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**THE COVERS:**

- FRONT COVER: Unknown caver in Peep-in-the-deep, Cascade Caverns, Spring Convention. By Don Arburn
- BACK COVER: Honey Creek T-Shirt design, found in my lost personal archives. By Don Arburn
About fifteen people got together on June 6th, 2003 with several tasks to accomplish. Six caves had been found earlier that morning and needed to be surveyed. Other known caves had to be found and GPS locations taken. Ridge walking needed to be done. Only fifteen percent of the park has ever been checked. Still other caves needed maps drawn from old survey data. It was helpful to go and explore these caves with the survey notes to see what the caves were doing. Jim Kennedy had talked to me about the new caves he had found and told me that these needed to be surveyed. I decided to survey these six small caves.

The drive down from Dallas was long. To make the drive a little more pleasant and cost efficient, Dr. Rafal Kedzierski and I rode down together. The small towns were zipping by until a local county sheriff decided he wanted to meet me. He asked for my license and walked back to his patrol car. He came back after running my license and told me to slow it down a little. I said, “Thank you,” and we proceeded on down the road towards Mason. The countryside began to get much hillier. Limestone began to break the surface here and there. Soon small mountains began to appear around Junction. We stopped in Junction to eat barbecue and when we left, night had fallen. On through Rocksprings the roads got narrow, curvy, and hilly. A roadside sign said, “Watch For Deer” as I had one run right in front of me. A few miles further another sign said “Open Range to Cattle.” I slowed down when I saw this, and it was a good thing because a small herd of cattle was standing right in the middle of the road a few miles further. They all were dark in color, and I just missed hitting three steers. I slowed some more and we drove on to arrive at the park at 10:45pm.

Rafal and I began to set up camp when Kurt Menking came over and told us we could stay in the bunkhouse. This was a big help. No camp to set up.

Saturday morning, as usual, came all to quickly as I was up at seven. Others began to stir as I banged a few pans together while fixing my breakfast. With the smell of hot spicy bratwurst and eggs, the rest were up soon.

Let’s go caving now! By 8:45 everyone had decided what he or she would be doing. Kurt showed Ron Rutherford and me where the six small caves were Jim Kennedy had told me about. Arriving at the cave we quickly got out the survey gear and got right to work (I mean got to play). The caves were along the base of a small mountain. Each cave was only fifteen to thirty feet above the valley floor. The first cave, Mike’s Crack, had an entrance about one meter tall by one and a half meters wide. The dirt and cobble floor sloped up as the ceiling rose. The length of the cave was only 5.2 meters. Many harvestman spiders and crickets covered the ceiling. As you crawled under them, many would fall on the back of your neck. The second cave was west and a little higher up the hillside. Heart Attack Cave, so named because when discovered a porcupine had scared the —— out of the Park Ranger’s wife. Several trees framed the cave entrance. Its opening was 1 1/2 meters wide by 1 1/2 meters tall. A large rock at the drip line became our first survey station. Our second station was on a shelf 5.25 meters away. The cave was tall enough to stand at this point. The cave made a 70-degree turn to the left and ended at another shelf 2 meters further. The floor was covered with dry goat scat. With this cave mapped, we went looking for the next cave.

Kazak #1 Cave was found after walking 250 ft. through the thick undergrowth beneath the oak trees. This cave was smaller than the first two. It taped in at 3.10 meters. Its entrance was 2 meters wide by 1 meter tall. At the end of the cave was a rock shelf, and on the right wall, at the floor, was eroded limestone that resembled a petrified tree trunk. The floor was covered with cobbles, dirt, and a lot more goat scat. More of the same critters covered the rock ceiling. Twenty-five feet further to the west and ten feet up the slope was the fourth cave. Kazak #2 Cave had a wide 4-meter by 1 1/2 meter tall entrance. The cave was mostly level, with a slight rise at the back end of this huge, 5.75-meter long cave. This cave had several large pieces of breakdown that covered the floor.

The next cave, Kazak #3, was another forty feet along the strike to a nice entrance. The width was a little more than two
meters wide and one meter tall. The cave sloped up at 13.0 degrees. The floor was more dirt, cobbles, and scat. It ended in breakdown after 6.5 meters. The scat almost covered the floor.

The next and last cave, Kazak #4, was another sixty feet along the face of the mountain. This monster tapped in at 6.91 meters in length. On the right wall was a small amount of flowstone. This cave had a low entrance and the remainder of the cave was low also. The average height of this cave was .5 meters. The floor was covered with scat and the fleas were thick. The cave had crickets, harvestmen, millipedes, fleas, spiders, and two different types of beetles feeding on the scat and any caver that happened to be lying around. So we quickly did our survey, the sketch, and left the cave.

I had wanted to get pictures of all the entrances and had forgotten at every cave. I went back to four of the six entrances and got the photos that I wanted. Then Ron, his son, and I headed back to camp for lunch. Back at camp, the discussion was about other things that needed doing. Kurt asked if I wanted to help with finding two caves so a GPS reading could be taken. We had a map that showed where the caves were, but it still took a little doing to find them. The first cave we looked for was Pocket Cave. Travis Scott had asked me to draw a map from the old survey notes that Linda Palit and Jerry Atkinson had written in 1988. I wanted to look at the cave so I would be familiar with it, to make drafting the map easier.

It took us about twenty minutes to locate the cave. Kurt found it and yelled for Travis and me to come over. We walked over to the cave and I looked at a very small entrance. It was very hot and I knew it would be cooler in that cave. I turned on my Duo light and found that the entrance was just big enough for me to get down. I slid down the slick walls about ten feet. The only problem was that the cave didn’t get any bigger. I yelled to Travis to bring me the sketch of the cave. I reached up, got the sketch from Travis and began looking at it.

“Let’s see here, where’s the scale? This part is .7 meters, .8 meters here, .5 meters here. How tall is this cave? .5 meters here, maybe .7 meters here. It’s not even a meter tall! I’m not going down this cave. The sketch looks good. I can draw up a map from this. I’m coming out.”

So with a great deal of effort, with my arms pinned to my side, I squeezed back up and out the entrance to the laughter of Kurt and Travis. I asked if either one of them wanted to go. They both had some reason for not wanting to torture their bodies.

We headed back to the car and drove over to find Jack In The Crack. After about fifteen minutes I found it and yelled to the others to come. I waited till I saw them coming before I climbed down
into the cave. The cave had a five-foot diameter entrance that dropped straight down for fifteen feet to a low pancake shaped room. As I neared the cave floor I began to hear some hissing. “Something’s in there.” I thought it was a baby buzzard, but I wasn’t sure. After a few seconds, my desire to see the cave overcame my fear of the unknown critter. I stepped down on the floor and looked around to find what was hissing at me. Behind a rock pendant were two baby buzzards, with their wings spread wide, trying to look fierce! They never stopped hissing.

I began looking around the room. The ceiling was between two and four feet tall and the room’s diameter was thirty feet. At one end of the room, the floor sloped down to end in rockfall with no airflow detected. It didn’t appear to continue. At the other side of the room, a couple of small openings in the floor appeared to drain into a much larger opening that spiraled down fifteen feet out of sight. It appeared to be filled with debris, but it will need to be checked by a smaller caver. The original map did not appear to show this passage going down. Maybe it has opened up since the cave map was done back in 1988. A new survey should be done that shows this passage.

I climbed back out and we returned to camp. Earlier in the day, Kurt had talked to the Park Ranger about the group going into Kickapoo Caverns. He said, “That will be fine, but don’t go into the Helectite Room, it’s too delicate.”

At five PM, everyone in camp loaded up in three cars to drive to the parking area below the cave. Travis Scott, Kurt Menking, and James Lopez wanted to do some video and photography in the cave. Several of the others were asked to carry in camera gear and help with lighting while the photos were taken.

The cave is 1200 feet long, at least 100 feet across, with a ceiling height of 20 to 100 feet. Several large columns, one of which is pictured on the cover of the 1994 NSS Convention Book, were seen. My little camera wouldn’t come close to photographing these huge formations. I had to settle for much smaller pictures, such as the beautiful helectites along the walls and the more decorated areas near the Graffiti Room at the back of the cave. After several hours of photography and exploring, we left the cave.

Back at camp, everyone began getting their hot showers and their dinners prepared. I had brought two delicious Rib-eye steaks and a couple of baked potatoes. “Life is good!” I was stuffed after dinner. It was time for a cold one.

It had been a long day, but a good day. Six caves surveyed, several caves relocated and GPS coordinates taken. Several acres had been ridge-walked and a successful photo trip into Kickapoo Caverns shot. What a borehole cave it is. I look forward to the next Kickapoo Caverns Karst Survey. Thanks go to the Park Ranger and to the State of Texas Parks Department for allowing us to help with this project. It’s a worthwhile project and could lead, (has led) to new cave discoveries.
Trip/Project report for Kickapoo Caverns State Park
June 7, 2003
Compiled by Travis Scott and Kurt Menking.  6-11-03

Over the weekend of June 7th we had the second Kickapoo Caverns State Park project. There was a good showing of cavers and a lot was accomplished.

The weekend started early with a Texas Parks and Wildlife meeting that was held at the park on Friday morning. The meeting brought about twelve to fifteen TPWD employees and involved cavers out to the park. Eight of the attendees were able to do a little ridge walking after the meeting ended and found and explored a few new caves and karst features. One of the new caves was surveyed that evening before everyone headed over to watch the bat flight at Stewart Bat Cave. In the mean time, cavers were showing up, watching the bat flight, and setting up camp. Many attendees of the TPWD meeting stayed Friday night to help with the project on Saturday.

The weather turned out great. Clear skies and a cool Friday night made camping wonderful. Nineteen cavers awoke Saturday morning eager to get going before the afternoon heat took over. The group met in the bunkhouse and quickly split into three groups. It was a non-typical caving trip. Everyone decided which team they wanted to join, and then quickly gathered their gear and departed. Most groups left camp before 8:30, and all were out working before 9:00am. The largest group set off for the south end of the park to do some general ridge walking in an area where a cave was rumored to be. Another group, armed with survey gear, set off to the area where the caves had been found the previous night. The third group headed off to find Cricket Siphon (quite elusive on the last trip) and to take some photos in Cot Cave.

The first group ended up ridge walking a large area which greatly added to the “checked” area of the park. Unfortunately, only one karst feature was found in such a large area of the park and no true caves. The second group ended up finding and surveying six new features in the northwest part of the park. Four were caves, two were karst features. The third group found Cricket Siphon after a good amount of ridge walking. It turns out that the location on the map was at least 60 meters away from the actual cave location. The cave was GPSed, photographed, and explored. They then went over and did some photography in Cot Cave.

All three groups trickled back to camp around mid afternoon. After a little relaxing and eating, two groups set off to the northeast side of the park. Their mission was to find the rest of the caves that needed to be relocated. These caves are on an old road
that is rarely used. Kurt got his truck stuck and we spent an hour digging it out of a ditch. However, all three remaining caves were located and photographed.

By this time it had warmed up a little and the others were ready to head underground. Everyone organized their gear and headed for Kickapoo Caverns. Immediately after entering the cave, the photography began. Although this held everyone up, folks were very patient. We took pictures throughout the entire cave. Thanks to the immediate viewing of digital technology we were able to take some very good photos documenting all parts of the caverns, not just the “usual” photos. On the way back to camp a few stopped to watch the bat flight while the rest of us headed for some grub and a good night’s sleep.

Because we went into Kickapoo Saturday night, there was no trip on Sunday. Some cavers wanted to visit Devil’s Sinkhole but I never heard if they made it out there.

All in all, it turned out to be a great weekend and we got a lot accomplished. We now have all known caves in the park located, GPSed, and surveyed. We added 4 new caves and 4 new karst features to the park totals. We searched a large portion of the park previously unchecked. We also have six caves that are going to have final maps drafted from the survey data by various cavers.

I would like to thank everyone that came out for their time and effort. It was a good group and a good project weekend. We hope to see you on the next trip which will be in either September or October. Items still on the “To Do List” include continued ridge walking (there is a LOT of that to do), more photography of the caves in the park (entrances and internal photographs), map drafting and various other items.

I would like to thank Mike for letting us use the bunk house. It is wonderful and rare to camp with AC, a gas stove and oven, electricity, showers, and beds. It’s almost not camping at all. Everyone I spoke with seemed to have a great time at Kickapoo and we are moving along quickly with the project. We hope everyone can make it back next time, along with some more of you.

Those that attended the project are:
Falling Waters Ranch  
By Mark Gee

I had a most enjoyable time a few weeks back while exploring and surveying a newly discovered cave. I took off work early because of the long drive. The plan was to stop in Austin and pick up Keith Heuss at his home, and then continue on to Uvalde, Texas. I made sure that the cold beer that Keith had with him was loaded in the truck, and then continued to load the rest of his gear.

Keith had been contacted by Christi Bennett to do a cave radio location so that the landowner could drill a well to bring water to part of his ranch. The ranch had a clear running stream on its east side, but the other side of the ranch was dry.

When I had last talked to Keith on the prior weekend, he told me that only four people would be going on the trip. When I arrived at his house on Friday, he told me that fourteen people would be going. “Well, the more the merrier!” We quickly loaded my truck and headed for a weekend of fun and adventure.

We found the road to the ranch, and after going through six bump gates, pulled up to what we thought was the rancher’s home to ask where we were to stay for the evening. We were the first cavers to arrive at the ranch. A friendly face answered the door and told us that the house we were looking for was a little way down the road. We got back in my truck and drove on across a creek and up to the owner’s home. We knocked on the door, and a woman answered. We introduced ourselves and let her know that we were cavers. She told us her name was Pat and asked us to come in. The conversation lead to the question, “Where are we to stay?” She said, “We have two homes out here that the cavers stay in.” At that moment her husband walked up and we introduced ourselves again. His name was Tom, and he asked us if we wanted a beer. Life is good! We both got a beer.

Tom was surprised to see us ahead of the others. There had been a mix-up, it seems we were to meet the rest of the group back at Castroville, TX. The group waited one hour for us there as we found out later. Keith and I were both apologetic about the mix-up.

Keith and I drove to the small house and moved our gear in and set up our beds. I was getting hungry. Keith had told me that we would all be eating together as a group. It was getting late, and then I remembered that Christi had included her cell phone number in the e-mail message that I had received. I dialed the number and she answered. I asked if we were still going to eat together. She told me it was never the plan to eat together. Another little mix-up, oh well! Keith and I fixed our dinner and cleaned up before the others arrived. Around nine o’clock the rest of the group showed up. A few of the cavers that arrived I didn’t know. I said hello to the ones I knew and introduced myself to the ones I didn’t. Christi asked me if the landowner was upset about Keith and I showing up early. I told her I didn’t think he was upset at all, maybe just caught off-guard.

As I said, there were two houses for the cavers to stay in. The small stone house we were in was very nice. It had a large, deep whirlpool bath, a modern kitchen, and a nice outside porch overlooking two small creeks, one on each side of the house. Many tall trees grew along these small streams, and they were filled with song each morning from the birds. A wild turkey was seen one morning walking down the road away from our home.

The ranch was semi-arid and mountainous; the height of the mountain was between 600 and 1200 feet tall. The owner also had some exotic animals on his ranch. Friday afternoon Tom had asked if we wanted to go feed the zebras. Now how many times, in a lifetime, do you get asked to feed the zebras? As we drove out into the pasture, Tom sounded his truck horn to call the zebras out to the road. They came and Tom got out and poured some sort of grain on the ground, then the animals really chowed down. What a sight!

Saturday morning came all too quickly. Christi wanted to get an early start so as to get several things done. First Keith and I were going to do our cave radio location with Joe Ranzau, Linda Palit and Phil Rykwalder. Then we were going to survey two or three small caves. When this was finished, we were going to visit a new cave, now called Honeycomb Cave, to see the mazey passages that it had on its second and third levels. Mike Cunningham and Mike Burrell thought that the cave could “go big”. I had never before heard that expression. Several of the passages had blowing air. Mike C. commented that when he had removed a fist-sized rock from a dig, a gust of air began blowing sand in his face. They haven’t explored all of the open passages as of yet, but there are already several blowing leads that need to be opened up. Could this be another large, beautiful cave for Edwards County?

We loaded up and left the cabin by 9:00 a.m. I followed
Joe as he drove through the ranch to Palace Cave. At one steep, rocky spot, Joe put his truck down into low four-wheel drive and drove up a steep section of road. Then I tried to follow. After my fourth try, Joe (from behind me) honked his horn and waved at me to come this way. Seems he had pulled a fast one on me, the cave entrance was fifty yards behind his car. I backed slowly down the hill, then pulled up and parked beside Joe’s truck. Seems that I was the butt of the joke. They laughed a little, but I’ll get even one day, Joe! You’ll never see it coming!

So the five of us (Joe, Phil, Linda, Emily McGowan and myself) headed into the entrance of Palace Cave. Keith and Rebecca Rainbolt/O’Daniel headed up the hill to the approximate location of the cave radio signal. Keith and I were going to turn our equipment on at exactly 10:00 a.m. We were going to do three separate radio locations, all in the stream. The best location would be used for the well. The first location we tried turned out to be the best one. It was in a nice clearing, about fifty feet from the road, but best of all, it was at the top of a saddle. Tom would be able to water both side of the mountain. The other two locations were in a big cactus patch. Keith and I felt as though we had done a very accurate radio location. The transmitter was held level for the entire fifteen-minute period. After all three locations were completed we put the transmitter back into my pack. Linda, Phil and I then took our time on the way out of the cave so we could sightsee and take pictures. The cave was 900 feet long and mostly straight. The average width of the cave was 20 to 25 feet, and it dropped about 70 feet in elevation from the entrance to the point where the cave dropped into the stream, at the far end. The cave was filled with speleothems from one end to the other.

There were many large and small columns, cascading flowstone, rimstone dams with pools, and countless stalagmites and stalactites were along every step throughout the cave. A lot of the formations were covered with cave popcorn and beautiful cave coral. A large portion of the cave, from left to right, is shaped like a crescent moon that dips down on both sides. Large piles of breakdown occur throughout the center of the cave, and a profusion of speleothems has grown on this breakdown material. The cave is very photogenic.

While we had been doing the cave radio location, Emily and Joe had gone out to meet some of Tom’s friends to take them through the cave. On our way out we met this group of seven who graciously allowed us to pass by them. We headed on out to wait for this second group to exit, and then we would go survey. After about an hour they exited the cave. I took a photo of the group, and then they climbed into their car and headed back to the ranch house.

With this group on their way, Joe led us to a cave found by the ranch foreman, Joe Onate. The cave was named Joe Onate Cave. The cave had a 2-1/2 foot opening that dropped straight down four feet. Just inside the entrance, a second entrance of half the size was seen on the right. The floor dropped down steeply, and the passage enlarged as it turned to the left. The ceiling height grew to two meters. The width of the dirt and rock-floored passage was four meters. The floor continued down under a low ceiling where stalactites grew all the way across the passage. The passage narrowed down to three meters with some stalagmites and breakdown on the floor. The cave ended in a few more feet at a small six-inch hole where the water exited the cave. Keith, Rebecca and I surveyed this cave in five stations.

As I was finishing the sketch, I could hear the others outside saying, “Let’s go, hurry up”. I finished the last floor detail and ran to my truck. Joe then led us several miles over some seldom-used roads to a cave named Twin Oaks. This cave was ten feet from the fence line, heading to the southwest and back under the fence line.

The entrance was about 2-1/2 feet wide and eleven inches tall. Phil was down through the entrance first, followed by Linda. They were calling out the dimensions as I recorded them. Then I tried to crawl in, it was tight. As I was trying to decide whether I could fit or not, I heard Phil say, “There’s a skunk down here.” I called out to Bill Lockhart, who was just outside, to pull me out because I was stuck. Linda crawled out the tight entrance, I grabbed her and pulled her out. Then Phil crawled out and I grabbed him and pulled him out, too. Phil said he had heard a noise several times somewhere near him. Then the skunk began looking at him from behind a rock about two feet from his face. The skunk must have been asleep. He didn’t spray us and we were all glad about that! I got three stations recorded for a total of 5.25 meters and a little sketch drawn from what I could see when I was stuck in the entrance. We left “Pepe LaPew” alone and drove over to another cave known as New Cave, but now named Honeycomb Cave.

This cave had a really pretty sinkhole entrance with a large tree growing from the floor up beside the lip of the pit. The depth of the pit was four meters and it was three meters in diameter. I walked to the edge and proceeded to climb down. The sloping floor at the bottom of the entrance sink led to a large room about thirteen meters in diameter. The ceiling was between one and two meters tall. I traversed the edge of the room and found three ways down to lower levels. All three were small, but each would allow me to proceed. Since I was alone in the cave, I walked back to the entrance and climbed out. Those who had been working in the cave were putting away their tools. Everyone was going back to get cleaned up for the party at Tom’s home.

The Bexar Grotto really knows how to get a potluck dinner going. Mike C., Christi, Vickie and others (I’m not sure who) prepared some really good food. Barbecued ribs, chicken, three kinds of sausage and brisket were cooked. A very good corn dressing, salads, soup and pinto beans were prepared. Tom provided an ice chest full of beer and several bottles of wine. As you can see, we were treated like special guests. Our lodging and food couldn’t be beat.

I left the party around ten o’clock. I was greeted by a flat tire,
but only on one side. I changed my tire and drove back up the hill to the cabin. The lights were still on, but as I got in bed they were turned out. I guess they were waiting up for me.

Sunday morning came all too quickly. I woke up early again but was still groggy. I started packing and got the truck loaded. Rebecca had asked me to help with cooking breakfast, and I was glad to help (if I cooked, I didn’t have to help clean up). Rebecca and I had breakfast sitting on the table, hot and ready to eat in about thirty-five minutes. That Bexar Grotto knows how to eat.

I sure enjoyed my trip to the Falling Waters Ranch. Palace Cave was well worth the drive; it’s a beautiful cave. Christi, Mike B., Kevin, Emily, Tom, Vicki, Mike C., Bill, Linda, Rebecca, and Joe led a great trip. I enjoyed the opportunity to participate with the radio location and survey of the two small caves. Thanks again to Christi Bennett.
Hard and Soft Rock Caving
in West Texas
by George Veni
(all photos by the author)

Hard Rock Caving, Episode 1

When I first started caving, I devoured all back issues of The Texas Caver. One that particularly stuck in my mind was Pete Lindsley’s 1969 article on his Thanksgiving 1968 trip to Mount Emory Cave. At 2,149 m above mean sea level on the flank of Texas’ second highest mountain, it was the highest elevation cave then known in Texas (now supplanted by three caves in the Guadalupe Mountains). A couple of years later I did my first of many hikes up Mount Emory and kept a keen eye looking for the entrance I’d heard was somewhere above the trail. I never saw it.

My interest grew when I became a geologist and realized that Mount Emory Cave could not be a typical cave. Most caves are formed by “soft” geologic processes such as dissolution of soluble sedimentary rocks like limestone and gypsum, but Mount Emory is predominantly a mix of igneous rocks that are not generally cavernous. I had privately speculated on the cave’s origins, but without a map, photos, or a precise location to identify the rock that forms it, I couldn’t be sure.

In mid-2001, a Pseudokarst Symposium was announced for the summer 2002 National Speleological Society Convention. As one of Texas’ deeper caves, and given its spectacular setting, I decided that a paper on the origin of this pseudokarst cave would be appropriate for the symposium. However, arranging the trip to conduct the research took a little more effort than most caving trips. First, since it is located in Big Bend National Park, the cave requires permission to enter from the National Park Service. Second, the cave is home to the federally listed endangered bat species Leptonectoris nivalis (the Mexican Long-nosed bat), which further complicates access. I assembled a small team consisting of myself and Peter Sprouse, since we possess permits to enter caves with endangered species, bat biologist Faith Watkins using a tree branch to climb into the main room of Mount Emory Cave.

and caver Jim Kennedy from Bat Conservation International (BCI), and Mary Kay Manning, a caver who works at the park and could guide us to the cave. The trip was also scheduled for the winter when the endangered bats would be in Mexico.

Jim and Peter picked me up on 25 January 2002 and we drove west to Big Bend. Early the next morning, we hiked up the mountain with Mary Kay, carrying backpacks and camp gear in addition to caving gear. It took more than 4 hours to reach and set up camp, then we set off to the cave. Our goals were to survey the cave, make observations of the geology, collect geologic samples for analysis if warranted, conduct a collection of invertebrate species, observe what bats occur in the cave when Leptonectoris isn’t present, and download information from previously installed dataloggers that recorded some of the cave’s microclimatic conditions. With a roughly mean temperature of about 9-10°C, this is one of the colder caves in Texas.

We entered via the cave’s lower entrance. Located at the base of a cliff, it is about 3 m high by 4 m wide. We found it was formed in rhyolite, a granitic-type igneous rock. The cave both met and defied my expectations. I expected it was a tectonic cave, formed by rifts created as large sections of rock split and slumped away from the mountain’s core. While this proved true, the cave was more complex than expected. The lower entrance and passage were not at all rift-like as the cave extended 15 m into the mountain to a 7-m-long by 4-m-wide by 12-m-high room. A steep climb up one side led to a passage that headed up and back to the cliff via a higher entrance. Near that entrance we found graffiti from the 1930s when the Civilian Conservation Corps was building trails in the park.

Surveying in the other direction, into the mountain, the cave changed character and became what I expected of a tectonic cave, a series of high, narrow pits and passages with floors of wedged rocks that divide single passages into a stacked group of passages. In some areas gaps between the rocks allow more than one route to deeper areas. However, the lack of significant water and traffic flow through the cave makes many of the rocks loose and potentially unstable.
We surveyed a 15-m-deep pit, along an 8-m-long passage to a 17-m-deep pit into a 14-m-long passage. According to Lindsley’s report, we were at the bottom of the cave, except that in the 34-year interval, some wedged rocks had fallen from the floor, revealing a pit that dropped 5 m deeper. The rope we had brought was just enough to meet Lindsley’s description but nothing more. We left the cave unfinished, enjoyed our lovely camp that night, and hiked down the mountain and drove home the next day.

**Hard Rock Caving, Episode 2**

I was disappointed that we didn’t finish and that I didn’t have enough information to present a paper during the Pseudokarst Symposium, but it was just as well. In addition to the new pit at the bottom, the cave had several other leads that would require bolting to reach, where the passages fissured-off high above our heads and across pits. Biologically, Jim made some good observations of about 80 Townsend’s Big-eared bats (Corynorhinus townsendii), but due to the winter cold, we saw no invertebrates. Geologically, I collected one sample of a whitish coating that occurs along some walls but needed more samples and time away from surveying to do the job right. I kept these needs in mind while setting up the return trip.

The first step was to get permission to bring in a bigger crew. Peter and Mary Kay had other obligations this time, but Jim and I recruited several others. We drove out on Thursday, 17 April 2003, and headed up the mountain the next day to work as three teams. Team 1 consisted of Jim, Randy Brown, and Roberta Pratt; Julia Germany was to have joined them but got ill on the hike up the mountain. Jim planned to lead them to the new pit to survey as they explored deeper into the cave. If that ended, they would move upward and start pushing the high leads. Team 2 was comprised of Chris Krejca, Vivian Loftin, Linda Palit, and Philip Rykwalder. They pushed and surveyed leads at the top of the pit series and would work their way deeper toward Team 1. Jean Krejca, Faith Watkins, and I made up the third team. Our job was to do science, with Jean focusing on the invertebrates, Faith (also from BCI like Jim) on the bats, and me on the non-solutional, “hard rock” geologic origin of the cave. Faith and I also managed to photograph much of the cave. Rather than camp on the mountain, our plan this time was to hike up and down the same day and either wrap up the cave or get to a point where it would be clear that another trip would be needed.

The spring weather was beautiful and perfect for this trip. Everyone enjoyed the marvelous scenery. Once in the cave, we slowly got ourselves organized and the teams went to work. A portable drill accompanied each survey team and stainless steel long-life bolts were set to rig the pits; the rigging on the previous trip had been less than optimal due to poorly-located natural anchors and sharp rocks that couldn’t be avoided.

Jim, Randy, and Roberta reached the new pit without incident and found it led to a narrow and incredibly dusty passage. It quickly pinched off in the direction of the cliff. In the opposite direction, the passage extended 6 m to a 4-m-deep pit. Airflow from the bottom of the pit indicates more passage, but it rose from a rock-filled rift that is too narrow to excavate. Setting a couple of bolts above the pit, they crossed it and surveyed only 5 m to an impassable constriction. Returning to the limit of the previous survey, they bolted 3 m up the wall to follow that passage another 11 m. While the passage is perhaps 20 m or taller, the floor is too narrow, and more bolting is needed to proceed further into the mountain.

Chris, Linda, Philip, and Viv were expected to tie up loose ends, connecting their passages into the known parts of the cave. Instead they found a new section of the cave that was about as large as the known pit series. They first followed a passage toward the cliff from the top of the pit series for about 10 m horizontally while it dropped vertically about 36 m. In the other direction, they proceeded about 6 m perpendicularly to join the rift associated with the main entrance and then down a 10-m-deep pit. The passage then split with one way going 2 m to a 16-m-deep pit and the other going 6 m to a 22-m-deep pit.

Jean, Faith, and I slowly followed the others, collecting critters and rocks for further study and making notes along the way. Jean couldn’t resist exploring and rigged and checked the 10-m pit to where she saw that more rope was needed. Near the bottom of the cave, she also climbed a high dome at the end of one passage. She heard voices, and connected to Team 2 through an impressingly small crack.

I was hoping for a clear resolution to finishing the cave but didn’t get one. There is certainly more to do. Both survey teams left leads going. However, for the purposes of the permit, science, and the general definition of the cave, we have probably mapped much of it at a vertical extent of 57.6 m and a horizontal length of 151.5 m. Additional survey and exploration is worthwhile, but the bolting effort needed and the long drive and climb to
the cave are more than most of us are willing to do for the time being. As night and an amazing sunset fell, we called it quits and hiked the trail down to our vehicles in the dark.

Soft Rock Caving

Arising bright and late the next morning, we departed Big Bend. Jim, Julia, Randy and Roberta drove to Fort Davis while the rest of us went “next door” to Big Brushy Canyon Preserve and Black Gap Wildlife Management Area. In 1992, I led a group of cavers to Big Brushy, which had recently been acquired by The Nature Conservancy (TNC), and we found several small caves (Texas Caver, “Cave hunting near Big Bend National Park March 14-21, 1992.” 37(3):47-49). While planning the trip to Mount Emory Cave, I was called by John Karges of TNC who told me of a sinkhole and fist-sized hole with good airflow at Big Brushy. I thought these leads would be good to check after we finished at Big Bend.

As it turned out, the plans became more involved. About a month before the trip, John e-mailed to tell me that TNC was working out the final details to sell Big Brushy to Texas Parks and Wildlife (TPW) to be made a part of Black Gap Wildlife Management Area. It wasn’t certain who would own Big Brushy during our visit, so I got permission from TNC and TPW.

A final, fortuitous event occurred that further tied things together. For the past 3 years or so, Hank Boudinot and Evelyn Townsend have been spending the winters in Texas, away from their snow-covered northern home. They often visit Black Gap and attend Bexar Grotto meetings, where in December of last year they gave me four Texas Speleological Survey (TSS) cave and karst report forms on four small caves they found at Black Gap. The caves hadn’t been surveyed, so I asked Jim to pull the forms from the TSS files so we could survey them if time allowed.

On the morning of 19 April 2003, we drove to Black Gap headquarters and met with TPW wildlife biologist Tom Vanzant, who joined us for the rest of the day. He was good company and helped us find what we were looking for. We first visited Big Brushy, and with John Karges’ GPS coordinates, we quickly found the cave, after the slow 18-km-long off-road drive. It was a 4-m-diameter by 2-m-deep sinkhole into a 1-m-wide by 1 to 2-m-high passage that led 4 m to a 6-m-deep pit. Air could be heard moving through fill that blocked the bottom of the pit, but digging through it would be a massive job.

While Chris, Faith, Linda, and Philip surveyed Echinocereus Pit, named for the genus of Rainbow Cactus found in the area, Jean, Tom, Viv, and I went to find the blowhole. The first hole we looked at had a rock with a rattlesnake under it, but the second was the right one. Just as John had told me, it was about fist sized and had good airflow. Looking in with my light, I could see down a fissure at least 0.5 m to rock blockage. There is a cave down there somewhere, but no way to reach it without substantial blasting which isn’t warranted on a nature preserve at this time.

Returning to the highway and heading onto Black Gap proper, Tom led us with the directions I had to some of the caves reported to TSS. Two of the caves had GPS coordinates listed, and we saw that they were too far to reach before nightfall. But the two without coordinates were reachable. The two entrances of Flint Knapping Shelter Cave were visible from where we parked the trucks, about a 10-minute walk away. It didn’t take long to survey the cave, a single 20-m-long by 4-m-wide by 2-m-high passage with an entrance at either end. Parts of the bare limestone floor were covered by grooves, apparently the result of Native American tool-making long ago.

The cave report forms indicated that Hedgehog Cactus Cave could not be seen from where the trucks were parked, but it could be seen from Flint Knapping Shelter Cave. We searched the canyon high and low, checking every possible hole we could see but didn’t find it. I later learned that the note was written in error, so we didn’t overlook the cave. Meanwhile, the searching yielded two small new caves. Catclaw Cave is about 2 m high and wide and 6 m long. Snakes Are For Hissin’ Cave has a 1-m-long crawlway extending north from its entrance, and another crawlway at least 4 m long and heads south; it was not fully pushed or carefully examined since some unknown critter had made it a home. It was also starting to get dark, so we headed to a camp site for reverie and rest, then drove home the next morning.

Go West, Young Caver

In my 1992 Texas Caver report on Big Brushy, I concluded there is potential for large and interesting caves in that area, but most will be rather small. This trip strengthens my conviction. Hank and Evelyn have since sent me forms for another 13 caves at Black Gap to file with the TSS. All are small, but persistence and systematic checking like theirs will eventually lead to the large voids that are producing the notable airflow found in several small holes in the area. Additionally, I can’t help but wonder how many other significant pseudokarst caves like Mount Emory Cave occur in Big Bend. Any caving at Black Gap should be coordinated with Steve Fleming and Steve Peerman of New Mexico who have an ongoing project there. This part of the state has received little attention from cavers over the years due to its distance from population centers. But I’m confident that continued exploration will turn up some important caves in that stark, yet gorgeous landscape.
Highway 17 Cavern, Reeves County
by Jim Kennedy

Across Texas, new caves are being discovered in the course of development, and caves may also be lost to the same development. While this does not usually result in additional caves for cavers to explore on weekends, it does give us insight to local cave-forming processes, and give us clues to look for additional caves in those areas. Such is the story of Highway 17 Cavern.

The cave entrance is beneath State Highway 17, about 13 miles south of Pecos. Originally a collapse sink two to three feet deep and four to ten feet in diameter led down a rubble slope to a single chamber about 45 feet in diameter and up to eight feet high in gypsum. The cave has since been filled.

A letter about the cave from the Texas Highway Department to the TSS is reproduced below.

Texas Highway Department
Post Office Box 69
Pecos, Texas

February 14, 1964
A Richard Smith
Box 7672 UT Station
Austin 12, Texas

Dear Mr. Smith,

This is to acknowledge your letter of February 1, in which you asked for information about a hole we found under State Highway 17 about 13 miles south of Pecos. This sort of thing is not uncommon in this area, and is known locally as a “sink hole” or “gyp sink”. The thing that was unusual about this particular hole is that it happened to be under a highway.

The cause for these holes (I use this term for lack of something better, and as I understand, it is not a cave) is the water table in the Pecos area being lowered so much by irrigation wells south and west of Pecos City. This, as I understand it, leaves voids or creates a cavern by water erosion. I inspected the cavern under discussion quite well and the walls were very smooth as if water worn and well compacted.

As for the size and shape of this hole, I would say it was originally round or circular, having a diameter of about 45 feet, but it had caved off from one side. That is when it was discovered.

I am enclosing some negatives of the film I took. You may make as many prints as you like, and return said negatives to me, please.

I hope this will be of some help in your work. If you are ever in this area, I would be happy to show you some of the holes that are still in existence.

Sincerely yours,
Jack Ferguson
MINUTES OF WINTER
TSA BOG MEETING
26 January 2003
(Convened at Bracken Bat Cave, Comal County, Texas)

Present: Terry Holsinger, Chairman; Christi Bennett, Vice-Chairman; Jerry Atkinson, Secretary; Joe Ranzau, Treasurer.

TSA Members in attendance: Linda Palit (BG); Logan McNatt (UTG); Jim Kennedy (UTG); Jay Jorden (DFWG); Bill Mixon (UTG); and Shannon Summers (AS).  

The meeting convened at Bracken Bat Cave from 10:45 AM to 1:00 PM. The minutes of the last TSA meeting were not read as Past-Secretary Ranzau did not bring them.

Past-Chairman’s Report: (Kennedy) Kennedy has filed the TSA’s IO report to the NSS and a copy is in the files. Kennedy will deposit miscellaneous TSA files with the Secretary for archiving.

Vice-Chairman’s Report: (Bennett) Date and location of TSA Convention have been set. Will be located at Cascade Caverns on the first weekend in May. The Bexar Grotto is hosting the event and Bob Cowell has been responsible for most of the location logistics. The estimated costs have not been calculated but are expected to be low. Salon judges have not been selected yet but will be discussed at the next Bexar Grotto meeting. It was suggested that pre-registration be used with a mid-April deadline established. Kennedy volunteered to create a flyer which will be sent to the Texas Caver and posted on CaveTex.

Approximately 30 people attended the weekend’s Bracken Bat Cave Cleanup.

Secretary’s Report: (Atkinson) Atkinson has organized all the past TSA records by year and topic. All TSA minutes have been compiled into a single notebook that dates back to 1962. Kennedy suggested that a listing of all past and present TSA officers be posted on the TSA web-site.

Treasurer’s Report: (Ranzau) Past financial statements of the organization are still being located and will be ordered from the Credit Union. The approximate $800 balance remaining in the Credit Union will be closed out and deposited in the main account at Compass Bank.

As of October 2002, the TSA has a total of $16,268.70 in cash assets, including $2345.76 in the Land Trust. The Compass Bank accounts consist of $6071.77 in checking, and $7054.89 in savings. The Credit Union accounts consist of $371.88 in checking, and $6071.77 in savings. 

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Recent activity included the movement of $4220.00 to the Land Trust from the following sources: 1.) $4000 from the Compass Bank savings account per the motion passed at the last TSA meeting 2.) $101 from the Bustamante Project, and 3.) $119 from the last year’s budget directives.

A motion was made to purchase QUICKEN software in the TSA’s name. The motion passed unanimously.

Travis Kinchen is setting up a membership information and online service page on the TSA website.

Committee Reports:
Publication: The Chair position is open.
TSA Bookstore: (McNatt) Sales from the last TCR totaled $523.45 of which $486 were deposited 16 January 2003. There is presently $105 in petty cash. McNatt, et al, moved approximately 14,000 TSA publications from Bill Mixon’s house to the TSS office for storage. It was noted that the Texas Caver editor needs to send (4) copies of the Texas Caver to the NSS, SpeleoDigest, and American Caving Accidents editors. Exchanges should be sent to the Secretary for filing.

A short recess was called to remove various mongrels from the meeting site.

Extra 2002 Texas Cavers will be sent to McNatt.

Ranzau made a motion to send the forthcoming 2003 January issue of the Texas Caver to all 200 members that were on the 2002 membership list. The motion passed by general consensus. We are presently down to about 100 mailings of the Texas Caver. It was suggested that the next issue contain a membership signup and editorial explaining the present Texas Caver situation. It was noted that this needs to happen quickly. Ranzau volunteered to expedite.

Texas Caver Report: (Holsinger reporting in Don Arburn’s absence) Approximately 1/2 of the January issue is typeset and ready. Don has been busy with work.

Remaining 2001 Texas Caver Issues: (Kennedy) Becky reported that there is 1 issue typeset and Tim Stich has volunteered to help typeset the remaining issues. A short discussion ensued on the history of the 2001 editorship woes. It was decided to produce a combined 2001 issue of the Texas Caver that includes all unpublished material submitted to the publication for that year. If it is not possible to recover the material that Becky possesses, then a solicitation will be posted on CaveTex for all authors to resubmit their unpublished material to the TSA. Kennedy volunteered to compile and perform layout for the combined 2001 issue. It will be mailed to all current and past 2001 TSA members on record.

Web Editor: (Mikelski not present) The BraveNet account has been closed. The TSA is receiving approximately $60 per quarter from the Café Express online store sales, and about $4 per quarter from the Amazon.com site sales. The TSA website has been moved and is presently hosted from England. The TSA pays $90 per year for host server costs. It was noted that the TSA owns the TSA website. It was also noted that the website design needs to be changed.

Member’s Manual: (Bennett) Plan to compile the manual after the 1QTR membership drive. It was suggested that the deadline for inclusion in the manual be set for convention time in May. The Membership Committee, consisting of the Treasurer, Secretary, Editor, and Travis Kinchen, are responsible for the compilation of the manual. A June 2003 publication target is planned.

Conservation: (vacant) No report.

Safety and Rescue: (vacant) No activity or report. Chair position is open.

Constitution: Articles of Incorporation were drafted by Terri Whitfield in July of 2002. Consensus of the Board was that the TSA...
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How to get

LOST!

Jonathan Wilson
Texas Independent Caver

On a recent trip to Mexico I got lost. I got lost several times. Understandably, getting lost makes one ponder the act of getting lost and the act of getting unlost. With just about any endeavor, such as getting unlost, the most useful piece of gear you can have is mounted on a swivel bracket above your shoulders. Preplanning and preparation can keep anyone from getting lost most of the time. Clear thinking and good judgment can get you unlost.

We arrived at the Infernillo camp site close to sun set. Tired and dirty from a long day behind the wheel we decide to run down to the resurgence spring and go for a refreshing swim. We grabbed some of the standard gear- compass, GPS, and lights. Setting off down the trail I checked my watch- 1930. The light was failing as we followed the flagging north down an arroyo toward the canyon. I was watching my compass the whole way down. It was dark before we met the main canyon and broke out among the scoured boulders. The resurgence spring was right there with its cool, refreshing water. The clothes piled up on the surrounding rocks as we all dove into the deep pool. The moon, not quite full, hovered between the canyon walls and illuminated our private swimming hole. I floated on my back staring at its lunar magnificence thinking what an amazing place this was. Lighting bugs performed their flash dance above our heads as bats swooped down and feasted on the insect performers. An hour passed before we decided to make our way out. Checking the GPS we all gazed blankly in horrification. No signal. Not a single satellite. Infernillo is not a slot canyon in any sense of the word, but the 100 m+ canyon walls blinded our little, magic black box. Strike one.

Moving up the canyon we searched in the dark for the arroyo where we entered the canyon. In this world of shadow everything looked the same. We tried the best looking spot and fought through the thick vegetation for a bit. Our path shot us out into the main canyon again. Strike Two.

After some discussion our mighty band of ‘expert cave explorers’ remembered the logging road crossed the canyon upstream of where we were. We struck out over the boulders, scrambling and climbing along. An hour later we met an impassable obstacle, a 40m headwall. Any attempt to climb the headwall unroped and unprotected would have been foolhardy. Strike Three. You’re lost!

We had no water and the thirst was growing. Your thirst invades your every thought, remaining you over and over that it needs water to survive. We cruised back down stream towards the resurgence pool. The water coming from the spring should be relatively clean in this remote region. By the time we made it back down the canyon Gardia and other water born parasites were the farther thing from our thoughts. I drank voraciously from the natural water fountain. I couldn’t get enough. We had returned to the last place where we knew we were not lost. This was key to our salvation as in the distance we heard a voice calling out. It was Peter, who had stayed back with the trucks. He was on the ridge top between us and the trucks; we struck out, up the canyon wall towards his voice. Soon we saw light from his headlamp. The climb up was taxing to say the least. We would move towards Peter with effort only to find a small headwall blocking the way. We would traverse the headwall until we could climb over only to hit another headwall. This continued for an hour, one last final climb and we met up with Peter. Exhaustion and frustration has an odd way of melting into joy and relief. This moment often that goes unnoticed, but the emotional shift is like a flood. Peter had set up a network of the other folks in the expedition to lead us back to the trucks. Peter called out and pointed into the woods. Off in the distance was another light which we followed to find the next person on the trail home. From there another light in the distance lead the way, and so it went for the next 100m. I looked at my watch when we arrived in camp. 0130. So much for a quick dip in the pool.

What we did wrong: We underestimated the scope of our short trip. We did not understand how far and how much elevation was involved to get to the spring. One should remember to pack some water when heading off into the bush. We watched the compass down but didn’t mark our tail well. As we entered the main canyon we didn’t note or mark our exit. The GPS turned out to be useless in the environment we were in.

What saved our butts: We returned to our last known point. We had informed friends of our plans and when we expected to be back. When that time came and went our friends set out to look for us. When they came to look for us we were in a place where we could be found.

Fast forward several days later to the Brinco-Infernillo through trip. Nine of us entered the cave. Only one of us, Peter, had ever done a through trip in this cave before. The rest of us knew parts of the upper cave and were here to learn the rest. The four who had been lost just days before would press ahead until we got a little confused then waited for Peter with the knowledge and the rest of the crew to come and show us the way. This plan worked great for the first four of the eight kilometer through trip. We took a wrong turn while Peter and company scooted by unnoticed. We backtracked about 10 M back into a main passage to look for Peter and realize that we had gone around another way. Ahead of us lay places with names like the ‘Breakdown Maze’ where people have taken 16 hours to pass, and the ‘Confusion Tubes’, a place with a million possible routes. There was no way we could find our way out without Peter. Meanwhile Peter was moving along impressed how easily we were finding the route ahead of him, being ‘expert cave explorers’. Lost again! We set up a bivouac at the last place we were with Peter and decided to stay put. We set the wetsuits out on the cave florr and sat on them to insulate from the cold. We counted our food and battery supply. We discussed rescue. Would Peter leave the cave to get the rest out and then come back for us? It was six hours from here to the cave entrance in either direction. This would mean a twelve hour wait. What if Peter needed to resupply at the field house before he come for us? Add on another six hours to get to the field house and back. 18 hours is a long time to wait. We could go back out the Brinco entrance, but that had many complications as well. We waited huddled together for warmth. Idle talk was punctuated by the extreme silence of the cave. We had several things going for us. We were not in a stream...
passage which could have meant hypothermia. We had a water supply nearby. We had food. But most of all we had nerves, cave nerves. No one panicked, no one freaked out.

The cold settled in. We took an excursion down the cave to look for the trail. It took 10 minutes of hard caving to warm back up. Returning to our bivouac the cold crept back in. My teeth began to chatter yet again. I hate the cold. It’s hard to ignore.

In the silence of the cave every boot scuff, stomach growl, and sigh of boredom sounded like someone moving up the passage towards us, signaling our salvation. With so many false sounds of hope I gave up listening to hard for rescue. So much so, when Peter called out from 5m down the passage I didn’t respond right away. I didn’t believe my ears. A couple of seconds later he spoke again. And then the cold and frustration melted away into elation and deliverance. We spent very little time with hand shakes and back slaps; we still had six hours of cave, and hour of canyon, and three hours of four wheel driving to get to our beds. We packed and we caved for home.

Peter had found us because we had returned to the point where we had seen each other last. When you are lost you must first admit that you are lost. Stay calm, you can not form a plan with panic as a guide. Do everything you can to make yourself found. It’s similar to a boating accident or a plane crash. It’s easier to find the boat or plane than it is a person, so you stay with it. In this case you go to where the last known point was. Eventually someone will look there.

One of the lessons I have taken home from this experience is to not underestimate the environment and overestimate my abilities. After so many years of stomping around the bush I thought I was getting pretty good at orienteering. I guess I’ve been getting cocky. Leave it to nature to knock me down off my high horse. Getting lost is not a possibility, it is an eventuality. Are you ready?

Review

Mammoth Cave and the Kentucky Cave Region.
Bob and Judi Thompson. ISBN 0-7385-1514-0.

Wind Cave National Park:
The First 100 Years.

These nice little books are essentially compilations of old photographs, but the paragraph-long captions convey a lot of history. The Mammoth Cave volume has photographs from 1866 to 1940, with lots of pictures of early guides and group photos of tourists. About the last forty pages cover other show caves in the area and the Floyd Collins accident of 1925. The photographs in the Wind Cave volume are mostly undated, but span the period from about 1880 to the present, although only the last twenty pages are devoted to the last fifty years. Emphasis is on the work of the Civilian Conservation Corps in developing the cave and the park facilities during the 1930s. Must-buys for people interested in show-cave history or spelean history in general.-Bill Mixon
In Low Airspace, No One Can Hear You Scream.

THE TEXAS CAVER
10801 County Road 116
Kenedy, Texas 78119

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