San Buenaventura Caving

By Bev Shade and Peter Sprouse
(adapted from an article in AMCS Activities Newsletter no. 28)

Charley ignores the warnings at Cueva de La Azufrosa

This was supposed to be an Oztotl Flying Club trip to recon the karst of Coahuila from the air, but mother nature decided it was going to be cloudy. So we reconned the karst at ground level instead. Jesse Becker, Charley Savvas, Bev Shade, and Peter left Austin on 26 January 2005 and crossed into Coahuila at Piedras Negras. The next morning we set off to find Cueva de La Azufrosa, which bat investigators Jim Kennedy and Arnulfo Moreno had visited in the summer of 2003. In 2003 Arnulfo had stopped by first, and declined to go in after he was told that two people had died in the cave from “gases”. The cave was located above a sulfur spring. Jim visited the site shortly thereafter with Merlin Tuttle, but didn’t go too far in due to bad air.

Armed with this information we drove south from Allende on the road to Villa Unión. After 11 kilometers we turned right on the road to Ejido la Azufrosa, where we obtained a ranch key from the comisariado. From there it was only a kilometer drive west to the cave. With the directions from the ejidatarios and Jim Kennedy’s coordinates we reached the sulfur spring with little trouble. The sulfur spring emerges at the base of a hill. We could smell the sulfur as soon as we stepped out of the truck. The main spring itself was fascinating. Water bubbled up from an orifice at the deepest point of the pool. A large leopard frog sat on the bottom, its head bobbing in the flow from the orifice. After watching him for awhile, even making a video of him, we realized he was actually dead. Was it the sulfur that killed him? The stream was filled with blue and white bio-mats and stalagmite-shaped growths. Downstream was another small sulfur spring flanked by a small fresh water spring. Minnows swam up the fresh water flow, but wouldn’t enter the sulfurous water.

Sulfur (left) and freshwater springs at La Azufrosa

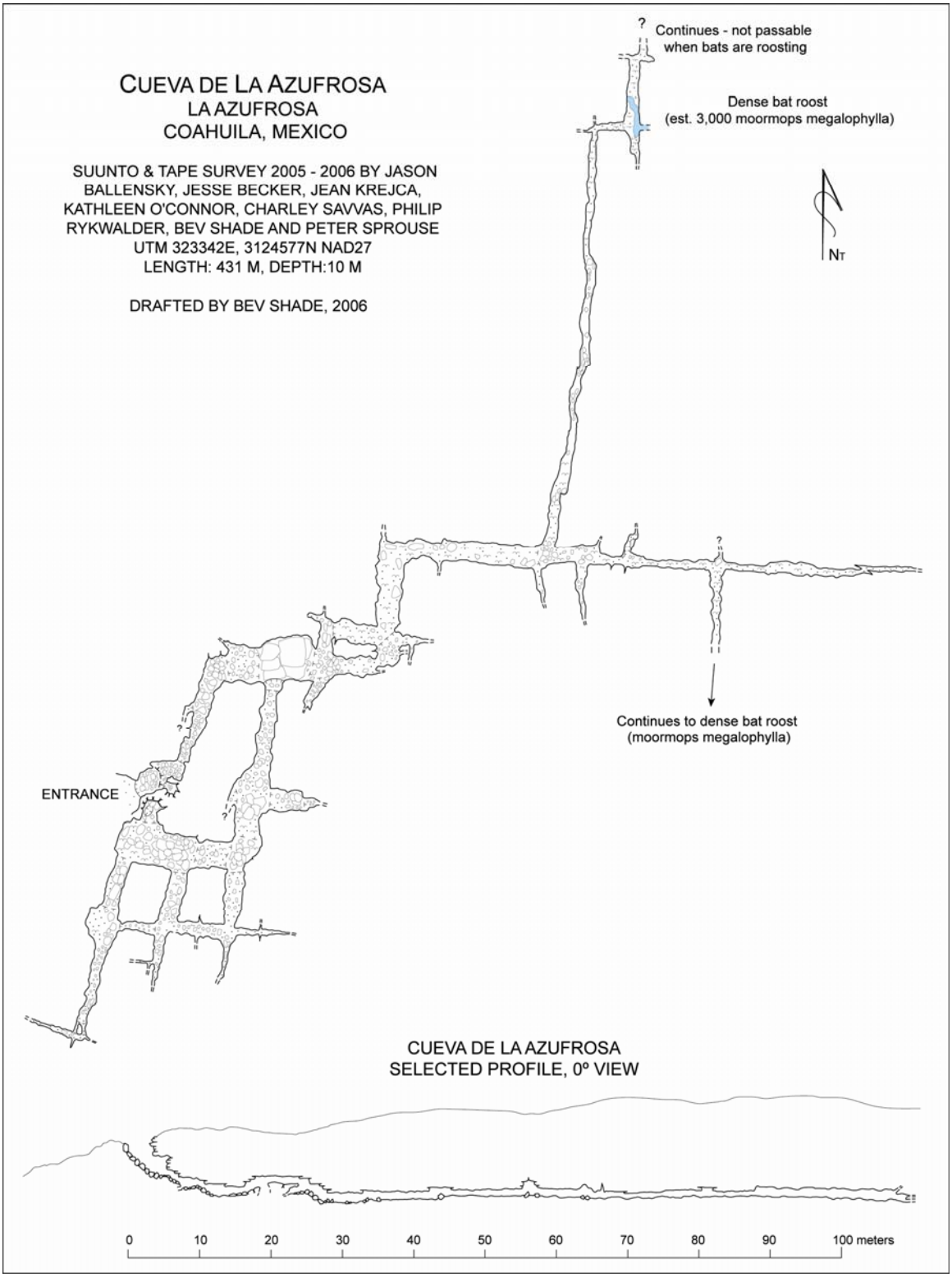
There is actually a whole line of springs along the northwestern edge of the low hill. The marshy area that the springs feed is pocked with old and recent collapses into unconsolidated soil mixed with a variety of mineral precipitates. The springs appear to have started forming to the north and slowly moved south along the rise. The most active spring is described above. It is about 2m

wide, with a 1-m-wide spring run that flows about 20m northwest. The remains of at least four older springs can be seen north of the main spring; some of them are still active.

We set off to locate the two reported cave entrances just up the hill. One was a sink just uphill from the main spring that supposedly had been an entrance to the cave, but the local residents had filled it with trash. The open entrance was 100m to the south. It was a steep sink developed in blockish, flaggy rock akin to Boquillas Flagstone. Warnings and a death's head adorned the rock, and soon a goat-herder came up to warn them that some 20 years before 7 kids had gone in, three of whom became gravely ill and the others had died. He explained that they had gone into the cave until they came across something, an object of stalagmitic shape perhaps, that caused them to feel ill and flee. Two died in Monterrey and two in Piedras, and one, his nephew, was in the San Antonio hospital for two months. So we surveyed into the cave with some caution. A restriction at the bottom of the slope opened into a stoop-way of ample width. Suspecting histoplasmosis as the problem, we spidered carefully over the thick guano piles. The passage zigzagged through right angle turns and cross passages. Dead bats on the wall raised some concern, but we detected no sulfur fumes or bad air. Soon we passed some cross-joint passages with live bats, *Mormoops megalophylla.*

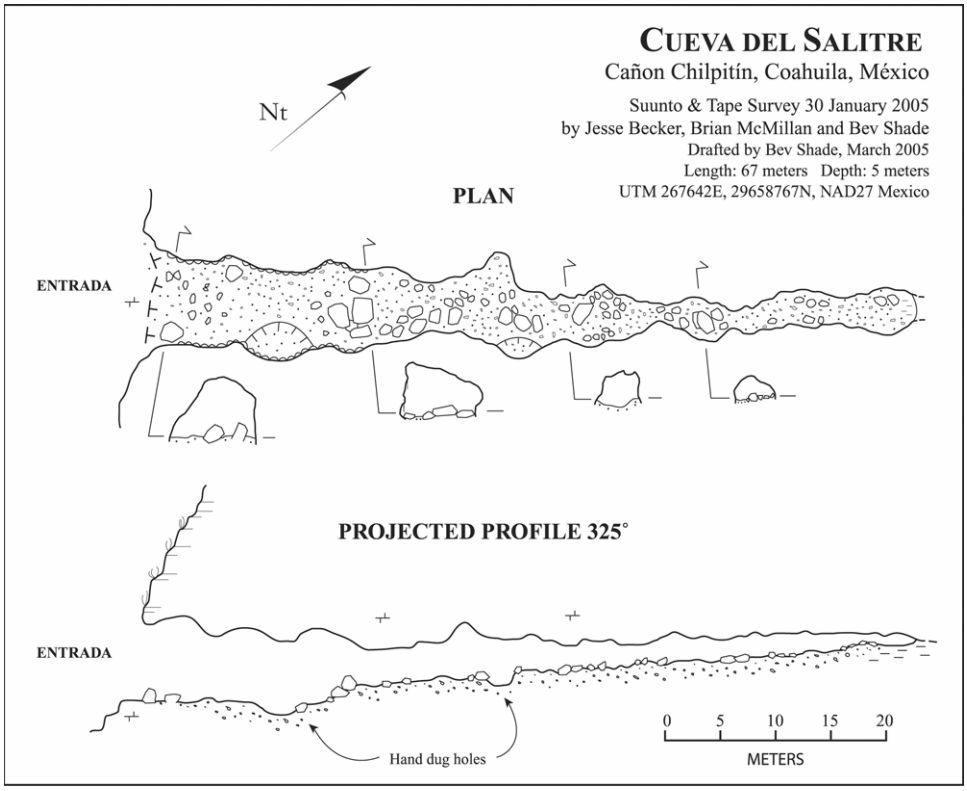
Rectilinear fractures create rectangular breakdown in Cueva de La Azufrosa

The main route we were following narrowed to a gun barrel, where we got a 20 meter survey shot, but it got too tight soon after. One of the bat passages was pushable, but there were too many bats, perhaps five hundred in all. The last left hand lead on the way out, which Jesse had noticed, was the one that went. It was walking passage where we quit the survey, and Jesse explored 50m ahead and it continued smaller, sloping down. But continued mapping would have to wait for the next trip, as we had to continue on to Monclova to pick up Mónica Grissel Ponce González, president of the Asociación Coahuilense de Espeleología.



The next day we drove back and forth through Monclova looking for a spring shop to add a leaf to Bev's truck, to no avail. So we drove southeast of town to Chilpitín Canyon, which penetrates the core of the Sierra la Gloria, a place Peter had wanted to visit for many years. We picked a way across the desert to the canyon entrance. Entering the canyon, we could see a number of

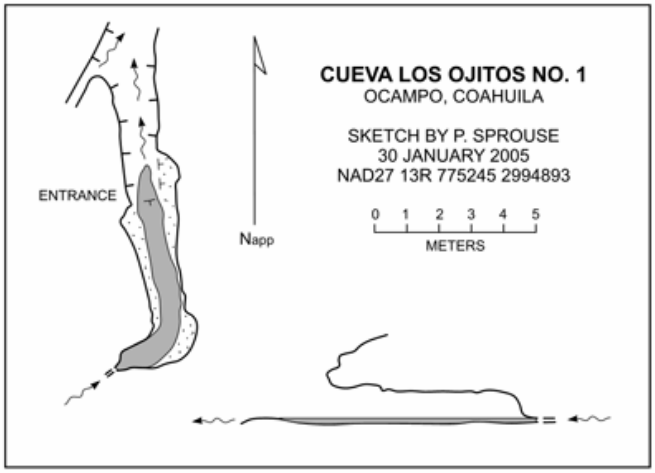
entrances high on the walls. We stopped at a ranch house and learned that some of them on the south side were called the Cuevas de Belén, which looked like an interesting climb to reach. The reputed largest cave in the canyon is called Cueva del Salitre, and a rancher named Pancho Torres said he could take them to it in a few days. Farther up the canyon there is supposed to be a pictograph cave.



On 29 January we were joined by New Mexico Tech geology students Kevin Stafford, Laura Rosales, Megan Curry, and Brendan Headd. We all set off to track down a lead on a pit near Cuatro Ciénegas, but we couldn't connect with the guide. Asking about sulfur springs, we heard about some in the Ocampo valley. We picked up one of the Rancho Agua Verde ranch owners in Cuatro Ciénegas and drove an hour north. The ranch was due east of Ocampo, in the middle of the alluvial valley. We saw three springs, one of which Laura sampled for sulfurous water.

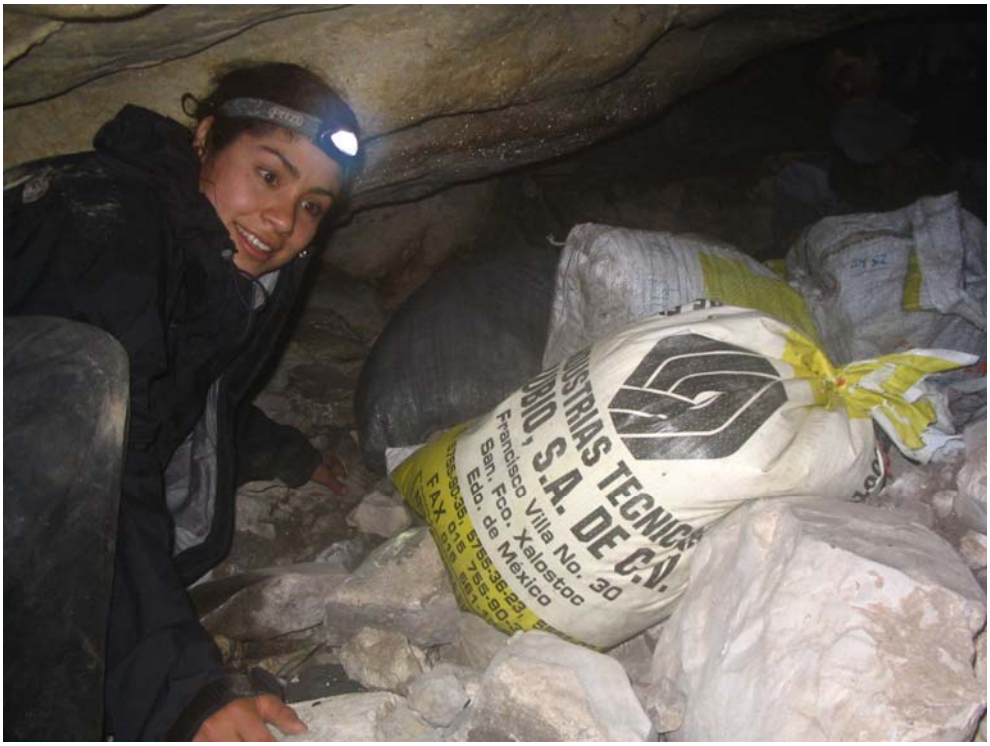
Laura and Monica head for the Ocampo sulfur springs

On the following day Kevin's crew set off 10 km north of San Buenaventura to Santa Gertrudis to look at a La Azufrosa spring, where they collected water samples, then they were headed to Nuevo León for a few days. Bev, Jesse, and Mónica went back to Cañon Chilpitín to check leads there. The guide who knew the location of Cueva del Salitre was busy herding goats, so we explored farther east into the canyon, accompanied by his 10-year-old son, Manolo Torres. We drove far enough up Cañon Chilpitín to get into oaks and mountain laurel, where Manolo led them to several short, shelter-like caves with fairly well-preserved pictographs. Don Emiliano Aquirre, another local rancher, referred to this group of caves as Cuevas de los Indios. The Cuevas de los Indios appear to be small paleosprings that issued on top of a thick bed of limestone along a northeast-southwest cliff face. The paleosprings are smallest to the southwest, and enlarge to the northeast. Don Aguirre also told them about more pictograph caves way up in the mountains that he had visited as a young man, as well as the approximate location of a road that climbs the south side of the mountain. Charley and Peter went into Cuatro Ciénegas to try to visit a guano cave we'd heard about, but couldn't convince the guide to actually leave town. We gave up and headed back to the Ocampo valley, stopping to look for biologist Dean Hendrickson along the way. At Rancho el Retiro we heard of large caves and an "hundido" at Palos Verdes, with access via Ejido la Victoria, but consulting the new book from the Italian cavers we found they had already been checked. So we asked about caves at Ejido el Oso, and heard about one in Cañon el Guano which they could take them to another day. This is likely one visited by Charles Fromén and others in the early 1980's. Meanwhile we drove up to the ejido water source at Los Ojitos, where considerable water comes out of some 15 springs developed in alluvium and bedrock. Two of these came out of very short caves, which we did some collecting in, finding cave crickets, spiders and *tachys*. We sketched the longest cave, Cueva los Ojitos no. 1, some 5m to a sump dig. Our group was enlarged that evening with the arrival of Gustavo Vela, Luisa Estrada, Leonard Pruitt, Geoff Hoese, and Brian McMillin.

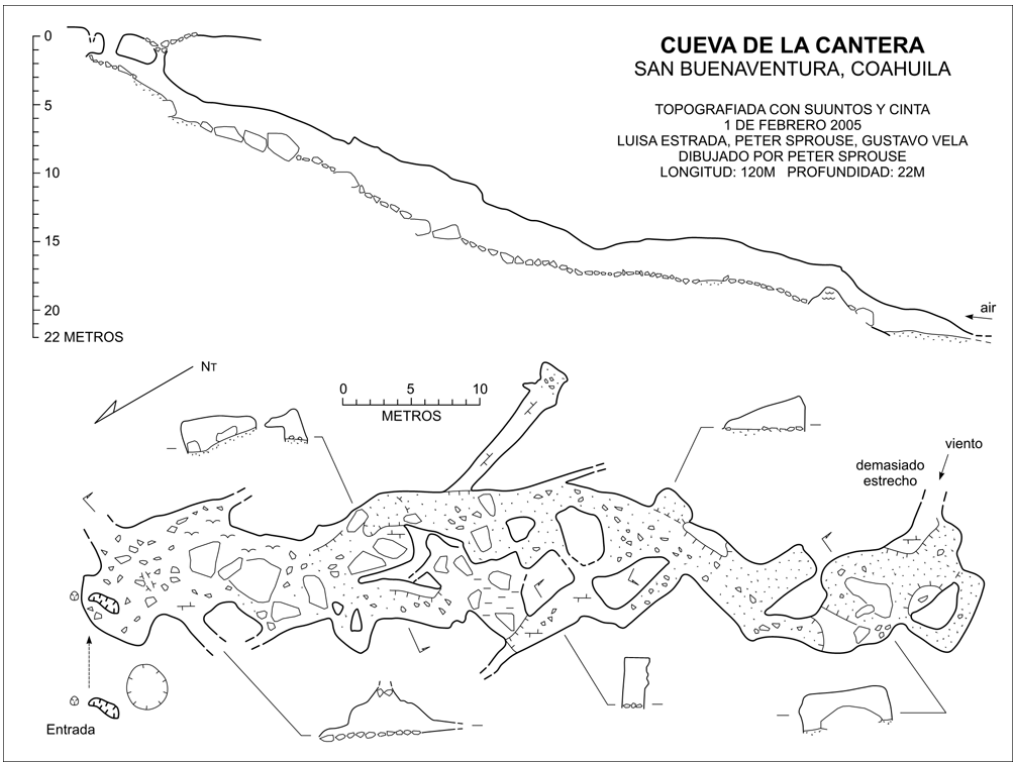


Thus fortified, we organized three teams on 31 January. Geoff, Mónica, Leonard and Charley headed south to go to a guano cave marked on the topo map south of Monclova in Nuevo León. After many hours checking roads they reached the site in late afternoon. There were two pits 50m apart with old steel ladders leading down in. They seemed about 60m deep, and one had a strong guano smell. They did not explore them due to lack of time and gear. Gustavo, Luisa, and Peter tried to visit Cueva el Hundido in the Sierra la Rata, but could not find the guy with the key. So we drove west to San Antonio de la Cascada, where we checked out some of the springs west of town. They were slightly thermal. Then we went to La Cascada, where diverted water drops off a 30m high travertine mesa. There is a scenic grotto behind the falls, and we were able to climb up onto the mesa. We followed the stream for nearly a kilometer to find two springs, one in alluvium and one in travertine, neither enterable. Once back in San Antonio de la Cascada we heard about a cave above Ojito la Tacita, and got guides to take them there. We drove through

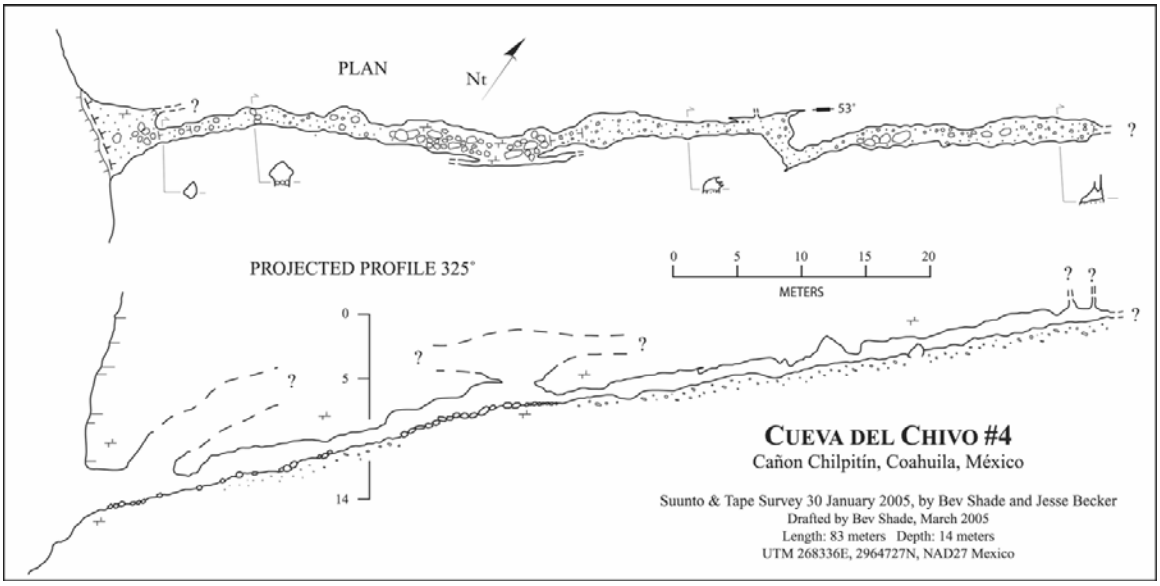
an interesting travertine quarry and parked just above it. 100m upslope was the cave. Luisa dropped 2m into a broad sloping stoopway. After crawling over sacks of blasting mixtures she found the cave went at least 50m, and continued.

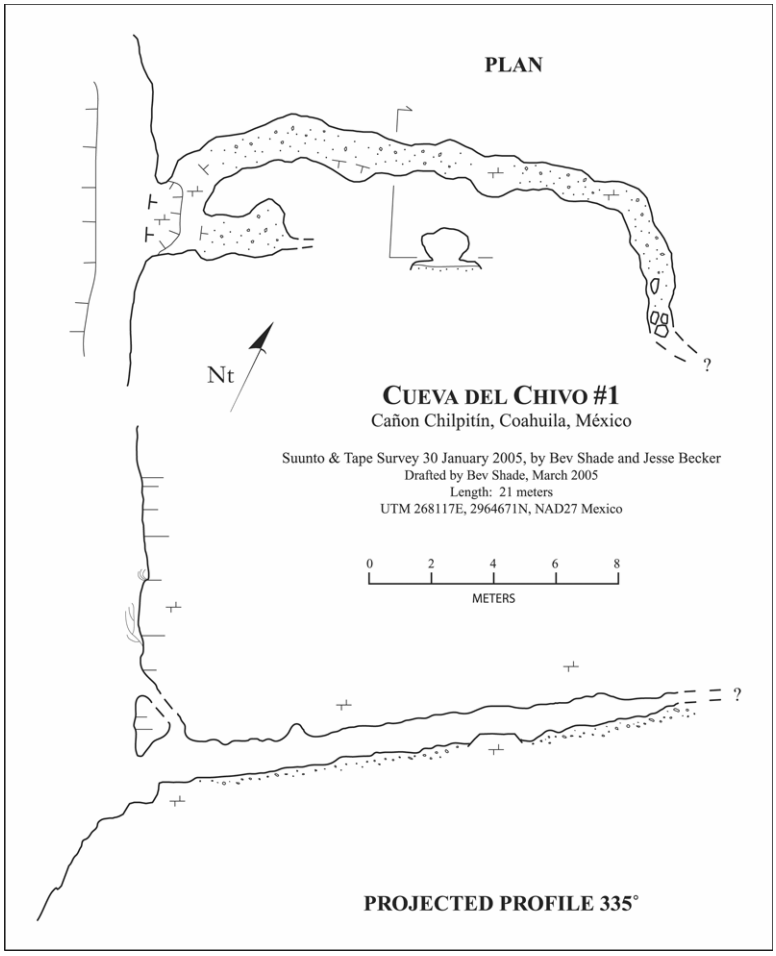


Luisa crawls over blasting supplies in Cueva de la Cantera

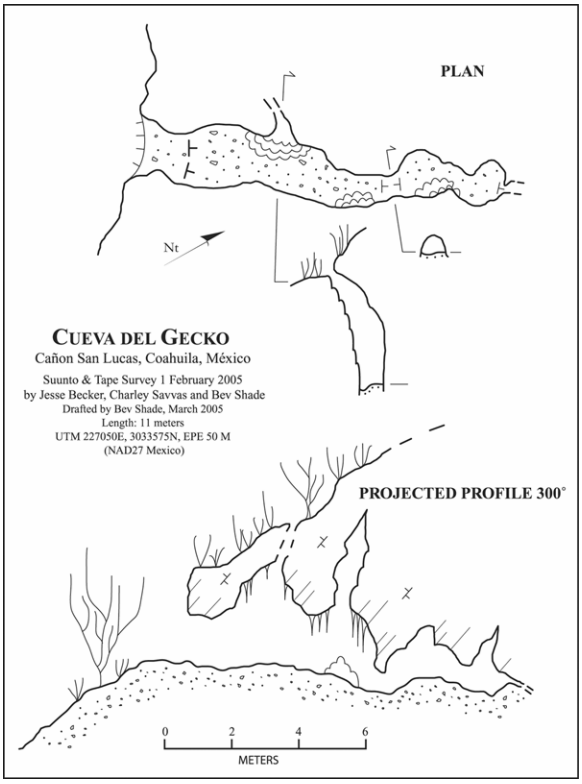


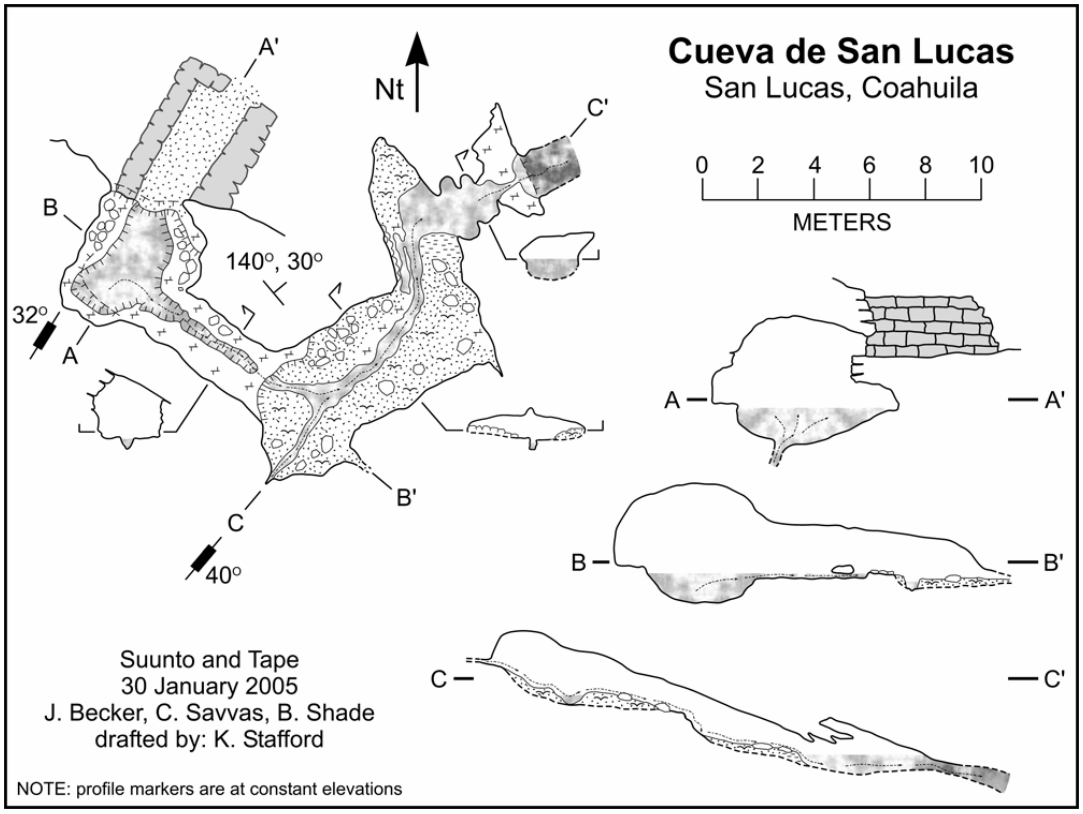
We then took the guides home and drove north two towns to San Antonio de las Higueras, where we heard about a cave at San Lucas with a sulfur stream in it. The crew of Bev, Jesse, and Brian returned to Cañon Chilpitín, and were led by Pancho to several of the cliff caves we had spotted on the first visit. On a steep hike along the south side of the canyon, we mapped Cueva del Chivo #1, and Cueva del Chivo #4, and attempted to climb into another cave about 5m above the trail. We quickly determined that it needed a rope, as it sits above a narrow ledge, perhaps 1 and ½ meters wide that drops off some distance. Both of these caves, as well as several other short flowstone-choked holes, appear to be small phreatically-formed conduits that have been intersected by the cliff face. The conduits have minor vadose modifications, like downcutting into the floor. They probably led to small paleosprings like the Cuevas de los Indios. They are fairly horizontal, sloping gently toward the cliffs. There is airflow in some of these caves, which seems to be circulating from higher up the cliffs, where more recent vadosely enlarged fractures have intersected the older conduits. Cueva del Chivo #4 is over 80 m long, and Cueva del Chivo #2 was mapped for over 20m to a restriction which could be easily dug open. We also surveyed Cueva del Salitre, on the north side of the canyon, but within sight of the Chivo caves. Cueva del Salitre is a much bigger paleospring, probably a major resurgence for the canyon in the past. Later, Salitre was a well-decorated active air-filled cavern for a period of time, seen in the large old flowstone and draperies along the first 20m of passage. The scenic entrance is about 8m tall by 8m wide, but the floor quickly rises to intersect the ceiling of the passage, so that the cave is less than 70m long. The fill is dry and sandy, with several holes along the east wall that have been excavated in modern times. In the last 20m of the cave, small gypsum needles are forming in the dry sediment. The very end of the cave is blocked by dry compact clay, an older fill than the loose sand filling the rest of the cave. All of the Chilpitín caves serve as shelter to the many goats raised in the area, and are dusty, with lots of goat scat and hair, as well as rodent refuse. A dust mask is recommended to explore caves in this area.





Bev, Charley, Geoff, Mónica, and Jesse went to check the San Lucas area the next day. We found several freshwater springs as we approached the cañada, and then reached the sulfur cave. There were ruins of an old spa hotel from 1906, where people would soak in the thermal waters. Cueva de San Lucas had a travertine blockhouse built at the entrance, with a spring pool just inside. The cave water had a strong sulfur smell, and flowed 20m to a sump, with all kinds of interesting minerals precipitating on top of guano, as well as what appears to be snottites. The cave stream is fast-flowing, even where it enters the sump. We hiked farther up the canyon and found several more small caves. Charley, Bev and Jesse mapped a small cave farther up the canyon, which was inhabited by two large geckos; we called it Cueva del Geko. This cave is a vadosely enlarged fracture that runs roughly perpendicular to the canyon at that point. It is mostly filled with loose sandy material, and has clearly been excavated by hand in two places. The first is a restriction that leads to the back chamber where the geckos were living, and the second dig is at the very end of the cave. The cave is well decorated with inactive formations, but most of these have been broken, probably by the same people digging in the cave. Leonard, Gustavo, Luisa, Brian and Peter went back to Cueva de la Cantera by the travertine quarries. It followed the plunge of the anticline down for about 60m to where it got too small. We also mapped a loop through several right angle turns. Then we tried to follow the road around the mountain to the northwest, but it was fenced off, so we returned to the highway. At San Lorenzo we asked about going to Cueva el Tulillo, but the comisariado wasn't home so we couldn't get the ranch key. So we drove southwest of the quarries toward Trincheras, asking about caves at a travertine block loading station. We heard about several caves at El Terrero, but you would have to get a key from the owner in Monclova.


PLAN
Nt
CUEVA DEL GECKO
Cañon San Lucas, Coahuila, México
Suunto & Tape Survey 1 February 2005
by Jesse Becker, Charley Savvas and Bev Shade
Drafted by Bev Shade, March 2005
Length: 11 meters
UTM 227050E, 3033575N, EPE 50 M
(NAD27 Mexico)
PROJECTED PROFILE 300°
0 2 4 6
METERS


Cueva de San Lucas
San Lucas, Coahuila
Nt
A'
C'
B
140°, 30°
32°
A
B'
C
40°
0 2 4 6 8 10
METERS
A
A'
B
B'
C
C'
Suunto and Tape
30 January 2005
J. Becker, C. Savvas, B. Shade
drafted by: K. Stafford
NOTE: profile markers are at constant elevations

The next day the expedition vacated their base in San Buenaventura and headed into Monclova to meet a guy that Mónica had met in the cyber café. He agreed to guide the group up onto the western foothills of the Sierra la Gloria to a 4 or 5 second pit that he had found while running above the dolomite quarries. We worked their way through the quarries, acquiring permission along the way, and passed them not long before a blast. We spread out to search for the meter-diameter pit, to no avail. Driving south out of Monclova, Peter had the misfortune to get pulled over twice, lightening his wallet each time. Several of the crew were ill in the stomach, so they stayed at a hotel in Monterrey while Charley, Mónica and Peter joined Kevin's crew camped at Potrero Chico, Nuevo León. They had visited Carrizal since leaving the others had seen them. The new arrivals roused them from bed and started a campfire, until it began to rain all night.

The next few days were spent at the UMAE congress in Monterrey, where several of the group gave papers and many new acquaintances were made. The evening of 4 February, eight of the remaining group went to meet Becky Jones at Minas Viejas, but couldn't get through the ranch gate. So we went a bit farther north and camped at Rancho Cerro Colorado instead. In the morning we drove into a canyon of the Sierra de Lampazos to find a cliff lead north of Cueva de el Tule which we had seen years before. Laura, Charley, Bev, and Peter hiked up the lechuguilla-covered talus to it, but at the base of the cliff we faced an 8m climb for which we lacked technical gear. Kevin, Mónica, Brendan, and Megan looked for caves in other areas parts of the canyon, but didn't find anything either. All drove into Bustamante for the closing remarks and dinner of the congress. Bidding farewell to the others, who were headed to visit Cueva de San Lucas for hydrogeologic sampling, Charley and Peter headed north to Texas.

Monica spots the cliff cave in Sierra de Lampazos