Once at the bottom of this it was one shot to the top of the next 10-meter drop. The next day Scott, Maria, and Cyndie continued the survey in Anaconda, while John

and Carlos Nasby rigged ahead. The survey stopped at the top of a drop, while the rig crew reached a flowstone terminus. The day after, the survey was finished by Susie, Laura, and Barbara Luke. (SL&PS)

CUEVA DEL PAPAMOSCA PEP 477 Revilla, Tamaulipas

Length: 35 meters Depth: 23 meters
UTM coordinates: 452080E 2645516N

This cave is located south of Revilla, near Sótano del Caracol. It was found by Bart Hogan, and surveyed by Bart Hogan, Bev Shade and Bill Stone on 29 March 2002. It was named after a flycatcher living near the entrance. The entrance is only a few meters wide, but is located at the bottom of a bigger sink, about 10 meters across. The cave is developed along a bedrock fracture that heads roughly NNW. The cave is narrow, with lots of thin, sharp bedrock ledges. There is only one lead, at the bottom of the cave, in the lowest floor section. This lead had strong airflow, but was blocked by breakdown. It would be challenging to dig in this cave, as fill would have to be moved all the way to the surface; most of the floor is covered by deep breakdown fill. (BLS)

POZO DE GNAT KING HOLE PEP478

Revilla, Tamaulipas
Length: 41 meters Depth: 23 meters
UTM coordinates: 452251E 2645447N

This pit is right next to the road running from Revilla to Rancho Nuevo, near Sótano del Caracol. It is a blind pit with no airflow, and was full of gnats. The pit had a small skylight entrance due south of the main entrance. There was a small lead at the lowest corner of the cave at the north end, which was a hole in dirt and organic debris. The cave was surveyed by Bev Shade and Jim Smith on 2 April 2002. (BLS)

POZO DEL MURCIELAGO ENOJADO PEP 524

Chupaderos, Nuevo León
Length: 11 meters Depth: 9 meters
UTM coordinates: 433639E 2650061N

This pit is located near the campsite in Chupaderos Valley that was used during the PEP Christmas 2001-2002 expedition. It was explored and mapped by Matt Kramar, Nick Johnson and Bev Shade on 29 December 2001. The pit was named for a bat that was disturbed during exploration. The cave has two parallel pits, one of which is the entrance pit, and the other smaller domepit is east of the entrance. The pits are floored by a mixture of rocks and organic debris. There is a small dig lead at the bottom on each pit, but neither lead had noticeable airflow, and the entire cave was choked with gnats. (BLS)

POZO DE LA DELGADA RAYA AMARILLA

PEP 525 Chupaderos, Nuevo León
Length: 110 meters Depth: 71 meters
UTM coordinates: 433729E 2649897N

This 71-meter-deep pit was east of the 2001-2002 PEP Christmas expedition camp near Chupaderos. It was discovered by Matt Kramar and surveyed on 29 December 2001 by Nick Johnson, Matt Kramar and Bev Shade. The entrance is a boulder-choked sinkhole right next to the road. The pit was named for some grimy yellow string on a nearby bush, and after rigging through the loose boulder choke at the top of a 50+ meter drop, the name was joking referred to as "*thin* yellow line". The base of the long entrance drop is a boulder-covered floor, and the walls of the first drop are well decorated. A handline and two short drops led through a twisting constriction and finally to a mud floored room. It is clear that water sinks in several places in this room, but no leads were found (BLS).

POZO SOLTERO PEP 541

Chupaderos, Nuevo León
Length: 15 meters Depth: 13 meters
UTM coordinates: 433632E 2649812N

This small pit was south of the 2001-2002 PEP Christmas expedition camp near Chupaderos. It was located in a field of sinkholes, and was the only open entrance in this group of sinkholes. This cave was discovered by Nick Johnson, and surveyed by Nick Johnson, Matt Kramar and Bev Shade on 31 December 2001. Some dirt was removed from the entrance to make it passable. A restriction about 4 meters down the drop also required enlarging. The floor of the pit was clean, with sharp bedrock fins oriented radially around the room. A very small bedrock tube led down through the floor, but was not passable. No airflow was detected. (BLS)

POZO DE MARCOS PEP530

Margaras, Nuevo León
Length: 93 meters Depth: 73 meters
UTM coordinates: 433174E 2646603N

Pozo de Marcos is located southeast of Margaras, at 2884 meters elevation. It is on rugged karst slope of El Abra limestone, south of Cueva Garapata. It is a 72 meter shaft broken by a bridge halfway down. It ends in dirt fill. This pit was shown to Aldo Guevara, Mark (Marcos) Halverson, and Jonathan Wilson on 30 December 2001 by Pablo Gallegos. Matt Covington, Andy Lewington, Jenny Pinder, and Peter Sprouse explored and mapped it on 1 January 2002. (PS)

CUEVA GARAPATA PEP 542

Margaras, Nuevo León
Length: 110 meters Depth: 28 meters
UTM coordinates: 433350E 2647168N

This cave is south of the small community of Margaras, very close to Pozo de Marcos (PEP 530). Most of the cave is comprised of a large well-decorated room. There are several narrow side passages developed along bedrock fractures. This cave was surveyed by Matt Kramar, Pat Shaw and Bev Shade on 1 January 2002. This cave is fairly high on a hillside and does not appear to be active. Several large logs were found at the base of the entrance drop, presumably dropped in by accident when loggers were rolling cut trees down the steep hill. (BLS)