

Dive attempt to connect Mertz to Crevice Cave and a dome climb in Mertz to find another entrance

SATURDAY, AUGUST 28, 2010, PERRY COUNTY, MISSOURI

**A compilation of trip reports by Paul Hauck, Edmund Tucker, Rob "Bobcat" Kavaliauskas, Kiley Bush, Shannon Wallace, and Chad McCain
(edited by Edmund Tucker)**

People wishing to view a video of this trip may do so by visiting: <http://www.ocda.org/NewMertz.htm>, completely filmed and edited by Bob Koch. Special thanks to Chad McCain for single handedly coordinating this historic cave trip. The trip went very smoothly underground because it was so well planned above ground.

17 cavers from six different caving organizations, three divers, one videographer, one photographer, three rafts, eleven hours, and two missions: connect Mertz cave to Crevice Cave underwater, and a climb up a seventy foot dome to find another entrance. Right off the bat, you're probably thinking, that is way too many cavers to take on such a seriously tough trip. Well, for this trip, that amount of people was intended and necessary in order to transport the larger than usual load of combined cave gear that was used to attempt both the dive and the climb. I'll explain why later on.

The previous afternoon, Paul Hauck and Chad McCain, with chainsaw and machete in hand, went down the roadway to the cave to remove a large, fallen limb and generally clean up the route for the vehicles. They were also taking a raft down to the cave for the equipment transport the next day. During the cleanup, Chad noticed that he had gashed a hole in the raft with the machete, but was able to repair it that night and still use it on the trip Saturday. After cleaning up the roadway to the cave, Paul and Chad went over to the suspected area that lies over the dome that was to be climbed in the cave the following day. They

were looking for any possible openings that would allow human exit, sound connection (air horn, or screaming), or smoke connection from the cave. Nothing presented itself.

The seventeen cavers who made this long journey are listed below, along with their grotto affiliations: Paul Hauck (LEG/SEMO), Richard Young (LEG/SEMO), Don Bittle (LEG/SEMO), Edmund Tucker (LEG/SEMO/NNG), Rob "Bobcat" Kavaliauskas (SEMO), Eric Hooper (SEMO), Ralph Sawyer (NNG), Jennifer Thompson (MVG/SEMO), Joe Nicolussi (MSM), Kristin Nicolussi (MSM), Tyler Allen (MSM), Kiley Bush (MSM), Michael Bradford (MSM), Laura Sisken (MSM), Bob Koch (Ozark Cave Diving Alliance-OCDA), Dirk Bennett (OCDA), Shannon Wallace (OCDA)

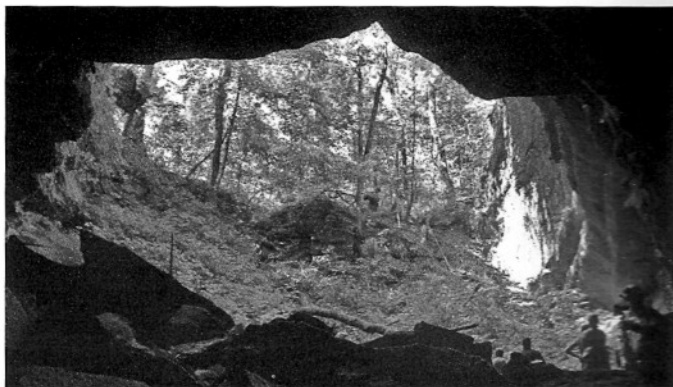
Three other cavers temporarily joined the group into the entrance of Mertz to help carry gear down the steep hill into the cave and bid us farewell once the swimming passage, called New Mertz, began. They consisted of Chad McCain (SEMO/LEG), Ted Mueller (LEG), and the legendary Joe Walsh (MVG).

This group all joined up at the Park-et for breakfast, along with four more cavers, who did not go on the trip: Kat McCain, Dana Hooper, Chris "Cowboy" Goodson (SEMO/LEG), and Doug Kettler (SEMO/MMV). Twenty-four total! That is a lot of cavers in an already packed, tiny diner on a Saturday morning! It was pretty wild seeing the line of vehicles all following each other from the Park-Et to the cave parking by the barn. It looked like a funeral was underway!

The morning started with a group

meeting of all the cavers who were going underground. It was established at this point that Paul would lead the front of the group, and Edmund would follow up the rear. They also went over several key points and specifics about the upcoming journey. What they were about to encounter, what to do, and where to do it, that sort of thing. Once the meeting was over, they headed to the cave. Paul had previously gained permission from the owner of the cave for this adventure, as well as permission from an adjoining landowner to cross the back of his yard with 4-wheel drive vehicles in order to haul all the caving, climbing, and diving gear down to the cave entrance. This made the quarter mile hike down the hill for the cavers a lot easier.

It was a slow process of actually getting everyone and everything into the cave. Eventually, the group managed to make their way into the low ceiling, swimming passage, known as New Mertz, not far from the entrance. This passage was deep enough that no one could touch the bottom, but it eventually opened up after a hundred feet into two large chambers about 35 feet high, called the Lake Rooms. These rooms were decorated, and Ralph Sawyer, the main photographer, stopped to take some pictures. There were three rafts used on this trip. One, which belonged to Chad, was inflated at the beginning of the New Mertz passage, to transport all the gear through the two Lake Rooms, which immediately followed. That raft didn't survive this task, and was popped beyond repair while moving through the small water passage, which connects the two Lake Rooms. Kiley was

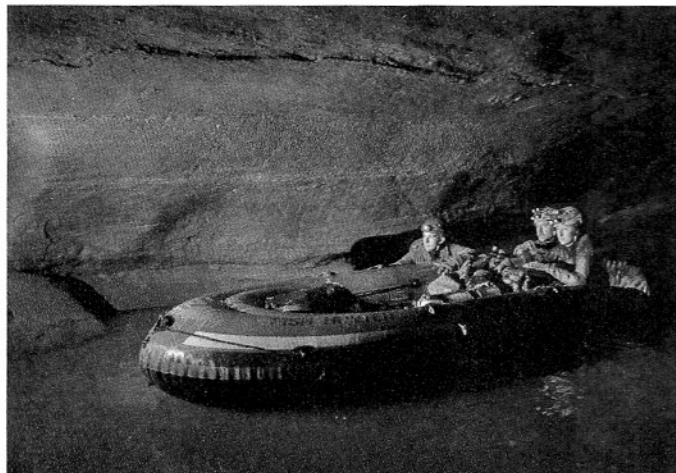


Ralph Sawyer

Cavers making their way down the hill into the entrance of Mertz Cave

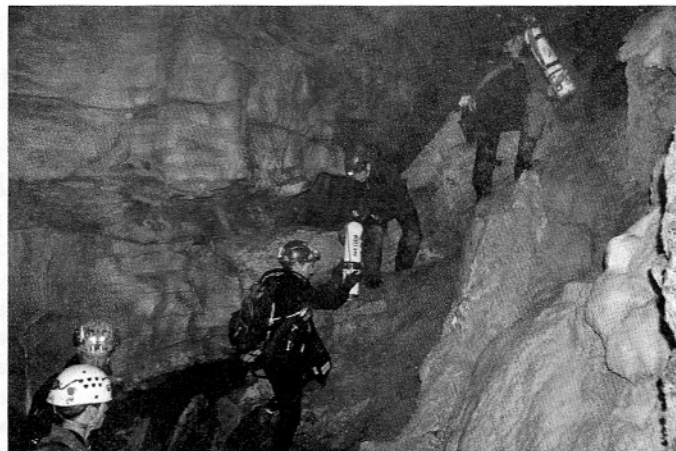


Edmund Tucker



Ralph Sawyer

Michael Bradford, Joe and Kris Nicolussi moving the raft along during the long journey



Ralph Sawyer

Cavers passing dive tanks up the breakdown pile. From left to right: Tyler Allen, Joe Nicolussi, Dirk Bennett, Michael Bradford, Don Bittle, and Richard Young.

using his three foot tall pickle barrel as a floatation device, and talked about how he felt like Bilbo Baggins riding a wine barrel out of the wood elves' fortress. This was his first cave trip in about 3 months, and by the time he reached the narrow passage on the other side of the lake, he was giggling like a schoolgirl. He has something of a fetish for water passages in caves, and had become overwhelmed by the awesomeness. At this point, they had been in the cave for maybe fifteen minutes.

Once through this section, the group was faced with a massive breakdown pile. In order to pass through it, all seventeen cavers followed Paul as they wormed their way through the combination of breakdown and small passage, forming a human chain, and one by one, passed along a long string of items. This not only included each individual's cave packs, some cavers having two or more, but also two hundred feet of rope, six dive tanks, three weighted dive vests, a video camera with tripod, and two rafts. The larger of the two rafts was twelve feet long and weighed roughly fifty pounds. In order to fit it through this small passage, it was tightly rolled up and bound with webbing, which earned it the nickname, "the burrito." It was truly awesome getting to be part of this experience, and watching all those people in both directions working together. Edmund noted, as soon as he would hand off a dive tank to Don Bittle on his right, Bobcat would be handing him another from his left. Finally, the item would find its way to the head of the chain to be stashed by Paul in whatever alcove he could find. After all the gear had been passed through and stashed, everyone would move forward and begin the routine all over again. It took an hour to make it through this section of breakdown and small passage, and a total of seven, separate bucket brigades. It must be noted how crazy it was as the group would advance up to a new section of passage throughout the

breakdown pile, and they would all get the opportunity to see the huge pile of combined cave gear in its entirety. The center of the pile stood about three feet tall, and took up a space about seven feet in diameter.

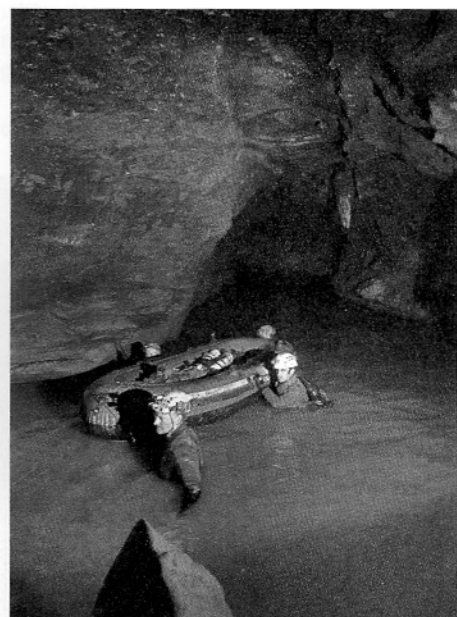
Once through the breakdown pile, we all congregated at the beginning of the one-mile long water passage. At this point, Edmund unrolled the large raft, and spent the next fifteen minutes inflating its five separate compartments with a battery-powered, air pump. The divers inflated their raft as well, and their Buoyancy Control packs (BCs). Kiley also took advantage of this opportunity to start up his carbide headlamp. Everyone threw all of their gear into the rafts, and we were off. The mud throughout this long, mile and a half section of cave is a real killer, and acts like quicksand if you stand in one place for too long, which everyone soon figured out while waiting for the raft to be inflated!

The water ranged in depth from six inches at its shallowest, to reaching points where nobody could touch the bottom. Luckily, the width of the water in this passage was always wide enough to float the raft through, and everyone was willing to take part in pushing it along the way. Edmund failed at his experiment to put on the diver's flippers, lay across the back of the raft, and propel it through the water. It sounded like a good idea at the time, but after five minutes, he felt his energy level dropping considerably!

The downstream parts of the passage are very exhausting because the mud is one to two feet deep and the water is seldom deep enough to effectively float. Some people did float along on their bellies and pulled with their arms, but sometimes the water got more than arm deep, and they'd get a face full of that sweet, fresh, farm runoff water. Kiley Bush refers to this method of caving as salamandering. This is the technique in which one floats across the top of the water on their belly, and pulls him or

herself through the water with their arms. Kiley enjoyed salamandering, and notes how he couldn't help but think that this would be a perfect cave for a cave steed. A cave steed is a giant asian salamander that has been raised from birth to allow a person to ride on its back. Someday, Kiley intends to have a cave steed of his very own. Most people just stayed on their feet and trudged through the deep mud. The upstream parts of the passage are relatively easy to traverse due to the deeper water. You just float and push yourself along.

It was a real challenge carrying the enormous raft over the two long portages. Up, across, and down two large piles of boulders blocking the water. The first of these two portages was pretty clumsy, due to the steep degree of incline up the boulder pile, combined with the relatively low ceiling. It was a group effort, very similar to being



Ralph Sawyer

Joe Nicolussi, Tyler Allen, Laura Sisken, and Kris Nicolussi moving the raft along during the long journey back out.

a pallbearer, and luckily, it was recorded on high definition video by Bob Koch, one of the divers, who did a great job recording throughout most of this trip. At one point, everyone was climbing up this rock pile, struggling to hold on to the raft, and Edmund noticed a foot sticking out from underneath it, coming from the middle section. He called out, "Who's under the raft?"

Out came the reply, "Me!"

"Who is that?" Edmund asked the group. Richard said it was Don, at which point, Edmund let go of the raft to see what the heck he was doing under there.

Don was lying on his back, splaying his body out like a snow angel, and calling out, "I'm trying to keep it from scraping the bottom!" Only Don would do this! He is always coming up with the craziest ideas!

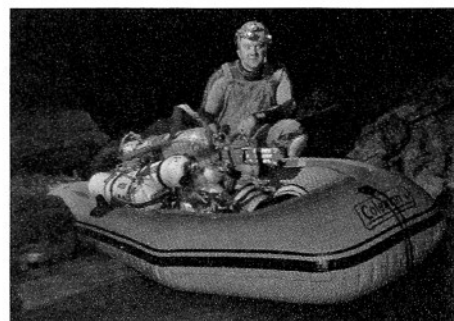
Eventually, the terrain of the portage smoothed out, and Don, Edmund, and Eric carried the raft the rest of the way across and got it back in the water. Ralph hopped in before all the gear was loaded back up, and laid down to take a short rest. Edmund started spinning the raft around and around in the water, which must have been a pretty bizarre experience for Ralph while looking up at the cave ceiling!

Once Eric and Edmund made it to the base of the second breakdown pile, the empty raft was floating there, but there were no cavers to be seen. They had unloaded everything, and moved all the cave gear up and across to the other side, and left the raft for Eric and Edmund. They learned it was much easier to flip the raft upside down and carry it like a canoe above them, with their heads inside the raft looking down at their feet. Pretty soon, Don joined them and jumped in between Eric and Edmund. Edmund notes that they must have passed the rest of the cavers, because he could hear them talking, although all he could see were his feet. Richard was walking up ahead of them, acting as their navigator. It was a

pretty memorable experience!

Three hours passed since the seventeen cavers parted ways with the other three cavers near the entrance, and finally they arrived at the large dome room, seventy feet tall, and twelve hundred feet from the end of the cave, where the cave dive was to take place. This dome, appropriately named the Big Room, is where Eric and Edmund began their mission of finding a way out to the surface by lead climbing. They had brought with them everything under the sun to use as anchors, ranging from webbing, wedge stops, hexes, and even bolts, hangers, and a hammer drill, if absolutely necessary, which ended up not being the case. You can look up and see large logs, ranging between four to seven feet in length, jammed into areas high up throughout the dome—clear signs that there is debris coming in from the surface. One log worth mentioning was lying on the floor of the cave, directly under this dome. It had been sawn about twenty inches in length, and was about fifteen inches in diameter, but split in half, like it had come from someone's log pile. On a previous trip about a year ago, there was a large pile of surface debris lying under this dome, which contained the green leaves of a fern.

The rest of the group left Edmund and Eric to their climb and headed on up to the terminal siphons, where the passage goes underwater, with the loaded rafts. This is where the water from Crevice Cave enters into Mertz Cave. Both caves are mapped, but if the divers could map the connection under water, it would line everything up, making both maps more accurate. Upon reaching the gravel bar at the junction of the siphons, two of the divers, Dirk and Shannon, commenced to unpack, prepare, and put on their gear, while the rest of the group took the opportunity to grab a snack, or two, or three. While the divers were preparing, and the rest were eating, Bob walked out into the beginning of the sump



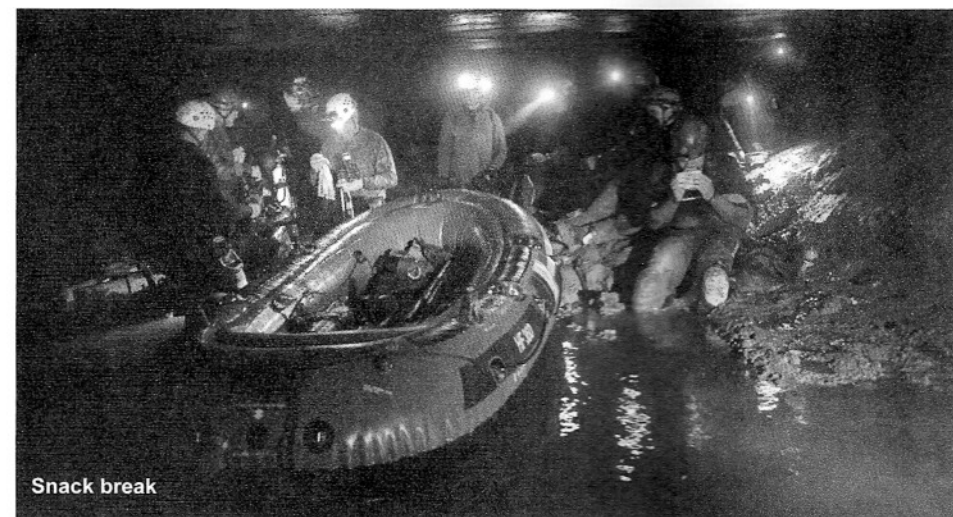
Ralph Sawyer

Rob "Bobcat" Kavaliauskas preparing to begin the swim section into the Lake Room. This is the last photo of this raft before it popped.

area to check the water visibility and reported back with a grim 6 inches. Bob was also doing video while Ralph and Richard were doing still photography. The rest of the group ate some much-needed food. Once everyone stopped moving, they began to get a little bit cold. Kris huddled over the camp stove for warmth, while Kiley huddled around his carbide lamp.

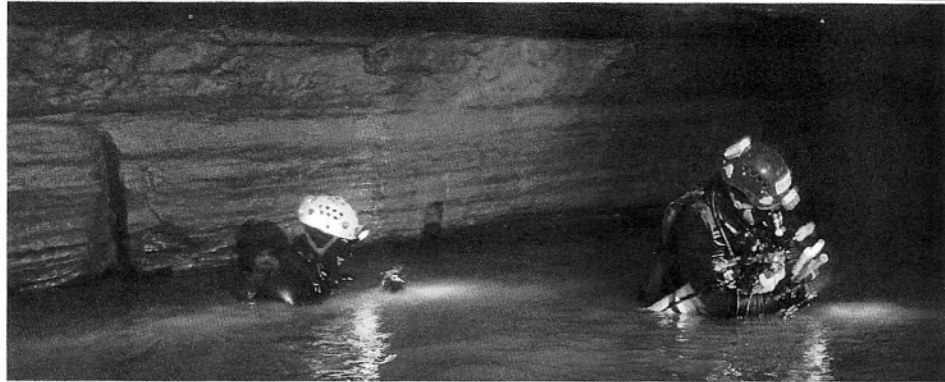
Finally, fully prepared and geared up, the divers proceeded upstream toward the first of the two suspected Crevice sumps, this one being on the left. They set their Disler spike in the right hand mud bank, tied off their safety line, and headed straight for the end of the passage. As they submerged, the glow of their lights disappeared in the murky water, and there was the continual explosion of the exhaled air belching out from under the ceiling ledge. The visibility was six inches at best, so the dive progressed by feel alone. Shannon Wallace was lead diver, reeling out the safety/guide line. They followed the right wall inbound and soon came to an area which pinched down to twelve inches. The floor was twelve to fourteen inches of boot-sucking mud, and the ceiling was rock. From the feel of things, it seemed to be more of a bedding plane. Shannon moved several feet to the left, feeling his way through, but the passage he felt in front of him did not increase in size. He turned around, found Dirk Bennett, and pulled up on his thumb, signaling the dive was called. Shannon reeled up the line, and Dirk kept the line taught, pulling it off of the Disler spikes they had placed in the deep mud floor. The first dive was a little over five minutes.

They regrouped with the others, and decided to head over to the left wall and work their way inbound from there. They quickly disappeared from view completely, and the belching air also stopped. Conditions were worse since the mud had been stirred up previously in the narrow entrance to the sump. They followed the left wall and the tunnel they were in seemed more promising. After what felt like thirty to forty feet inbound, Shannon felt the floor and ceiling start to pinch down like the right wall did,



Ralph Sawyer

Snack break



Ralph Sawyer

Shannon Wallace and Dirk Bennett preparing to dive under the Mertz / Crevice sump.

with the same twelve to fourteen inches of clearance. He moved over what seemed like ten feet, and found going passage, three to four feet from floor to ceiling. The dive continued forward, hoping to find the other side of the sump. Since they couldn't see anything, they progressed very slowly, and moved forward by feel alone. Eventually, their journey brought them to an area where the floor and ceiling started to pinch down again. Dagnabit!! It appeared as though this cave was not going to give them any breaks. Shannon decided they had gone far enough in zero visibility, turned around, and signaled the dive was called by again pulling up on Dirks thumb. As they exited the sump, Dirk used the knots they had spaced on the cave line every ten feet to measure the travel distance. They had pushed the tunnel seventy feet. It seemed much further in the chocolate milk water. The second dive lasted a total of eight minutes. There has to be a hole back there somewhere, but whether a diver can squeeze through it remains to be seen. Perry County has very challenging dive conditions, to be sure.

Paul then took Dirk and Shannon up to the right hand sump passage, which had a good amount of gravel pushed out from past heavy rains. They tied in to a pair of Disler spikes, and went off looking for going passage. This sump was much smaller at the start. After thirty feet, the passage turned hard right, and proceeded into an area six feet wide with smooth sloping walls, closing down to about a foot in height. Shannon turned to Dirk, and called the dive in the near zero visibility water. Shannon mentioned that the silt swirls were not being picked up by water movement at all in the narrow confines of the pinched down area. The first sump seemed to be where the water was coming from.

The rafts were loaded up again and everyone headed back down towards the entrance. The divers stopped at the next passage downstream from the sumps to take a look at it. They would have poked into it, but the big raft, with some necessary equipment on it, had already gone well ahead of everybody else, so they took off all unnecessary equipment, loaded it into their raft, and headed out. When the main group

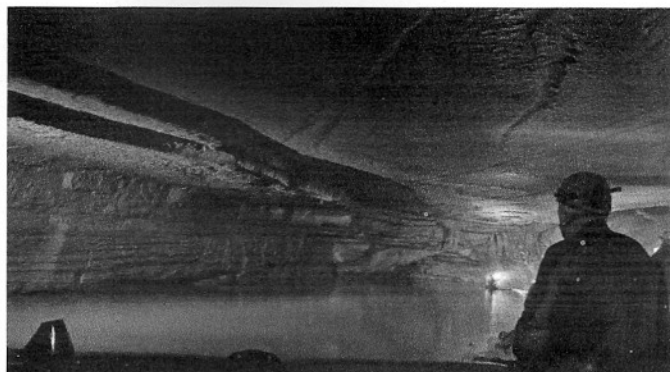
reached the Big Room where the climb was going on, Edmund was still playing Tarzan up in the top, while Eric was belaying him. Everyone hauled all the gear through the Big Room to the stream on the downstream end and stashed it while the rafts were being brought over.

THE DOME CLIMB

Moving back in time two and a half hours to the beginning of the dome climb—Edmund had brought with him a large marine air horn, and had agreed with Chad, who was now on the surface, that at 3:00pm, and every hour on the hour after that, he would blast off the horn up the dome, in hopes that Chad would hear it on the surface and locate the exact location of where this thing was above ground. At 3 o'clock, Edmund and Eric did just that. Try imagining for a second what it must be like experiencing the blast of an air horn underground! It was dead quiet, Edmund pointed the horn up into the dome, and pulled the trigger. Good grief! The sound reverberated around, and echoed down the passages on both sides of us. It was unbelievable! Soon after, Edmund and Eric both swear that they heard someone talking on the surface. However, Chad never heard the horn go off, even though they sounded it probably twelve more times over the next three and a half hours. So up Edmund went. The foot and handholds were everywhere they needed to be, and there were plenty of rock outcrops to loop webbing around for belay anchors. These were placed around every ten feet up. Eric belayed Edmund from down below with his two hundred foot dynamic rope. Once Edmund reached a height of around forty feet, the dome split off into three separate domes, running upwards next to each other in a triangle. At this mid level, there was a natural bridge that he could use to carefully climb across to access the base of two of these three domes. One of these domes, located directly over the passage below, has a fifteen-foot pit at the base

of it. It's hard to imagine a pit under a dome, both of which are over a large horizontal passage below. Unfortunately, Edmund's camera was down by Eric, and he already had enough stuff attached to him to be climbing around this deep inside a cave. This specific dome had the largest of the logs jammed directly underneath it, which was a seven-foot long, cedar tree trunk, including the root ball, which was about nine inches across. Edmund climbed to the top of this dome, and just like the other two, it pinched off at the very top into solid rock. The other dome had some large logs in it as well, but no visible passage was seen anywhere. There are a couple areas up there Edmund did not check. They consisted of horizontal passage that would have required some time-consuming bolt placing to access. In short, it would have been a risky maneuver that would have required a lot of energy, and Edmund had already been climbing in that dome for three and half hours, not to mention that Eric had been doing the constant job of belaying him from down below that entire time as well. Three and a half hours is a long time to stand there with your head tilted back, looking straight up, and keeping tension on the rope when necessary. The main reason Edmund resisted checking out any more areas in this dome was due to the fact that the two passages in question are both located underneath the jammed logs, which are higher up in the domes. He was focused on the areas located directly above the jammed logs.

By the time Eric lowered Edmund back down, the rest of the cavers had wrapped up the dive portion of the trip, and had already headed out towards the entrance, passing them along the way. Bobcat, who was with the passing group, remembers noting that Edmund was up so high he couldn't even see him. He and Eric were yelling at each other like an old married couple. When the group Bobcat was with left, they also took the raft with them. Three cavers from their crew, Ralph, Jennifer, and Michael, who goes by his last name "Bradford", stayed behind with Eric and Edmund. Jennifer and Bradford made two final sounds of the



Ralph Sawyer



Shannon Wallace preparing to dive under the Mertz / Crevice sump (photo by Ralph Sawyer)



Shannon Wallace and Dirk Bennett after diving the Mertz / Crevice sump (photo by Ralph Sawyer)

air horn before they all headed out together. Boy did those five cavers miss that raft on the way out! That was a long journey for all of them carrying all that gear out!

Shortly after leaving the dome, they encountered a side slot in the ceiling on the right side of the passage, with water pouring in, cascading down over a flowstone formation. Closer examination revealed logs jammed up in the vertical, chimney passage. Eric made the climb with the assistance of Ralph, but it too pinched off after about fifteen feet. They continued on their journey towards the entrance, about forty minutes behind the others.

Meanwhile, back at the breakdown, the rafts had to be deflated, which was not an easy task given there really is no good place to lay anything. The mud banks are soft and slick, and there is a foot of water on the floor. Trying to roll the raft up in those conditions resulted in a significant amount of water winding up inside the raft, which made it that much heavier to ferry through the breakdown. Moving the gear back through the breakdown maze was a little bit more confusing than the first time, because all of the gear was very muddy and easy to mistake for a lump of mud or rock. They almost left a couple of packs behind, but luckily they were vigilant and all of the gear made it out.

At the Lake Rooms, it was noted that Chad's raft had only lost its side walls, so Joe Nicolussi piled the big raft (The Burrito) onto the inflated floor of the raft and wrapped the side walls around it. He then piled a few other various items on top, and he and Kristin proceeded to slowly make their way across the lakes and out of the water passage. Kiley had his big, plastic, cream can that floated really well, so several of the air tanks were clipped to that and he floated them out. That was a big help. At this point, the second group of five cavers

caught up to the rest of the group. All got back to the end of the water passage at the entrance of the cave to see Chad looking at what was left of his raft with a big "OMG" on his face. All gear was hauled back up to the vehicles, clothes were changed and all headed for Pizza Hut for a well deserved meal and to review the experience we all just had participated in.

What a historic trip. We will never forget it. One to tell the grandkids about! Thanks again Chad for making this happen. We all made a lot of new friends and brought home some great memories!

PRESCRIPT

A little back story. In the early part of the year while stuck on the road at work, Chad McCain was searching for cave diving online and came across the Ozark Cave Diving Alliance website. After seeing their videos of the Ozark spring caves they have mapped, Chad asked Bob Koch about his interest in helping to connect two Perry

County caves together, effectively pushing Crevice over 31.3 miles long. Paul Hauck gave his advice when and how to proceed, and a date was set. The date was canceled and then reset again. Finally the day came around when Bob Koch would travel from Tulsa, Oklahoma with fellow OCDA diver, Shannon Wallace (Also from Oklahoma), and Dirk Bennett from Springfield, Missouri (OCDA). Chad began talking to his close-knit group of project cavers about doing this trip, and an outreach for more help occurred. He began asking cavers from the Near Normal Grotto, Meramec Valley Grotto, Missouri School of Mining Grotto, Little Egypt Grotto, and of course, South East Missouri Grotto. Word spread, interest grew, and finally when the day rolled around for the trip, 14 sherpas showed up to pack the diver's gear upstream through Mertz. As much as Chad wanted to be on this trip, he had to sit this one out due to letting a knee injury heal. He helped as much as he could, but unfortunately that only took him as far as the water passage started.



The group photo: From left to right, back row (standing): Kat, Chad, and Jon McCain, Jennifer Thompson, Tyler Allen, Paul Hauck, Eric Hooper, Kristin Nicolussi, Joe Nicolussi, Bob Koch, Dirk Bennett, Shannon Wallace, Don Bittle, Ted Mueller, Rob "Bobcat" Kavaliauskas, Richard Young, and Joe Walsh. From left to right, front row (kneeling): Edmund Tucker, Kiley Bush, Ralph Sawyer, Michael Bradford, and Laura Sisken (Not shown in photo: Dana Hooper, photographer) (photo by Dana Hooper)