Facing the Unexpected in Great Expectations Cave

Bruce White

with guidance from Jason Ballensky, Doug Warner, Mike Greene, and Shane Snyder

Photos by Bruce White unless credited otherwise

DISCLAIMER: Great Expectations is an NSS-owned alpine cave in Wyoming. It is not for the beginner. It is a very challenging cave requiring a lengthy time commitment and containing vertical drops (negotiable only via single-rope technique), deep pools, waterfalls, strong currents, low air spaces, and dangerously cold temperatures. Do not attempt to visit this cave unless you have the proper experience and equipment, and have consulted NSS member Bob Montgomery for a permit and key.

Great Expectations Cave. I had wanted to go since Ben Sainsbury told me about his trip there in 2005. His description sealed it: The deepest through-trip in the lower 48 states at 1400 vertical feet from upper entrance to lower entrance, 5 miles of walking, 7 rappels, 38 degree F temperatures (air and water), lots of swimming, and a nasty 2000-foot-long water crawl at the end. I had tried numerous times to get onto trips going through the cave over recent years, but school or work always got in the way. Out of the blue I emailed Jason Ballensky, the apparent locus of recent Great Ex activity, to see if he was going this year, and as luck would have it a group of cavers from TAG had already persuaded him to do a trip. When I e-mailed him, he replied and said that he had planned to ask me if I wanted to go.

Bob Montgomery, the NSS contact for Great Ex, had mentioned to Jason that summer in Wyoming had been wet, and to expect more water than usual. However, the official Great Ex management plan states that “The ideal time frames in which to visit the cave are from mid to late summer and in early fall, when the potential for flooding is low, even during thunderstorms,” so we felt confident that the water levels would be manageable. A few days before the trip was supposed to happen, Jason sent an e-mail to the group with a link to a really crappy weather forecast predicting both rain and snow for the weekend. This was eerily reminiscent of a really nasty time I had attempting to cave in Utah a few years ago—a beautiful summer had turned into a rainy, then freezy, then full-on spindrift blizzardly weekend before my very eyes and had dramatically changed the planned course of events. So I hopped a flight out of San Francisco hoping not to have a repeat of that.

My connection in Denver was very tight, so I had to run to the next flight, which connected to Worland, WY. Once on the plane I unexpectedly sat right in front of Jason, so we talked caving and got reacquainted as I hadn’t seen him in about 5 years. After landing in Worland, we were greeted by most of our group. Shane Snyder, Mike Greene and Chad Ellis flew in from TAG; I had caved with Shane once like 10 years ago, but had never met Mike or Chad before. Willie Hunt, a regular caving buddy of mine, drove all the way from Southern California in his F250 loaded with tons of gear, and was my ride for the weekend. The pit of my stomach started to sink with each passing second as my bag did not show up at the baggage claim. This bag contained all of my cave gear and food, so the bad omen that had started with the weather report had now continued with my luggage. I exchanged phone numbers with the lady in charge with a promise from her to get to the bottom of things, and we all took off in three vehicles for a 2-hour drive out into the woods to our campsite.

The paved portion of the drive was uneventful, with the exception of the light rain sprinkles that had started. The second half of the drive was on a windy, muddy road that was probably only suitable for 4wd vehicles in those conditions. Everybody had 4wd except for Chad, who was driving a regular car. We had just about reached the campsite when he scraped bottom hard on a rock. He rolled down the window and smelled hot oil. Getting out, there was a 15-foot-long trail of oil behind the car—the oil pan had ruptured. Yet another bad omen. Chad pulled the car off to the side of the road and left it there for the remainder of the weekend. Arriving at camp, we found Doug Warner, a caver buddy of mine from Montana, who completed the group. We set up tents (I borrowed one from Willie) and went to bed. Then the rain really started. A raucous thunderstorm came in and poured on the campsite for hours, repeatedly waking all of us up.

The next morning I woke up to a very wet tent, but somehow my sleeping bag was totally dry. I had to variously mooch clothes, cups, and stoves from people to get through the morning. The plan for the day was to check out the lower entrance of the cave and make sure it was passable so we could get out the next day. We piled into three 4wd
dry on his previous trips. Jason entered the cave to make sure the route was passable and that water levels were normal. He quickly returned and reported that some rocks had moved and the resulting squeeze was certainly too tight for everyone in the group to fit through. He also could not conclusively tell whether the water levels in the grim crawl were high enough to sump it shut. To bypass the squeeze, we checked out an alternate sand crawl route, but it was silted shut. Jason, Shane and I dug on this for the next hour or two and eventually made a voice and light connection, but we never got it large enough to fit through. Mike and Chad made a fire outside and we all gathered around it to discuss options. It was getting late in the day and I still had to go back to Worland to pick up my bag, assuming it had even arrived. And if we didn’t get that lower entrance dug out, nobody was going all the way through the cave. On top of that, we didn’t know for sure if the water was high enough to close off the passage. The idea of abandoning the trip to do a different but less spectacular cave was suggested. Or perhaps we would explore Great Ex from the top, see only part of the cave, and exit the way we came in. My opinion was that if I was going to do Great Ex, it would be a through trip, otherwise I would rather do a different cave. It started to rain harder, and willpower was lost. Various folks stated then and there that they had already decided they didn’t want to do the through trip, what with all the bad omens piling up. We had the time and energy for one last dig. Miraculously, Chad and Mike managed to find and enlarge another alternate squeeze route enough that everyone in the group could fit. We then found an easier game trail back up the hill to the cars. Luckily, both vehicles made it back across the steep muddy valley to where we had left Willie’s truck, but not without a little suspense—we had to get out of the Suburban and watch Shane spin the tires and drive it nearly sideways to get up the hill.

I managed to finally get reception out there and talk to the lady at the Worland Airport—my bag would be arriving at 6:30 pm that night. Doug and I drove back into Worland and the bag was there—thank goodness! I probably could have done the cave borrowing other folks’ gear, but I really didn’t want to. Back at camp, Jason, Mike and Shane made the short hike to the entrance of Great Ex to check out the water level entering the cave. The three had a frank discussion about the water and its possible effects on the impending trip. They noted a spot in the creekbed for future reference as an indicator of rising or lowering water levels. They decided that if it was raining the next morning, even looked like rain, or the
watermark was noticeably under water, the trip would be off. By the time Doug and I returned to camp, everyone was asleap and snow was covering everything.

The next day we woke up to a beautiful sunny morning. The huge tent that Willie had set up for gear storage had collapsed during the night. It was still cold and the snow was not melting, but the clear sky and bright sun rejuvenated everyone and it was quickly agreed that we were going into the cave. Four of us would do the through trip, and the other three would go in as far as the lunch room, then turn around and exit the way we came in. This was decided due to a combination of complex vehicle parking logistics, workweek sleep deprivation, hypothermia concerns, dead rental car return times, and the fact that a 7-person through-trip was going to take a really long time.

The upper entrance to the cave, at 8500’ elevation, was only 300 yards from the campsite, so we geared up and headed in. Although he had been there three times previously (once all the way through), this was Jason’s first time leading a trip to Great Ex. As such, he was armed with map print-outs and route-finding/rope length notes from various individuals. With the exception of one climb down with some heavy spray from a waterfall, the first section of the cave was dry. We had to do a little bit of route finding, but the trip took us through the massive and beautiful Great Hall, down a short rope drop, through some very nice formations, and into a large chamber called the Theta Room. Just beyond, we stopped at the Lunch Room and ate.

Here the group split up. Doug, Willie, and Chad exited the same way we came in for a 6-hour trip. Three grazing Moose greeted them when they emerged. A couple of rope drops, the largest 50’, took Jason, Shane, Mike and myself down to the level of the Lost Worland River. This is where the cave really got interesting—for the rest of the trip we would follow this massive underground river. Once everybody was down, Jason said “Alright, you guys ready to do this thing??” and immediately jumped into a pool over his head and started swimming downstream. We followed. The first thing I noticed was that the current was very strong. I didn’t really have to paddle in any of the pools as the water would just pull me along, sometimes to the side into eddies that took some effort to get out of, and I had to brace myself at the top of many of the cascades and waterfalls to keep from being sucked over.

The character of the passage was a deep tan sculpted dolomite with beautiful black chert/manganese shelves every 10 vertical feet or so up the walls, interrupted often by waterfalls of all sizes. Generally, the passage averaged perhaps 40 feet high and 15 feet wide, although this varied to probably as high as 100 feet and as low as sumped (requiring a bypass route). The next few hours were absolute bliss and my favorite kind of caving. Wet and splashy with positively-mudless rapids, waterfalls, climbs, plunge pools, and intermittent rope drops. I was hooting and hollering and having a great time. We were all wearing wetsuits at least 7mm thick, covered with various abrasion-resistant (or so we thought) clothing to protect against the sharp dolomite. For 95% of the trip I was toasty warm, often too hot, even though we were swimming in 38° F water.

All the rope drops in the cave were already rigged, with the exception of the wet drops where any ropes left would be shredded by the pounding water in a very short time. Jason had brought a single 100-foot piece of rope. At the first wet drop, he judged the rope length, cut it with a knife, and rigged. This thing was awesome—a 30’ rappel next to an absolutely evil, pounding falls. At the bottom we had to rappel off the end of the rope and into a rolling pool over our heads, then continue swimming down the passage. Too cool! We came to the top of a 10-foot waterfall and Jason immediately climbed down it like it was no big deal. The rest of us watched wide-eyed and decided there was no way we were going to climb that. It was at this point that we started to understand something about Jason: he is fearless. So we rigged the remaining rope we
had and Mike rappelled it. Near the bottom he was absolutely engulfed in the water, only to reappear seconds later in the plunge pool at the bottom. Shane did the same, and gave us the willies by staying under the falls and flailing for a few long seconds. I riggled the rope out of the falls, right down the route Jason has climbed. As I rappelled, I realized just how easy the climb actually was. This theme would repeat — having been there before, Jason’s familiarity with the cave and overall fearlessness gave him a much higher risk tolerance than the rest of us. For Shane, Mike and myself, this was an unfamiliar cave in which fatal hypothermia would swiftly come with one mistake, so our risk tolerance was very low. Climbs that we normally would have no problem with suddenly became too risky because of the nature of the cave. Because of this Jason often pushed our comfort level on this trip, and I am sure that we appeared to be overly cautious to him.

After rappelling the short falls, Jason derigged the rope and climbed back down with it so we could rappel the next drop. We all still felt very good and energetic. That would change as we encountered one of the most intimidating cave passages I have ever been in. The water current quickly became much stronger, and we soon found ourselves climbing down next to a series of seriously malevolent rapids and waterfalls. The section started with a 6-foot-high climbable falls followed by a series of violently swirling frothy pools. From there the water exploded out over a 20-foot falls into another rolling pool, over another 10-foot falls into yet another pool, then over a final 5-foot falls into a big pool that was calm at the far end. I really cannot describe the full power of the water here, it was absolutely jaw-dropping. Needless to say, if you fell into the water, you were almost certainly dead. If you didn’t drown in the rapids first, you’d be pulled over the falls instantly. We had to stick to a small sloping ledge to the right side of the passage to keep from falling in. It was here that Jason announced that yes, the water was definitely higher than he’d ever seen it. This planted a small seed of anxiety in my mind that the grim crawl at the end might beumping shut. It was also here that Mike confided “Man, this scares me.”

Jason tied off the rope and slowly inched out to the edge of the 20-foot falls, riggled into the bolts there, and rappelled out of sight. A minute later I saw him reappear at the top of the 10-foot falls below, still on rope. He started the rappel, and looked confused for a second. Then he swung to his right a bit, into the falls, and suddenly he looked like a fallen water skier being dragged by the tow rope at high speed. A second later he disappeared down into the waterfall. He reappeared at the bottom and gave the all-clear. I went next and rappelled the 20-foot falls. I had to hold the rope with my right hand and grab handholds with my left the entire time to keep myself from swinging directly into the full brunt of the falls. Still on rope, I traversed the plunge pool at the base of the 20-foot falls and prepared to rappel the 10-foot falls below. I started down and very quickly noticed, to my great horror, that I was short rigged! The rope did not reach the bottom. We had cut off a little bit too much of it at the previous drop. The end was only 5 or 6 feet off the ground, but rappelling off the end meant tumbling right into the maelstrom of the falls. I clung onto the wall to the left of the falls looking for foot and hand holds that would allow me to climb down, but there was nothing. I turned my head around and looked across the plunge pool and saw Jason was waving for me to swing into the falls. It was the only option as it would allow for the greatest amount of rope length. I swung into the falls and the full force of it immediately smacked me right on the chest and flipped me over backwards. I lost my grip on the rope and fell to the bottom of the falls, back-first. I landed on my back, inside the falls, onto the rocky floor of the plunge pool. Luckily, I was wearing a very robust and waterproof Swaygo pack, and it cushioned the fall very well. I heartily endorse Swaygo! From that point the current took me and rolled me twice out into the plunge pool. I managed to grab the edge of the pool and stop myself before I went over the final 5-foot falls. I emerged from the pool shaken, and amazed that I wasn’t hurt at all. The falls were so loud that I had to be within a foot of Jason, yelling, to talk to him. There was no way to communicate with those above us, and ascending back up almost certainly would have been a more dangerous endeavor, requiring prolonged full-submersion in both waterfalls. Mike came down next, and this time Jason crossed the plunge pool and coached him down. He swung into the falls

Jason takes a food break

High cliffs visible on the hike to the lower entrance

NSS NEWS, December 2009
in a more crouched position than I did and was thrown down into the pool, albeit much more safely than I was. Shane came down and innovatively swung himself all the way across, and through, the falls to the other side where he attempted to land. He almost made it, but then fell backwards into the pool just at the base of the falls. I breathed a sigh of relief after everyone was down safely. But that incident sapped a little of everybody’s strength and confidence.

The tone of the trip became a bit more serious after that. The route from that point consisted of a nasty exposed step-across move below an overhang and 20 feet over rapids below (at which point I turned to Mike and said “this is what scares me!”), followed by a few hairy, steep climbdowns. The final pucker was when we missed a high bypass route and came to the top of a sketchy 8-foot falls. At first Jason looked for an alternate route, but finding nothing he attempted to climb down the falls. He slide over the edge on his butt, sort of clung to the right wall, then bounced into the falls. He reappeared below and mouthed “it’s not that bad.” The rest of us were not convinced. We had one final piece of tattered handline that we’d found in the remains of a rope left back at one of the wet drops. We tied this off and the three of us easily climbed down.

From here the cave eased up. We spent hours walking peacefully through waist-deep, gorgeous, glassy-calm water passage with 50-foot ceilings, incredible bleach-white flowstone and soda straws, and huge black, vertical, free-standing chert fins. After awhile longer, Jason told us that the grim crawl was only 1000 feet away, which peppeled us up. We continued on and had to route find for awhile before we figured out the right way into the crawl. At the start of the crawl we stopped and ate. Jason noted that the water was also high here, as an overflow route that had been dry before was now filled with water. This did not make me feel better. The prospect of heading back out the way we came seemed nearly impossible – it would have required very difficult rope ascents and climbs in all the waterfalls we had already encountered, and would easily have taken 20 incredibly exhausting hours or more. I said “I think I have a hole in the butt of my wetsuit” to which Mike replied, “Oh yeah, you have for awhile.” I hadn’t noticed. Bummer, that thing was expensive. At the start of the cave, the character of the dolomite had been rough and grabby like very course sandpaper. As we descended deeper, the dolomite continued to get sharper. Now, in the lower part of the cave, some of the boulders looked very nearly like they were covered in shark teeth, or as Shane described it, “thousands of small elephant tusks.” Everybody’s outer layer had pretty much shredded. Jason’s cave suit had become a skirt. The lower legs of the pants covering my wetsuit were only held in place by my kneepads.

We started into the crawl, not entirely sure that it wouldn’t be sumped to the ceiling. The passage itself was about 25 feet wide and 2 feet high, with about 8 inches of water in it flowing very rapidly. The floor of the cave was covered in dolomite rock horns and bumps. The horns easily and frequently caught on clothing and pack straps. We went in feet first and let the water carry us as much as possible. The current was strong enough that the water would flow up and over my shoulders, often getting in my ears and face. After being warm the entire trip, my hands and feet finally went numb. I could feel the rock making contact with my butt through the hole in my wetsuit, but it didn’t feel like it was leaving a wound. We made sure to stick close together here. We went through what was supposed to be the lowest airspace section; thankfully, it was passable with one side of the face touching the ceiling and the other side down in the water. The crawl continued for about 2 hours when suddenly we emerged into a hands and knees crawlway. Jason bounded ahead and started hooting with delight. We had made it. A few more squeezes through some dirt and rocks, and we were out after 17 hours underground.

Having felt energetic for most of the trip, the relief of being out of the cave gave way to utter exhaustion. The hike back up the hill in the dark was a slow death march, but we finally made it to the top where Doug and Chad were thoughtfully waiting in Doug’s truck with food and water (sparing us from walking perhaps another 2 miles further to Shane’s Suburban). The sun started to come up as we drove the 4wd road back to camp. I got about 3 hours of sleep before it was time to wake up and pack the gear. Upon rising, I realized what a wreck I was. Every joint ached, all my muscles were sore, I had cuts and bruises everywhere, and what I thought was a minor abrasion on my butt turned out to be a huge 5-inch diameter raspberry that looked like I had sat on a stove. It would be 4 days before I could sit normally again. A day later at home I discovered that I had lost 5 pounds. As of this writing, nearly three weeks later, both Shane and Mike are still having foot numbness issues from the cold water and possible permanent nerve damage.

So what did I think of the trip? Great Expectations Cave is absolutely incredible. A true classic cave and a test for any hardcore caver. In my top 5 for sure. Comparable in caliber, but not necessarily difficulty, to caves like Main Drain, Neilsons Well, or Ellisons Cave. In spite of any difficulties, I would definitely do it again. Next time I would take 150 feet of rope to rig the wet drops, 100 feet of sacrificial webbing just in case someone is not comfortable with a climb and needs a handline, and I would wear much more robust ballistic nylon shorts as an outer layer. A few general lessons were learned during the course of this trip, the most obvious being that even if by all appearances you have done your homework and are completely prepared for a trip, unexpected events can and do still happen anyway, and their impact is sudden and potentially dangerous. Those of us who have been caving for awhile with no incidents tend to get lulled into a false sense of security, and this complacency will eventually catch up to us if we don’t remind ourselves to be constantly vigilant. This trip was also a reminder that it is a good idea to wear your ascending gear while on rappel even if someone else appears to have successfully negotiated the drop before you, although that may or may not have been of much benefit here.

Thanks to Jason for leading the trip, thanks to everyone in the group for being great guys to cave with, and thanks to Willie, Doug and Chad for all the support on the surface. I ended up having to wear black rubber knee-high Wellies on the flight home as they were my only dry shoes.