

48 Hours in Upper Thunder River

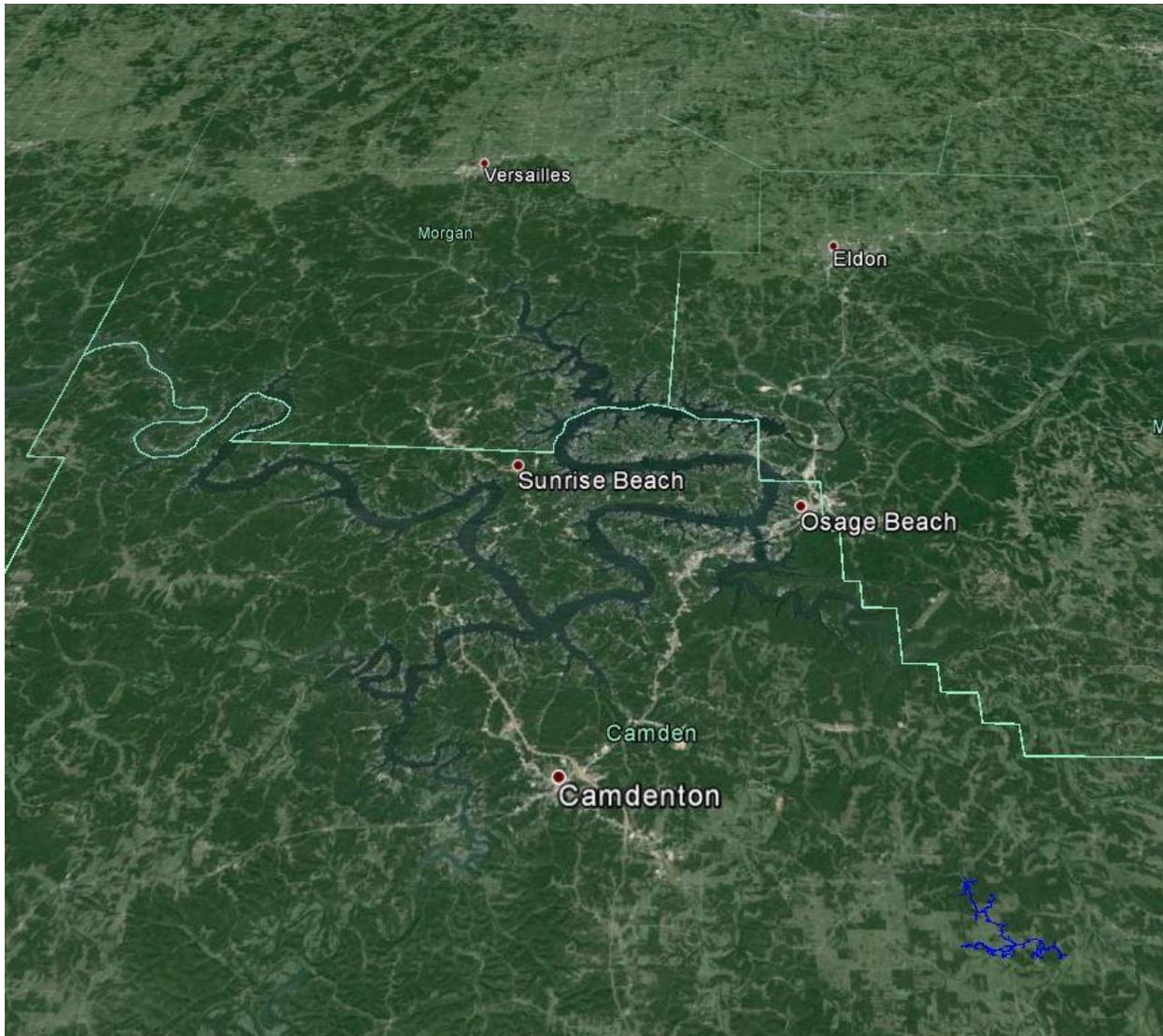
Carroll Cave, Camden County, Missouri

by Dan Lamping



Bob Lerch (left) and Dan Lamping (right) rest above UR1 in Upper Thunder River, Carroll Cave during the exit of a two day camp trip.

On December 28, 2016, Bob Lerch, Josh Hafner and I went into Carroll Cave for two straight days, on a survey mission to make it just a little bit longer. Carroll Cave is located outside of the town of Montreal, Missouri, in Camden County, southeast of the Lake of Ozarks. Currently, it is Missouri's second longest mapped cave with over 20 miles of surveyed passage, all of which has been mapped since 2002 by members of the Carroll Cave Conservancy (CCC). A few of us in MVG have been key players in the survey project since nearly the beginning, namely Joe Sikorski, Tony Schmitt and I, along with others from MVG such as Mike and Natalia Tennant, and Josh Hafner who got involved more recently with Val Schmidt, Shawn Williams, and Brian Borton having been involved in the past. Carroll Cave has a hearty place in the lore of Missouri caving. There the first meeting of the Missouri Speleological Survey convened in 1956 with the goal of exploring, mapping and documenting what was then called Wet Glaze Cave, along with the rest of the caves in the state. The stories of exploration and perseverance which followed are truly wonderful as cavers made what had to be heart pounding discoveries such as the Left Fork, the Azure Pool, Thunder River, Thunder Falls, Convention Hall, DL7, The Lake Room and many more.

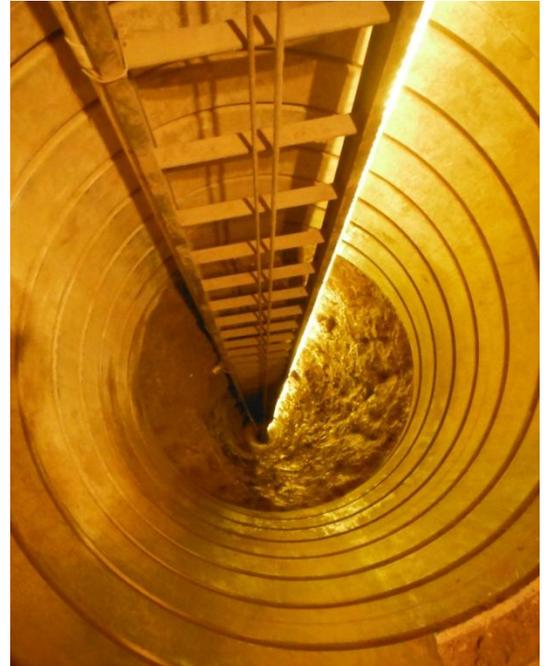


Note: The outline of Carroll Cave, shown at scale, in blue on the southeast corner of the image above.

Carroll Cave has been surveyed by three generations of cavers, ours being the most recent; though, no doubt the most herculean efforts were by those who originally slogged their way up the muddy, yet dramatically decorated Carroll River, only to encounter what were then the remote depths of Thunder River pulsing 30 ft below the upstream end of the Carroll River passage. Prior to the CCC survey the only published map of the cave, which came out in 1965, was made by Jim Hellwig and showed only the mainstream trunk passages. Survey would continue off of this map under efforts led by Dave Hoffman, where side passages such as DL7 were mapped, though no finished cartographic surveys from this era were ever published due to an agreement made between Hoffman and the landowner of the time. By the 1980s Carroll Cave was effectively closed. In 1968 the cave was gated, though cavers still enjoyed access for years. Eventually the cave's owners placed their own lock on the gate prohibiting caver access, which at this time, largely included recreational and exploratory trips where little was documented, side passages were scooped and no survey was going on. The gate itself is made of rebar and is not of the same rigid quality that modern angle iron bat gates are today. At some point in time, after the owners closed the cave, the gate was breached and covert access continued, though still, nothing productive came out of the cave. In 2002 members of the Carroll Cave Conservancy

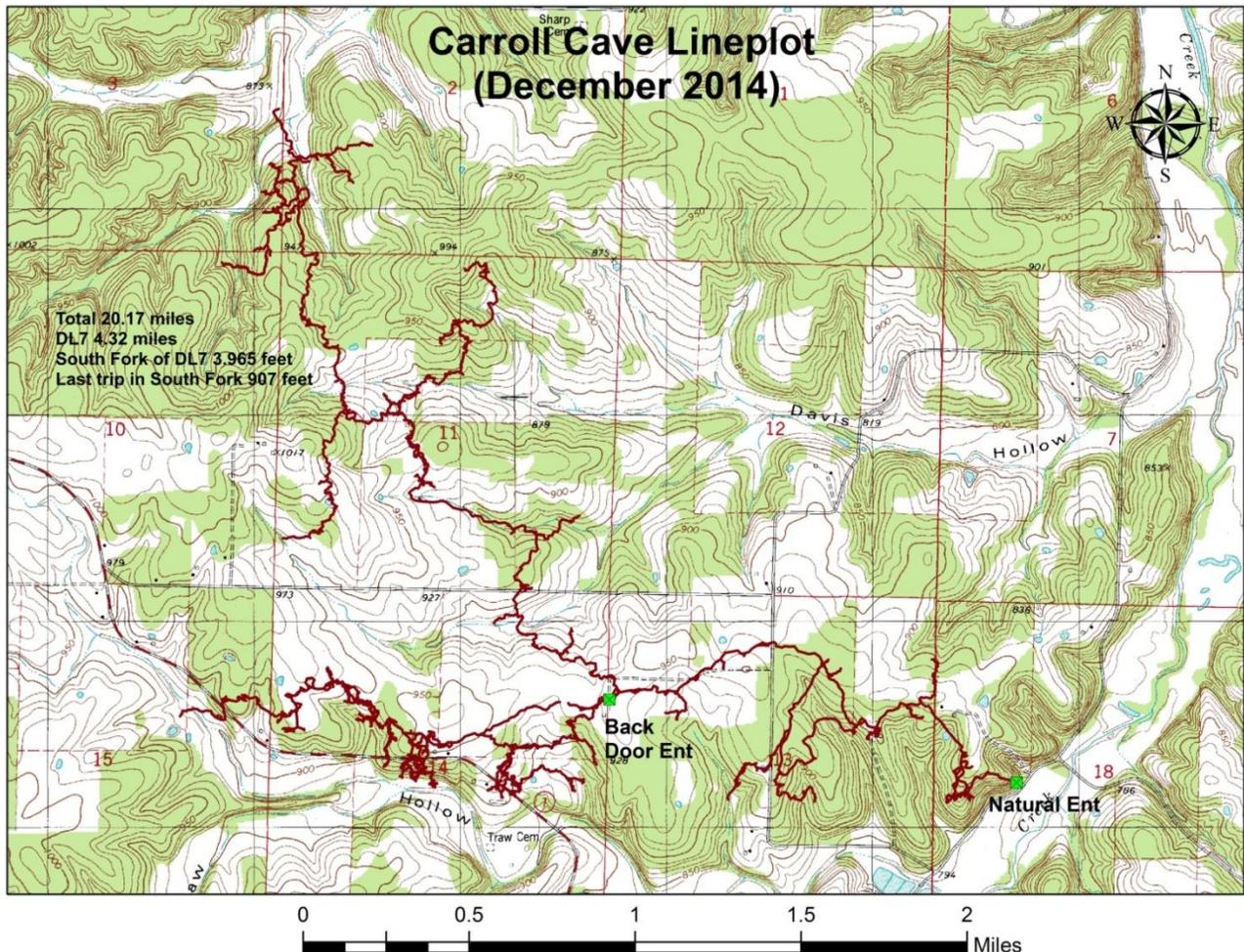
created an artificial entrance into Carroll Cave. The Backdoor Entrance is a 118 ft rappel down a roughly 3 ft wide shaft which has an aluminum ladder running its length for ascending. The Backdoor Entrance leads to T Junction where all three arms of the cave meet.

The official reported length of Carroll from the first few decades of survey work was approximately 12 miles. It was known that more cave was there and indeed more than 12 miles had been surveyed, perhaps even a couple miles more, though maps and data from that era remained and still remain unpublished. Most of the early survey was of the mainstream passages and few of Carroll's many side passages were ever fully mapped, though some such as parts of UL2 (also known as the Convention Hall passage) were. It was in the many side passages that the contemporary survey was able to push the cave to the twenty mile mark which includes UL2 and UL3, both large Upper Thunder River side passages which exceed over a mile each in surveyed passage and DL7 which exceeds four miles of survey and is still going. Throughout the efforts of the CCC mappers very little virgin passage was encountered. A bit here and there in some of the side passages, though most

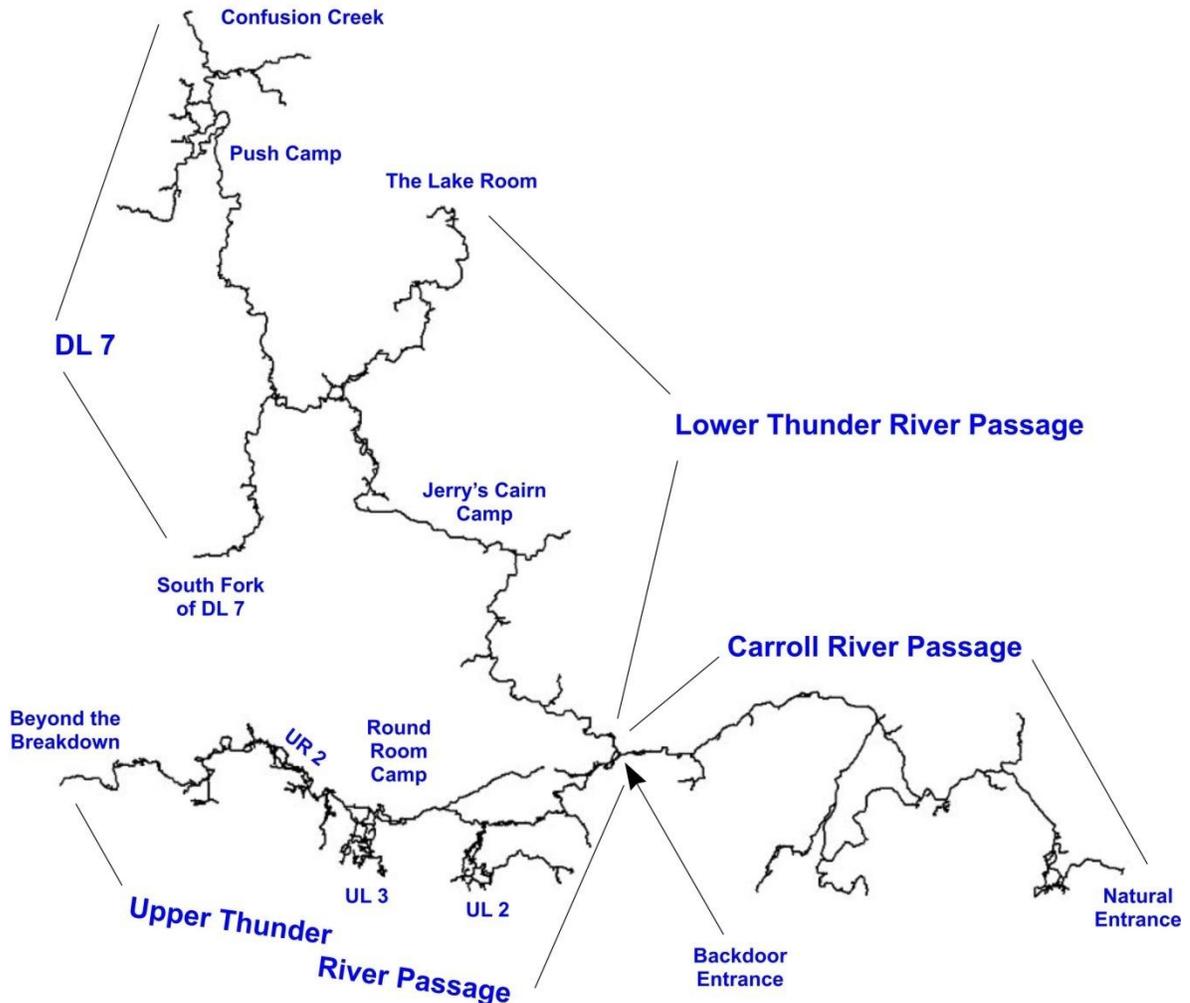


118 ft shaft at the Backdoor Entrance.

- Photo by Tony Schmitt



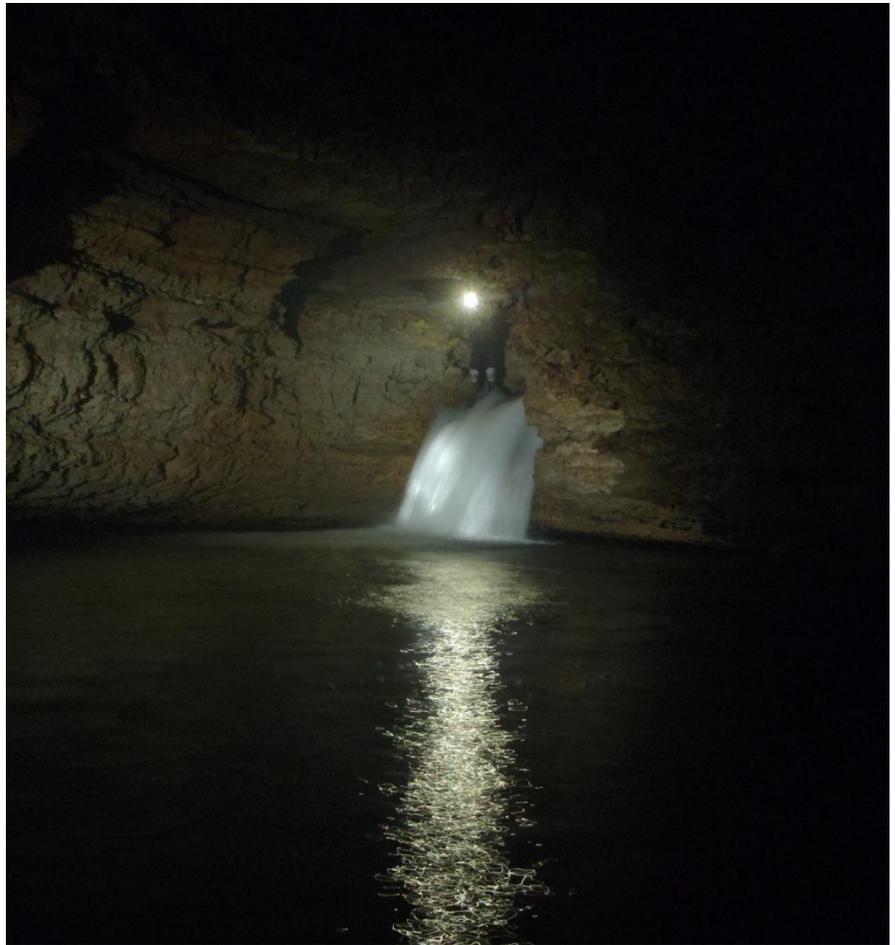
of the side passages were mapped following the prints of a single explorer or very small group. Much of the solo exploration is believed to have been done by Tim McClain, an eccentric caver who now digs extensively in Arkansas' Ennis Cave. Whether it was McClain who did all of the solo scooping or not it was quite expected throughout the survey that the passage ahead would be "McClained." The biggest exception to this was the L6, L7, and L8 side passage complex at the far northern end of DL7 in Lower Thunder River. Places with names such as Moonwalk, Barter Town, Van Goh's Hall, and Shelfstone Canyon were all first seen by us and to this day have only been seen by us. This was all virgin discovery, over a mile of exciting passage in the most remote part of Carroll. A jackpot pittance for hard-paid dues. There are still grim leads with great potential in this part of the cave, though getting there from the Backdoor Entrance requires 6 to 8 hours of often strenuous caving. After a few grueling camp trips back there we've decided that trips to the north arm of DL7 from Jerry's Cairn are the best way to go, in order to avoid the painful drudgery of lumbering 40 lb packs up and down the endless mud slopes and consuming muddy stream crossings of the Hills of Hell. Jerry's Cairn is about two and half hours from the Backdoor Entrance and then an additional three and a half to four to promising, though low, wet and muddy survey leads in DL7. It's from Jerry's Cairn camp that most of Lower Thunder including nearly all of DL7 was mapped. Though that's another story.



Carroll Cave has three distinctive arms, each with their own character. For most of the cave's anthropogenic history the Carroll River passage has been the most commonly traversed. From the Natural Entrance explorers had to enter via canoe or some other watercraft initially. Carroll River is all large walking borehole in a pooled stream and is some of the most decorated cave passage in Missouri. All together there are nearly five miles of passage in the Carroll River passage, including side passages with the main trunk being over two and half miles of impressive passage with large glistening formations and long stretches of deep, slick and consuming mud.

Carroll River passage ends where it intersects Thunder River, the larger stream within the cave. Throughout the cave's geologic history it appears much change has occurred over time. Originally Thunder River, which gets much of its water from Traw Hollow, a large sinking stream on the surface, flowed through Carroll River passage and out of the Historic Entrance, into Mill Creek. At some point the stream was pirated midway through its course and began heading north into what is now Lower Thunder River towards the Lake Room where the cave sumps and the water reemerges at the surface a few miles away at Toronto Springs. Along the way Thunder River encountered the formidable DL7, a cave within a cave, within a cave.

Thunder River pulses some 30 ft below where the Carroll River passage ends. This is called T Junction and is the site of the Backdoor Entrance. For the original explorers, Thunder River was no doubt a cave within a cave, and DL7 even more so. Just downstream of T Junction one approaches Lower Thunder River, which begins at Thunder Falls, a five ft tall waterfall that rages into a beautiful lake room. The original explorers called this area going down into Lower Thunder River, Hells Canyon. All together Lower Thunder River consists of over 8 miles of surveyed passage. This is where we still expect the greatest potential for the cave to continue going. About 2/3 of the way down Thunder River DL7 is encountered. DL7 stands for downstream Thunder River, left side of the passage, 7th side passage; hence D (downstream) L (left) 7 (though it's not the 7th side passage; more like the 3rd or 4th.) Lower Thunder is not very decorated, though in places it's incredibly impressive. Most of Lower Thunder is really wet and bleak. Long stretches of deep mud holes and even longer stretches of crocodile crawling through the shallow stream to avoid the mud largely defines half of Lower Thunder. The other half, downstream of Jerry's Cairn lacks the pools, but still has the mud and countless slopes.



Thunder Falls, 2011 - Photo by Sikorski, Lamping and Crews

Most of the formations in Lower Thunder River are re-dissolved due to the passage frequently flooding when water from DL7 and Upper Thunder eventually exceed what the sump or siphon in the Lake Room can pass. This causes all of Lower Thunder to go completely underwater. It took us years of blissful ignorance to realize how dangerous Lower Thunder can be as we originally assumed that since the passage is so grand it likely doesn't flood to the ceiling often. Wrong. Usually at least once a year all of Lower Thunder River becomes sumped. We realized this as we often found some of our camp items



Bob Lerch in typical Upper Thunder River passage.

left in the cave for frequent use (tarps, water bladders, sleeping pads) moved around by slow moving flood waters. At one point we staged camp gear at Push Camp at the back of DL7 for a long survey trip. We entered Friday night for an extended camp trip and expected only to make it to camp by early Saturday morning to sleep. We were relying on stashed gear such as sleeping bags, pads, food, etc. which had been stashed a few months prior. As we made our way a couple of miles into DL7 we found the first dry bag, swamped in the stream about a mile downstream from where it had been left. We knew we were screwed. We made it to camp and found that all of our packs had been blasted away by flood waters. It was too late to turn back. We needed sleep and then could make the long journey out of the cave, defeated. There were four of us. One caver, Roger Webb had all of his gear for the trip so he was fine. Myself, Bob Lerch and Ben Miller were totally "FUBARed." None of us had a sleeping bag and two of us had a sleeping pad. I put on every dry stitch of clothes I had and a trash bag for a blanket and smeared myself onto half of a sleeping pad as all three of us tried sharing the two which Bob and I had. Ben got the middle and stayed relatively comfortable. It was the worst night of "sleep" I have ever had being on the edge of the pads and without a sleeping bag in a cool 56*, muddy temperature. Calling it the worst night of my life is no small claim given that my one year old daughter doesn't sleep. Ever.

Upper Thunder River, the arm of the cave visited on our most recent trip and the subject of this article is a spectacular arm of the cave. It also begins at T Junction at the end of Carroll River near the Backdoor Entrance. While the impressive Thunder River meanders through it, the deep mud and long pools of Lower Thunder aren't present and the passage is considerably tall, usually 30 ft tall or so. All

together Upper Thunder River contains about seven miles of surveyed passage with two side passages that each contain over a mile of passage. The first half of Upper Thunder is a large canyon with dramatic ceiling ledges, swaying meanders and several crotch deep pools. Eventually, a mile or two in, just past the Bone Room, the passage splits into an upper level which crosses major breakdown rooms and requires numerous jumps across sketchy ledges 15 - 20 ft tall and a lower stream level which is all walking clean-washed bedrock and gravel floored passage but requires a wetsuit given the deep pools. The upper route is the more often followed and was the route taken for our most recent survey.

For nearly a decade we've had an extended trip into Carroll between Christmas and New Years, the longest of which was five days at Push Camp in DL7. It had been years since we camped in Upper Thunder River, the site of our first camp trip over a decade ago. We had hoped to go back down to Lower Thunder originally to push leads in DL7 since the last time we were back there was Labor Day Weekend 2015 for a multi day camp trip with six people. We ended up departing with only a few hundred feet of new survey as our primary objective, a low lead beneath a valley floor, had too much water in it to push. Defeated and given the constraints of life, we didn't do a camp trip over the 2015 holiday season so we were eager for 2016. When we decided life was going to allow us to go in this year Lower Thunder River was initially suggested but once we found out we would be working with a skeleton crew we were quick to consider other objectives and finally settled on picking away at grim leads in Upper Thunder River. At this point nearly all of the leads in Carroll are grim, though we've not given up on her and Upper Thunder River still needs some lovin' and can yet produce more cave.

Most of Upper Thunder was mapped as long day trips ranging from 12 to 18 hours on average, with a few camp trips up there over the years. Upper Thunder was the first passage the CCC survey took on in the early 2000s. A transit was used for the mainline survey of Thunder River and large side passages such as UL2 and UL3 yielded exciting finds in complex cave. UL2 is a giant canyon and has the largest tributary within the cave system and UL3 is a three dimensional maze of interconnected crawlways with three distinct levels and four entrances into the passage. This is where Tony Schmitt, Joe Sikorski and I, along with the other primary surveyors of Carroll really cut our teeth. The first of any MVG'ers to help survey in Carroll was Ashley Sikorski, who at the time had just started dating Joe. Val Schmidt and I went soon after and helped with a bio inventory to count fish. Val went into Upper Thunder and I, along with Heather Levy and Lawrence Ireland, went into Lower Thunder down to DL7, counting around 70 something cave adapted fish (*Typhlichthys eigenmanni*) along the way. I recall making it down to DL7 and entering only to find massive, dark passage 30 ft tall and 40 ft wide with miserably muddy, steep slopes that rise and fall between a tiny clear stream which slithers back and forth around slick, switchbacking meanders. At that time I had only surveyed on a few occasions and had never been so far into a cave. I was new to caving but knew enough to realize that mapping this passage, so muddy, so imposing and hours away from the entrance would require a sick and twisted perseverance. I was blown away and recall a feeling of dread for the people who would map it. I wondered who it would be and certainly didn't expect it would be me. A few years later after toughening up and learning how to cave in Carroll through our experiences mapping in Upper Thunder and Carroll River, I was at that exact place in DL7 sketching as we mapped our way into the remote beast. DL7 is formidable. It is remote. It still goes. I'm hooked.

Typical of Carroll trips, Bob Lerch, Josh Hafner and I met an hour or two later than our planned time on the morning of Wednesday, December 28, 2016. The plan was to meet around 10:00, we met around 11:30 and were in the cave by 1:00 or so after rigging, catching up and preparing at a gentlemanly pace. Joe Sikorski was originally going to join us but had to bail last minute due to life. Our plan was to go in Wednesday, camp at the Round Room in Upper Thunder River and head out Friday, December 30th. Usually for camp trips we have to strategically pack large SealLine backpacks, made of PVC. This typically involves several dry bags within dry bags as the trip into Lower Thunder River, our usual camp destination requires long stretches of floating the camp pack behind you, tethered to the

waist. But in Upper Thunder the pack never touches the water, which gave Josh and I the chance to go in with plush backpacking packs with comfortable support straps and padding. Both mine and Bob's pack were probably around 40 lbs. Josh's, without his camera gear even, was probably 539 lbs, conservatively. More on why later.



Josh and Bob at UL2

which is exceptional in low light environments. Not using any flash and using only headlamps the camera takes high quality pictures which most truly captures the lighting, colors and shadows of really being there, often better than a flash could. It's also waterproof and in a protective case. In addition, I stored it in a small Pelican box clipped to my pack, making it easily retrievable for quick pictures, which we took a lot of on this trip.

By the time we made it to camp it was late afternoon. Our camp, the Round Room, is a little past UL2 or the Convention Hall Passage as it's sometimes called, and just a bit beyond Black Rock Falls and UR1. The Round Room is as it sounds, a round room situated a bit off and above the stream passage. Overall the relatively flat camping area is probably 30 ft in diameter and over 20 ft tall, so it's deceptively spacious. Throughout the room are steady drips which come from the ceiling making the hard clay floor sloppy in places and turning prime real estate into unusable empty space. There was plenty of room for all three of us to find flat, dry ground, though we all had to sleep in different orientations and another person or two would have made for cramped sleeping arrangements. In our first camp trip to Upper Thunder we used the site and packed people in there. Tony, Sikorski and I

Josh had only been a short distance in Upper Thunder a couple of years ago, so most of the passage he would see was new. Our trip upstream was casual and comfortable. The route is marked relatively well with small reflectors which suggest when to cross the stream, which slopes to climb, when to follow the meander, etc. Between using these along with Bob and I's cloudy recollection from frequent travel through the route so many times over the years, getting to camp was a breeze, especially with the comfortable packs and not having to wear a wetsuit nor deal with the soul sucking mud of Lower Thunder. Something unique about this trip was that on the way in and throughout the entire trip, we took frequent photos, far more than usual. Over the years many of us had tried capturing our survey experiences with photos. My earliest Carroll pictures were taken with film using the proverbial caver classic, the Pentax WR-90 rather than digital. Nearly all of our photos over the years were with point and shoots. While today they make great trips down memory lane for those of us who were there, they're largely foggy, orby snapshots of misery for anyone else. Today things are different. Josh had his digital SLR with him along with a Go Pro which he used exclusively for still shots rather than video and I had my cyborg extension, also known as a Samsung Galaxy 6 cell phone. Of course there's no reception in the cave, but the phone has a remarkable camera

opted to camp a bit further upstream on that trip at the entrance of UL3, or what we called Jeffco Camp. It sucked.



Bob and Dan at Round Room Camp - Photo by Josh Hafner

We unpacked a bit at the Round Room and decided to make our way upstream to begin picking away at leads. Our goal was to go up to the Phantom Side Passage to check on a lead Bob believed needed to be finished. We passed the many entrances of UL3, made our way up into the Bone Room, passed UL4 and just beyond the climb down past UL4 which one would take to enter UL5 we noticed an upper lead on the left wall, high above UL5, heading towards UL4 (UL4 and UL5 are the same passage, it's just a large narrow canyon that widens at the top with UL4 being the upper and UL5 being the lower, stream level.) It

looked as though if one went back towards the UL4 entrance and skirted along the wall by the climb down perhaps the passage could be accessed. We decided that picking away at little leads like this was the



*Josh peering out of the alcove above UL5
with Bob in the background.*

purpose of the trip and no doubt if this went it would be virgin. Josh agreed to try it out and Bob followed along to help. I stayed down near the stream below to watch for Josh's light coming out of the passage and to get a photo in case Josh was able to get into it. With minimal effort Josh was able to get into the passage. I could see his light and hear him making his way to the lead. Initially he crawled past the little window above the stream, but he came back and peered out some 25 ft above the stream. He went on to further check the lead and reported that it quickly ended. He did decide to give it a go digging a bit so Bob urged him on while I waited below. After 20 minutes or so we called it off and finished the exploration of Josh's virgin alcove.

With time left in the day we made our way further upstream to check the lead off the Phantom Side. This area of the cave requires a bit more climbing up and down muddy ledges which are steeply sloped and downright vertical in some places so one has to be careful as no footing is solid nor are any handholds. Combined with the Jumps further upstream, it's one of, if not the most sporting sections of the cave with some sketchy exposure in places, though never bad enough that most cavers who are capable of getting there ever have much of a problem beyond having a healthy respect for where they are. We made it to the Phantom Side pretty quickly. While I knew where it was, I had not ever been in

it. The name is a reference to its elusiveness. That area of the cave is vast and is a nightmare for sketchers as there really aren't absolute walls which can ever be seen from any one place. So, the passage can be 100 ft wide or wider up there but not at all appear so. When the section was initially surveyed,



Ben Miller was sketching. *Josh admires formations in the Phantom Side with Lerch in the background*

Given the complexity of the area and perhaps an eagerness to get the big stuff mapped, the side passage was missed and drawn in as a wall. A few years later Spike Crews, who is drafting that quad of the map (Sheet U3) went in to better define details of the sketch and found the Phantom Side Passage thereby giving him lifetime rights to bust Ben's balls anytime he wishes. Sadly Spike has the same claim over me given a low crawl I missed while sketching in UL4. It happens. Overall, the Phantom Side Passage isn't very long, mostly crawl, though one does enter the passage via climb-up a breakdown slab which creates a small bridge leading into a sizable room with some really nice flowstone. From there a few hundred miserable feet follow.

Once we realized there was nothing to do off the Phantom Side and seeing that it was getting late, we made our way back to camp at the Round Room, which was little more than half an hour to 45 minutes away. In Carroll, everything is mud and camp is a refuge. Typically we lay out one large, communal tarp as a base and then individual tarps on top. From there camp consists of a sleeping pad, light sleeping bag, a dry set of clothes, lots of food, a couple pots, a few backpacking stoves, pee bottles, burrito bags, communal water bladder, a wee bit o' whiskey and lots of good humor. Tricks of

the trade include changing out of wet, muddy, foul clothes and getting onto the tarp without making a mess, to put on the warm, dry clothes of camp, and then finding the courage to put the wet, muddy and now really cold clothes back on the next morning. Others issues include waking up in the middle of the night, morning or day, whenever one's sleeping, and scrambling for a head light in utter darkness, then trying to pee is a small plastic bottle that gets just as full as the nights and mornings are long. Often our sleep schedule gets twisted around on camp trips because it's typical to head in on a Friday evening, though on this most recent trip we went in mid-day and kept a regular schedule. Most of the time we eat backpacker style, freeze dried meals, which means eating from a disposable bag, creating no real mess to clean up, just adding boiling water to a package and then waiting impatiently for what the package recommends to be 10-12 minutes, but feels like 30 minutes and really is only about 8 minutes and 30 seconds.



Josh fills the water bladder from Thunder River

Lightweight and efficient. Josh however, on our most recent trip, amplified Carroll's culinary experience light Electric Mud. Bringing no freeze dried meals, Josh went old-school and brought pasta, etc. to boil in a pot. Most impressive was that he carried in eggs. Not powdered eggs. Fresh eggs, out of the shell and packaged in tiny, disposable, plastic water bottles. These he cooked on a small skillet with sausage to make a grande burrito, the likes of which would shame even Taco Bell's largest. Delicious, no doubt, and entertaining to watch, of course, there's a reason Josh's pack weighed 946 lbs compared to our 35-40 lbs. Other luxuries which added to Josh's pack weight included a separate pair of shoes for camp, (we have all tried this at one time or another but most have settled on using a ziplock back as a semi-water resistant, dry sock condom, which serves as an ineffective barrier between a wet, muddy boot and a dry camp sock.), a large LED lamp for mood lighting in camp, an entire tool box complete with emergency bailing wire, 17 lbs of extra food, a complex water filtration system, similar to those used in dystopian future movies, like Mad Max (most use iodine), 3 gallons of hipster beard oil, and the latest issue of Vanity Fair magazine. .

Camp discussion weaves in and out of normal chatter, serious discussions, obscure movie and song references, random screaming, Joe Sikorski singing haunting songs from the 80s, frequent farts, inside jokes which make no sense to anyone but us, and often times, little sense to us, reminiscing on past trips, perseverating on most topics and serious ball busting of one another and anyone else who comes to mind. Perhaps you, at some point. Topics on this trip included Josh's robotic job killing for low skilled workers, his un-Trump-like job creation for skilled workers, Millennials, the sometimes misguided wastefulness of well intentioned, but short sighted environmentalism, survey objectives, old stories and a detailed discussion on Burrito Bag etiquette. It seems we all have a different approach to those most personal, morning bowel evacuations. We learned of Bob's dodo bird-esque nesting ritual when pooping, which includes putting a large piece of aluminum foil on the ground, squatting, hovering,

circling, aiming, hoping, wiping and then cleansing. For me, it's simple. Oven bags for turkey or just a regular plastic grocery bag, held up to the ass and then double packed in Ziplock bags. It's worked so far. We also debated the finer points of where to go for such rituals. Heading in the direction of downstream, out of camp meant an easier walk with only one slick slope to style down, but with no access to water in the event of a messy mistake or heading upstream out of camp which means down climbing a steep muddy hill, requiring the use of hands on mud, which is getting serious when one is in the comfort of clean camp clothes. Though with this way comes access to water.

After a hearty breakfast of oatmeal for me and a five star, glamour burrito for Josh, we performed the above described morning rituals and began the slow process of packing for the day. Our objective was UR2, meaning the second side passage on the right side in Upper Thunder River. Bob, Tony Schmitt and Amber Spohn had begun the survey of this passage a few years ago. It's located at the bottom of a muddy slump pit just before the most gut wrenching of all the Jumps in Upper Thunder. Accessing it was easy though entering it required passing through knee deep mud. A couple hundred feet of mostly walking passage had been surveyed by the previous team. They left it in walking passage, though one had to shimmy through a tight meander to get to the end of survey.

After a few survey shots we came to a tight constriction, within a meander. It was obvious someone had passed through it, though the approach was awkward, requiring one go head first, slightly leaning down slope, with feet

kicked high up overhead, which is always a bit unnerving. Bob was lead tape, Josh was foresights and I was sketching. Both Bob and Josh hemmed and hawed about the constriction. Each entered part way then backed out. While it was certainly tight, the greatest part of the perceived barrier was a commitment to smear oneself into it and no doubt get slimed by the ubiquitous Carroll mud. Not wanting to end the day of survey I attempted passing through it.

While both Bob and Josh are taller than I am, my chest is

broader and my bubbly ass far more buttilicious than either of theirs. I set down the sketch book, slipped on my gloves and made my way partly into the turn, about as far as they had gone. I paused, realized I could likely make it if I wanted to, and pushed ahead. Once through the tightest part and out of the meander I was standing in spacious passage 6 ft tall and 5 ft wide, with the passage continuing at the same dimensions for at least another 30 ft. Each of them then came through and we continued on into the survey. We encountered two more really tight constrictions, which like the previous, had been passed by what appeared to be just a single person. In Carroll one can't help but leave their mark given the muddy nature of the cave. Passing through what was virgin only a few times by a small group really leaves behind a visual impact once the mud is disturbed. Because of this, it's not too tough to gauge how much traffic a passage has seen.



Dan Lamping's feet flailing about, pushing through a tight squeeze

Now that we were all fully covered in mud, the other two constrictions did not seem so daunting. Though each were probably a bit tighter than the first constriction, they were also easier to excavate, which Bob graciously did. At our last constriction, one had to climb above a large mud bank which went about a body length and was no taller than my butt is big. Awkwardly, the floor dropped about 6 ft at a 90 degree angle at the end of the constriction, meaning one had to swing their legs out from under them and sprawl out across the mini mud pit and then

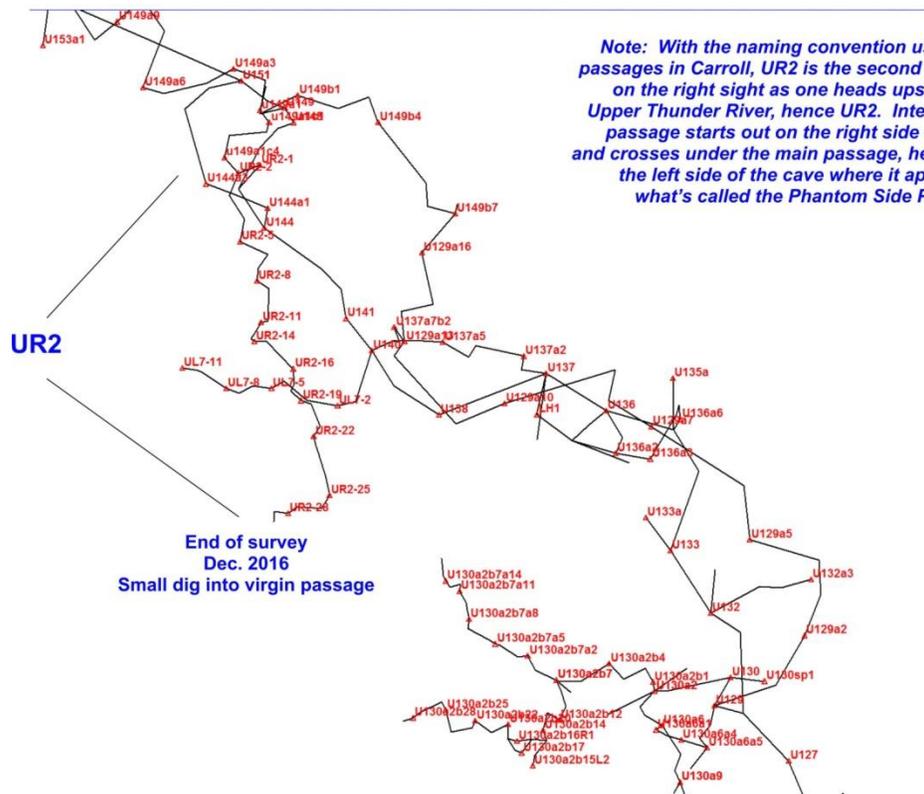


Surveying beyond the first constriction.

down climb without the slick mud walls aiding gravity's subtle grip. It was here that I puckered a little more than my compadres as each have longer legs than I. Totally lacking grace and grateful for making it without injury we were able to pull one more shot before another, even tighter constriction was encountered. This one however, was virgin. It would no doubt require some digging with a trowel to get through the tight spot which is high above the floor and no taller than 6 inches and about 1 ft wide. It was here, just as the initial explorer had decided years ago, that our tour would end, with the mental note that someday this may be a lead worth returning to, so that a whole day can be spent digging and cussing only to find another impassable constriction around the next bend. With that in mind, adventure awaits, as it does appear the passage is walking height beyond the rabbit hole, with a tiny trickle of a stream,

though it's probably only 2 ft wide. Who knows, it could go. We made our way back to camp without incident, though one of the down climbs just before the Bone Room caused some trepidation for me. Covered in mud, as slick as it were cooking oil, I began the down climb which is overall about 12 ft high, though not sheer vertical. I slid a bit,

Upper Thunder River
mainstream survey



lost my footing and caught myself. This caused a momentary retreat on my part. Josh came up on me and I told him to go ahead. Like the glistening bearded stud he is, he made small effort of the climb, which jostled me to get my ass in gear. Without problem I made my way down. On the way back we passed UL4 again which is at the top of the Bone Room so named because Pleistocene Era bones were discovered there years ago. Interestingly though, this place is miles from an entrance. The mega fauna bones and the presence of thousands of bat bones littered across the floor throughout much of Upper Thunder suggests that at one time a paleo entrance must have been nearby. When Tony and I first began mapping in UL4 over a decade ago we discovered some very large claw marks on the wall. Bob encouraged Josh to go in and see them, expecting me to lead him. This is the problem caving with old crotchety cavers like Bob. Most of their good ideas require you to carry them out. Josh and I went into the passage a bit, got to where we'd have to crawl, looked at each other and without much of a word mutually agreed to turn around. Bob busted our balls and we sauntered our way back to camp.

Once at camp we all had to make a decision. Totally covered in mud and with plans to head out the next morning, what was one to do? Clean gear and clothes in the stream, thereby making it wet and heavy or not clean it in the stream and leave it damp, muddy and heavy. All three of us opted to clean the mud off and drip dry our clothes, which mostly worked. That night we ate, told stories, laughed, probably made fun of you, sipped some whiskey and passed out. The next morning we slowly progressed through the various stages of packing. As usual I was first to be packed and Bob was last.

On the way out we took our time and snapped quite a few photos with my phone and up to T Junction sometime around noon or so. After preparing our heavy camp packs for the haul out, Bob ascended in order to get changed and get his truck fired up to haul out the packs. I followed and Josh valiantly volunteered to go up last, committing him to clip each pack onto the haul rope and likely meaning he'd be the one to de-rig since Bob and I would already be dressed in clean clothes by the time he got out. What the hell am I saying? Josh was destined by his youth to de-rig regardless of who went out last. For the first few years of camp trips the worst part of the trip was hauling the heavy camp packs out, hand-over-hand with a pulley. This usually required taking turns in pairs and was absolutely miserable. Ass whooped after days underground, grateful for the scent of the surface and eager to rip off every wet, muddy stitch of stinky synthetic clothes only to have to pull dead weight packs, stuffed with muddy, waterlogged gear up a 118 ft shaft assured that every trip ended with arm muscles overworked and aching. One day, after a couple years of unquestioningly enduring this closing ritual, the obvious struck us like an apple falling from a tree. Why not drop a haul rope, tie it to a truck and slowly pull the packs up using combustion and steel? It worked and we've not hauled a pack manually since. On this particular trip we rigged the pit a bit different than normal placing the rope in the center of the shaft by tying a butterfly knot which was clipped into two webbing slings which were anchored to the wall and from that a lead to a figure 8 which ran up to the rescue hatch which is centered above the shaft. Balancing the load between the two put the rope in the center, making for one of the smoother rappels I've had in there and allowing us



Lerch and Hafner climbing to the entrance

to use a haul rope without having to pull the climbing rope as there was just enough slack in the rig to allow for us to open the shaft which pulled the climbing rope up against the wall and out of the way for hauling packs. It was a serendipitous breeze which worked perfectly. Bob used his truck to pull the packs, Josh stayed at the bottom to clip packs onto the rope and I watched each pack slowly pulled up and hollered to Bob as they got to the top, leaving enough slack for me to yank them over the lip, unclip them and set them back down. Shortly after all three packs were up, Josh made his way to the top. By that time Bob and I were changed and onto beer. We made Josh de-rig of course and then helped with the haul line. It was a slightly windy, cool, sunny day. It was beautiful.

By the end of the trip we checked off a few leads and mapped 217 ft. In a 20 mile long cave, that's



Dan Lamping after exiting

nothing. This article is longer than that! But that's where we're at in Carroll right now. Far beyond the point of diminishing returns every foot we add is intensive and at times degrading. I don't know how many trips I've done into Carroll over the years. When the survey first began trips were the first full weekend of each month. I made most religiously. As the trips got tougher and fewer people showed up, a small, core group formed, who along with others here and there, mapped most of the cave. I would guess I've been in the cave 30, maybe 40 times. Maybe 15 of those have been camp trips. Perhaps more. The longest was six days straight and we camped in both Lower Thunder at Jerry's Cairn and then in Upper Thunder at the Round Room, for no good reason, other than because. Overall I'd guess I've spent, months of my life, collectively accumulated over the past 13 years, exploring, mapping and sleeping in Carroll Cave. Because of that, this article has been a long time coming. On several occasions, since my involvement in Carroll began, I started articles following a trip and never finished them. Wanting to avoid that habit with this article, what was originally going to be a short piece on an inconsequential trip, turned out to be a nostalgic journey into a rabbit hole 22 pages long. To learn more about the project as a whole, look to the 2015 NSS Convention Guidebook where several of us pooled our efforts together to write a more comprehensive article. Because of publishing constraints much of what was written had to be cut and much of could have been written about wasn't even scratched upon. This led us to treat the Guidebook article as a rough draft for a more voluminous publication in the future which we someday hope to publish as an issue of *Missouri Speleology* or even a small book. There you can expect to see these ramblings and more. As others have no doubt felt about it in the past and as others will surely feel



Dan Lamping waiting to climb

about it long after I'm gone, Carroll Cave is my cave. I know my brothers and sisters whom I've been fortunate enough to share these experiences with feel the same way. Our hope for 2017 is to get a few more trips in than what we got last year and the year before. Hopefully those trips come to fruition and yield more survey footage than the number of words used to describe this most recent experience.



*Above: Hafner, Lerch and Lamping in the silo before entering. The hatch at the bottom is directly over the shaft, whereas the one closer to the entrance is what one climbs down to access the shaft.
- Photo by Josh Hafner*

Right: Josh Hafner in Upper Thunder River.





*Above: Josh Hafner thinking about how cool his beard is.
Below: Bob Lerch also thinking about how cool Josh's beard is.*





Above: Bob Lerch at the SLUG Cairn in Upper Thunder. This was made on the second exploration trip into Thunder River in 1957.

Below: The Second Azure Pool. - Photo by Dan Lamping





Above: Dan Lamping admires the Second Azure Pool. - Photo by Josh Hafner



Above: Dan Lamping and Bob Lerch in Upper Thunder River. - Photo by Josh Hafner



Above: Dan Lamping in UR2. / Below: Bob Lerch digging with a survey tape. - Photos by Josh Hafner





Above: Dead bat with mold and springtails in Upper Thunder River.



Above: Dan Lamping and Bob Lerch in Upper Thunder River.



*Above: Josh Hafner and Bob Lerch in Upper Thunder River
Below: Bob Lerch reads clinometer as Dan Lamping sketches in UR2. - Photo by Josh Hafner*



Note: Unless otherwise noted, all photos taken by Dan Lamping, Josh Hafner and Bob Lerch.