

My Experience at Cheve

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This past March and April, I went on my first caving expedition, to Sistema Cheve in Oaxaca, Mexico. Going on an extended expedition to explore an incredible, deep, remote cave was something I had been dreaming about for many years. This spring, I found out that I would be starting grad school during the upcoming fall, and could take a break from work until then, which meant I had the opportunity to take enough time off (1 whole month) to go to Cheve. So I pounced on the opportunity!

A little bit of context about Cheve—as of the start of this year’s expedition, it was the 11th deepest cave in the world, at 5043 ft deep, and 47.7 miles long. During last year’s expedition, they had a massive breakthrough—they finally made it beyond the sumps that had marked the end of the cave for many years, by breaking into dry, upper level maze passage that went above and beyond the sumps before going deeper than the former deepest point in the cave. This new section of mazy upper level passage in Cheve beyond the sumps still has many leads, and lots of air, but the extreme remoteness and difficulty of getting supplies all the way down to the bottom of the cave meant that they couldn’t push everything last year. It takes 4+ days to get all the way down to the bottom of the cave. That, and the fact that tons of food and supplies (food, camp gear, rope, bolts, drill batteries, etc) had to be hauled down to the bottom of the cave to support productive exploration, meant that many people spent last year’s expedition only hauling supplies to support a small few who got to camp at the bottom and push leads.

This year, rather than attempt another massive logistical operation to get people and supplies all the way to the bottom of the cave to push leads there, they had 2 different goals for the expedition: (1) push the many leads near the entrances/upper parts of the cave that had been historically ignored due to the focus on going deeper, and (2) search for a lower entrance to the cave to make exploration at the bottom easier and simpler. I spent the first half of my time at Cheve working on that first goal, at the main Cheve basecamp, and I spent the second half of my time there working on that second goal, staying at the basecamp in the town of San Miguel Santa Flor. San Miguel Santa Flor is directly above the current bottom of Cheve and contains many caves which are promising to connect to Cheve and provide a shortcut to the bottom of the cave.

When I showed up on March 27th, my first impression was that their basecamp was incredible. A narrow, winding old logging road led steeply down into the bottom of a mile wide sinkhole, where the forest opened up into a beautiful, flat, grassy meadow, which the locals call Llano Cheve. At the edge of the Llano is a sparse pine forest where everyone sets up their own individual campsites. In the Llano itself are the communal spaces—the kitchen, the gear tent, the command tent, and a large fire pit, around which we would gather every night to unwind from the day and discuss plans for the next day. They even ran a hose from a nearby surface stream to right next to the kitchen area so that we could have unlimited running water from the hose at all times. The weather during the days was generally quite nice—sunny, warm but not too hot, rarely windy, and only occasionally rainy. The high elevation (9000ft) meant that nights got quite cold, below freezing, even though we were in far southern Mexico. It also meant that we had little in the way of bugs, and never had to worry about animals getting into our food, which was stored out in the open in the kitchen and pantry tents. The cave entrance was a mere 10 minute walk away.

One of my first trips when I got to Cheve was a 6 day camp trip in the Pena Negra section of the cave—my first time cave camping! We stayed at an established camp in the cave called Camp Kyle, which, while only modestly deep by Cheve standards (1280ft deep, 3-5 hours into the cave), was by far the deepest I had been in any cave. And here I was going down there with a heavy camp pack, committed to staying down there for several days! The goal of this camp trip was largely to mop up small leads, but several of the mop up leads broke out into significant new passages, and we discovered several kilometers of passage on that trip. I was encouraged to go on that camp trip because it was likely to be the last trip to Pena Negra for a long time, because we expected to kill that section of the cave. However, the breakouts were so good that we couldn’t kill all the leads on that trip! There was another camp trip to that section after I left, and they still didn’t kill that section; they will surely return there again. Some of the passage we discovered was quite decorated—the highlight was a tall walking/stemming canyon with shiny, bone white flowstone formations densely covering all of the walls. We named this canyon “Yeehaw Canyon”, and there are still going leads there that will be pushed next year!

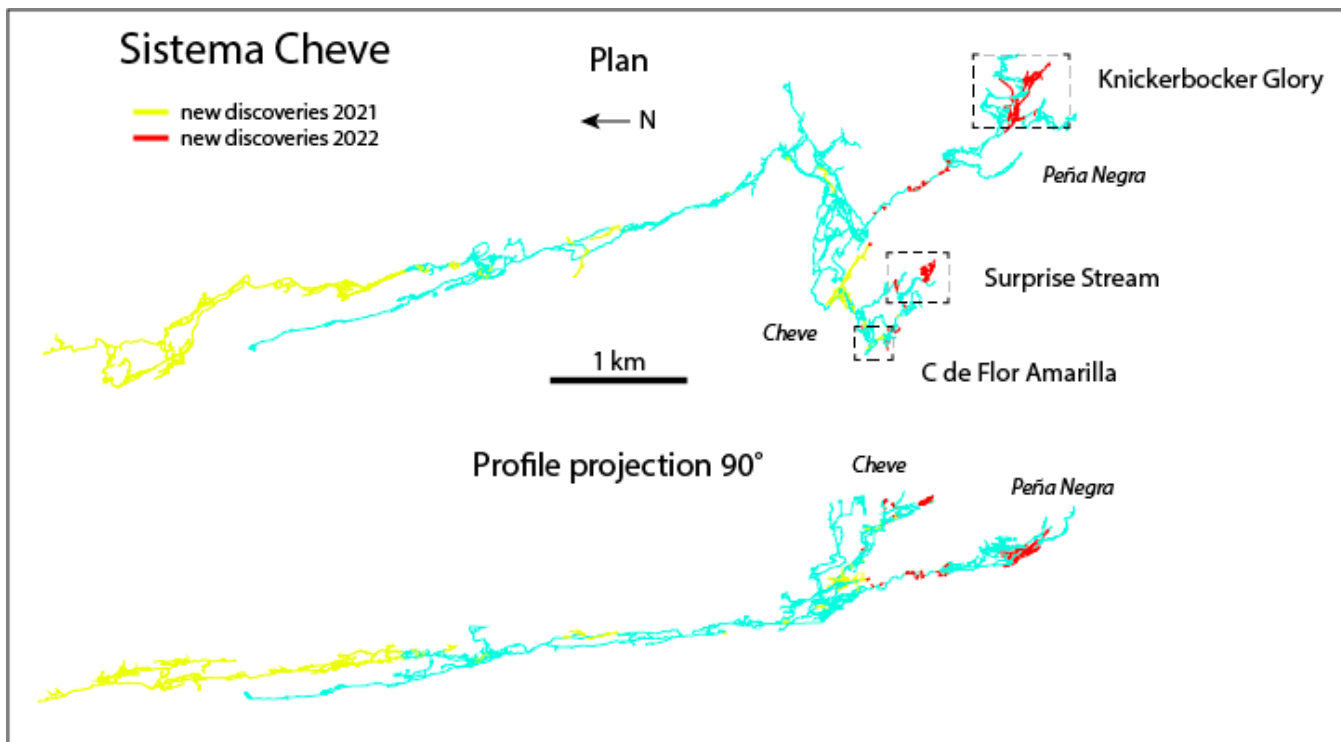
Detailed view of new discoveries this year in the Pena Negra section of Cheve. I was on the camp trip that discovered the Knickerbocker glory passages and Yeehaw Canyon, which was one of the highlights of my time at Cheve. Map credit: Beverly Shade.

After that Pena Negra trip, I switched to the San Miguel Santa Flor basecamp because they wanted an “enthusiastic digger”. There, they were pushing a cave called Agua Pajarito (also previously referred to as Palomora) which is promising to connect to Cheve near the current bottom. We think it’s so promising because Cheve generally sucks in lots of air deeper into the cave—except, notably, right before the current bottom of the cave, the air disappears. Where does the air go? Well, right above that bottom of the cave, in the town of San Miguel Santa Flor, there is this cave Agua Pajarito which blows a ton of air. However, the current bottom of the cave is a too tight fissure that we were digging.

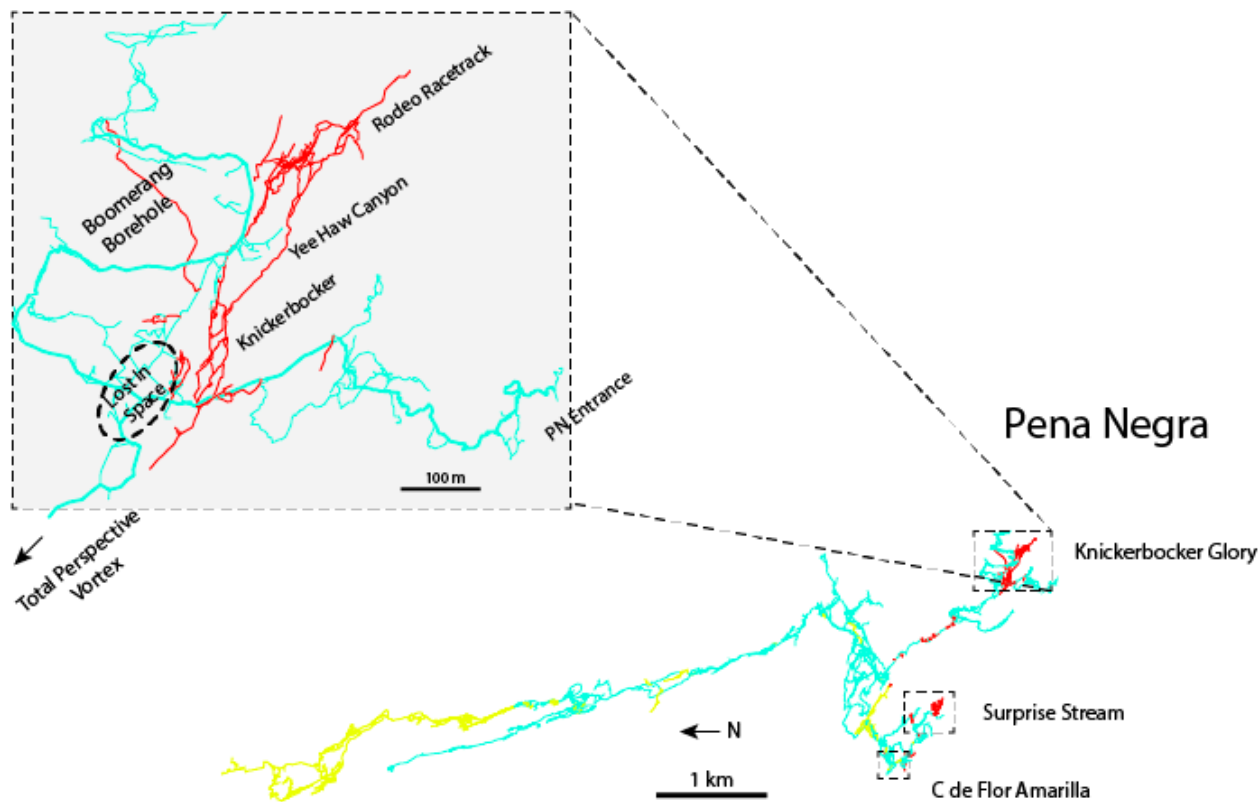
Agua Pajarito is different than Cheve in many ways. It is warmer—low 60s instead of low 50s. It is also much tighter and more abrasive than Cheve, which is known for its massive boreholes (although the recently discovered upper levels near the bottom of Cheve contain much breakdown crawling). It is also much muddier—muddy enough where

I chose to wear a cave suit, despite the warm temperature and how hard I was working there. Because of the heat, I ended up wearing nothing underneath my cave suit, and un-velcroing it when I was working particularly hard. I did 2 camp trips down there, a 4 day trip and a 6 day trip, to work on the bottom of this 1200ft deep cave. We had some minor breakouts, but the bottom of the cave is still a dig, albeit a very promising one with tons of air. Anyone who has done much digging knows that it is tough work that destroys your body. That last day of the 6 day digging camp trip was pretty long and arduous. On that last day we dug as much as we could given the time we had, surveyed the passage we dug open, then ascended out of the 1200ft deep challenging cave with many tight/awkward spots. We got out of the cave at 12:30am. The next day I was by far the most sore I’ve been in my entire life—every muscle in my body had been worked and was sore!

The vibe in the San Miguel Santa Flor basecamp was different than that of the main Cheve basecamp in several ways, but it was also awesome. It’s in a (semi-) populated town, unlike the Cheve basecamp which is quite remote. We stayed in a house we rented, rather than tent camping. While Cheve basecamp had zero cell service, in San Miguel Santa Flor we had the option of paying daily for WiFi. I quite liked being disconnected from the outside world for weeks at a time, so I made it a point to



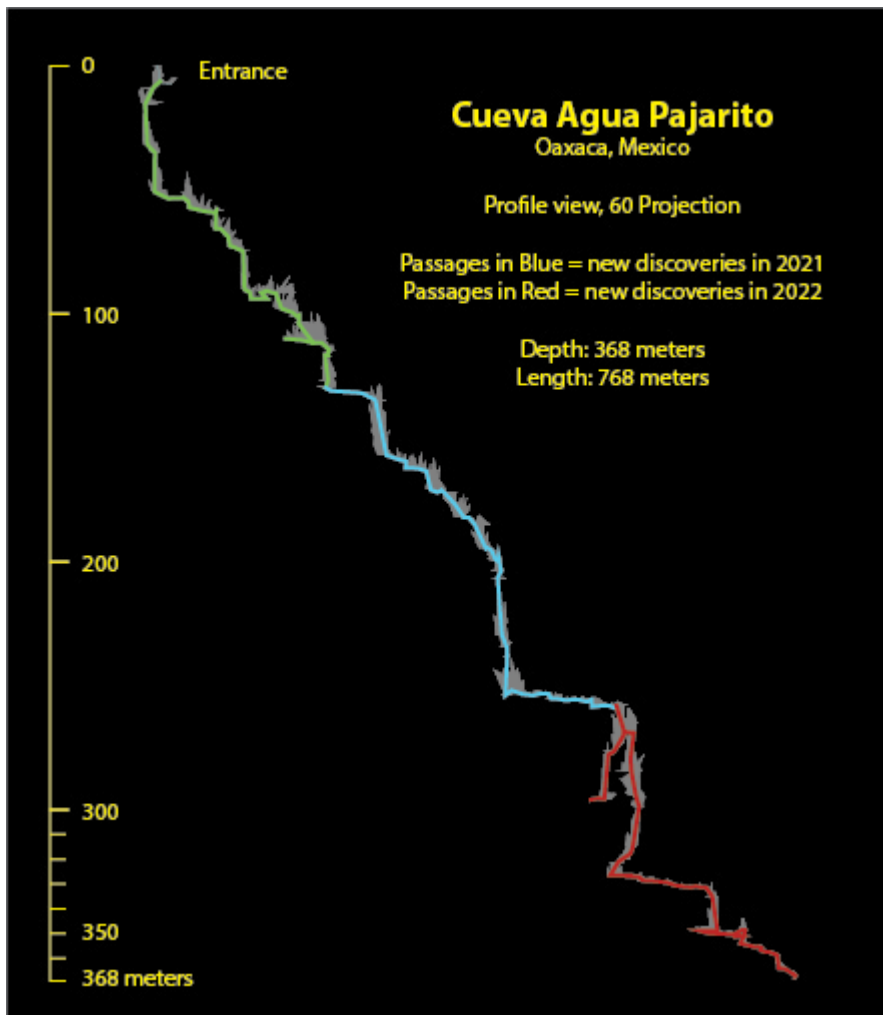
New discoveries in Cheve in 2021 and 2022. Map credit: Beverly Shade



only get WiFi for one single day when I had some personal business to attend to. And instead of cooking all of our own communal meals in the basecamp kitchen, we ate most of our meals at a nearby restaurant, Comedor Mary. Here, Mary, a local resident and long time friend of cavers, would make one meal per day, and for 50 pesos (or 2.50 USD), you could eat as much of it as you wanted. In fact, Mary would keep trying to feed us more food, and she would be happier the more of it we ate (we would also be happier the more of it we ate!). So we had effectively free, unlimited, home cooked traditional Mexican food for every meal (when we were on the surface at least). What more could you ask for!

Overall, I had very high expectations going into this expedition, and those expectations were exceeded! I look forward to going back as soon as my work/school situation allows me to. I highly recommend going on an extended caving expedition to anyone who is interested in doing so and feels ready for one.

P.S. You can watch the National Geographic documentary about last year's expedition (the year before I went) at <https://www.nationalgeographic.com/tv/movies-and-specials/explorer-the-deepest-cave> (cable sign in required). Just released May 30th!



New discoveries in Agua Pajarito in 2021 and 2022. Map credit: Beverly Shade.



The Cheve entrance room, John Kerr is barely visible in the center-right for scale.