Actun Tunichil Muknal - the Cave of the Crystal Sepulcher January 2014



Entrance to ATM cave

I had heard about the mysterious Cave of the Crystal Sepulcher years ago through National Geographic. Apparently buried in the rainforest in Belize in Central America was a wonder forgotten for many centuries. It is a place riddled with wonder and superstition, shrouded in a foreboding mist, guarded by poisonous snakes and tangling vines in the jungle.

I had the privilege of visiting this wonderful cave in January 2014 as part of an ecotour of Belize. It is actually not far from Belize City or Belize's current capital Belmopan as the crow flies, but getting there would be a bit more of an adventure than anticipated. The cave was called Actun Tunichil Muknal cave (ATM for short). It's also known as Xibalba or Cave of the Crystal Sepulcher. I imagined trying to visit it would be like going to King Tut's tomb - the inner parts would be completely off limits except to a chosen few scientists.

The cave is more famous than I realized - on the way to Belize, a girl at the airport was playing some silly "Flappy Bird" game on her phone, and in between games she

asked me with some incredulous look if I was going to the "cave with the creepy skulls"? I knew we were going to a Mayan ceremonial cave, but didn't really know what to expect. She made it sound like something from an Indian Jones movie - I couldn't imagine we'd actually see skulls in a cave, (I knew this wouldn't happen in America) - I sort of hoped we wouldn't, but I guess it would pretty cool if we did...

On the way to the cave, we passed many plantations - teak wood forests, banana plantations, date palms and corn. I was reading a recent NSS journal for the long bus ride - there was a great article about tropical caves in Haiti and some of the adventures of getting there. Even though ATM was supposedly a "tourist" cave, it felt a bit more of an adventure than visiting a "show cave" in the US. I had just finished reading about washed out roads in Haiti when I looked out the front window of the bus and saw a river with no bridge. It had been raining more than usual this season (the monsoon generally ends around November, but this year, it seemed to drag on through December and even with some rain last week). I guess the drivers are used to a little water - he just put the bus in low gear and we splashed right through the foot-deep water to the other side.

About 15 minutes later, we were there! A guy at the security booth confirmed what our guide Juan Carlos had indicated earlier - no cameras were allowed in the cave. I heard this mentioned in our pre-trip orientation newsletter, but forgot. I didn't expect a whole lot from the cave - maybe just a few small rooms with a bunch of Mayan artifacts (I already had pictures on some postcards anyway). But the cave would turn out to be so much more than any of us expected!

Leaving our cameras on the bus, we donned our wetsuits, helmets and lights and set off for the 1-mile walk to the cave. One mile wouldn't seem like much, but it involved not only narrow trails surrounded by entangling rainforest, but it involved 3 crossings of the deep and rather swift and aptly-named Roaring River in the heart of the Tapir Mountain nature reserve. The water was cold and the first crossing caused my heart to skip a beat when the cool water rushed down and filled the inside of my wetsuit. Holding hands as a group, we formed a human chain allowing us to cross safely with water up to our chest, without getting swept too far downstream.

The trail was muddy, passing between walls of thick vegetation. We had been walking for perhaps an hour - I was starting to lose faith that we were even going the right way (I had been on some ill-fated cave trips in the past, involving broken or missing keys, groups getting separated, elusive cave entrances not being found, and gear getting lost). Just around the corner, the trail ended abruptly in a thicket of branches! So much for even finding the cave here!

Our guide Juan Carlos busted out his machete and started hacking at some of the branches. A sweet gum smell emerged from the freshly cut leaves and twigs as we slowly clawed our way through. Just to the right, we saw another piece of the trail - apparently the tree had fallen in the last couple days, obscuring the trail. Luckily,

this proved to just be about a 15-minute delay and soon we were making tracks again toward the cave. We heard some howler monkeys singing over our heads.

After a final river crossing, we came upon a shelter with some picnic tables - our "staging" area. We'd be putting on our helmets and gloves, getting our lights ready, and zipping our wetsuits the rest of the way for a swim into the cave. The cave entrance was just another 50 years at a small creek.

Climbing down some slippery stairs, we came to a beautiful blue pool at the entrance of a dark opening in the side of the cliff - the entrance to Actun Tunichil Muknal cave! I couldn't believe we were here - it was stuff out of a legend. I imagined some dwarves to emerge from the cave, or elves to come out of the jungle. The water was cold, about the same as the river. The entrance pool started about waist-deep, but soon the bottom dropped out, forcing us to swim across about 20 feet to a flowstone ledge on the far side. The cave had been flooded out several times recently - water reaching to the ceiling blocked any access without scuba gear.

The twilight made for an eerie scene - one of the formations above appeared like a face. Supposedly some of the ancient Mayans had carved the formation, modifying it a bit to ward off evil spirits or something. The water flowed down the side of the wall, forming hundreds of miniature rimstone dams a few millimeters high, but making a rippled pattern like a giant brain.

Wading in the chest-deep water, we followed the wall on our right-hand-side, working our way deeper into the black void. We were in a phreatic stream passage. The entire passage was about 2 miles long, ending in a sump, but the sump could be bypassed with another passage continuing another mile or so through a narrow exit, allowing a through trip. That was a bit ambitious for us - we'd be just going in about 1/2 mile and back.

Walking through the deep water upstream against the current was hard work and chilling as well. A couple boulders forced us to duck down almost putting our heads underwater to cross. One place required a sinuous detour with some non-trivial climbing and traversing - the passage probably continued underwater, but ducking under and swimming underwater in a dark cave while looking for a way through didn't sound too appealing.

Waves of water flowed down the bulbous shaped barrels of flowstone on both sides, rippling in waves about 6 inches apart in a hypnotic pattern. Holes in the ceiling appeared to have been carved out by some unknown force, now providing a convenient roost for the cave's many bats. Some of the flowstone had re-dissolved into twisted shapes, perhaps from the many floods that filled the cave. Strange shapes of crystalized calcium carbonate and extruded manganese crystals had developed through the eons. The Mayans believed spirits lived there - in one place, our guide shone his flashlight near one of these shapes, causing a shadow of a dragon to fly across the arched ceiling.

Juan Carlos said we had reached a junction - I didn't know what he was talking about, until I saw some people starting to climb a pile of breakdown toward the right. It was probably a class-3 scramble up the naturally chiseled rock - we traversed and climbed our way up a broad bench where an upper passage flowed into the main trunk passage. The floor sparkled in places with white flowstone.

We had to take off our shoes at this point - I was glad to have thick hiking socks as we continued further up the passage. We were walking on pristine flowstone now -I was surprised we were even allowed to go in further, but I was glad we were no longer tromping around in our heavy boots on the delicate formations! The floor sloped upward slightly - deeper rimstones partly filled with water mottled the floor in a polygonal pattern.

Working our way up a steeper slope, we then came across a flatter section where water had once pooled for many centuries. Pieces of pottery were strewn about - it was like a museum! The path was taped off here - we had to stay on the trail, and for good reason. Just a bit further, several complete pots stood, cemented into the floor by ages of deposition of minerals. The bottom several inches of the pot were covered in a crust about 1/2 inch thick, but the rest of the pot was still reddish brown naked clay. Apparently water came and went during the centuries, partially submerging the pot, depositing a thin layer of calcium carbonate.

I had to take photos in my head - none of us had our cameras. In a way, lacking the camera forced me to intensely observe and study what we were seeing - too many times I would pass something quickly, take a snapshot and immediately move on, missing detail along the way. I had to get over the fact that "if you don't have a picture, it didn't exist". Here, we had time to see some of the carvings and Mayan patterns etched into the individual pots - evidently much care had been taken in their placement. Several pots had "kill holes" in them – evidence that they had been placed for ceremonial purposes.



Pottery in the cave

Sacrifices had been made through the centuries - the Mayan society was agrarian, farming to meet their food needs. The monsoonal rains would come and go, often in irregular patterns. The Mayans were also a highly religious people, praying and sacrificing often with desperate measures, even to the point of human sacrifices! The girl in the airport had mentioned "creepy skulls" - I hadn't fully prepared my mind for what was coming... the Mayans had left many artifacts in their wake, but a dreadful one was about to come.

Just a bit further up the trail, we came across a set of bones - pieces of a skeleton. I had seen bones in caves before - of animals that had fallen into the cave years ago, but this was quite far for an animal to have gotten lost. I had to come to grips with the fact the bones were human bones! Only a few bones were visible, but maybe more had been cemented so deeply they were mostly obscured. Just to the right was an unmistakable form - a human skull! The skeleton was rather small, perhaps from a 5-year old. Somebody had been sacrificed deep in the cave.

I wonder if the person was dragged into the cave, kicking and screaming, or if they were drugged, or already dead. Or were they fully compliant, in the way Issac followed Abraham up the mountain. Sacrifice was such an integral part of Mayan society - perhaps the person was raised from birth knowing they were a candidate for a sacrifice, maybe in the way that suicide bombers in the Middle East go through their act with the promise of countless virgins in heaven if they die for a noble cause.

California is currently in a terrible 3-year drought - some say the worst in 120 years (though some rains are starting to come). I couldn't imagine farmers offering sacrifices in Bakersfield! Elijah prayed for rain after a 3-year drought and the rain finally came as a deluge and the people overflowed with thankfulness.



Grand hall in the cave

Continuing up a gradual slope, the passage opened to a grand hall - corrugated columns stretching from floor to ceiling in places, stalactites and stalagmites growing in a wondrous array of shapes, and the floor displaying a mosaic pattern of gours, tiled with interlocking rimstone polygons several feet in diameter. Water mostly filled these polygonal shaped pools now - the passage was wetter the further upstream one went. The floors of the pools were decorated in a sparkling array of crystals, small cave pearls and popcorn. Small shelves of overhanging calcite formed rims around some of the pools.

Climbing some narrow steps and several steep ladders at the back of the hall, we came to a small alcove with some more artifacts. Some of the first we came across were a couple more skulls and bones, again partly calcified into the floor. When we looked, however, we saw one skull had a hole in it. I had been punctured back in May of 2012, and we soon saw the reason no cameras were allowed. Tragically a careless tourist had dropped his camera while taking a photo, and with Murphy's Law, not only was the camera ruined, but also the priceless treasure of a 1000-year old skull was forever spoiled. Because of this misfortune, the photos in this article are not my own, but stock photos found online before 2012 (though nothing really has changed in hundreds of years - let alone 2 years!)



The Crystal Maiden

The grand treasure of the cave was just a ways further, behind a metal railing - the "Crystal Maiden" - the cover photo of the National Geographic article many years ago. It was totally out of a dream - a complete skeleton lying on the floor, maybe 4 feet from head to toe was laying in situ, expression frozen on its face. It was the skeleton of a teenaged girl, perhaps raised from birth to be offered as a sacrifice in this way. I wonder if she lived in a way that Jesus did, knowing that a main purpose of her life on earth was to die by being sacrificed, as Jesus knew he was going to be nailed to the cross.

It was a humbling sight - an image that would be frozen on my mind for years. A photo wouldn't do justice to the scene. We would step back down the ladders and cross the hall of columns and mosaic patterns of rimstone gours in silence - our minds still trying to grasp the reality of what we had just seen. The cave had an eerie beauty now - a holy sepulcher of sacrificed spirits.

We found out that 14 bodies had been sacrificed in the cave - we had just seen the first 5. The rest are buried in more obscure passages and haven't been preserved quite as well as the "crystal maiden". I wondered if actually more than 14 bodies are inside - maybe we had actually walked right over some bones that were so calcified into the floor they were no longer recognizable as human remains... a creepy thought indeed.

A song was going through my head in the cave, a tune that my men's chorus had sung in years past, called "The Way We Were" by Barbara Streisand – one stanza goes "Mem'ries, may be beautiful and yet, What's too painful to remember, We simply choose to forget, So it's the laughter, We will remember". The cave had a timeless quality to it and the haunting harmony in this section of the song reminded me of the fleeting days of our lives, that our short time on earth was just a small part of a greater eternity. The song proved a valuable vehicle for my mind to process the experience.

Our pile of shoes was waiting right where we had left it - I was relieved to know we were on our way out. Down climbing our way back to the river, we then entered the water and were quickly making our way forward, this time wading with the current. I was a bit chilled, and rather hungry at this point - my mind overcome with exhaustion of what it had taken in. I continued on with the group, following the stream passage and admiring the formations on both sides to take my mind off what it had just witnessed.

On our way back, we did a "lights-out", testing the degree of the darkness of the cave. The cave appeared to be full of glowing bits of life that darted back and forth, until I realized those glowing life-forms were actually from my own brain trying to come to grips with the total darkness. We were all close together as a group, and by each of us holding the left shoulder of the person in front of them with their left hand, and putting their right hand on the right wall, we managed to cover a decent amount of distance. The right wall eventually turned abruptly away to the right,

leaving some of us holding on to just the person in front and trying to stay afloat in the watery passage - the guide said it was OK to put our lights back on at that point!

A dim hazy light shone in the far distance – perhaps a hint of the entrance twilight. But coming up a few hundred more yards, I realized it wasn't natural light - it was another group coming! Another group of 8, just like ours. 8 people is the allowed limit per group, imposed by the government to avoid further damage to the cave. Several bats flew overhead, probably in response to our lights. One of the biggest dangers to these natural wonders is usually tourism - people being careless like the one who dropped his camera. Several more groups passed us on our way out - the passage reminded me more like Disneyland than the serene natural setting that we encountered on our way in. I'm glad we got an early start to have the place to ourselves.

I noticed the passage ended abruptly ahead - I think this is where we had done the sinuous detour to pass a sumped section on the way in. The next thing I noticed was the guide disappearing into the water and soon telling the person in front of me to take his hand. He disappeared and soon must have popped out on the other side - I just heard a "wow – cool!" from his lips! A hand soon came for me, taking me through the duck-under and in a moment I was on the other side. It was only a foot or so underwater, but any place in the cave where the way on wasn't visible had a foreboding feel.

The duck-under turned out to be a nice short-cut, and soon we were able to see natural light after all - it had a cool hazy feel I hadn't seen in a while. A hint of the fresh scent from the rainforest brought life back to my nostrils. The stone face we had seen guarding the entrance still had its gaze pointed forward. With the final swim back to the entrance, we were soon back in the safety of the shelter just outside. I felt we had been baptized through the underworld - being immersed in the water and coming back out alive.

The hike back was much easier (and shorter since we knew the way and didn't have to cut through the tree again!). Wading through the river felt good, washing off some of the mud we had picked up on our way out of the cave. The van was still waiting in the small parking area - the adventure had just been a few hours, but I felt we went through a warp through space and time to another dimension. I'm sure the Mayans had felt the same way thousands of years ago.