

Caving in Bolivia

Greg Horne

As we admired the view up the canyon I noticed the river's edge appeared to be rising with each ripple. I pointed this out to our guide Mario, who yelled for us to run and get back to our gear left downstream along the river bank to dry; a flash flood was coming. And did it ever! In the span of less than five minutes a torrent of brown water flushed down the canyon making the previous knee-deep crossing an impossible venture. We waited two hours before being able to boulder-hop back across the river. This was a sobering reminder for use to pay close attention to the weather, especially since we had just spent the previous three days in active river caves.

I had initially planned a visit to Bolivia for March and April of 1996 to climb Nevado Sajama, at 6542 m the highest peak in the country.

The Lonely Planet guidebook of Bolivia mentions a couple of caves that are accessible by public transport. The standard reference books, Atlas of the Great Caves of the World and The Underground Atlas, revealed little information. Bill Torode, NSS Librarian was very helpful in tracking down five French references; two almost historic (1976) and three recent reports (1989 and 1990) from the magazine Spelunca, which would be my only reliable written information.

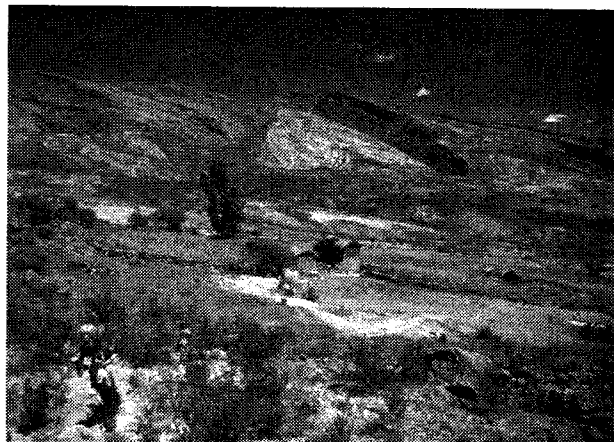
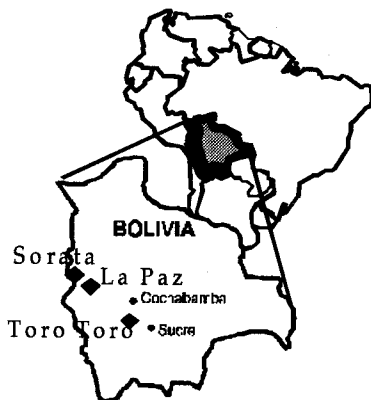
First I bussed from La Paz to Sorata, a spectacular journey across the altiplano, along the shores of Lake Titicaca, with views of the glacier-flanked Cordillera Real before a hairpin descent down to the subtropical town of Sorata. I checked into the Residencial Sorata, an old colonial style mansion. My first night's sleep was broken by hellish nightmares including swimming an endless loop in a water-filled cave passage, hopefully not a warning of things to come! Sweats and chills, cramps and countless visits to the facilities took me through to dawn.

Luckily, the toilet and sink were strategically installed so that both could be used simultaneously. A further 24

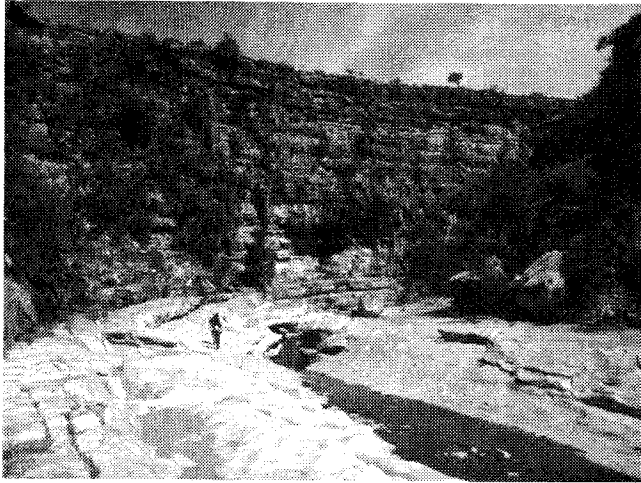
hours of bed rest followed by eviction from the hotel was definitely a low blow. It seemed the hotel had a block booking, so no room for a gringo who was plugging up the toilets. I wobbled down the street to the competition.

After another day of recovery I set off on foot for a visit of Gruta de San Pedro. The route was a three-hour walk down the Rio San Cristobal along a dirt road with infrequent truck traffic. Just beyond the village of San Pedro was a side road leading to below the cave entrance. I paid the equivalent of one dollar to enter. I had brought a headlamp not knowing what I would find, but a small portable generator was running and inside I met a crew of workers installing a new electrical line on poles. They were amused with my Petzl headlamp as they had regular flashlights strapped to their heads with pieces of inner tube.

I followed a string of feeble yellowish lightbulbs down into the cave. The noise and sight of bats increased as I continued. The lights ended at the edge of the lake which nearly fills the width of the main passage. I traversed along a ledge system above the left side of the lake until the risk of falling into the lake outweighed further progress. As I was traversing back the electrical lights went out. No problem, I had my own light, luckily. As I had some lunch I noticed the level of bat activity was increasing



Hiking toward Umajalanta. Cave entrance is in the valley to the right of the limestone wedge. Photo by Greg Horne.



Hiking downstream along the Rio Toro Toro towards Chiflonkkakka. Photo by Greg Home.

dramatically with all the lights out. Bats were whistling by my head at an alarming rate. On my way out I understood that the bats were coming out of the cracks and roosting on the electrical line, like laundry hung up to dry. Once on the surface I figured out why the lights were off, it was lunch time for the work crew.

According to Andrew Pavey in the August 1979 *British Caver*, this is Bolivia's only show cave with no other caves known in the immediate area; the entrance is at 2395 m, the cave is -49 m deep with 510 m of very lineal single passage in marble with no significant speleothems; the 30 m long, 8 m deep lake has been dived by the Italians and locals.

At the end of March I met Calgary caver and climber Marg Saul in La Paz. Marg had been in South America since the new year, first on an Alpine Club of Canada expedition to Aconcagua, then in Ecuador hiking and visiting the Galapagos. After a day of shopping we took a bus to Cochabamba, about 6 hours away. We were headed to Toro Toro, a village and new national park in Potosi province. The area surrounding Toro Toro has most of Bolivia's known caves.

My research led us to believe that a truck would leave Cochabamba from the corner of Calle Republica and 6 de Agosto every Sunday and Thursday, at 6 or 6.30 am. We checked out the corner the afternoon before, asking street vendors if this was the right place, and no one gave a very positive response. But the next morning a big three-ton truck was parked where it was supposed to be. We picked the choice spots at the front of the cargo box and placed our packs as seats. For the next ten hours the truck picked up and dropped off passengers, livestock and cargo enroute to Toro Toro. At times there was no space to sit on the pack,

standing on it was necessary to rise above the masses jammed in. Food vendors peddled fruit, empanadas and ice cream to our outstretched hands. A couple of hours from Toro Toro the driving crux of the journey was reached, a ford of the chocolate-brown Rio Caine. Looking better suited for rafting than driving, I crossed my fingers for this one; the standing waves weren't encouraging. The driver dropped into low and we bounced our way over the cobbles.

With the name of Sr. Saul Foronda, who had accommodation and could secure a guide, we scurried off to locate him as soon as we arrived. Foronda ran a very basic store and an even more basic flophouse, a low-life Hilton so to say. Toilets were flushed with a bucket of water when water was available, lighting was by candle and we used the laundry sink as our kitchen. By the end of our stay I figured out why I was scratching myself crazy - bed bugs.

We met our cave guide, Eliodoro Chui, that first evening and set a time to meet the following morning and go to Umajalanta, Bolivia's longest and deepest cave at 4600 m and -164 m. Two Israeli guys who



Greg Home climbing out of the entrance pool of Chiflonkaakaa. Photo by Marg Saul.



Cave-guide Mario Jaldin in Sapaipa Huakon Juskuj. Photo by Greg Home

arrived on the truck with us and were staying in the same dive would join us. Before leaving town the next morning we all had to sign in at the town hall and pay a park user fee of two dollars each. The mandatory guide's rate of pay was four dollars for the first two people and a dollar more for each extra person. The fine for not having a guide was \$40. I'm not a big fan of mandatory guides but given our very limited time and lack of knowledge of the terrain it was a blessing in disguise.

Enroute Elidoro stopped to scoop sand out of dinosaur tracks very near the trail. They were the three-toed variety, about 15 - 20 cm long. We hiked across an undulating plateau at 2600 to 2900 m altitude, bordered by 4000 m peaks to the south and an escarpment dropping off to the north down to the Rio Caine at 2000

A stream flowing out of a steep mountain valley is captured by its huge entrance, 20 m high and 30 m wide. We began by descending over large water-worn boulders, then climbing up to an inobvious side passage with a gate. This route bypassed the slick active stream passage which would first appear to be the way to go. Beyond the gate the route is down through decorated but vandalized passage, a bat chamber and a couple of exposed moves to a tiny pond.

This pond is the end of the trip for the majority of guided tourists. We continued down to the first junction at -156 m and turned right into the Rio 7-Up drainage. Missing the ascending passage, we bottomed out in a couple of silted-up passages where things deteriorated to the point of a belly crawl in a stream with one eye and nostril submerged. Elidoro and Marg were happy to wait for me. Beautiful emerald green frogs were hopping around in these lower parts of the cave. Driftwood jammed in the high ceilings further back

certainly indicate that not only frogs are washed into the lower portions of this cave. A small, blind, and completely white catfish (*Trichomycterus chaberti*) was frequently seen in the shallow streams of the lower cave. A late start, and the failing lights of our guide and the Isrealis, ended our first day.

The next day Marg and I returned with Elidoro; the Isrealis had had enough. We returned to the first junction and turned the other way, heading up the Rio Singani. With our photocopied half-page map it's difficult to know exactly where we ended up. Our furthest point upstream was the base of a waterfall with a 9 mm fixed rope (probably from the French in 1988). Elidoro bridged the walls of the vadose canyon downstream and managed to climb barefoot above the falls and fixed line, then turned around.

Somewhere futher up, where the passage is blocked with breakdown, voice communication is possible with another cave, Chankakkani. While exploring a side passage I made a further detour up through some breakdown into a beautiful well-decorated large aven that appeared completely untouched.

Day three was a morning excursion to Chili Juscu (160 m, -2 m, +55 m), a small cave overlooking the village of Toro Toro and its water supply. A plastic collection pipe goes most of the way up through the cave and connects to a pipeline down the mountain.

In the afternoon we hiked down the Rio Toro Toro past petroglyphs to the impressive resurgence of Chiflonkkakka gushing out of the canyon wall. An exposed traverse across a slab led to the entrance pools. Elidoro declined to head upstream; he would wait for us. The first pools were wading depth but became swimming and then back to a shallower rushing stream. A bridging climb up the narrow slot canyon walls led into a dry breakdown passage through vampire bat roosting habitat and then into big walking terrain along or in the stream. More of the same blind catfish were present. There is some discussion if Umajalanta drains into Chiflonkkakka since they share a common yet unique fish species, however the elevation math between Umajalanta sump and the upper Chiflonkkakka resurgence is 12 m off and 4 km away.

Upon our return to the village we met by chance another cave guide, Mario Jaldin. He had been guiding since 1972 and it quickly became apparent that he knew his stuff. We arranged to have Mario take us to a seldom-visited and little-known show

cave, Sapaipa Huakanon Juskuj, 130 m and -5 m. It is located about 2 km NNW of Umajalanta, along the Rio Laguna Mayu. This cave has a lot of delicate features in pristine condition. It is also a popular vampire bat roost with an oozing guano floor to navigate. While washing up and getting ready to leave we experienced the introductory flash flood.

Mario certainly knows of other caves that are not included in the summary list of Bolivia in *Spelunca* no. 36 and 37, but how significant they turn out to be is another matter.

References

Miller, Tom. *Humajalanta, Bolivia. Canadian Caver Vol 8 No 1 May 1976.*

Spelunca No 36, Oct-Dec 1989. *Amerique du Sud - Bolivie (page 7, regional report)*

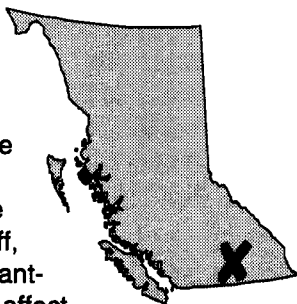
Spelunca No 37, Jan-March 1990. *Amerique du Sud - Bolivie (page 13, regional report)*

Spelunca No 37, Jan-March 1990. *Les Principales Cavites du Massif de Toro-Toro, Andes Tropicales de Bolivie (pages 25 - 28, the best summary document of the region known)*

Status Report on Cody Cave

John Pollack

In 1992-93 as part of my convalescence from a broken neck, a few friends and I decided to re-survey Cody Cave. Although this small cave is designated as a provincial park and gated, I had become acquainted with the Parks staff, and they were amenable to granting access provided it did not affect the tours run during the summer months.



Cody Cave is located in a small band of the Badshot formation high above the western shore of Kootenay Lake, a little over an hour's drive from Nelson, B.C.. The cave has a long history of visitation, dating from the mining boom of the mid-1880's. Parks staff and cavers estimated it consisted of 600 m of large, walking streamway with one active tributary, but existing maps were incomplete.

What ensued was a thorough mapping project. As expected, the first mapping trips yielded large, easy passage, but as the work progressed, we pushed and surveyed a number of tight, muddy inlet passages and crawls that are notable only in the short length of the average survey shots. We ran our trips after 5 PM so as not to conflict with the tours, and frequently returned home in the small hours of the morning.

The results were not surprising. By 1995 Cody was still

a small cave, but not as small as many expected. We had surveyed 1050 metres underground, and determined that Cody has a series of smaller inlet passages in addition to the main passage. These inlet passages are most common at the upstream end of the cave, and in this area several of them rise as domes, ascending up to 25 m above stream level. The high points of these ascending passages are blocked with boulders and earth, and they frequently have airflow.

We also ran surface surveys to relate above ground features to the cave. Cody is a shallow cave, with the floor of the main stream passage approximately 30 m below the surface. During the above-ground surveys we surveyed four surface karst features and nearby Krao Creek. The first feature was the resurgence spring, located immediately adjacent to the trail to the cave entrance. Cavers believed this spring was located only a few metres away from the downstream sump in Cody Cave. In fact, the surveys showed 110 m of horizontal distance between the two.

Roughly upslope of this unexplored "gap" we found an active stream sink approximately 130 m to the west, and 70 m above, the main entrance. This small stream drops through a wet slot into a low crawl, blocked with rubble. Likely this stream joins the main stream of Cody, as a tributary, somewhere is the unexplored "gap" between the downstream