

The

The Kansas City Area Grotto

GUANO

Volume 21

Issue 2

June 2007

Carroll Cave

plus Caves of Barbuda and Montserrat, Hunter's Cave, Doss Cave, Jagged Canyon Cave, Huzzah Conservation Area caves, Jacks Fork caves, Spring 2007 MVOR, Doghouse Cave, Devil's Den, and more

Table of Contents



Carroll Cave's Lake Room

trip report and photos by Rick Hines

page **4**



Carroll Cave Bio Trip Reports

trip reports by Bill Gee and Andy Isbell • photos by Bill Gee, Dr. David Ashley, Rick Hines, and others

page **7**



Caves of Montserrat and Barbuda

trip report by Jerry Cindric • photos by Ben Boling

page **11**



Jacks Fork Caves

trip report by Gary Johnson • photos by Mark Lankford, Matt Kuehnert, Dale Curtis, and Gary Johnson

page **20**



Huzzah Conservation Area

trip report by Gary Johnson • photos by Jeff Page, Steve Potter, and Gary Johnson

page **33**



Spring 2007 MVOR

report by Andy Isbell, Mark Lankford, and Jim Cooley
photos by Bill Gee and Mark Lankford

page **40**



Three Creeks Conservation Area

trip report by John McGuire

page **45**



Hunter's Cave

trip report by Gary Johnson • photos by Matt Kuehnert and Jay Kennedy

page **46**

Events

July 11

KCAG monthly meeting — 7:00 p.m. at the Arthur Mag Conference Center at Midwest Research Institute (MRI), near the UMKC campus, at the corner of Volker and Cherry.

July 13-15

Meramec caving trip — Several caving trips scheduled in Meramec State Park and Meramec Conservation Area. Contact Bryon Carmoney for more information.

July 23-27

2007 NSS Convention — Marengo, Indiana. A wide variety of sessions, caving opportunities, field trips, and other activities are scheduled. Visit the convention's web site for more info: www.nss2007.com.

August 8

KCAG monthly meeting — 7:00 p.m. at the Arthur Mag Conference Center at Midwest Research Institute (MRI), near the UMKC campus, at the corner of Volker and Cherry.

August 18-19

Orientation to Cave Rescue — The Central Region of the National Cave Rescue Commission will hold an Orientation to Cave Rescue (OCR) at Mid-County Fire Protection District station in Camdenton, MO. For more information, contact Bill Gee.

September 12

KCAG monthly meeting — 7:00 p.m. at the Arthur Mag Conference Center at Midwest Research Institute (MRI), near the UMKC campus, at the corner of Volker and Cherry.

In the Next Issue

Clean-up work at Onyx Cave during the May 2007 MSS Meeting ...

Jerry Cindric leads a trip to TAG country ...

Mark Lankford goes caving in Arkansas ...

reports from the 2007 NSS Convention in Indiana ... and much more. (Striped salamander photo by Tandi Edelman. From Onyx Cave restoration trip.)



The Guano

June 2007, Vol. 21, Issue 2

The *Guano* is published on an irregular schedule as dictated by the trip reports submitted to the editor.

Submit articles via e-mail to the editor:
editor@kcgrotto.org. Preferred file format for trip report attachments: Microsoft Word. Multiple photos are typically required for each trip report.

Guano subscription rate for nonmembers: \$6.00 annually. Electronic: FREE.

President: Bill Gee (president@kcgrotto.org)

V.P./Treasurer: Pam Rader

Secretary: Jerry Cindric

Web Master: Sam Clippinger (samc@kcgrotto.org)

Editor: Gary Johnson (editor@kcgrotto.org)

Copy editors: Bill Gee, Pam Rader, and Jim Cooley

The Kansas City Area Grotto is affiliated with the National Speleological Society and the Missouri Speleological Survey. In addition, KCAG is a founding member of the Missouri Caves & Karst Conservancy.

Meetings are held monthly. Check www.kcgrotto.org to determine the dates.

Annual Dues: \$15 for full members (three caving trips with KCAG, nomination, and vote of membership required.)

NCRC Callout number – Emergency use only: Central Region (502) 564-7815. This number may be used for cave rescue emergencies in the states of Illinois, Indiana, Iowa, Kentucky, Michigan, Missouri, Ohio, and Wisconsin.

A **Message** *From* *the* **President**

In my last message I raised questions about what value there is in belonging to a grotto. Since then we have had a bumper crop of strong cavers join KCAG. Welcome, everyone, and I hope you find value in your membership.

Perhaps one place where grotto membership can bring value is social networking. Cave trips often come together when one person has a big itch and needs some people to go along. Grotto meetings and e-mail lists provide a venue to announce trips and find other interested people.

Most of our business meeting time is spent on trip reports and upcoming trips. I think this is a good thing and I intend to keep the other business stuff to a minimum. Keep those trip reports coming.



Bill Gee on rope at Devil's Den (photo by Mark Lankford).

Cave safely!

Bill Gee

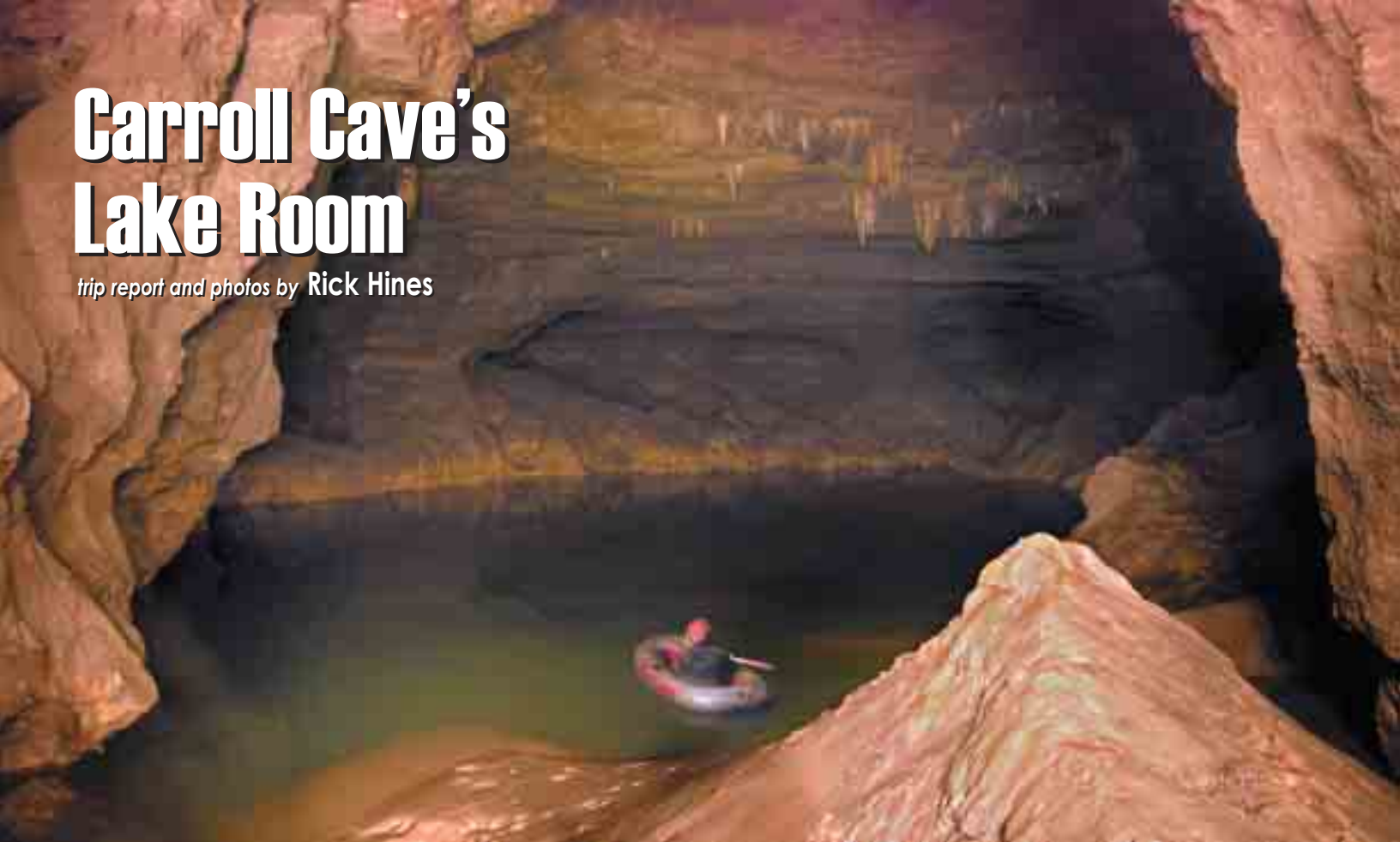
KCAG President

Cover photo

The Liberty Bell is one of the largest formations along Lower Thunder River on the route to Carroll Cave's Lake Room. Photo by Rick Hines.

Carroll Cave's Lake Room

trip report and photos by Rick Hines



Editor's note: The Lake Room is one of the most remote areas of Carroll Cave, at over six miles from the natural entrance. Not many cavers have ever made the trip. The first such trip was in August 1958, when John Cantwell, John Reuprect, and Jim Lyons pushed downstream Thunder River to the limits of their endurance. They only turned back when they encountered deep water. At the time, they didn't realize they had reached the end of Lower Thunder River and were wading into the Lake Room. Subsequent investigations by George Dieke found footsteps leading into the lake, confirming that he wasn't the first to reach this point. While these early trips were conducted as mammoth single-day trips, soon treks down Thunder River were considered multi-day camping trips. David Hoffman's 1960s and '70s surveying trips down Thunder River to the Lake Room were conducted as four-day trips. However, Hoffman's crews never crossed the lake, so his map of the Lake Room is only a generalized oval (with a dotted line for walls). Few cavers have attempted to cross the lake.

December 26-28, 2006 • Photo Trip • Report by Rick Hines (team leader)
Participants: Terry DeFraties, Jamie Euliss, Craig Hines, Chad Hines, Regan Youngman, and Shawn Williams

As usual, suiting up and getting down the Carroll Cave shaft took a little longer than planned, but we were all at the base of the ladder by 4:00 p.m.

I had a bad start to the trip! As I tried to find a way down to Thunder River from the base of the ladder, I ended up on a steep slippery slope and started to slide. I sat down and poked my walking stick into the mud but couldn't stop the slide. I slid down about 6', bounced off a lip and free fell another 6', landing horizontal in the mud at the edge of Thunder River. The fall would not have been too bad except that my right thigh landed on a football-sized rock. It hurt, but I was able to stand up and walk; nothing broken.

Above: Chad Hines paddling across the Lake Room in Carroll Cave (photo by Rick Hines).

I did not want to abort the trip and decided to go on a little farther and see how I felt. This thought process continued for the next day and a half until we reached the Lake Room.

There are probably many reasons why I took my fall, but my story is that after losing the vision in my left eye last summer I have no depth perception and could not judge the slope correctly. That's my story and I am sticking to it. My son Craig may try to tell you that I fell because I didn't listen to him when he tried to tell me the correct way down and told me to wait for him to lead. (I let him lead for the next three days.)



Other than my slow pace, everything went well on the trip. We passed DL7 and found a large, fairly flat camping area just as Andy Isbell had described from a previous trip. We heated water for a hot dinner and were in the sack by midnight. We had a slow start the next morning, getting up, pumping water, making breakfast, and finally getting into a cold, wet wetsuit. We were moving toward the Lake Room by 11:00 a.m.

On the way to the Lake Room we photographed the falls just beyond DL7 (Do they have a name?) and the Liberty Bell. We passed a pair of large natural bridges and a large pendant hanging in the passage and decided to photograph them on the way out. (I should have known better: that never happens and this trip was no exception.)

I think it was about 4:00 p.m. when we pulled ourselves through very deep mud to arrive at the Lake Room. I planted my walking stick in the mud and strapped a mini-tripod to the top to hold the camera for a time exposure. With the camera wide open and on maximum wide angle, we fired seven Vivitar 285 flash units five times each for a total of 35 flashes to get a reasonable exposure of the far side of the lake. Even with the maximum wide angle setting on my camera I was not able to get in all the width I wanted. I then took a left and a right hand shot to be stitched together later using Panaview software.

We located the rubber boat Jamie Euliss and others had hauled in on a previous trip, and my two sons, Chad and Craig, each took a turn paddling across the lake to explore the far side. Craig tried to plumb the depth of the lake but found only

Above: Chad Hines inspects a waterfall downstream from DL7 in Carroll Cave (photo by Rick Hines).

that much of it was deeper than the 30-foot string he had to measure with. They found a stream entering the lake on the far right hand side. The stream flowed down a steep mud bank from about 20 feet above the lake level. After a tough, steep climb through deep mud, they entered horizontal walking passage. They traveled a few hundred feet in walking passage before turning around. Footprints, most likely Jamie's from a previous trip, continued on.

We took one photo of Chad in the boat but we could only do one simultaneous flash of the seven flash units. We had just enough light to expose Chad and the boat but not the entire room. My plan was to use Photoshop to place the boat in the Lake Room photo. I was careful



to keep the location of the camera and the wide angle setting constant for both photos.

We left the Lake Room, cold and tired, at about 6:00 p.m. I was very slow and tired on the trip back to camp. We reached camp by 10:00 p.m., and after a hot meal we made it to bed a little after midnight.

After another slow start the next morning, we headed out about noon. Just down stream from Jerry's cairn, we ran into Bob Lerch and his survey crew.

Shawn Williams, after three days caving with us, decided to join the surveyors for another three days before seeing daylight! Bob followed us back to Jerry's cairn so Shawn could drop his camping gear and then the two of them could catch up with the others on the survey trip.

The six of us continued at a slow pace and with many breaks to allow my leg to regain a little strength.

We made it to the ladder by 8:30 p.m., and Terry DeFraties, Regan Youngman, Craig, and Chad headed up. Terry rigged a 2 to 1 to haul the packs out. Jamie and I hooked the first pack on and watched then go up. The packs were heavy, and I assumed they could use more help at the top. Jamie climbed the ladder to help topside, and I stayed below to connect the packs. After the last pack, it was my turn. We used the 2 to 1 to give me an assist as I climbed out. Near the top, Terry asked me to let them try to pull me up as dead weight. I was more than happy to oblige. After a few feet, they had enough of that test, and I went back to climbing.

Above: The Liberty Bell sits high above Lower Thunder River in Carroll Cave (photo by Rick Hines).

We were all out and cleaned up by 10:00 p.m.

Thanks to all on the trip for carrying my slave flash units. Thanks to Craig and Chad for carrying more than their share of our group gear on the way in and nearly all of my gear on the way out. And thanks to all for putting up with my slow pace.

P.S. If you are ever injured during a cave trip and think the injury is not severe enough to abort the trip, please consider the consequences of potential complications underground. When in doubt head out!

After four weeks, the bruising is almost gone, but I still have a large hematoma on my right thigh. It is shrinking. ●



Carroll Cave Bio Trip Reports

Above: Bill Gee inspects boxwork in Carroll Cave (photo by Rick Hines). **Below left:** Bait sticks placed in Carroll Cave (photo by Dr. David Ashley).

April 14, 2007 Biology Trip
Destination: Carroll River Passage
Report by Bill Gee (trip leader)
Participants: Andy Isbell, Dr. David Ashley, Jason Winfrey, and Mike Voltz

This biology project trip has a large number of “firsts.” We had participation from some good students, we found a new waterfall, and we learned a lot about how to collect data.

I arrived at the schoolhouse first, shortly after 6:00 p.m. on Friday. It rained on me all the way from Kansas City. The ground at the schoolhouse was completely waterlogged and very soft. After setting up my camper, I put out a rain gauge. Saturday morning early the rain gauge had an inch in it, and when we came back after the cave trip, it had gained another quarter inch.

Andy Isbell arrived about 7:00 p.m. Dr. David Ashley, Mike Voltz, and Jason Winfrey arrived around midnight. Saturday morning it was still raining and had snowed enough to accumulate on windshields and grass. We all got in Dave’s truck and drove over to the natural entrance. The stream flow was quite strong.

We drove into Montreal to have breakfast only to discover the restaurant was not open. Apparently the owner had some family matters to deal with. We went to Richland for breakfast.

We got to the silo about 9:45 with the weather blowing cold rain and some snow.

The snow never accumulated very much, but it was definitely there. We all hauled into the silo to change, then go down the shaft. First person down the shaft was Andy at 10:30 a.m. By 11:00 we were all in the cave.

The first thing we did was drop some bait sticks right at the ladder. There is a bat carcass off to one side that we noted on a



previous trip. We placed two bait sticks near the carcass. The bait sticks are about 30 cm long and 3 or 4 cm in diameter. They are made from cuttings of downed wood that David found around the campus in St. Joseph. Each stick has an aluminum tag with an embossed number on it.

Over time we plan to watch the bait sticks to see what kind of critters are attracted. The two sticks right at the entrance should attract critters that fall down the shaft. That will serve as a control against the other sticks further into the cave.

We noticed that Thunder River was running substantially above its normal level. Andy and Jason went down to the stilling well and reported that only a foot of the stilling well was above water. That means the river was running 14 to 16 inches above normal. The sound was very loud.

On the way down Carroll River Passage, we stopped to admire the boxwork. We placed two more bait sticks off to the side near the boxwork. As we continued on, we noticed that Carroll River was clear and still as usual up to the Bear Claw side passage. There was a fairly substantial flow from the Bear Claw passage. From there on down, the stream was noticeably flowing and was rather murky from silt. This section of Carroll River is normally almost completely still. We collected a water sample just downstream from where the Bear Claw flow joins the main stream.

As we traveled through the cave, Mike and Jason used a laser digital thermometer to take the temperature of just about every bat they saw. They also recorded the temperature of the rock near each bat. The temperatures were generally around 10 to 12 degrees Celsius. Interestingly, the bats were typically about 1/2 degree colder than the rock.

Mike, Jason, and David also attempted species identification on each bat. I think most of the bats were Eastern Pipistrelles. Some were Little Brown. I don’t recall any other species being mentioned. David examined a number of bat carcasses, all of which



were in advanced stages of decomposition. He could not identify species on any of them. One carcass was found hanging from the rock. The bat died but did not fall.

We reached the Water Barrier at 11:30. As advertised, it was cold. Jason and Mike both commented that they were now caving for real! The water level was about 3 or 4 inches higher than normal. It was running only 2 inches below the shelf formation along the side. We collected another water sample about 100 feet downstream from the Water Barrier.

The first riffle below the Water Barrier gave an opportunity to do an isopod count. Jason and David started turning over rocks to count and measure length. As they measured, Mike wrote down the numbers. In this manner they collected length data on nearly 100 isopods. Generally the lengths were in the range of 4 to 7 mm with a few up to 12 mm. David collected one isopod for species identification.

We reached the first guano piles about 12:00. The very first pile had a grotto salamander on it, one of two we saw for the day. The guano gauges showed no new activity. Gauge 1 was about 30% covered, which is no change from the observation in October. I replaced it with a new style gauge (screwed plate instead of glued). The gauges on piles 2 and 3 also showed no activity since October.

Near guano pile 3 Andy found some spider webs in a crease of rock next to the stream. After a bit of searching, he found



Above left: A wet weather waterfall in the Lunch Room (photo by Bill Gee) **Top:** A grotto salamander crawls across bat guano (photo by Michael Voltz). **Above:** A guano gauge in Carroll Cave (photo by Bill Gee) **Above right:** A cave cricket (photo by Bill Gee). **Right:** An Eastern Pipistrelle in Carroll Cave (photo by Michael Voltz).

some spiders. David collected a spider for species identification. We placed two more bait sticks next to the guano gauge on pile 3, and we collected another water sample.

The stream at guano pile 3 was moving along at a good clip. It was very turbid. Normally the stream here barely flows and is very clear. On this trip we could not see anything in the water.

We added gauges to guano piles 7, 8 and 13. We also added a second gauge to piles 12 and 14. None of the existing gauges showed any new activity since the trip in October.

On pile 15 we found two cave crickets. This is the first cricket I have ever seen in Carroll Cave. It was hiding in a crack in the

guano. I managed to get a good picture of it.

Some of the guano piles had large numbers of very small flies.

We reached the Lunch Room about 3:00 p.m. A huge surprise was waiting there ... A waterfall coming out of the ceiling! There was a substantial flow of water coming off a ceiling ledge about 20 feet above the floor. We got a number of good pictures of it.



After taking photos, we had a sandwich break and then started back. We left the Lunch Room about 4:00 p.m. The Water Barrier had not warmed up at all. About 100 feet upstream from the Water Barrier, near the entrance to the crawlway, we placed the last two bait sticks.

We arrived at the side passage to Thunder Falls a few minutes before 5:00 p.m. Everyone dropped gear except for their cameras, and then we went over to see the falls. The water was flowing very fast, but we were able to keep our footing. It was perhaps a foot higher than normal. Noise from Thunder Falls could be heard all the way to the far end of the shortcut.

Thunder Falls was flowing in a spectacular manner. The last 20 feet down to the lip was flowing too fast to try walking. Normally the water is 6 or 8 inches deep here, but we found it close to 2 feet deep. We looked around and took some pictures, then went back to the ladder.

We started gearing up for the climb about 5:45. Everyone was out by 6:30. The weather was still cold, but it was no longer raining. There was no visible snow on the ground. We were cleaned up, packed up, locked up, and driving down the hill by shortly after 7:00 p.m.

Andy and I learned much from David and his students. It is amazing how much data they collected in just a few hours, especially on the size of isopods.

Regular biology trips at least as far as the Lunch Room should be done in April and October every year. Over time we will accumulate knowledge on how the bats are using

the cave and what other critters there are. The bait sticks need to be watched for activity.

Another student at Missouri Western will analyze the water samples.

May 29, 2007 Biology Trip
 Destination: UL2 and Convention Hall
 Report by Andy Isbell (trip leader)
 Participants: Dr. David Ashley, Manuel Padilla, Parisa Tourgoli, Kathleen Holeman

I arrived at 12 noon, set up camp, and started cleaning up the camp area. Mostly burning brush. Bill Gee started cutting brush at 7 a.m., so there was plenty of brush to burn by noon. I dug out the fire pit and started burning what was already cut. We also refilled the wood rack with decent-sized wood.

Jeff Page, Steve Potter, Kathleen Holeman, and I went to breakfast in Montreal. It was good!!

I tried another means of taking field notes, a small digital voice recorder. It worked correctly every time: it just wasn't the piece of equipment I needed. It could record a maximum of 30 files, and each time I stopped recording, it would restart at the next file instead of the one I was using. I ran out of files this way. I learned to take written notes and then transfer them to the recorder. I managed to get some things recorded, but the totals on isopods, snails, bats and fish will be close guesses.



Top left: Dr. David Ashley and Bill Gee inspect a guano guage (photo by Michael Voltz). **Top:** Andy Isbell inspects a shallow pool for cave life in Carroll Cave (photos by Rick Hines). **Above:** Andy Isbell inspects a shallow pool for cave life in Carroll Cave (photo by Rick Hines).

In a surprise, the Thunder River Round Room Team counted only 18 fish. Normally they count between 75 to 100 in that stretch of river. The UL-2 Bio Count Team counted near 50 Southern Cavefish (*Typhlichthys subterraneus*)

We left the back door at 11:15 and saw a few Pipistrelle Bats (*Pipistrellus subflavus*). David had his students check the temperature of the bats and then the rock next to the bats. It seems that the bats are always cooler than the rock. We saw four roosting and two flying.

One of the goals of my team was to look for snails (*Fontigens aldrichi*). These snails had never before recorded in Carroll Cave. Kathleen wanted to see a flatworm. Both of these critters are VERY small and my eyes are getting worse every day. Luckily I brought a magnifying glass with me. Can you picture that? 3 maybe 4 miles in a cave and



examining a rock with a magnifying glass. In Thunder River we found seven snails. We believe them to be *Fontigens aldrichi*. Dr. Ashley will identify them later. This made my day. Snails are in Carroll Cave! WOW, yes, sweet, terrific: I am so proud they were found by my team.

We caught up to the In-Cave Radio LocateTeam and walked right past UL-2 in the process. This is where we were to do our bio count. I was looking for UL-2. Going upstream, it's easy to miss; it's behind a boulder. Going downstream, it's easy to see. You might mistake it for the way out. Anyway, we found UL-2.

We started finding Southern Cavefish right away. The stream was flowing the entire way. In this side passage, at different times it will slow down to a trickle with pools and very little water flow. We found many large fish up to 60mm (2 3/8"). A new record.

Probably 4 hours into the cave in UL-2, I saw some scum, pointed at it and said look there for flatworms (planarian). I don't remember what Dr. Ashley's exact words were, something like "MY God, I don't

believe it." He found two, so Kathleen got to see her flatworm. There was also one grotto salamander (*Eurycea spelaea*). Dr. Ashley then said, "Andy, you are better than a bird dog." This is the first time flat worms were found in UL-2. Two firsts for the A-Team! Snails in UL-2 and flatworms.

A note on the scum: It was floating on the surface of the water. An area of about 4 ft by 4 ft. Brown in color. It had bubbles, some as large as softballs. I think the flatworms were on this floating scum. David and Kathleen stayed here quite a while.

Convention Hall is a large room with a balcony and a small waterfall, say 25 ft. From floor to ceiling, the room may be 70 ft. Near the waterfall, I found a piece of breakdown that looks like boxwork. David got a picture of it. I hope it turns out. That would be the second location for boxwork in Carroll Cave. That makes three firsts for Carroll Cave's UL-2 passage: snails, flatworms, and boxwork!

We ate, relaxed, explored the room, took some pictures, and headed out. Manuel, then Parisa led us out of UL-2 to Thunder River, where I took over the lead. We stayed in Thunder River to Thunder Falls where we

Top left: Bill Gee places a guano guage in Carroll Cave. **Top:** The natural entrance of Carroll Cave (photo by Bill Gee). **Above left:** Fungus growing on guano (photo by Dr. David Ashley). **Above:** A Southern Cavefish in Carroll Cave (photo by Shawn Williams).

met up with Bill's Round Room Team. They got there 10 to 15 minutes ahead of us. Everyone got to see Thunder Falls and visit before we headed out. It was like a small Howdy Party 130 ft. underground.

Earl Hancock, Lannin Hancock, and Bill Pfantz. were waiting for us at the top. Bill helped everyone get safely off rope. Thank you, Bill Pfantz.

We were in cave 6 hours. Tuesday evening Jeff, Steve, Kathleen, Earl, Lannin, Bill P., and I went to the natural entrance to see the bats fly. It wasn't like a stream of bats, but there were a LOT of them.

Let's do it again. Ever heard that? Well, I mean it. Thank you Kathleen, David, Manuel, and Parisa. Those bruises you're finding today you got in Carroll Cave yesterday. ●



Caving in
Barbuda & Montserrat

report by *Jerry Cindric*

photos by *Ben Boling*

This trip was a follow up to a trip I took in 2006. My main goal was to map Dark Cave and give the map to the Barbuda Council. They are trying to grow their ecotourism and island caving is thought to be a possible tourist draw (for the right type of tourist). I got Ben Boling to go and my brother Richard and his friend Gay Garrett. Richard had to drop out for work reasons but Gay went for an island vacation. Other goals were:

- to visit other caves on Barbuda and map what we can,
- to check out some small caves on Montserrat,
- to do some rough bat counts for a bat biologist from South Dakota,
- to take amphipod samples from Dark Cave for a professor in Texas,
- to look for old rodent bones in breccia layers in caves visited for a professor/caver in California, and
- to have a good time.

The following is a revised rendition of my journal

Saturday, February 3

Flights were all on time, but we got to Barbuda late. Lynton Thomas was there to meet us. He stopped the owner at The Palm Tree Restaurant. She opened up the restaurant for us. I had dolphin. Got to The Carriage House and went to Burton's Depot for water and food. Got the car from Lynton—a Mitsubishi.

Sunday, February 4

Stopped to see McKenzie Frank at The Art Café, and then took off to Darby Sink with Ben and Gay. Saw plenty of Hermit (Soldier) Crabs and three bee hives. Also saw three small groups of bats about 30 feet up under the ledge. These were Jamaican Fruit Bats. Each group was about 25 individuals. They were moving around on the rock. A couple were flying. They were larger in size. We noticed seeds in the guano. We stayed about an hour.

After some vacation stuff we were back at the house at 7:00 and waiting for us were Calvin and Kenrick from the Barbuda



Council. They went with us to the restaurant while we had lobster from the lagoon.

I learned a few things from them:

- They do not know where New Cave is located.
- They say that the water in Deep Cave is 300 deep (really?).
- They know a slot cave about 50 feet deep that is north of Dark Cave.
- Calvin has a shit load of artifacts from the Amerindians (arrived from South America)—a skeleton of someone holding a pot, beads, and sculptures of manatees and turtles.
- Kenrick lives in a cave up by the limestone quarry and has two other houses.
- The new time share on the strip of land across the lagoon from Codrington will be for the ultrarich at about \$2,000 to \$5,000/night.
- Barbudans do not buy or sell their land. The island is theirs. They just build a house after receiving permission from island officials.

Monday, February 5

We met Kenrick at 7:30 at The Palm. We then drove the half hour to Dark Cave. The trail was better than the last time especially since Kenrick was clearing with his machete. You can see the Dark Cave area



Top: Jerry, Kenrick and Ben at the entrance of Dark Cave (photo by Ben Boling). **Above:** Cave shrimp in Dark Cave (photo by Ben Boling). **Previous page:** The entrance of "Back on Praying Land" Cave (photo by Ben Boling).

from a distance. There are three palms around the outside of the sink.

When we got to the cave, we did a bat count. There were two or three species; some were much like grey bats, lighter on the front, darker brown on the back with almost black wings—quiet, individually perched (*Natalus stramineus*). We also saw other fruit bats (*Artibeus*) which were more grouped. Late in the day (4:30) the bats were very active, flying around the cave. We mapped close to the end of walking passage but did not do the side passage with the skylight. We got shrimp samples, just where the ground ends and the water



starts. There were thousands of shrimp and we got maybe fifty.

Few things learned today.

- Kenrick says the population of Barbuda has remained about the same throughout his life—1,200.
- Only shotguns used for hunting. Heavy fine if a rifle is used.
- Some crime, mostly break-ins. Other crimes are low. Shop owners can carry pistols.
- Kenrick is either 55 or 58 years old, and he did not drink a drop of water while we were with him.
- Saw a couple of land turtles on the walk to and from Dark Cave.

Tuesday, February 6

Breakfast as usual and off to new caves. Calvin Gore is busy meeting some BBC people at the airport. We again drove east but north of the road to Dark Cave. We kept going until we could drive no further. We walked SSE using animal trails for about $\frac{3}{4}$ of a mile to a pit called “Back on Praying Land” Cave. Kenrick had been there last July and built a rope ladder with stick rungs. The cave is about 45 feet deep. Kenrick says only three people have been there and this was last year.

We were not about to use the ladder. The depth looked deeper than 45 feet. Using webbing we got the rope to barely reach the bottom. So we would be the fourth and fifth people in the cave and the only non-Barbudans. We had gone “light” with the vertical gear—sit/stand, no chest harness.

Kenrick said it was very difficult to climb out on the ladder, especially at the lip. I rappelled in first and landed to meet about 10 red crabs, each about a foot wide. They hid under the rocks after a few minutes. The cave had five or six openings, making it well lit. A fig tree is growing above the cave sending roots down to the bottom. One root group was about 3 feet



Top: *Brachyphylla* bats in Back on Praying Land Cave (photo by Ben Boling). **Left:** Ben and Kenrick peer into the water passage of Dark Cave (photo by Ben Boling).



in diameter and went right through solid rock at the top.

Several hundred (300 to 400?) noisy bats (Lesser Antillean Fruit Bat, *Brachyphylla cavernarum*) grouped fairly close together. We found an odd skull that was about hand size. There were many bones at the bottom. Kenrick says the bones were boar (wild pig), goat, donkey, cattle, and deer. I roamed around and found a small passage down low at one end, but the passage was blocked with rocks that I could not move.

I was first out doing a sit/stand and took quite awhile to go 45 feet. At the top, I needed the etrier and the ladder to help. Ben followed and at the top broke a rung and scraped and bruised his arm.

We hiked to the vehicle and headed back. Part way back, we turned left on a side road. The unnamed cave was just to the right of the road. It was a small cave about 15 feet deep. We could climb down the roots and rocks. Not much to see; it did cut under the main opening in most directions but not far. Diameter of the opening was about 15 feet. The next cave was close by and named by Kenrick as Deer Cave because they found a live deer in the cave.

Top: *Natalus* bats in Deer Cave (photo by Ben Boling). **Right:** Kenrick at the entrance of Deer Cave (photo by Ben Boling).





Left: Kenrick and Jerry in a side passage of Dark Cave (photo by Ben Boling). **Bottom:** Jerry mapping in Dark Cave (photo by Ben Boling).

It was just out in the opening with a 3 to 4 foot opening. The drop was only 15 feet deep or less even though it looked deeper—a real illusion. The cave went four directions from the drop. One direction had airflow. After a 40 to 50 foot crawl we got to a dome room which looked 12 tall and had to be very near the surface. Many bats, maybe 200 to 300 (*Natalus stramineus*), in this dome and in a slot slightly further down the cave. These were quiet bats, individually perched. Shortly past the slot, the passage was too small to get through; large rocks blocked the small passage.

A second passage went nowhere. The other two were similar. They were low crawls in fine dust until it got too small. I did not bother trying to dig my way further—NASTY. Since I was soaked from sweat I was filthy. Kenrick and two or three of his friends were probably the only ones to go to these caves.

Learned today that the K Club is closed and Princess Di had stayed there. An Italian designer (woman) had worked with locals to build it. It has two miles of beach.

Wednesday, February 7

No caving today. We heard from Calvin how easy it is to find Amerindian artifacts, especially clay pots and dinnerware. We asked Kenrick to take us to a spot. We went to the north end of the island, walked the beach for awhile and then dug on a sand bank. Kenrick found the biggest stuff, but Ben and I also found a bunch of pieces. These were, of course, given to Calvin for the island.

We also went to Indian Cave but could not find the Indian writings on the walls. We did see nine Fish Bats (*Noctilio*) in a dome. They were evident by the long legs and feet. We also went to the top of the cliffs to look down at the spectacular view of Two Feet Bay. We came back and I started the clean up of the shrimp samples with an eyedropper and alcohol. We also saw Kenrick's cave home today. It looked like a lot of work, with 16" walls. It's near



the limestone mine on the cliff face. He has a great view.

Thursday, February 8

Met Kenrick for our final day with him. After breakfast it was back to Dark Cave to finish mapping. When we got there, we first did an overland survey from the main entrance to the skylight entrance. Kenrick had to chop a path so that we could do the survey. We then went in and Ben did bat photography before we stirred them up too badly. We saw a few hundred (*Brachyphylla*) today that I hadn't noticed on the other trip; noisy and obviously pig-nosed. We mapped the side passage to the skylight and then mapped the main passage to the water. We used aqua socks and inner tubes to get in the pools. Ben took plenty of pictures.

We set up two shrimp traps, one in the deepest area we could see, which was at the back of the left pool. I put in a couple of pieces of beef and weighted it to the bottom. I did not need to get in the water to put in this trap. I got about 100 to 200 larger shrimp from this trap. The second trap I put in the middle water passage in a deeper area off to the side after we had stirred up the water. We got no shrimp here.

The maximum water depth found was 10.5 feet but was deeper at the end of the left pool where the cave continues underwater for what appears to be quite a ways.

The cave also goes to another open passage. Ben had a small tank and snorkel. About half way up the middle pool to the left wall, there is a sump that he was certain would go to another passage after some unknown feet: he could see the void, but without proper cave diving experience, he did not go through.

We gathered up our stuff and headed out, reaching the car as it was getting dark. It was about a 35 minute brisk walk. We left Kenrick at his second house and gave him a goody bag from Ben. The council paid him for the four days with us, and I gave him some extra money on top of it. He was difficult to understand but a treat to be around. He knows the island probably as well as anyone I would guess.



Top: Ben with a whale bone on Barbuda (photo by Ben Boling).

It is getting near election time around here and the politicians were out. The two parties had staked out street corners about 5 blocks apart. They each had microphones and big speakers and were giving them hell. It sounded like a revival on hell and damnation.

Friday and Saturday, February 9/10

Jicky still has his broadcast show each morning over the loudspeaker starting about 6:45.

We went south to Martello Tower and took some pictures. We took a short walk to the west shore between The Beach House and the ferry pier.

We met the dive people at the Codrington Pier at the lagoon. We took a small boat north through The Creek. We saw egrets, frigate birds, and brown pelicans diving, and then we were out to sea. The water was too rough when we got near the wreck and had to retreat. Just a boat ride. The new villas (over \$2,000/night) are called Palm Beach and are on a small strip of land separating the lagoon from the sea. We saw about five yachts moored on the Caribbean side. You could see the masts above the Palm Beach land.

We got back and went downtown to see the end of the ceremonies for the opening of the World Cup of Cricket—food, music, stage, announcements. We missed most of it.

I walked around before sunrise and looked at some birds. Saw a couple of bananaquits making a nest in the backyard. We took the road to Cocoa Point. There is a beach access between the Cocoa beach guard station and the south end of the old K Club (now closed). The beach was terrific, but the water somewhat cloudy because of the undercurrent. There were several boats out on the bay including some bigger ones: "Huntress" and "Gin Tonic, London." We looked at some of the K Club villas which were all boarded up with hurricane covers. It is starting to get grown over. We did a little snorkeling.

We went back to Indian Cave in the afternoon to take pictures of the Fish Bats. We then drove to between Two Feet Bay and Hog Point. The water was much clearer there than the south end. We snorkeled and took pictures. We saw a bone on shore that must have been a whale bone; it was about 4 feet long.



Top: A cloud-shrouded volcano on Montserrat (photo by Ben Boling).

We met a couple who were physicians and worked for West Virginia University. They arrange for visiting doctors at Barbuda. The doctors usually stay for only 2 to 4 weeks so they rotate out often. We spend the rest of evening getting ready to leave at 7:30 tomorrow morning for Montserrat.

Sunday, February 11

Up early to go to Montserrat. Connections went well, and we made it to Montserrat as scheduled. Montserrat is much different from Barbuda. It is much more mountainous and somewhat smaller. I had to get a Montserrat driver's license for \$20. We got directions from BeBeep and drove directly to the Traveler's Palm. We met Roy and put our stuff in the rooms. They only have a total of 3 rooms. A British lady has the other room. There is a nice little swimming pool and a great view of the island of Redondo and in the distance, Nevis. We head to see if we can see the volcano and find the main road closed just a couple of miles past the Traveler's Palm. However, we still get a view of the volcano in the clouds. We find

our way to the Observatory and get a better view and stay about an hour. We head back to the rooms before going to dinner at 7:00. We learn that the volcano dome is at an all-time high and is expected to collapse in the next two months. They have also closed more of the island since the first of the year. I call Mappie. We are scheduled to meet him at 8:30 tomorrow out at the Montserrat National Trust (MNT).

Lottie and Roy have been to Cuba for long periods and have interesting information. The Cuban people are highly educated but paid little. Medical care is primo. That said, the island is gorgeous. Old Havana was in bad shape, however. People are very nice and strive to achieve in their field despite the lack of monetary compensation.

Monday, February 12

We go to the MNT at about 8:30 and meet Jean White, Lady Fergus, and Mappie. Mappie is busy with others creating a botanical garden area at the Trust. We spend quite a while meeting with Lady Fergus and discuss the cave mapping idea. She seems to approve. We go to Jack Boy Hill and get a view of the old Blackburne airport and the volcano spurting out some

gasses. We decide to visit the bat caves off Redevous Point by swimming and going to the Happy Hill Caves tomorrow morning and taking a hike with Mappie in the afternoon. We need to meet with "Scriber" at the Agriculture Dept and get permission to go to Happy Hill. He calls the police so we get a permit to go to the Exclusion Zone.

We have lunch and head back to the room to get the snorkeling stuff. We head out to Little Bay and snorkel about 15 minutes to Rendezvous Point and the bat caves. The waves are crashing in and it is not safe to go inside. I get a little beat up trying. I drop Ben off at the dive shop for a night dive and head back to Traveller's Palm. I snack, shower and watch a little TV. Then I go back to pick him up. He has seen octopus, lobster, and eel. We eat and go back to the Jack Boy Hill viewing area. The volcano is visible. We see volcanic rock tumbling down the mountain for a distance. We don't get back until 11:00 p.m.

Tuesday, February 13

We meet Mappie about 9:00 and head to the cave area in the Exclusion Zone. We go down Happy Hill and find the road is blocked by a barricade, so we take another road for about 500 feet and park. We walk downhill for only about 10 minutes or so,

and Mappie finds the first cave quickly using Scott Pedersen's hand-drawn map. It has a smallish entrance of perhaps four feet in height and ten feet across. It opens into two chambers of about the same size, 20 feet in diameter and 6-8 feet in height. There is at least a foot of solidified ash on the floor from the volcano. There is also a small crawl to the right side that goes perhaps 15 feet. We see three small bats (*Natalus*) in the cave. I get some OK pictures of some. The walls are an agglomerate of volcanic rock. Scott and Mappie called them "tarish." Also saw spiders, a frog, and termite tunnels.

The second cave was further along the outcropping to the south and east. It overlooked the old golf course, which was demolished in the 1995 eruption. The pyroclastic material flowed down the valley over the course and extended out to the sea for several hundred feet. Everything was "ashy" as the active volcano still deposits ash in this area because of the prevailing easterly winds. You could see a line of dead trees down the middle separating adjacent fairways. You can see the volcano smoldering from here. The second cave is nearly a replica of the first with two to three bats and two chambers with ash floor and standing height. The right chamber is a bit bigger with no small crawl passage. There is a huge, nasty-looking dead centipede in the left room. Nothing much to see. These would be a snap to map. Back to the car and we go to the Centre Hills for a walk with Mappie. We stop at his house so he can change and go toward Doug Hill. Mappie is the consummate womanizer, philosopher, and naturalist. Scott said he is a former Rasta. We drive pretty far uphill past the last house and park. We meet a retired guy who is farming up here, planting mostly tuber crops such as potatoes and taro. Other things have been planted in this lush soil. At this level the land has been cleared for planting in the past, including banana trees. We begin to walk up and the vegetation becomes thicker. Other plants are Heliconia in bloom and elephant ears that have leaves as tall as me and grow 60 feet up into the trees. There are many huge ferns and fern trees. There are also some native orchids.



Above: Mappie and Jerry in tarish cave on Montserrat (photo by Ben Boling). **Right:** *Natalus* bat in tarish cave on Montserrat (photo by Ben Boling).

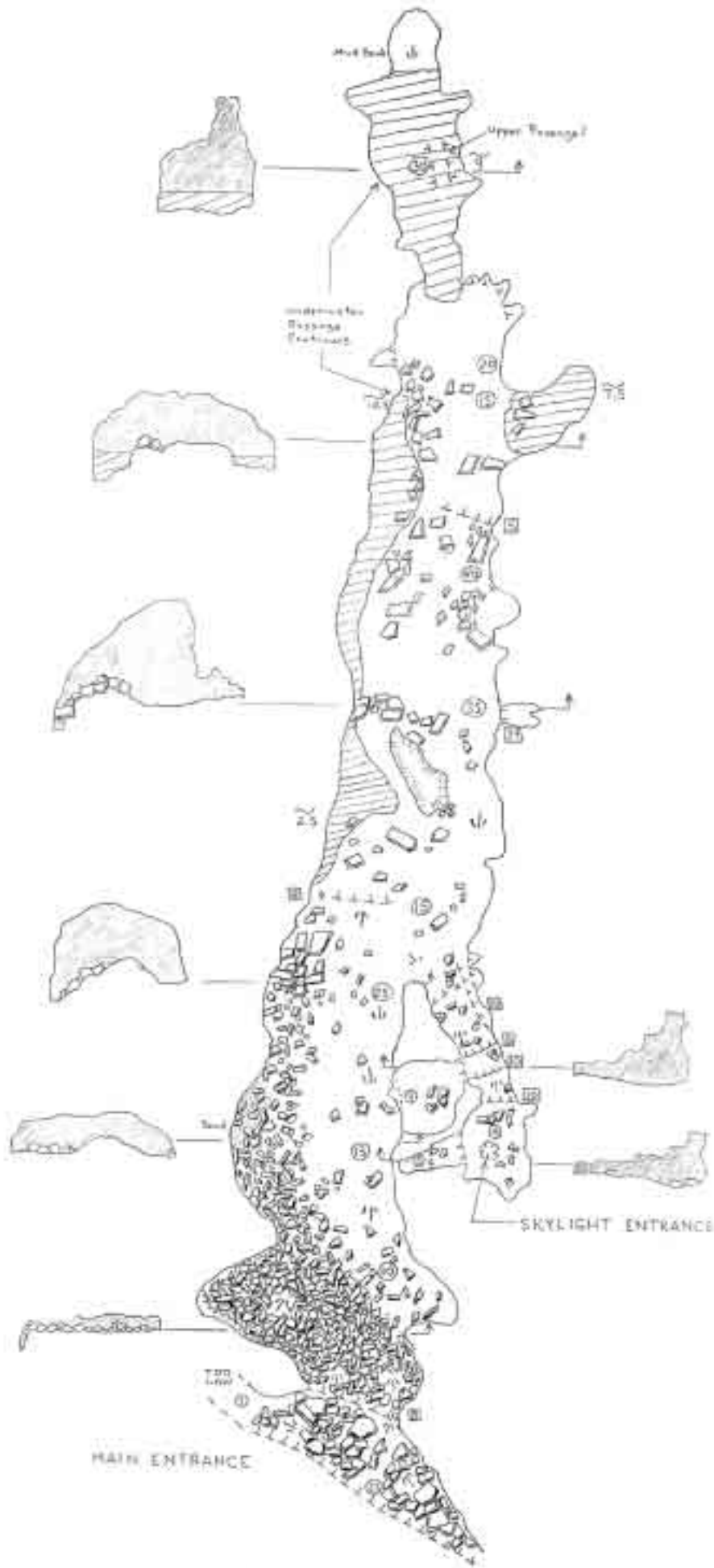
Mappie says he has seen some Green Monkeys on the island but hopes they don't populate and become a menace. We see the endangered Montserrat Oriole after Mappie calls it in. We see both males and females. Later, on the walk back, a female stops on the trail about 10 feet in front of us and provides us with the most exciting bird call I have ever heard, lasting about a full minute. The trail is not often used, and Mappie says he takes few people here. We work our way down to a small creek. We coax out some see-through crawfish in a pool with some KASHI bar. You can see the food they eat after ingestion. They are smallish, perhaps 2 inches long. Probably about 50 in this small pool. Also we see a purple-throated hummingbird, which is a lot like the green-throat on Barbuda. Mappie gets a bunch of bananas for us to take back to Lottie and Roy. Quite a gorgeous hike. Mappie invited us to go with him at night to hunt crawfish and "Mountain Chicken," a large frog in the mountains. I declined because it would likely have been an all nighter. We take Mappie back to his house, compensate him, and say goodbye. We head back and get Gay, go eat, and return to Jack Boy Hill to watch the light show. It is better tonight.



You can see many glowing rocks and boulders bounding down the hills toward the east.

Wednesday, February 13

Up early to get packed and go on a walk along the "Oriole Trail" with Lottie, Ruen, and about 20 others. They are mostly older, white and surprisingly fit. It is an OK walk, but we stop infrequently and see little. More of a social walk. It takes about 1.5 hours. Back to Traveller's Palm for good-byes and to get Gay. We have lunch and go to the airport. ●



Dark Cave

Island of Barbuda, West Indies

Surveyed 2/5/2007 and 2/7/2007

Surveyors: Jerry Cindric, Ben Boling, and Kenrick Joseph

Drawn by Jerry Cindric

Total Surveyed Distance: 582'

Cave Depth: 79.8'

Suunto Compass, Suunto Clinometer, and Fiberglass Tape



SCALE



Jacks Fork Caves

trip report by **Gary Johnson**
photos by **Mark Lankford,**
Gary Johnson, Matt Kuehnert,
and **Dale Curtis**

In April 2007, I led a trip on the Jacks Fork River in which we floated 24 miles of river over three days. Part of the trip was just fun stuff, visiting some of the typical sites, such as Blue Spring, Jam Up Cave, and Meeting House Cave, but we also had a purpose for being there. I had let Scott House (who works for the NPS) know that we'd be floating the Jacks Fork and asked if there was anything constructive we could do while in the vicinity. He sent me a list of caves and approximate locations (dots on a topo map). Our goal: to find the caves, get GPS locations, take photos, and monitor the cave biology and the human impact.

Alley Spring Campground

We met at Alley Spring campground on a Thursday evening. I'd reserved a cluster site, which are for groups of up to 20 people. Dale Curtis and his brother Chuck had come down earlier, and they had found plenty of firewood. Because it had rained the day before, I had sort of given up on the possibility of a campfire, so it was most welcome to see a campfire blazing and a large stack of firewood. I rode down with Steve Potter of PEG. Mark Lankford and Matt Kuehnert were already there, as was Jim Cooley, and a little later that evening, Sam Clippinger and Craig Hines arrived, so our party was complete. Most campsites at this campground are out in the open, without much in the way of trees or brush to provide privacy. In this case, however, we were one of the very few groups at the campground, so privacy wasn't a problem.

Canoe Rental

In the morning, we headed over to Harvey's Alley Spring Canoe Rental, which is located just across the road from the campground. We paid for the canoes, threw our



Above: Cavers are dwarfed by the entrance of Jam Up Cave (photo by Mark Lankford).

gear in the trailer, and piled in the van. Our driver had lived in the area all his life. We threw the usual crop of questions at him: Do any hunting? ("You bet. Turkey and deer mostly.") You ever eat a squirrel? ("Yeah. Didn't like it.") Ever seen a bear? ("Not in my 25 years living here.")

Buck Hollow

We arrived at Buck Hollow and pulled our gear out of the trailer while our driver unloaded the canoes. Buck Hollow is one of the major put-ins in the upper Jacks Fork area. It's located where the Hwy. 17 bridge crosses the river. We had an odd-numbered party, nine people, so we had four canoes and one kayak. Mark would be first to try the kayak.

Water was up about a foot thanks to the recent rain. So the river would be at a perfect depth for our float trip. The extra water would keep us going over the shallow spots where the river gets just a few inches deep.

Double Cave

First up on the agenda, one of the NPS caves, Double Cave. Located within 100 feet of the river, at the base of a small bluff, Double Cave gets its name from its two large entrances, but both passages are relatively short. Both the left and the right entrances have only about 30 to 40 feet of passage. The



left entrance is the larger of the two. It's about 14 feet high and 6 wide. The passage leads back and to the left, up a small slope. Many small flying insects (gnats?) swarmed near the end of the left passage, where a tight opening leads up to daylight. This opening could be crawled through by a thin person; however, we didn't attempt it. The map says it's "too tight," but I suspect the hole has been enlarged since the map was created (1984). The right entrance passage appears to be joint-determined. The ceiling is as high as 20 feet. This passage is narrow. It leads to an area with flowstone on the walls. Someone could squeeze into upper level, which would be an eight foot climb, but this would mean

Top left: Preparing to put in at Buck Hollow (photo by Dale Curtis). **Middle left:** Craig Hines in Double Cave (photo by Matt Kuehnert). **Bottom left:** Flowstone in Double Cave (photo by Mark Lankford). **Top left:** Jacks Fork below Buck Hollow (photo by Dale Curtis). **Above:** The entrance of Simpson Hole Cave (photo by Matt Kuehnert).

climbing on flowstone. We didn't attempt it. A passage runs between the two entrances, and a crawlway parallels the main passages, from the connecting passage. We did not follow this small passage, which would've been a crawl in mud.

Simpson Hole Cave

Simpson Hole Cave was the only cave on the NPS list that I was already planning to visit. It has an obvious river entrance at the base of a vertical bluff. Anyone who floats this section of the river will see this cave. It's only possible to access the cave from the river. You can float right to the cave entrance, which is 30 feet wide and 12 high. An upper window is apparent from the river, but I didn't see where it joined the main passage. Water depth drops off quickly in front of cave. There is room for several canoes to tie up at the entrance. A large tree grows from the entrance and hangs over river. Storm debris (bark, branches, leaves, etc.) littered the entrance.

Within 20 feet of the dripline, a large mass of rock hangs low and requires visitors to duck under on the left side, but then the cave is immediately walking height again. This leads to a large room, about 80 feet long and 50 feet wide with a ceiling height over 10 feet. Straight back from the entrance, we found the remains of a campfire: blackened fragments of sticks. It's amazing the stupid things that people will do. The fire was close enough to a stalagmite that it turned it grey. Otherwise, we saw very little trash in this room.

To the far right is a dome-like structure with water dripping from the ceiling. A shallow pool has formed. We inspected the pool for life but found nothing.

This is a well-decorated cave. Many soda straws and other formations. Some breakage of formations, but no graffiti. The floor is mostly hard packed from visitors. This is a highly visited cave. Most likely several people visit the main room every day.

A narrow squeezeway/crawlyway can be found on the left side of the main room. The MSS cave map doesn't quite do this passage justice, which indicates it's 4 and 5 feet high. To the contrary, the passage almost becomes a belly crawl at times, as the narrow canyon twists so that it requires a fair amount of work to squeeze through the contortions. The contortions are relatively brief, but we got good and slimed in the process. The churned-up muck in this passage seems to indicate that many people have been down this passage. Eventually, the passage opens into a room. A fair-sized room with an impressive display of soda straws on the ceiling. We saw many



Top: Draperies in Simpson Hole Cave (photo by Mark Lankford). **Middle left:** Craig Hines and gear (photo by Matt Kuehnert). **Middle right:** A view from the bluff at Blue Spring (photo by Matt Kuehnert). **Right:** Mark Lankford in the entrance of Flue Cave (photo by Gary Johnson)



Above: Jim Cooley looks over the Jacks Fork from the bluff entrance of Flue Cave (photo by Gary Johnson). **Above right:** Sam Clippinger in the bluff top entrance of Blue Spring Natural Tunnel (photo by Gary Johnson). **Right:** A retaining wall fell many years ago at Blue Spring (photo by Dale Curtis).

pipistrelle bats in this area, at least a dozen. (And we counted another dozen in the main room.)

I climbed up the steep slope in this room to a pile of breakdown and found old evidence of bat guano. This might indicate myotis bats used the cave at one time, but the guano is several years old. This is a very nice little cave.

I have to wonder if it might be wise to gate the cave, to protect the formations and encourage the return of myotis bats (if that's what they were).

Blue Spring

One of my reasons for putting together the Jacks Fork trip was so I could spend a little time inspecting the Blue Spring area. I'd read about several interesting geological features.

We stopped for lunch at the old ford that crosses the river a couple hundred yards upstream from Blue Spring. Sam had accepted the duties as lunch cook. He's good at it. He's had lots of practice on scout trips.

While the other trip participants were waiting for lunch to cook, I hiked down to the Blue Spring area and found a trail that led away from the river and up to the top of a



bluff. Here, as I expected, I found Flue Cave and Blue Spring Natural Tunnel, so after lunch, I led the crew back to this area.

Flue Cave is a little cave, but it's interesting. The entrance is a little hole on the top of the bluff. You simply drop in the hole. This puts you in the cave's one passage, which becomes

a window about 40 feet above the river. The total cave is only about 25 feet long.

Blue Spring Natural Tunnel is nearby in this same bluff. The entrance makes you go down on one knee in order to squeeze through the narrow passage. Then a single passage is about 30 feet long. As with Flue

Cave, the tunnel passage becomes a window. Instead of looking over the river, this window looks across a narrow canyon. Much of this area looks like the remnants from a cave collapse. Breakdown litters the canyon. On the bluff across the way from the natural tunnel is a cave entrance. This is Hospital Cave.

We donned our helmets and headed in. The entrance is so heavily trafficked that the floor is hard packed like a commercial cave. The walls are smooth. The passage is almost choked off by a large display of flowstone on the left, but most people can easily squeeze past it. A small cavity in the ceiling on the left contains a minor upper level with several columns and other small formations. Past the ceiling cavity, dripstone on the floor covers much of the passage. However, when I visited the cave about four years ago, the dripstone seemed much whiter. Now the formations on the floor are brown. I suspect traffic through the cave has taken its toll, but maybe my recollection of the formations from four years ago is faulty. We crawled up to the bluff entrance. Everyone sat for a couple minutes while I took a group photo. Then we headed back into the cave in order to exit at its third entrance, which is a slot with a high ceiling.

Nearby, we found Blue Spring running clear, with a little blue tint. It wasn't muddy at all considering it had rained within 48 hours. Another group had stopped at Blue Spring. This was the only time we shared a site with others. In all other instances, we were alone. A retaining wall was built many years ago at the edge of the spring. Not sure why it was built. It wouldn't have really raised the water level much. Now the wall was fallen into the rise pool. We took a few photos and then returned to our canoes.

Baptizing Hole Spring Cave

Baptizing Hole Spring Cave is a very pretty little cave. It has over 500 feet of passage, but we only walked back to the waterfall. So we only saw about the first 150 feet of passage. To get to additional passage, you have to climb up the ledge on the right, but here the flowstone is white. And we didn't have any good reason to be walking on white flowstone, so we just saw the waterfall and turned around.

Above: The bluff entrance of Blue Spring Natural Tunnel is in a narrow ridge (photo by Mark Lankford). **Middle:** One of three entrances to Hospital Cave (photo by Mark Lankford). **Right:** The Jacks Fork at Blue Spring canoe access (photo by Matt Kuehnert).





The cave is dangerously close to an area frequented by campers, so the cave undoubtedly gets plenty of visitation. The entrance is up a little slope from the river. The spring pops out of the bluff below the cave entrance and to the left. It flows under some large boulders before making the final cascade to the river.

The cave entrance looks like a double entrance, with one passage high and one low. However, the upper passage becomes a window on the lower passage, joining it at a high slot (40 feet high) where flowstone covers the north wall. The passage that continues deeper is about 10 feet high and 6 feet wide. It twists back and forth as you walk over a chert gravel floor. You can hear the waterfall long before you get there, and you feel the mist in the air. The waterfall comes from a little slot about nine feet up the back wall. It was gushing at a fair volume, maybe a gallon or two each second. It falls in a nice room with a gravel floor and flowstone on the walls.



Top left: The canoe team at the bluff entrance to Hospital Cave (left to right): Mark Lankford, Sam Clippinger, Jim Cooley, Craig Hines, Steve Potter, Chuck Curtis, Mark Kuehnert, and Dale Curtis. **Middle left:** Sam Clippinger at the entrance of Baptizing Hole Spring Cave. **Middle right:** Sam Clippinger at the waterfall in Baptizing Hole Spring Cave. **Left:** Sam Clippinger at Jacks Fork Natural Arch. **Above:** Craig Hines above the emergence of Baptizing Hole Spring. (All photos on this page by Gary Johnson.)

Jacks Fork Natural Arch

I'd read about Jacks Fork Natural Arch in *Geological Wonders and Curiosities of Missouri*, but the description in this book is fairly vague. So I wasn't sure what to expect. Well, frankly I expected a very minor little whisp of rock. Boy, was I surprised when I looked at the east bank of the river and saw a large arch. I had told Sam to lead the way to Jam Up Cave, fully expecting to skip the arch because we were way behind time, but when I saw the arch, I changed plans and headed for the shore. This is a very impressive site, also known as Three Entrance Cave. A large room/space behind the arch is sort of like a courtyard, with two smaller entrances also entering, as well as a cave entrance at the rear right, not to mention a little alcove in the back wall. The cave passage in the rear right wall is about 140 feet long and features a large number of small formations. Some breakage of the formations. The cave is almost floor-to-floor footprints, so it's apparently visited quite frequently.



Black Bluff Cave

Okay. Now, next stop Jam Up. Steve and I didn't wait for the others but shoved off a few minutes before they were ready. We came to a bend in the river, and up above the bend was a huge cave entrance. This had to be Black Bluff Cave. I hadn't see it before, and we had several minutes head start on everyone. So, even if we were behind time, we had to check this out.

Impressive entrance: 25 feet high, 30 wide. Small cave to the lower right: Little Black Bluff Cave. While Steve checked out the little cave, I headed into the large entrance. The middle of the entrance slope was wet and muddy. Maybe from water running over the bluff face. I wandered toward the back of the cave, ducked down briefly, declared it a formation choke and headed back toward the entrance.

Steve struggled past me up the slope, nursing a strained ankle, while I looked down at the river for the rest of our team. They were headed for the bank below. I yelled for them to continue to Jam Up, and then I looked for Steve. Steve? STEVE! Where was he? Several minutes later he emerged from the back of the cave. I guess it didn't "choke" as soon as I thought. Later, when I looked at the map, yes, it did indeed continue for about 40 feet through a thick collection of columns and stalagmites. The total cave length is only maybe 120 feet. We hurried back to our canoe and paddled to catch up with the others.



Jam Up Cave

Steve and I were last to reach Jam Up. Everyone else was already headed up to the cave.

Another float party had set up tents on the gravel bar opposite Jam Up. Here is where I

Top left: Sam Clippinger takin' it easy (photo by Matt Kuehnert). **Top right:** Sam Clippinger at the entrance of Jam Up Cave (photo by Matt Kuehnert). **Bottom left:** The bluff at Jam Up Cave (photo by Mark Lankford). **Bottom right:** Massive breakdown boulders clog the stream leading from Jam Up Cave (photo by Matt Kuehnert).



was thinking of setting up camp, so we'd have to look elsewhere.

I'd forgotten about the jumble of rock and dirt in front of Jam Up. Even though the entrance is about 90 feet high and 100 feet wide, it's half obscured by all the breakdown and trees. Still, you can't miss it. The dark curve on the bluff is obvious far upstream.

We pulled our canoe onto the bank and headed up the steep path to the entrance. The cave stream exits the cave on the left. Elsewhere the entrance is almost half filled by rubble. The path leads to the top of this pile of rubble, and from here is a genuinely awe-inspiring sight.

The gaping mouth of Jam Up is like nothing else in Missouri in terms of scale. New Mexico caves might pose a challenge. It's that big. People climbing over the breakdown in the distance looked impossibly small, as if an optical illusion were responsible. It takes the mind a few minutes to really take in what the eyes are seeing and comprehend the vastness of the entrance passage. Breakdown boulders the size of RVs, the size of entire houses, litter the floor of the cave in a massive jumble. It's as if you've suddenly been shrunk to little more than the size of a toy soldier.

I checked out the side passages on the left. These passages extend for about a 200 feet each, but both passages almost immediately require crawling. So I didn't venture far.

Daylight penetrates far into Jam Up. Even after you've scrambled past the breakdown, to 300 feet into the cave and you're standing beside the wide, deep pool at the room's terminus, where high walls rise over the pool and a waterfall pours through a rift in the wall, underneath a huge breakdown boulder that rests wedged above the narrow canyon that the water has cut, you still don't need a headlamp. In fact, your headlamp is largely useless here because the brightness of the entrance turns everything bluish grey.

I lay back on a block of breakdown, a huge dolomite boulder cleaved in a smooth plain, and allowed the mass of the rock to soak away the heat from my limbs, to soak away the heat I had generated from climbing down to the pool. After resting for a few minutes, I rounded up everyone and headed back to the canoes. More of Jam Up awaited us.

The sinkhole entrance is over the ridge. This isn't an easy climb, especially coming after a long day of canoeing and caving. We



Top: Recent rains formed a large pool in the main passage of Jam Up Cave (photo by Matt Kuehnert). **Middle:** Climbing through the breakdown blocks at Jam Up Cave (photo by Mark Lankford). **Left:** The huge main passage of Jam Up Cave (photo by Mark Lankford).



Above: The skylight entrance to Jam Up Cave's upper level (photo by Mark Lankford).
Right: The sinkhole entrance to Jam Up Cave (photo by Dale Curtis).

drifted downstream a hundred yards and then pulled ashore. This was much, much steeper than I remembered. Yet this is what we were here to do, so we started the climb. Here the climb is about 200 feet in a little break in the bluff where the slope swings away from vertical just enough that your feet can find dirt to dig into and your hands can find roots and trees to hang onto.

We slowly climbed toward the ridge top, and as we climbed my leg muscles started to burn. Are we at the top yet? I look up and wince. Yikes. Not even close. And continue climbing. Is everyone still with us? Yep, everyone's still climbing. Each step up sends spasms of fire into my legs. Where are we at? I look up. Ow! Still a ways to go. But here we can start to go sideways on the bluff, so the rough part of the climb is over. We stagger up to the ridge top, angling across the bluff face, until we intersect the trail at the summit. Whew! Level land, if ever so brief, never felt so good.

The ridge here is between Jam Up Creek and Jacks Fork. This very narrow ridge is called the Devil's Backbone and it separates the valleys by only the merest of margins (as measured by rock). In fact the rock (the ridge) had failed to keep the valleys separated precisely at Jam Up Cave, where the cave system swallowed up the stream. Jam Up Creek now enters the cave system to the south and pushes through a sump into the cave's upper reaches, to then flow through the cave's darkest passages for 600 feet to the cave's sinkhole entrance, where the cave's ceiling has given way to form a huge cellar door entrance into the cave's upper levels. Here deep green water moves forward through breadown and fallen tree trunks a foot thick.

We reach the sinkhole by turning away from the path on the ridge and plowing down into the undergrowth, which here is mercifully thin. The abandoned bed of Jam Up Creek looks like it hasn't carried water in many, many years. Trees have claimed the valley as part of the forest. No doubt the sinkhole captures all the flow.

But what's this? The sinkhole? It looks steeper than I remembered. Never mind. I was new to caving on my first trip here. I remember Jeff Page and Sam looking at the slope and wondering aloud if it was possible/wise to climb down into the cave through the sinkhole. I plowed down.

Now, however, as I looked down at the bottom of the sinkhole, I saw blackness. A gaping hole. But this has to be right? Doesn't it? So I start down. This is really steep. Dangerously steep. Well, I'll aim for that ledge at the bottom. Craig doubts me. He has better sense than to follow me. He'll wait and see how I do. Matt's right behind me. Hey, everything has gone right today. I've found everything that we've looked for. But Dale is thinking, this can't be right. He starts looking for alternatives. Wait a minute. What's this? Another sinkhole? A much bigger sinkhole. He yells his find. Could it be? Could this have been a stupid mistake? Could it ... suddenly I remember: the cave has a skylight entrance. I was attempting to enter the skylight entrance. I shudder. After this little episode, the participants were somewhat less willing to follow me. I can hardly blame them.



We regrouped beside the real sinkhole entrance and began the descent. This was easy. A cakewalk. Child's play. Soon we were all standing at the bottom of the sinkhole, within the upper reaches of the cave system. The east wall of the sinkhole forms a convenient ramp. The sinkhole is about 40 feet by 60 feet. Logs have tumbled down the entrance. Moss and ferns grow on the walls.

First on my agenda: find the skylight. How far would I have fallen? So I curve to the right and follow the wall as it undulates. Here's a dome-like room. Could this be it? No. I see no hole in the ceiling. I follow the wall again, and the passage is indeed high ceilinged ... but still no skylight. Hmm. Is this possible?

I give up on the search for the skylight once we get close to the pool overlooks. I crawl forward onto a ledge. Others do the same. I can hear their oohs and aahs. The cave's river entrance is visible. I sit 30 feet above the pool below. Very nice view. I crawl to another overlook, and then it's time to look at the overlooks on the other side. No one has been over there yet, so I lead the way over the rushing stream, where the water surges through a narrow cleft in the rock layer.

The passage curls to the left and then to the right. I enter a circular room with light ... from above. I look up. The skylight. Strange. The two sinkholes seemed so close together when we were on the surface, but in the cave they are on opposite sides of the main passage. Now I remember the skylight. It's amazing how the mind can store away crucial

pieces of information such as this, and then not serve up the recollection again until it's really too late to be of any use, as if the mind has a terrible librarian that misshelves crucial bits of info. Maybe I would've remembered the skylight as I plunged down the domepit. Maybe suddenly, in mid air, I would've thought. Oh, yes. Now I remember. Splat. Dappled greenish daylight playing on my inert body. Ah, memory. A 30-foot drop should be filed in a memory bin that's accompanied with a flashing red light. Remember this. Remember this. Remember this. Instead it was tossed into the same bin with my wife's requests for chores around the house, with unpaid bills tucked into my briefcase, with hints from my wife about what she wants for Christmas. Splat! Blood oozing from my ears. My eyes all yellow and motionless. The cavers stand around me. "I can't believe he tried climbing down through the skylight." They look up and then at the body on the cave floor. And up again. They shake their heads. "What do we do now?" "It was a good trip until this."

(Thank you, Dale. You may have saved my life.)

Friday Camping

We floated on down river, looking for a place to set up camp. We looked at one gravel bar and Sam nixed it for not allowing a route away from the river if the water level were to rise in the night. Yes, we needed a place with higher ground not far away, so we continued downstream. The waypoint for Red Bluff Cave popped up on my GPS, and yes, there in the left bluff, right before a hollow, was an obvious cave. Must be it. We needed to monitor this cave for the NPS. Not far ahead was a gravel bar on the right. We pulled ashore and looked over the gravel bar. It was a huge gravel bar. Maybe 40 yards wide and 200 yards long, but it was only a few inches above the river level. To the right, trees encroached to the edge of the gravel bar. I plowed up the slope. A 30-foot elevation gain, and then I was standing on a nice wide flat section of forested land with little undergrowth. A horse/ATV/ trail sliced through the woods 20 yards away. This would work.

Let's you think we were being overly cautious, we were fully expecting rain that evening. Weather forecasts had been predicting rain on Friday evening for several days, and according to the guy who ran Harvey's Alley Spring Canoe Rental, the weather forecast still predicted rain. So we needed high ground. Thirty feet high was a little excessive, but we didn't have much choice. Choice one: the gravel bar. Choice



Above: Sleepin' Sammy Clippinger taking it easy (photo by Matt Kuehnert). **Right:** The entrance of Red Bluff Cave (photo by Matt Kuehnert).

two: 30 feet up. Choice three: there wasn't a choice three if we wanted to stay near Red Bluff Cave. So we pitched camp in the woods on flat, soft soil. Just as we settled down for dinner, the raindrops hit. Did you feel that? No, don't tell me. Wait ... wait ... You've gotta be kidding me. ... Time to break out the rain gear. Damn. I headed for my tent to get my rain gear, but once I was inside the tent, I couldn't think of a good reason to go back out. Rain was coming down pretty good now, so I laid there until I fell asleep. I knew I wouldn't sleep long. And sure enough before midnight I was awake. Camp was quiet, except for the rain, which was still coming down surprisingly hard.

Surely someone checked the canoes and made sure they were safe, right? But could I trust that had happened? Well, there was no way I would go asleep again before I had an answer for that, so I pulled on my rain gear. I soon discovered the slope down to the gravel bar was like an otter slide. This made getting down the slope a little tricky (not to mention getting back up).

Once I reached the gravel bar, I found the river level hadn't really come up much, maybe two inches. One canoe was half in the water, so I pulled it completely onto the gravel. The others looked okay.

Saturday morning started with the valley was obscured by fog. As the sun rose above the trees, I hoped it would soon burn off the fog. While the sun began to work its magic, everyone broke camp. I packed up my gear and headed back back to the canoes. The route was still slippery but it was much easier without the rain running down the slope. The sun started to peek through the fog, so I threw my tent and rain gear over tree



branches. Before long they were reasonably dry. Time to head back to the river.

Red Bluff Cave

We paddled upstream a couple hundred yards to Red Bluff Cave. The entrance is visible from the river, although it's somewhat obscured by trees. Located about 30 feet above river level on the face of a low bluff, about 150 feet from the river, a somewhat tricky climb to the cave entrance serves as an effective deterrent for most visitors. There is no trail to the cave. The bluff face is terraced, so you have to reach the cave's level and then work over to the entrance. A minor bush-whack and climb up the slope on the left leads to the cave's level. Thorny vines also serve as deterrent. The cave entrance is about 10 feet wide and 20 feet high. The entrance area is very dry. There is no stream in the cave. It's completely dry. We rode out a hard rain the previous night just a couple hundred yards downstream on the right. Ironically, this cave was bone dry the next morning. A bit frustrating to think there was a nice dry place nearby when we were getting drenched. Pockets in the rock near the cave's entrance might be used by rats. Much nest-like debris in these pockets. Main passage heads straight back, up a dusty slope. Within 40 feet, the floor rises to the ceiling, leaving only a low, wide shelf, which can be easily crawled. We crawled back and to the right. The passage is very wide but only about 1 to 2 feet high. A minor cave of negligible value to recreational cavers.

Gilmore Cave

I should've been paying closer attention to the topo map and my GPS unit when we approached this cave because we somehow walked past the little niche in the bluff where the cave is located, although I remember asking the others "What's that dark area?" We ended up in the hollow to the west. I suspected this meant the cave was higher up the bluff. The bluff here is high and steep (about 200 feet high). I led the way up the bluff. The bluff face is terraced by the various exposed rock layers, so it's a bit tricky getting onto the level that you want to check. Other participants stayed low and worked back to the east.

When I finally checked my GPS unit, I found we were still a couple hundred feet to the west of the cave location as provided by Scott House (a dot on a topo map), so I continued working to the east. I ran into an indentation in the bluff and peeked down. I could see what looked like a cave, but I could not climb down to it. The bluff here was vertical, and I was about 20 feet up. So I shouted down to the others. They were following a side branch of the Jacks Fork. I told them where the indentation was. They headed toward it. While they climbed up toward the cave, I was forced to largely retrace my steps, which probably took 20 minutes.

Above: Dripstone formations in Gilmore Cave (photo by Dale Curtis). **Below:** The entrance of Meeting House Cave (photo by Mark Lankford). **Right:** Colorful formations in Gilmore Cave (photo by Mark Lankford).



Steve Potter, Sam Clippinger, Dale Curtis, and Mark Lankford monitored the cave for the NPS. They reported a single room with a very nice formation (see photos) and some rudimentary cave pearls (misshapen) and shallow rimstone pools (see photos). No signs of visitation. This is a difficult cave to reach (compared to other Jacks Fork caves). You can't see it from the river. There is about 100 yards of brush, branches, and other flood debris between the river and the bluff. To the west (upstream), the river splits, with a small branch trickling through the debris and forming what looks like a spring branch, and this branch runs at the base of the bluff. This branch is two to three feet deep in places,





Above left: Matt Kuehnert in the entrance of Moss Spring Cave. This moss-covered tube soon meets the larger main passage (photo by Matt Kuehnert). **Left, Above, and Right:** Flowstone formations in Moss Spring Cave (photos by Mark Lankford).



although it can be easily walked across in other places. The cave can be found up a steep talus slope, about 100 feet in elevation above the base of the bluff. No signs of human visitation. No trail to cave. No trash.

Meeting House Cave

This cave has one of the largest entrances you'll run across; however, coming after Jam Up, the entrance seems diminutive in comparison. The main passage starts huge but pinches relatively quickly, providing only about 220 feet of passage. After climbing up and down the bluff while looking for Gilmore Cave, I was in need of a little rest, so after leading the way to this cave, I laid back on a dolomite ledge and let the rock soak up the heat I was generating, while the others wandered to the back of the cave.

Rymers Area

Next stop, Rymers Spring. That was the plan anyway. I'd selected the waypoint on my GPS unit and was merely floating to the waypoint, not paying attention to the topo map. A few hundred yards before the waypoint, I noticed what looked like a spring branch on the left. The water was definitely bluish, but I shrugged and continued toward the waypoint. As Steve and I neared the waypoint, however, Rymers river access came into view on the right. That can't be right.

Oh, no. We had floated past the spring. What looked like a spring branch was most likely the route to Rymers Spring. I'd selected the wrong waypoint. Instead of selecting Rymers Spring, I had selected the next one downstream: Rough Hollow. So we turned into Rough Hollow and paddled up it as far as we could go. At the end, the brush was incredibly thick. You'd practically need a machete to work your way through this brush. Previously, I had entertained thoughts of bushwhacking up Rough Hollow ... maybe not. After a little look-see in Rough Hollow, we headed back to Rymers river access on the south bank of the river and set up for lunch, which once again was provided by Sam.

Lodder Bluff Cave

We floated to the GPS location derived from the topo map location provided by Scott House. The bluff here is very tall, over 300 feet tall as shown on the topo map. The location put us in a little side branch of the Jacks Fork. The river has changed course since the topo map was created. The river has moved to the south and left an abandoned side branch at the base of the bluff. Not really a spring branch, just an abandoned route of the Jacks Fork around an island/peninsula/gravel bar/shoal. We paddled up the branch until reaching the topo map location.

The bluff is fairly uniform in this area. The topo map contour lines are parallel. There are

few indentations in the bluff. As we paddled up, I noticed small pockets in the bluff, way high. Could that be the cave? So it was bushwhacking time.

I went to the left. Craig and Steve went to the right. I kept seeing shadows and dark places in the brush that kept pulling me higher and higher up the bluff. I had originally said there was no way I was going to go all the way up the bluff, but after 20 minutes of climbing, there I was, skirting the bluff face, hanging onto small trees and tree roots as I crossed the talus slope on the bluff face. This bluff is terraced. Drop offs from one level to the next are 10 to 30 feet. Even the pockets at the top of the bluff turned out to be nothing much. I decided to head back down. When I turned and looked toward the river ... yikes. I was very, very high. Very difficult getting back down. Had to retrace my steps way to the west before I could find a way down. Many, many thorny vines on this bluff. Lucky I didn't blind myself by running into them. Several cuts on my hands. Should've worn my gloves.

Back at the base of the bluff, Steve and Craig said they had found nothing. The others were anxious to get downriver, so I said "fine." We got back in our canoes and started to float down river. I shouted to Sam to lead the way to Catfish Bluff Cave. Steve and I brought up the rear.

As we floated at the base of the bluff, we stared through the trees and brush, looking



for the cave. About 100-150 yards east of the GPS coordinates for Lodder Bluff Cave, we saw an obvious cave entrance. Maybe 6 feet high, 6 feet wide. Sort of like a keyhole in the bluff, about 20 feet above the river. A dark passage heading straight into the bluff. There is a good chance this is Lodder Bluff Cave. I suspect the topo location was off because the bluff here doesn't have many features. The position was off to the west. I was concerned about the other canoes slipping away downstream, so I didn't take time to check out the cave. I took a GPS waypoint from the river. Not exactly accurate, but it's an improvement over the dot on the topo map.

Catfish Bluff Cave

We were running behind time, so I slashed some caves from our list. We did not attempt to find Fern Shelter, Upper Lodder Hole Cave, or Dark Hollow Hole Cave. That left just one more cave on the agenda, Catfish Bluff Cave. At the location for this cave, the left side of the river is a rock wall, about 10 to 15 feet high, so we floated on down river for about 200 yards. Here, at last, we could pull our canoes ashore. The brush was very thick. I looked at the cave map, which showed the cave on a bluff oriented northwest to southeast. That didn't look right: the bluff here was northeast to southwest. Maybe the cave is in the ravine to the west. No one was up for bushwhacking through thick brush, so we didn't attempt to find this cave.

Moss Spring Cave

After opting to not go bushwhacking for Catfish Bluff Cave, that left just one stop on our schedule: Moss Spring Cave. I was just guessing where this cave was located. I'd read a description of the cave in Missouri Speleology, which gave vague information but just enough that I thought I knew where the cave was located. Sam had the GPS location that I'd created and he floated in the lead with Matt. They drifted to the left before a large bluff and pulled their canoe to the left bank. "This it?" Sam asked. I saw a little spring branch flowing into the river. There's the spring. Looks promising. I nodded to Sam. He headed up the ravine, and in a matter of a couple minutes, we were standing at the entrance of Moss Spring Cave. The GPS location was only a few feet off. Sometimes you get lucky.

The entrance of Moss Spring Cave is a moss-covered, 30" x 30" horizontal tunnel. Water trickles over the floor of the tunnel. After crawling through the tunnel for 10 feet, you can stand up. You're in a little canyon passage that takes a serpentine course to the left. To the right, the floor is covered with flowstone, and further back, several rimstone dams line the slope. We went to the left and followed the main passage.

This is a pretty little cave with lots of flowstone and small formations. The cave only contains approximately 130 feet of passage, but most all of this passage is nicely decorated. After about 80 feet in the main passage, a large formation almost chokes off the passage, but you can squeeze by on the right

Left: The mill at Alley Spring. **Center:** The sluice gate at Alley Spring. **Above:** The spring branch at Alley Spring. (All photos this page by Gary Johnson).

into the waterfall room. Here, the cave stream emerges from a cavity in the back wall and cascades to the floor. The walls of this little room have been sculpted in jagged scoops out of dolomite (so water must really rocket through here after heavy rains). I'd forgotten my gloves, so when the others crawled in the stream cavity to reach the upper level, I was a bit reluctant to follow. The walls were sharp. But after the others had passed. I looked around and saw that I could chimney up the room I was in. The walls were rough and provided great traction, so I quickly chimneyed up and joined the others in the upper level, which is a shelf of clay/dirt with dozens of small columns, stalagmites, and soda straws. This cave was a very nice way of ending the caving portion of the trip. From here on, we would be paddling only.

Saturday Camping

I was hoping we could simply set up across the river from the cave on a gravel bar. Craig paddled across in the kayak to check it out. He found there was another group set up to the east, only about 100 yards away, and it looked like they might be there to party. We opted to continue floating down the river. Sam pointed out we were only about eight miles from the takeout at Alley Spring. Seems we made up time very fast on the river. The



current was fairly fast. With a little paddling, we were easily hitting five miles per hour. Sam pointed out we could be at Alley Spring in an hour and a half. He also extolled the virtues of hot showers. His argument did have a certain allure. Craig, on the other hand, definitely wanted to camp on a gravel bar. Hmm, I could see both arguments. I'd made virtually all the decisions the entire trip. I was willing to let the others chime in and make the call, but Craig and Sam were the only ones who had a preference. So I said we'd float a little more and look for a good place to camp—and then make the decision.

We floated maybe a half mile when we came upon a huge gravel bar on the left. The gravel bar sat unusually high, maybe five feet above the river, so the elevation difference would provide some safety if it rained somewhere up river. This looked like a winner to me. I told Sam, "This is our best argument for camping." Soon Steve and Matt said they wanted to camp. Our decision was made. I think most everyone was glad to take it easy and rest beside the river, instead of rushing back to civilization. Some of us set up our tents near the river. Others opted to walk 50 yards to trees and dirt. I found the gravel bar to be a great campsite.

The following morning Craig reported that he saw a bear. Around midnight, he heard the sound of a large critter moving through the brush across the river. Here the river was fairly narrow, so the bear was maybe 40 feet away. Craig got a good look at it and was quite confident it was a small black bear. After the trip, I contacted Scott House and he said there were indeed reports of a black bear in

the vicinity. It frequently broke into coolers at Bay Creek campground. And we were actually fairly close to Bay Creek. This campground is strung alongside the river. An access road heads two miles upriver from the campground, with a smattering of additional campsites scattered along the way. In fact, the final Bay Creek campsites were located only about 100 yards from where we set up camp. Directly across the river from our camp was a high, very steep bluff pockmarked with holes—a great place for a bear to hide out.

Sunday Paddlin'

On Sunday morning we had a little over seven miles of river left. We broke camp and began the final leg of our journey. This part of the river has a wider valley. Whereas the upper Jacks Fork is fairly narrow, with bluffs that come down to the river on both sides, in this mid-section of the river, the valley occasionally widened to a half mile. Surprisingly, though, this is where some of the river's largest bluffs can be found. We were frequently floating beside sheer vertical bluff faces that soared to as much as 200 feet. (I guessed 200 when I was on the river, but when I later checked the topo map, I discovered some of the bluffs were considerably higher than 200. Some were even pushing 300 feet.) So while this part of the river doesn't have many caves compared to the upper Jacks Fork, it's very impressive nonetheless.

I highly recommend you take the time to float this stretch. The river gets fairly shallow in places. In summer, it gets shallow enough

Above: Alley Spring Mill sits beside the spring's wide rise pool. (photo by Gary Johnson).

that canoe outfitters won't rent for fear their canoes will get beaten up on the rocks.

We caught the river at a good time. The water level was still up several inches. Steve and I occasionally ran into stretches where the bottom of our canoe scraped gravel briefly, but we never had to get out and pull our canoes. We always got by. The final seven miles went by very quickly and soon we were paddling up to the bridge that crosses the river at Alley Spring. We paddled up a little side pool to the takeout point. Our vehicles sat within 100 feet.

Alley Spring

As a final coda for the trip, I talked Steve into heading over to Alley Spring. I'd seen it a couple times before, but it's a beautiful site. We walked around the rise pool, along the spring branch, and beside the bluff (which has so many holes it's like Swiss cheese). We ran into Craig and Sam near the spring branch bridge, and later we saw Jim reclining in his camp chair under a tree, taking it easy. No doubt, this is a great place to relax after a tiring trip.

Afterwards, Steve and I drove into Eminence to get lunch at T&T's, which had a lunch buffet of fried chicken, mashed potatoes and gravy, green beans, rolls, and pie. Ummm-ummm. A great way to end a trip, especially after surviving on freeze-dried meals for two days. ●

Spring 2007 MVOR



MVOR Overview by Andy Isbell

I had most of my stuff already in plastic bins. It wasn't in any order but it was there. All that was left was to pack the bins in my truck. Fill my cooler and head out for Table Rock Lake at 4:15 a.m. The trip took 6 hrs. I had to go past Branson, Missouri, and the traffic wasn't bad. All I can say about that is WOW!

The MVOR was at the Cow Creek Boy Scout Camp off Mo. 86. The area was really nice. Paved roads, gravel parking areas with picnic tables. Just past the registration booth I found two KCAG members. This is where I camped. After getting the clothesline up, lawn chairs and cooler out, bed roll in tent, I finally got to see the rest of the area. There was a shelter house used for the Howdy Party and the Banquet. A stage near the water is where the Ben Miller Band played on Friday night (good band) . Boat ramp, rock beach, and a homemade wood-burning hot tub for 20.

The vendors row was near the bottom of the hill, along with the climbing wall. They sold gear, silver jewelry, glass beads, art, carbide lanterns, etc.

Friday was nice. A lot of walking around checking the vendors, who I am getting to know by their first names, visiting old and new cavers, checking out the different grottos and clubs, seeing all the different signs they made, drinking camp coffee, and having a good time. Finding out who my camp neighbors were. What a shock: I would be in for a long night. I don't think the grotto members I camped with had ever been to MVOR before and had never heard of CLUB 69 from St.Louis.

Twenty-five gallons of margaritas and a fully stocked bar was the fuel for one BLAST of a P@A#R\$T%Y that Table



Top: A sunset view across Table Rock Lake from the MVOR grounds at Cow Creek Boy Scout Camp. **Middle left:** Bill Gee at the MVOR vertical tree, **Middle right:** The climbing wall at MVOR. **Left:** Jim Cooley tests his frog system on rope. **Top:** The pre-immolation MVOR bonfire. (All photos this page by Bill Gee).

Rock Lake residents will not soon forget. The club would yell “B~U~L~L~S~H~I~T” and then their theme song, “A~S~S~H~O~L~E. I’m an ASSHOLE. A~S~S~H~O~L~E. Asshole. Asshole. I’m an Asshole.” (Imagine a bouncing ball.) They yelled/sang this song a lot. Someone down the hill would yell shut up!.And get the response “B~U~L~L~S~H~I~T” and another round of the “Asshole” song. It was the LOUDEST night of camping I have ever had the pleasure to experience. Laughing, shouting, singing, music—it was great. They also yelled/sang the “Star Spangled Banner.” That was cool. I finally got to sleep some time after the barfing stopped beside my tent. Later, I woke to a couple doing the wild thing and not being a bit shy about it. Ah, what a night.

I didn’t get to cave during MVOR. The trips filled up fast. That was OK. I had a wonderful time. I may do it again in a few YEARS.

Devil’s Den by Mark Lankford

After enduring a Friday night of late arrivals and partygoers, I was surprised to see a fairly decent turnout for the cave trips on Saturday morning. Although the interest in vertical trips appeared to be minimal, we were able to put together a group of four plus the trip leader to Devil’s Den near Compton, Arkansas. As was described to me, the pit is a ~95’ drop with some cave at the bottom. Aaron White from OHG was the trip leader. The rest of the group was comprised of Bill Gee (KCAG), Jay Kennedy (KCAG), and Wade Baker (BMG).

After a fairly long drive from Cow Creek campground on Table Rock Lake in Missouri to Compton, Arkansas, we arrived at the small parking area near the trail. We took a few minutes to change and pack the necessary gear and then hiked the short distance to the pit, arriving before noon. The pit is easy to find as it is situated right on the main trail.

Upon arrival at the pit, our trip leader Erin immediately tended to rigging the drop while we pulled out our vertical gear and cave packs. There was some water steadily running in the lower portion of the



Top left: A ring-necked snake in Devil’s Den (photo by Bill Gee) **Top right:** The entrance of Devil’s Den (photo by Bill Gee). **Above:** A pickereel frog in Devil’s Den (photo by Bill Gee). **Right:** Bill Gee on rope at Devil’s Den (photo by Mark Lankford).

pit, so care was taken to rig the rope away from the waterfall. A quick, uneventful rappel dropped us into a rain forest-like environment. Luckily, Bill brought his waterproof camera, as I didn’t even attempt to pull mine out for fear of water damage.

After everyone was down the rope, we decided to check out some of the easier walking passage, intentionally avoiding the muddy crawl on the opposite end. The cave is not very decorated in the passage we checked out, but does have some nicely sculpted features and a few formations that are definitely worth seeing along the way.



I really enjoyed the variety of life observed in the cave. Three prairie ring-necked snakes were spotted apparently doing well in the litter on the floor of the pit. Also observed were a pickereel frog, two Western slimy salamanders (one large adult with a regenerating tail and 1 young), an adult grotto salamander, an Eastern phoebe nest, two springtails, two terrestrial snail shells, and around 20 Eastern pipistrelle bats. (Bio information provided by Wade Baker).

After spending a short time checking out the local residents, we decided it was time to return to the surface. Erin led the way at

an impressive pace by climbing with the only frog system in the group. The rest of us all used some variety of ropewalker. In turn we each climbed out to a nice warm Saturday afternoon.

After a short break to catch our breath and some discussion about the experience, we repacked our gear for the short walk to the road. We looked forward to the festivities that would welcome us at MVOR on Saturday night.

Doghouse Cave by Jim Cooley

When reviewing the “Coming Attractions” page on the MVOR.org website, advertising their Spring, 2007 conclave of cavers, the first thing I did was make a mental note to get on a trip to Doghouse Cave. Several tours to Doghouse were offered, including one on Friday at 2:00, and two on Saturday at 11:30 and 1:00. Each promised slots for 8-12 cavers. So I figured I’d be in plenty of company and needn’t be ashamed to sign up for what the e-brochure author described as a “fun, mazy cave ... I would rate it as easy.” Because I am essentially a novice caver, just now returning to the sport after a 35-year hiatus, I figured I could sacrifice a little pride in the interest of maintaining some dignity while rediscovering all those tiny cave-critical muscles that not only hadn’t been used in 35 years, but which in fact might have atrophied away altogether during that time. A fun, easy cave, they rated it? So much the better. Sign me up!

Doghouse wasn’t my first wild cave since Nixon was in the White House. Thanks to a wonderful three-day canoe-and-cave carnival the weekend before MVOR, masterfully organized by Gary Johnson, I’d just crawled in and out of what seemed like several dozen natural bridges and small caves (and a couple of really BIG ones) on the upper Jacks Fork River, along with seven other canoe-capable (and one kayak-krazed) KCAGsters. Though I was still licking my wounds from the Jacks Fork when I arrived at Cow Creek, none of those wounds looked likely to prove fatal, or even permanent. I began to wonder if I shouldn’t have tried the fabled Fitton instead. I was further dismayed to read in the glossary of the convention guide (handed out at registration) that Doghouse was 45 miles from camp (Fitton was only 85), promising possibly more drive time

than cave time on this easy adventure. But I also noted that the glossary promised 4,000 feet of “easy” cave, which was easily 3,300 more contiguous underground feet than I’d seen anywhere up the Jacks Fork. Besides, Bill Gee was interested in checking out this hole, too. So we headed for Doghouse on the Friday, 2:00 p.m. tour. Why not beat the holiday rush?

One thing this trip reminded me of was the obligatory amount of misinformation that seems to attend all things speleological. It turned out Doghouse was less than five miles from Cow Creek, in Blue Eye, not far from the high school. I’d also discovered just before leaving camp that Robert L. Taylor’s trip-report description of the cave in the back of the convention guide cited 2,400 feet as the “reported” length of this cave, a 1,600 foot difference from the length advertised in the glossary. So it goes. It was certainly a popular cave. While our group was suiting up, another much scruffier crew showed up, most of them riding in the open bed of a beat-up pickup, and proceeded to gear up for the cave. These guys (and one gal) looked like they might have a lot of double first cousins dangling from the limbs of their family tree, like “orthodontia” was not in their lexicon, if you know what I mean. At least they had helmets. I wondered if maybe they were hillbilly locals. Who knows? They did not seem particularly friendly.

About that time, an older, heavysset fellow in a large, old car pulled up. The rest of our group had already transited the gate and headed for the cave, leaving only Bill and I to stop and talk with this guy.

“What are you up to?” he asked.

“Going to visit Doghouse cave,” we replied. “It’s just up that hill there.”

“I know where it is,” he replied. “Who are all you people?”

We explained that we were from the MVOR, a local cavers’ convention.

“Don’t you think you might ought to ask permission first?” he inquired.

“Well ...” I stammered, and looked at Bill. Bill shrugged his shoulders. “We assumed the group sponsoring the convention had taken care of all that,” I explained. “We just signed up for the tour going in.”

“Yeah, well, just so you know, this is my land, and no one has asked my permission for anything!”

It looked like we were really in the doghouse now! This fellow was getting



Above: In Doghouse Cave, a constant flow of water runs down this formation to the pool at its base (photo by Bill Gee).

grumpier and grumpier as the conversation wore on.

“Sir,” I said, “if you like, we’ll go fetch the rest of our group back, and leave. But there’s another group headed up there too, who don’t appear to be affiliated with us. Just so you know.”

The man glared at us from the car. I was beginning to wonder if maybe it wasn’t trespassers he minded so much, but Yankees in fancy, store-bought caving coveralls.

Finally he said, “Nah, I guess it’s all right this time. But next time, please tell your leaders up to that there convention to ask first.”

“Yes, sir!” Bill and I cried, waving as our landowner put his car in gear and drove off up the hollow. Neither one of us was really sure what that was all about -- but we were darned sure going to chat with the Ozark Highlands Grotto MVOR sponsors when

we got back to camp and find out. I had met those guys and just couldn't imagine they had failed to get obtain permission from a private landowner.

Bill and I beat feet up the hill to the cave entrance, which was in a steep, dirt hillside. It had apparently been long ago stabilized and reinforced with a rough concrete "doghouse" structure, hence its name. There was supposedly a second, very tight lower stream entrance below, conceivably the only original access to the cave. Just inside this doghouse, the cave opened up into a large room. In spite of the aforementioned Principle of Maximal Speleo-Misinformation, the description from Robert L. Taylor's trip report in the convention guide generally resembled the cave that I saw. I doubt my still-meager caver vocabulary and knowledge of karst geology and speleogenesis will throw any additional light on this gritty, grungy grotto.

In spite of being advertised in the glossary as "mazy," though, this cave seemed to me to be a pretty much a straight-line, originally fracture- or fissure-determined cave created by phreatic activity, long since drained by an uplift and then undercut by a stream meander and now congested with a great deal of large breakdown, well packed with dirt and clay -- a not untypical story in southern Missouri caves. I can't imagine anyone could get lost in it, save in one of those catastrophic total-loss-of-light-source situations that only happen to so-called "spelunkers."

Traversing this formation-poor cave was mostly a matter of clambering up and down roller-coaster mounds of large, dirt-packed breakdown, being careful at the top not to disturb the few hanging bats that we encountered, all of them Eastern pipistrelles. A couple of tricky stream fords at the bottom of convex dirt slopes offered the unwary novice (i.e., yours truly) a fine opportunity to get wet to the knees.

Eventually, about mid-cave, we came to an area where we had to pass a tight "squeezeway" under a large slab. The convention guide's trip report notes that "previous visitors have apparently worried about the stability of this overhanging slab and placed several support[ing] columns of braced rock beneath it." Subsequent to visiting this cave, I discovered a post on the NSS discussion board dated October 9, 2005 (<http://www.caves.org/soapbox/view->



Above: Jim Cooley at the entrance of Doghouse Cave (photo by Bill Gee).

topic.php?p=2257&sid=c00c205f60aa5c981c7f2bec387d51ca) that claims a large slab in Doghouse, presumably this one, had shifted during historical times, now allowing folks to go over it as well as under. I could still manage to squeeze my barrel chest beneath this slab, though I could not take a deep breath while doing so. I wonder if those "supporting columns of braced rock" will be able to deter several dozen tons of dolomite breakdown should it decide to settle a little further?

I doubt it.

We exited the cave through the concrete doghouse in about three and a half hours. Doghouse Cave did, as advertised, prove to be great exercise: By the time I got out, my heavy duty polypro was soaked in sweat. Later, Bill followed up on the permissions question with the OHG leadership, and found that a son or son-in-law of the landowner had been the only person who could be contacted. This authorized party had readily granted permission to enter the cave.

It was a good thing I got in on the "easy" cave at MVOR. Andy Isbell and I

were too late to get on an oversubscribed Indian Creek Caverns trip the next day. Note to self, and anyone else who attends MVORs primarily for the caving opportunities: Sign up early! (The early pipistrelle munches the mosquito.) Conversely, the Fitton trip, scheduled to leave Friday at a heroic 11:00 p.m. for deepest, darkest Arkansas, was canceled due to lack of participation. Only three participants, including trip leader Terry Sherman, signed up for it, one short of the number that safety requires. ●

Huzzah Conservation Area

trip report by Gary Johnson • photos by Jeff Page, Gary Johnson, and Steve Potter





Some caving trips have some built-in drama or at least some anxiety-inducing moments. The Huzzah Conservation Area trip, however, was extraordinarily pleasant. No real problems. Just a very pleasant time with friends in a fairly easy group of caves, and a very pleasant time camping near Courtois Creek.

Steve Potter of Pony Express Grotto put this trip together, although I had to nose my way into co-leading the trip by getting the permit for Jagged Canyon Cave and getting advance permission from a landowner to cross their property as we walked to Doss Cave. Yeah, I don't know what it is about me. Usually, I'm about as reserved as anyone you'd ever meet, but when it comes to caving trips, I'm the one usually grabbing the gate key and telling people what to do. I don't take these trips lightly. At 48 years of age, I came to caving fairly late in life, so I suppose I'm hearing the clock ticking and don't want to screw around and waste time.

This trip was originally scheduled for January. Yeah, that's right. January. Brrrrr. Shudder. But we've had fairly mild winters in recent years, so this would be another mild winter, right? Let's plan a caving trip. Well, on the week of the trip, weather reports focused on a major stormfront promised to hit eastern Missouri on the day we'd leave Kansas City. Aww, it'll pass right by, I thought. But as the week ticked by, members of our group saw the weather report and started dropping out. By Thursday, I suspect most remaining people in the group were secretly pleading that we'd cancel the trip. And then on Friday morning, the snow hit, just as the forecast predicted. To make matters worse, freezing rain was predicted for Sunday. Yikes. Steve and I talked on the phone on Friday morning and decided to call off the trip. In retrospect, it was the right thing to do. The ice storm arrived as predicted on Sunday, and it shut down parts of I-70, leaving motorists stuck in huge lines of traffic for several hours.

We rescheduled the trip for March. We got a new permit and again got permission to cross the landowner's property on the way to Doss Cave. Would the weather cooperate now? This time the weather report focused

Previous page: Rimstone pools in Jagged Canyon Cave (photo by Gary Johnson). **Top:** A view from a bluff overlooking Courtois Creek (photo by Jeff Page). **Middle:** Courtois Creek near the Huzzah Conservation Area campground (photo by Jeff Page). **Far left:** The entrance of Campsite Cave (photo by Gary Johnson). **Left:** The entrance of Refuge Cave #1 (photo by Gary Johnson).

on rain, with a 50% chance predicted. But again I felt confident it'd pass. The week before the trip, as each day passed, the weather forecast improved a little. The trip was on.

Jeff Page and I were carpooling, so we agreed to meet by a hotel across from Kaufman Stadium. We threw my gear into his SUV and trailer, leaving my truck in the parking lot, and we set off for Huzzah Conservation Area. (By the way, it's pronounced HUH-zuh, not huh-ZAH.)

Why does everything have to be so far from Kansas City? Every time you go caving you're locked in a car for several hours. I envy the cavers in Rolla or Perry County or Springfield. Not that I didn't appreciate Jeff's company. But regardless of who you're with, it's a long way to most any caving area in the state. Plus, I know I'm not real good company. I have no good stories to tell. I'm sort of cynical and a bit grumpy. And my brain is totally incapable of remembering jokes. Please accept my advance apologies if you ever carpool with me. The long trip gave Jeff the opportunity to extol the virtues of Sirius Satellite Radio. We listened to several stations, and I agreed it was a huge improvement over conventional broadcast radio. No argument there.

We arrived at the Huzzah Conservation Area campground long after sunset. Steve and Kathleen were already there. Preacher Dan had set up camp across the road. It's always pleasant to go caving with Steve and Kathleen. Steve has a great attitude: he's very positive and friendly. Kathleen is a professional jazz singer who frequently has gigs in the St. Joseph, Kansas City, and Lake of the Ozarks areas. She tells good stories at the campfire.

The sky was cloudy, but that meant the daytime heat would be held in, right? So it's good, right? Still, I'd prefer a star-filled sky. Cloudy skies make me feel claustrophobic. Later that evening, Iowa Dan arrived. And not long after his arrival, while we were sitting around the campfire, I noticed the clouds had cleared away. So it'd be a little cooler tonight, but it looked very promising for Saturday.

Bluff Caves

While everyone was getting breakfast on Saturday morning, I took a little hike to check out the bluff that runs east from the campground. I had visited this area a year earlier on a Courtois Creek float trip, but we didn't have much time to spend exploring this bluff. However, this bluff is pockmarked with several small caves. I decided to go take a



Above: The entrance of Indian Cave #2 (photo by Jeff Page).

look. The caves are highly visited. Last year, we'd run into several mildly drunk/stoned campers stumbling down the trail, with drinks in hand, crawling into some of the caves. But on this morning, I had the trail all to myself.

The bluff starts out modestly, just a few feet high, but then it grows to 40 feet high, 60 feet, and then finally 80 feet. And that's a sheer vertical bluff face. The trail follows the base of the bluff, only a few feet from the creek. It makes for a very scenic little walk. Almost horizontal, unless you opt to take the route to the top of the bluff, and even then the climb is pretty easy. Hardly enough to make you break a sweat.

Along the base of the bluff is a series of small caves: Dark Cave, Refuge Cave #1, Refuge Cave #2, and Campsite Cave. And not far away is another cave, Indian Cave #2. The bluff has several additional small pockets and holes that almost qualify as caves (as well as a little rock shelter). These caves are in the Potosi Dolomite, and this layer contains no caves of any appreciable length. Dark Cave is all crawlway passage for a little over 30 feet of total passage. Not sure how it got the name "Dark." Must be ironic. The entrance floor of Refuge Cave #1 has been worn smooth by

prospective visitors trying to leap up into the cave and sliding back down the dirt slope. So it's a bit difficult to get in this cave although the climb is only about nine feet. On this morning, water seeped across the entrance floor, creating a muddy mess. I didn't attempt the climb. The cave is about 45 feet long. The entrance passage is walking height for the first 30 feet. Refuge Cave #2 is about 13 feet above the trail and requires a climb on the rock bluff face. The rock looked rather unforgiving. Someone with a little rock-climbing ability could make the climb easily. It reportedly contains lots of dripstone and flowstone, with a total passage length of about 60 feet. Campsite Cave requires a little climb of about eight feet, but there are sufficient handholds on the right so that the climb is fairly easy, although the drop back down is a little intimidating because it's hard to see where to put your feet. The passage is a little over 100 feet long. I was content to just stand in the entrance after the climb. Indian Cave #2 is the longest of these caves, at about 120 feet. It contains a few modest formations and



ends in a formation choke. Near Indian Cave #2, a little box canyon with vertical walls resembles a remnant collapsed dome. In wet weather, a waterfall no doubt cascades down the steep valley that leads to the canyon. I poked around in some of the other holes in the bluff, circled back up above and took the arguably more scenic route on top for the route back. Several lookouts at the edge of the bluff provide impressive views over the Courtois. Gnarled cedar trees, twisted and contorted, have dug into the top of the bluff.

Not long after I got back to camp, Hannah Jane Chambers and her boyfriend Robert arrived. Our group was complete.

Jagged Canyon Cave

Steve got Saturday morning started in grand style by cooking breakfast in his Dutch oven. His eggs/sausage/potato mixture was first rate. Afterwards, Steve whipped out his map of the route to Jagged Canyon Cave, and I immediately smirked. "That ain't right," I said. But I'd misunderstood where we'd be parking. Steve pointed out the location on a map. I was a little skeptical, but Steve had been to the cave before. So I followed his advice.

We piled into our vehicles. Jeff and I led the way, driving to the area that Steven had pointed to on the topo map. I was a bit leery as we pulled onto the access road, but eventually the road curved to near the river. A nice wide trail continued to the bluff where we'd find the cave. Steve knew what he was talking about. This would be an easy hike.

By the time we had our gear ready to go, another group of cars pulled down the hill. How could this be? We had a permit from the Missouri Department of Conservation. Certainly they don't hand out more than one permit per day. As the other group members started getting out of their cars, I searched for the person in charge. I wanted to find out if they had a permit. I found a 60s-ish, distinguished looking gentleman. He said they had a permit. I didn't see a permit. But he acted like he knew what he was talking about. He was surprised like me that two permits had been issued. He was leading a Boy Scouts of America High Adventure group.

I didn't like the idea of sharing the cave with another group, but it looked like we didn't have a choice. I'd call the MDC once I got back to KC and find out what was up. As we set off for the cave, I hoped our little head start would be enough to keep our groups apart.

Not far from our vehicles, I noticed a dark place at the face of a low bluff, just visible through the trees, and beside it, an MDC sign. Must be a cave. Steve had been talking about visiting Chicken House Cave. This must be it. As the trail curved above the area marked with the sign, I climbed down and checked out the area. Yep. It's a cave. We'd check it out further later.

On the way to Jagged Canyon, we passed two additional caves. Mud River Cave has a wide entrance. It sits back a couple hundred yards from the trail. It's used by bats at this time of year, so we wouldn't be able to enter the cave, although later I'd drop by the entrance for a brief look-see. A little further along the trail, we saw a large cave entrance midway up the bluff. This was Lookout Cave. Once again, we'd check it out later, after Jagged Canyon.

The entrance to Jagged Canyon Cave is located low on a bluff face. The nearby river undoubtedly floods far into the cave after heavy rains. For that reason, the MDC controls access to the cave. On more than one occasion, groups have been stranded in the cave. Permits are automatically cancelled if rain is predicted for the day of the trip. Likewise, permits are automatically cancelled after heavy rains within 48 hours of the trip time.

Some fool had brought a huge spool of twine to the cave. It's hard to imagine why anyone, regardless of their skill level, would need to leave a trail of twine in a cave like Jagged Canyon. It's a single passage for about 1000 feet before higher level passages offer some alternatives, and even a huge spool of twine is almost guaranteed to have run out by the split.

We sloshed up the main passage. A small stream issues from the cave, so you frequently have to slosh through the stream as you walk up the passage. It's rarely very deep, though. As we wandered up the passage, we encountered some nice formations. In two or three areas, large columns/stalactites, and stalagmites occupy a good portion of the passage. Jeff, Preacher Dan, and I started to lag behind as Jeff and I took photographs.

Soon we encountered the cave's hallmark formation, a huge flowstone canopy. This is the real reason I wanted to visit this cave. This formation is one of the largest in all of the Ozarks. It's at least 40 feet wide. It hangs



Top: Preacher Dan at the entrance of Jagged Canyon Cave (photo by Gary Johnson).

Second from top: Kathleen Holeman leads the way into Jagged Canyon Cave (photo by Steve Potter). **Third from top:** Kathleen Holeman in the upper level crawlway of Jagged Canyon Cave (photo by Steve Potter). **Left:** Rimstone pools in Jagged Canyon Cave (photo by Gary Johnson).

10 feet above the floor of the passage, and it reaches about 15 feet high, which means it almost reaches the ceiling. Many texts call this formation a stalagmite, but I have difficulty seeing why anyone would consider it to be a stalagmite. The flowstone formed on clay or silt fill that later was removed, leaving the flowstone hanging above the passage. Subsequently, another round of calcite deposition took place, with the result being another mound of flowstone



Above: This huge canopy juts into the main passage of Jagged Canyon Cave (photo by Jeff Page).

forming on clay-silt fill beneath the canopy. The secondary formation is so large it almost touches the canopy. The canopy and lower mound of flowstone isn't particularly colorful. It's the same dull brown as the passage walls.

I suspect Steve, Kathleen, Iowa Dan, Hannah Jane, and Richard walked right past the canopy. The formation is so large it doesn't really register at first. I wouldn't be surprised if many groups walk right past it without understanding what they've seen. Even I was fully expecting this formation, but when I encountered it I was somewhat taken aback. Only after I studied it for a few seconds did the realization set in. This formation is huge. Then Jeff got out his camera while I jumped on top of a rock below the canopy and posed for his photos.

The main passage suddenly ends in a sump at about the 1,500 foot mark. The passage is quite large, 30 foot wide, with a 30 foot ceiling, just a few feet before the passage

ends. But then the ceiling quickly descends and pinches off the passage. It's not breakdown. There must be a more water resistant obstruction of rock in this layer. I looked up the high bank on the left. This must be the way to go. I could see two windows, up a steep climb of 20 feet. We scrambled up the slope and into the higher level passage, which is largely a crawling passage, with occasional stretches where you can stand or stoop walk.

The cave takes its name after this upper level passage, and we'd find out why soon enough. But first we ran into Kathleen. She was waiting for us while Steve and the others continued forward. Which way had they gone? The passage soon takes a somewhat deceptive split. The upper passage continues to head away from the main passage, in a narrow canyon passage with lots of chert ledges. Occasional meanders become difficult to negotiate. But you can crawl across the meanders on silt banks. So we could either continue high, or somewhere along the way (I wasn't sure where), the canyon passage descended on its way to meet the main passage, which meant you had to double back into the canyon, drop to its floor, and follow the watery crawlway passage to where it hit

the main passage—
on the far side of the sump! So where did Steve go? Kathleen didn't know.

I had to make a choice, so I decided on the upper level passage. We crawled forward. The canyon passage is a little bit tricky. At times the canyon gets to be about 10 feet high, and you negotiate these sections by stepping on chert ledges while straddling the canyon. As we moved further back in the cave, the passage became more complex, offering three possibilities: 1) to descend to the stream level at the bottom of the canyon, 2) to continue straddling the canyon, or 3) to bellycrawl on a silt bank near the ceiling. In fact, constrictions require that you frequently switch between these options. But there is rarely a definitive choice. The choice is usually personal preference. I was preferring to stay high and dry, so we mostly straddled and bellycrawled.

Meanwhile, I saw no signs of Steve and his bunch. Occasionally, I'd stop and hold my breath, hoping to hear some sign of Steve, but I heard nothing. How much further should we go this way? I thought. If Steve took the other route, there was no guarantee we'd run into him. He could instead return to the main passage. We could miss him entirely.

Parts of the upper passage became sort of tight, requiring bellycrawls down slopes. Preacher Dan said he was nursing an injury and didn't think he should go any further. He headed back to the main passage. Kathleen, Jeff, and I continued further, but the prospects didn't look good. Lots more crawling. I couldn't tell from the map if we really encountered any room or whether it was simply all "jagged canyon" passage. I was feeling a little apprehensive about finding Steve's group. So I put the brakes on exploring this passage. I found it hard to



Above: The entrance of Lookout Cave (photo by Gary Johnson). **Right:** Iowa Dan, Gary Johnson, Steve Potter, and Hannah Jane Chambers at the entrance of Lookout Cave (photo by Jeff Page).



believe that Steve would have brought a first-time caver like Robert into this part of the cave. He probably didn't. He probably took the other passage. So we turned around.

Just before reaching the place where the passages split, we ran into the Adventure Club cavers. They had a big group. We climbed below them in the canyon while they took the crawling route up above. I don't know how many people were in their group, but it took them a long time to pass. We asked if they had encountered anyone from our group. Yes, they had seen two separate lone cavers. What? So that was Preacher Dan and ... who? Maybe Steve came looking for us. Arrrggghhh. Had to be. Now, our group was completely fractured.

At about the point where the canyon descends toward the passage beyond the sump, we encountered Steve. Yes, he had come looking for us. So we followed Steve down into the canyon, where it soon became a hands-and-knees crawl over sharply sculpted dolomite. Knife edges ripped at my cave suit. Occasionally, I could rise to my feet and stoop walk. We struggled through this rock floored passage and emerged into a large room.

We stepped forward into one of the most impressive areas in the cave. A large dome-like structure caused the ceiling to soar to 30 feet, maybe 40. A waterfall in the middle of

the room fell on rimstone dams, each about a foot high and all holding water. The rimstone dams occupied an oval structure in the center of the room, and this structure had two levels. We pulled out our cameras and took plenty of photos (although most of the photos were fogged from all the body heat we were generating). This is a very impressive section of the cave.

I wanted to check out the sump. So we slogged through the ponded water for about 100 feet to the place where the ceiling descended. I'd be surprised if there is ever any air above the pool. It's most likely always sumped. We then headed upstream in the large passage briefly before calling it quits.

Lookout Cave

On the way back to the trailhead, we stopped at Lookout Cave. The entrance presents some minor climbing problems. You must climb a 10 foot bank of crumbling rock. There are a few handholds and multiple routes up. Iowa Dan, Hannah Jane, Steve, Jeff, and I made the climb. Kathleen stretched out on the grassy bank below. Richard and Preacher Dan had returned to the trailhead.

The cave entrance is large and impressive. It's like a canyon entrance, but the route quickly drops to crawling height. The cave has a little over 100 feet of passage.

Iowa Dan crawled in first, followed by Hannah Jane. Steve, Jeff, and I brought up the rear. We could hear Dan's struggles in the crawlway. He's a small guy. Maybe 5'7" and thin. If he was struggling to get through the

crawlway, how was I supposed to get through? The map showed a one foot high pinch. After listening to Dan's struggles for 10 minutes, I said, "Enough of that" and backed out. Jeff and Steve followed. Steve relayed the word that Dan had made it through the constriction, but Hannah Jane was struggling.

We climbed back down from the cave entrance. I wanted a photo of Dan at the cave's bluff window entrance. In fact, I had suspected I wouldn't get through the crawl, so I had given Iowa Dan my camera with instructions to get a photo looking out the entrance. Jeff and I walked along the bluff, looking for Dan. Suddenly there he was, standing on a ledge about 30 to 40 feet high, with a sheer bluff beneath him.

Later, I got my camera back from Dan. He said he got a photo. But when I got the photos developed, all I saw was a pink blur. I'm not sure what you photographed, Dan. I think it was your finger.

Mud River Cave

Mud River Cave is used by hibernating myotis bats, so this cave was closed on our March visit. Nonetheless, I trudged up the hill to look at the cave entrance, and what an entrance it is. This is one of the widest entrances that I've seen, at nearly 80 feet across and 10 to 12 feet high. Some wide entrances are obscured in part by breakdown. But here, the entire width of the entrance passage is clear. Located much higher than Jagged Canyon (or even Lookout Cave), Mud

River Cave nonetheless formed in the same bluff. The floor of the entrance is mostly covered with small breakdown boulders. The breakdown boulders continued for as far as I could see into the cave. A small stream wove through the breakdown, along the right wall, and then tumbled down the talus slope that descended from the cave mouth to the floor of a tree-filled ravine. A very pleasant, picturesque spot. However, according to the map, the wide entrance doesn't mean a lengthy cave system. The map shows only 381 feet of passage, and much of that passage, as the cave's name indicates, is the stream passage, where the water is occasionally wall to wall. The ceiling quickly descends so that crawling is required over the stream.

Chicken House Cave

On the hike back to the trailhead from Jagged Canyon, I noticed what looked like the foundation of a building in the trees to the right of the trail. Iowa Dan followed as we investigated. We found a surprisingly large concrete floor. The concrete pad was probably 50 feet long and 15 feet wide. Definitely not the dimensions of a typical Ozarks cabin. Circular pits in the floor on the far left and right looked like they might have been wells. Why two? Stairs led down to a lower level. I had to wonder if this might have been the remnant of a large fishing/hunting lodge. Definitely not a chicken house.

We continued on down the trail and encountered a narrow stone building on the right. This could be a chicken house. I'd read a cave description of Chicken House Cave that positioned the cave's namesake at this approximate location. Gotta be it. We continued on and caught up with the others, who were already crawling into the cave. I'd seen the cave map, however, and didn't relish the crawling-height-only passages. So I limited my visit to the entrance area. I found a small spring that exits the cave on the left. A concrete structure, a spring house, had been built to pool the spring. Stairs led down from the cave entrance to the spring house. The flow from the spring is relatively small, but I'm sure it was plenty to provide all the water that a family would need. After checking out the area outside the cave, I laid back on a nice cool rock just inside the cave's dripline and put my feet up on another rock. The arrangement made a nice comfortable recliner. Meanwhile, Jeff, Steve, and Iowa Dan crawled through the cave. After they were done, we called it a wrap and headed back to our vehicles.

That evening Steve whipped up another concoction in his Dutch oven, and once again



it was surprisingly good. Steve's onto something with this Dutch oven cooking. Everyone was plenty tired after a day of caving, so we crawled into our tents a little earlier this evening.

Doss Cave

Several months ago, when Steve announced his interest in visiting Doss Cave, he forwarded a map to me that showed the location of the cave. The route to the cave was long and over several ridges and hollows. Lots of bushwhacking. I looked on the topo map and noticed the ridge above the cave continues fairly level all the way to a road.

Top: The entrance of Mud River Cave (photo by Gary Johnson). **Above:** The entrance of Chicken House Cave (photo by Gary Johnson).

However, a quarter of a mile of private property separated the conservation area land from the road. If we could get permission from the landowner, we could easily get to the cave. In contrast, if we tried to stay within conservation area property, we'd be in for a nasty hike.

I got a lead on the landowner's name from a plat book, and then made a telephone call. I talked to a woman who conferred with her husband and then gave me permission to cross their property. She knew about the cave,

and even gave us some helpful tips on how to get there, as well as tips about avoiding the adjoining landowner's property. So now we had an easy stroll of about a mile to the cave entrance.

On Sunday morning, Jeff and I hiked along the bluff beside the campground. We both took photos and then did the little climb to the top of the bluff. When we got back, Steve had breakfast waiting, again courtesy of his Dutch oven.

Hannah Jane and Richard had departed after the caving on Saturday afternoon, as did Preacher Dan. So that left us a party of five for Doss Cave. Once again, the weather was cooperating to perfection. Blue skies. Mild

temperature. Little wind. A beautiful day for a hike through the woods.

We drove to the location I had marked on a topo and parked along the road, beside a gate. As we finished putting on our caving gear, a truck pulled up to the gate. Could this be the landowner? I introduced myself and yes, indeed, it was the landowner. He gave us instructions how to find the cave and said his son was at the mobile home just up the driveway. I thanked him and he drove away. We walked up the access road and waved at the gentleman beside the mobile home, thanking him for allowing us to cross the land. He came out to meet us and gave us further instructions on how to find the cave. We were now equipped with plenty of infor-

mation about the best route to the cave (which was good because I would have tried to bushwhack down to the cave from the east instead of curling back from the west as both the landowner and his son recommended).

We followed the dirt road and soon crossed the gate that marked the start of conservation department land. The walk to the cave was very pleasant. We walked through a shady forest of tall pine trees, their needles forming a soft blanket on the ground. We walked through a glade, where weathered outcrops of dolomite were intersected by clumps of grass and wildflowers. After a mile, we came to a gate. This was as far as we could go on the dirt road. On the other side of the fence was private property. To stay within the conservation area, we needed to head down the hill, beside the fence. My GPS unit showed the cave location was away from the fence a good hundred yards, so I started down the hill in that direction. Not long after, I found myself looking at a cave entrance.

The entrance of Doss Cave is situated in a thin outcrop of dolomite. The outcrop forms a minor drop in an otherwise gentle hillside that rolls from the ridge to the creek below. The entrance is about 25 feet wide and 7 feet wide. We geared up and headed inside.

Immediately, we recognized the floor of Doss Cave lacked the recent myriad of foot-steps so evident at Jagged Canyon. This cave does indeed get visited but in much smaller numbers. Most footprints were fuzzy and indistinct, as if many months had elapsed since the last visitation.

The first room in the cave is somewhat atypical of the cave to follow. It's wide with plenty room for walking. Large breakdown blocks lay in a jumble at the back of the room. A walking passage twists and curves deeper into the cave. Soon it turns into a canyon passage, much like the "jagged canyon" passage we encountered in Jagged Canyon Cave. We continued forward by straddling the canyon on ledges of chert. Occasionally we'd drop down to stream level. But for the most part, I wanted to keep my feet dry, so I stayed high. The upper level and lower level intersected frequently. They were connected by a narrow canyon that was occasionally too narrow to follow, so we'd climb over higher-level meanders to find additional passage.



Above: The entrance of Doss Cave (photo by Jeff Page). **Left:** Gary Johnson, Jeff Page, Steve Potter, and Kathleen Holeman at the entrance of Doss Cave (photo by Steve Potter).

We found a ledge with numerous small formations: helectites, spathites, and soda straws. The spathites seemed to alternate frequently with soda straws on the same structure. A soda straw would begin the descent from the ceiling and it would then turn into a spathite, which would surrender to a soda straw again. We saw several versions of this pattern.

Near the back of the cave the route gets fairly tight. I'd seen the cave map, however, and knew what was coming up (and it wasn't to be missed). While many caves just sort of peter out into increasingly smaller passage, Doss Cave ends with a bang. At least that's what the map indicated. So as the passage got tighter and smaller, I stuck with it. Otherwise, I might have given up, assuming the law of diminishing returns had already played its hand. I pulled out the map and made a rough guess of where we were. The ceiling was now 10 to 12 feet tall. There weren't many places like that on the map. Most of the cave struggled to reach walking height. It looked like we were about 100 feet from the end. I stayed high while Jeff went low in the canyon. I checked out a higher level passage, but I hit a deadend. Retracing my steps, I climbed down into the canyon. I squeezed through a constriction and followed the canyon back to the left. I was in a small dome-like structure, one of the largest rooms in the cave (beyond the entrance room). The walls were sculpted in jagged shapes.

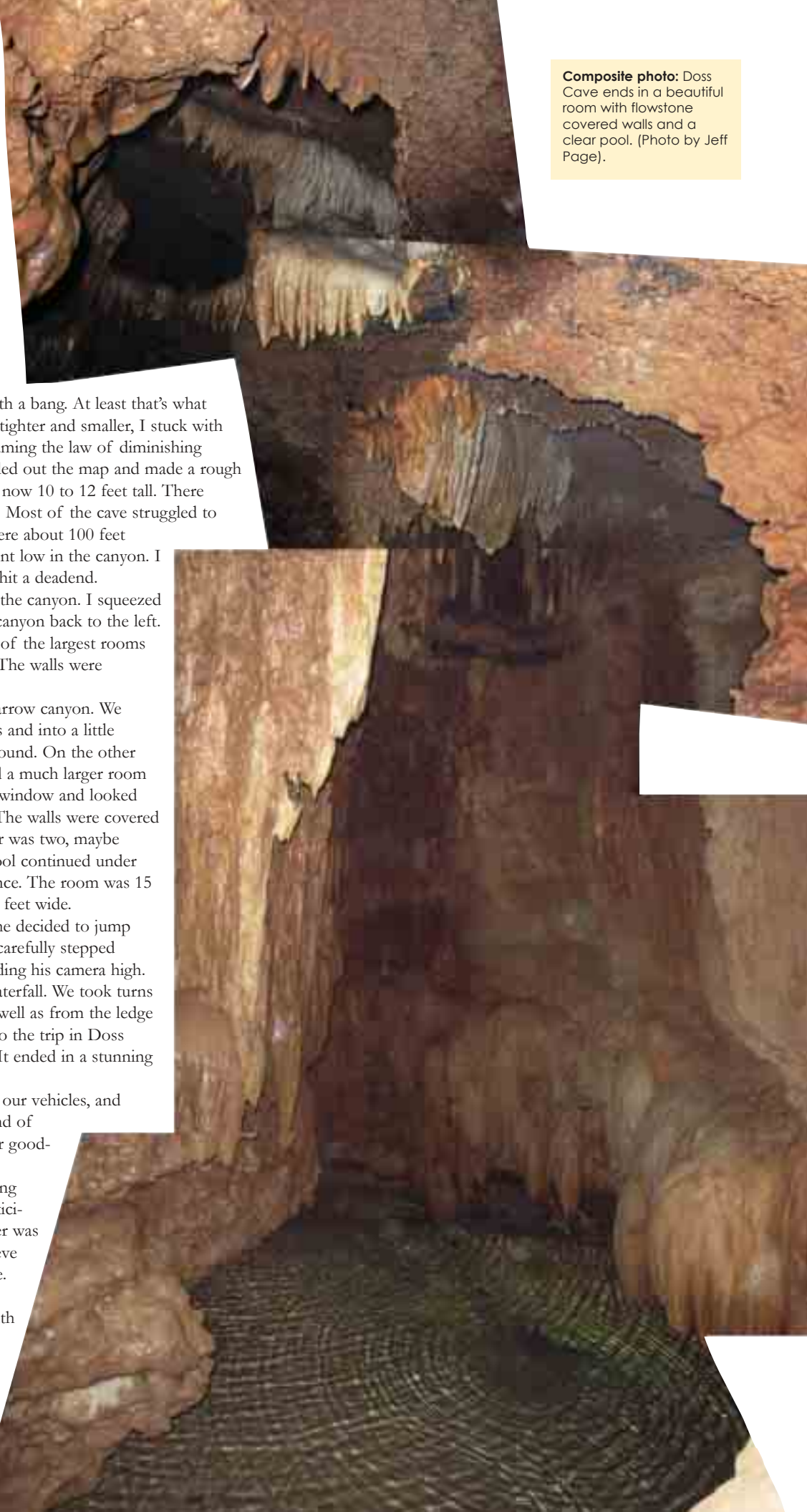
The next 20 feet was very tight in a narrow canyon. We squeezed through the canyon contortions and into a little alcove that provided room for turning around. On the other side of this alcove, a dark space indicated a much larger room was beyond. I poked my head through a window and looked down. I saw a large pool of clear water. The walls were covered in white and orange flowstone. The water was two, maybe three, feet deep. A brilliant green. The pool continued under the flowstone for an undetermined distance. The room was 15 to 20 feet high, about 15 feet long, and 8 feet wide.

Jeff was carrying a digital camera, so he decided to jump into the pool and take some photos. He carefully stepped forward as the water became deeper, holding his camera high. Around a corner, he took photos of a waterfall. We took turns looking at the pool from the window, as well as from the ledge above the water. A stunning conclusion to the trip in Doss Cave. No, this cave didn't just peter out. It ended in a stunning display.

We retraced our steps, headed back to our vehicles, and changed into regular clothes. Our weekend of caving was over. We broke camp, said our good-byes, and hit the road for home.

Thank you very much, Steve, for putting together this trip and allowing me to participate. The camping was great. The weather was great. The breakfast food courtesy of Steve and his Dutch Oven was a major surprise. Looks like Steve's really onto something. The evening campfires were excellent (with firewood courtesy of Iowa Dan). It was great seeing my friends from PEG again and getting to spend time with them. An excellent trip. ●

Composite photo: Doss Cave ends in a beautiful room with flowstone covered walls and a clear pool. (Photo by Jeff Page).



Success at Three Creeks Conservation Area

TRIP REPORT AND PHOTO BY JOHN MCGUIRE

On January 2nd this year I was returning from a cave trip in the Ozarks, and had just enough time to stop at the Three Creeks Conservation Area, south of Columbia, MO. I was prepared to once again, set off in search of Tumbling Cave in this vast forested area.

With maps and my GPS in hand, I left my car at 4:10 p.m., and I literally ran the first 1,000 feet of trail, hoping to have enough daylight left to find the cave, take a photo, and write down the GPS coordinates at its mouth.

The maps clearly show where the multi-use trails wind through the conservation area. These trails are intended for hiking, mountain biking, and horseback riding. The trails were muddy and I quickly wore tired of running with an extra pound of mud stuck to both boots.

I also quickly discovered that there are more trails than the ones indicated on the map, so navigating became confusing. I found my way to what had to be the intersection of two of the trails marked on the map, and followed the westward trail with confidence that I was nearing Tumbling Cave.

Just as the map indicated, the trail closely hugged Turkey Creek as it slowly bends to the southwest. To my dismay, though, the trail I was on kept curving due South, and kept curving until it was Eastbound. I decided that the topography itself was my best solid landmark to follow, so I set off-trail up a hillside into the woods.

It wouldn't have really been much fun to simply walk straight to the cave, as the bushwacking is part of the experience. On my way up this hillside, completely by chance, I walked straight to a vertical cave entrance at the base of a tree. It was very well hidden and reminded me a lot of the entrance to Polly's Pot Cave in nearby Rock Bridge Memorial State Park, also south of Columbia.

I snapped a photo of it on a cheap disposable camera and attempted to take the GPS coordinates. Even though the tree foliage was sparse for the winter, I still had to walk further up the hill to a clearing before I got coordinates.

It was now 5:10 p.m., and because I was in a valley, the sun was already below the horizon. I've always been blessed with an excellent sense of direction, and using this I set off straight through the woods toward my car. There was still enough of a glow in the western sky to indicate which way was southeast toward where I'd parked.

As soon as I got back to Kansas City I e-mailed Gary Johnson with the news that I had run across a pretty cool vertical cave entrance and gave him the GPS coordinates.

Gary then located the coordinates on a topo map for me, to show the relative location of the unnamed vertical cave to the expected location of Tumbling Cave. This gave me a good reason to return to Three Creeks as soon as possible to finally locate Tumbling Cave.

On Saturday, January 6th, I returned with a group of six other people to take a hike and try to lead them to Tumbling Cave for a photo. We stopped and got a group-photo at the vertical cave entrance, and headed west through the woods from there. Completely by chance again, I discovered another beautiful vertical cave entrance. This time, though, it was a set of 3 or 4 parallel gulfs that crossed a creek bed. They appeared to be approximately 4' wide each, by 25 feet long. The depth appeared to be 15 feet deep in one, and more like 25 feet deep in the others.

It was clear that any run-off water coming down this creek after a rain would drop into the cave below. I doubt that any running water ever



Above: The entrance of a Three Creeks pit (photo by John McGuire).

makes it past these incredible slits in the earth. I took photos and we pressed on again.

Some horseback riders told us that we were on the right trail to get to "the big cave another 150 yards up." On the way, one of my party members, my brother-in-law, Dan Johnson, spotted a small cave down low off the north side of the trail. My sister, Penny, and her daughter, Grace Anne went down to the cave with me and took a brief look inside the entrance. It required crawling on hands and knees and quickly became a belly crawl, so we decided our hunt for Tumbling Cave was still more important. It is interesting to note, though, that the water-passage of this little cave headed in the direction toward those vertical slot entrances just up the hill.

At this point, we all took a quick vote on whether to turn back toward the car now, or press on for victory at Tumbling Cave. Due to the time (the sun had gone below the horizon, just like my last trip here), I would not have blamed anyone in the group who wanted to call it a day. It was unanimous, though, to go the distance. We were not disappointed when we finally found the little spur trail off of the multi-use trail and followed it up to the grand entrance of Tumbling Cave.

Everybody else in the group excitedly ran up to see it while I fished my camera and GPS unit out. I had to walk a short distance along the trail where the overhead branches thinned out enough to get coordinates. Then I turned on the flash on my camera and snapped a very quick photo before making a hurried exit again.

I felt the responsibility of getting this whole group of people back to the vehicle ASAP, and one of our party members had already alerted me to his bad knee pain. I knew that taking the trail back would add an extra quarter mile to the hike length.

I decided to use that inherent sense of direction again and blazed a trail for everyone. We were currently at approximately 620 feet elevation, and our car was parked at roughly 800 feet elevation. We cut through as much of the open fields as possible, slowly gaining elevation. I limited any downhill shortcuts, since that was elevation we'd have to make up again.

I admit that after 20 minutes of pushing the pace, I was getting worried because I had not come to any of the trails yet. I was intending to intersect a multi-use trail but never found it.

All was well, though, when we recognized the series of sinkholes in the woods, where we'd first embarked on our hike. We had all earned a good sit-down meal after that workout, so we stopped in for dinner at Bob Evan's in Columbia. After three cups of coffee with my French toast, I was almost able to stay awake for the two and a half hour drive to Overland Park.

This is one of the premiere hiking, mountain biking, and caving areas near Kansas City. There may not be big caves like we enjoy in the Ozarks, but there's said to be about twenty caves in this conservation area alone, and the driving time is about half that of an Ozarks trip.

After all of the hiking and hunting around, I never even got to see Tumbling Cave except for the photograph I took from 100 feet away. I am very eager to make another trip there now that I know four more caves in addition to the four others I've been to there. In August 2006, when I visited Three Creeks, I found three small caves that I'd gladly show to grotto members that are interested. One of them requires some technical rock-climbing skills. ●

Taking The Icy Trail to Hunter's CAVE

trip report by Gary Johnson
photos by Matt Kuehnert
and Jay Kennedy

Hunter's Cave is a permit cave on Missouri Department of Conservation land. It's only open to visitation from late fall through early spring. That means trips to Hunter's Cave can frequently run into chilly weather. That alone is no big deal. However, if you plan to venture very far into Hunter's Cave, you must go through a watercrawl. Part belly-crawl, part hands-and-knees crawl, you get plenty wet sloshing through several inches of water. Combine a good soaking with freezing temperatures outside and you've got the recipe for a miserable trip, particularly on the trek back up the hill to the trailhead.

I'd heard lots of stories about unfortunate caving trips into Hunter's Cave. In two stories, snow on the ground and soaring daytime temperatures caused meltwater to drain into the cave and raise the water level several inches, making for a somewhat dicey journey back through the watercrawl after several hours of caving. Some people swore to never return to Hunter's Cave. I'm not sure those stories really amount to much, and I'll discuss why a little later in this trip report.

I wanted to make sure my group was properly prepared for Hunter's Cave, so I encouraged everyone to bring a dry change of clothes. Rita Worden of Choteau Grotto told me there was a nice dry area just inside the entrance. So that was the plan: we'd each stuff a complete set of clothes, including dry boots, in a backpack, which we'd lug down the trail and into the cave. After several hours of caving, regardless of the

Top: The entrance of Hunter's Cave (photo by Matt Kuehnert). **Right:** Danny Stark and J.P. Rey cross the creek in front of Hunter's Cave (photo by Matt Kuehnert).



temperature outside, we'd be dry for the walk uphill to our vehicles.

Some people swear Hunter's Cave is a wetsuit cave, while others swear the water-crawl isn't long enough to require a wetsuit. With conflicting stories, I wasn't sure what to do, but when both Mike McKinney of KCAG and Rita Worden said they didn't consider it a wetsuit cave, I found myself strongly leaning toward leaving my wet suit at home.

I tried to consider all the possibilities for our February 2007 trip. I warned my group that the trail to the cave was on a north facing slope, so there might still be snow on the ground. But then the weather got warm in Kansas City and most all the snow melted. Right before the trip, though, the temperature dropped again, so on our trip we'd have daytime highs in the 20s. That meant we wouldn't have to worry about meltwater. So maybe the weather was cooperating. Maybe ...

Jay Kennedy and I were carpooling, so we got together near Bannister Mall in Kansas City. I drove, and as we neared Columbia, we noticed there was still quite a bit of snow on the ground. They obviously got more snow than Kansas City. My anxiety level jumped up a notch. The ground was still completely white, but all the roads were clear—that is until we reached the conservation area. Suddenly, the road became pure ice. It was obvious the county plows hadn't bothered with the conservation area access road. Luckily, though, the access road was perfectly flat, so driving didn't present much of a challenge. I pulled into the trailhead parking. We were right on time. The rest of the group was already there. I stepped out of my truck to greet the others and immediately found the parking lot was like a skating rink. We shook hands and exchanged hellos, all the time struggling to remain standing.

I looked at the trailhead. Pure ice. Did the ice extend down the trail? How far down the trail? Whoa! There went Danny Stark, down hard on his back. Yikes. We haven't even left the parking lot and we're already falling down. Are you okay, Danny? He laughs. Yes, he's okay.

Everyone pulls on their backpacks, and we set off down the trail. We have a group of six: Jay, Danny, Jean-Philippe Rey, Matt Kuehnert, and Steve Potter. At first, the trail is level, but I've seen the topo map. I know what's coming up—about a 300 foot drop in a half mile. That's a nice slope, but under

normal conditions not particularly challenging. However, now everything's changed. The trail is a toboggan run. Apparently, the sun would sometimes melt the top layer of snow, and then at night, the temperatures would drop and refreeze the slush. The results: a hard helmet of ice that covered the entire hill. Only the occasional rock rising above the ice provided any semblance of traction.

I joked "Does anyone want to start a lottery for how many times we fall before



Above: Ice covered the route to Hunter's Cave on the February 2007 trip (photo by Matt Kuehnert).

we reach the cave? I'll take seven." Seconds later, wham! I was number one. A few steps later, wham! I'm picking myself up again. And there goes Steve ... and Danny ... and Jay. This is brutal. I start to wonder if we're going to be able to make it back up the slope. Wham! I'm on my back again. My left arm shot out to brace the fall, and now it feels like hundreds of pins have been jabbed into hand. I wiggle my fingers. I guess I'm okay.

Seriously now, will we be able to get back up the hill? Hmm, but we drove all this way. We can't really even think about bailing now.

I think about the Polish joke in which (please accept my apologies in advance) a Polack swims three fourths of the way across a river, decides he can't make it, and swims back. Does that apply here? Maybe so.

We continue down the hill. Now it's time to leave the trail and bushwhack down a steep slope. Steve steps off the trail. He starts to slide. He goes with it. He drops to his rear. He's sliding down the hill on his butt. Whooooaaa! He slides back and forth, through some weeds, and ... owwww! ... into a tree. Danny follows Steve's example. There he goes sledding on his rear down the hill. Yikes. We're going to be stranded at the bottom of the hill. I can see it now. Newsflash: Six cavers were found stranded at the bottom of an icy slope, unable to climb back up the hill and suffering from hypothermia. Should we call off the trip? I think about the Polish joke. Still applies. We can't stop.

I step off the trail. I'll try to remain standing. I step forward and immediately start to slide. I pick up momentum. This is it! I drop to my rear and follow Steven and Danny, zipping down the hill. Weeds slap against my face. Ffhttt, fhht, fffhhttt. fhhttt, fffhhttt. I spin and drift to a stop. How are we going to get back up this hill now? This is idiocy. I struggle to my feet and begin taking baby steps down the remainder of the slope. I soon learn to stay away from trees, where the snow is rock hard. In the patches away from trees, the ice occasionally has a crunchy surface. Traction! But telling the crunchy patches from the slippery patches isn't easy. Sometimes I'm sure the footstep will be on crunchy ice and then ... wham! I'm on my back again.

Eventually everyone makes it to the bottom of the hill. How we will ever get back up the hill I don't know. I'm not sure it's possible. Aww, we'll deal with that later. We crunch across a wide creek. With each footstep, will the ice hold? Yes ... yes ... yes ... crack! And my foot goes through, but the water underneath is only inches deep. Most of the space underneath the ice is air. We step, crunch, stumble, crack. Step, crunch, stumble, crack! Soon we're all across the creek and staring at the cave entrance. We walked directly to the cave.

Hunter's Cave has a strange entrance. It's like a giant keyhole punched in the base of the bluff. The surrounding rock has been worn smooth by water or wind. The cave entrance almost looks artificial, as if miners

had chiseled the entrance straight back into the bluff. Eight feet high and six feet wide, the entrance resembles a man-made tunnel. Wall to wall water, three to six inches deep runs across the floor. I step on rocks and make my way back to the gate, which sits right before the large inner passage. I find plenty of rocks to step on and keep my feet dry, until the final step to the gate. Here, I duck down low and peer up at the lock. Arrrrggghhh, I growl. This isn't going to be easy. I kneel down and reach up into the lock box and dial the numbers. I struggle with it for a few minutes but finally the lock falls open and I push the door open.

Just inside the gate, the passage is completely different. Instead of a narrow man-sized tunnel, the passage becomes high, wide, and irregular. We splash through the cave stream and onto the far bank, which is largely dry. This must be the place that Rita Worden told me about. I climb up onto a higher dirt bank and drop my backpack. We shed our coats and heavy clothing in favor of our caving coveralls. Steve has opted for a shortie wetsuit.

It's time to lock the gate. I splash back through the water and push the gate closed. I reach up inside the lock box. My fingers find the lock and I squeeze it together. Click. I start to back away, and then I think, surely I can see the combination numbers, right? I lean down and peek up. I can't see the lock. I drop to my knee and twist my head back and forth while looking up into the lock box. There it is, but I can just barely see it. And at this angle I can hardly make out the numbers. Oh, we'll figure it out later. Doesn't make any sense to worry about it now. We're locked in. Time to go caving. But it's hard to push the lock out of my mind. I have a vision of us trapped inside the cave. Weak. Dehydrated. Banging on the bars like caged prisoners. When will someone check the cave? How long will we be stranded? I shake my head and try to dispel the thoughts. Certainly it won't be a problem. People come and go from this cave all the time.

I lead the way up the main passage and in short order we arrive at the watercrawl. First, it's stooping height. Then we're on our stomachs, crawling forward into six inches of water. Then a foot of water. I find I can float in the water. I kick my feet in front of me and float on my back, pushing forward with my hands. It's actually sort of pleasant. Many small formations hang from the ceiling of the crawlway, and as I float on my

back, I can see the formations and duck around them. If I were crawling on my stomach, I'd risk running into the formations with my helmet. The crawlway area contains at least three areas where we drop into the water. In between, we can stand briefly. The Keyhole is a tight constriction. But we get through it without any real problems. The passage twists spastically and then we're crawling over a large breakdown boulder. We step across a little canyon and suddenly we're in big passage.

The cave then stays big passage for several hundred feet. I pull out the cave map and quickly notice that we somehow missed two large domes in the main passage. I guess we had our minds on the watercrawl. We'll find them on the way out. Now the passage heights grows to 20 feet. This is large borehole. We climb up a clay bank on the left and onto a flat level. Steve points out a cylindrical canister. Emergency supplies for any group that gets stranded in the cave, if the watercrawl sumps.

Permits for Hunter's Cave are automatically cancelled if it rains. Groups have been stranded here for several hours. Thus the emergency supplies. I suppose someone makes sure the supplies aren't all corroded and deteriorating. I'm tempted to open the canister and check, but the clasp isn't exactly easy to open. So I resist the temptation.

Heading off to the left is a side passage. It heads back to the Jewel Room. It's mostly crawlway. If we're still feeling good, we'll check it out later. Now, we'll head for the Bat Room. After a little crawling, we're walking again and the passage is bigger yet. The passage twists to the right and we find ourselves in a huge dome, over 80 feet high. We continue toward the back of the cave. Many pipistrelle bats cling to the ceiling. I don't notice any other bat species. We're moving so fast through the large passage that it takes no time at all before we're standing in the Bat Room. This is a large room, about 90 feet high in the center (according to the map, although that seems a stretch). Both the left and right sides are steep slopes. We climb up the right slope and rest. It's hard to believe we're already at the back of the main passage. Seems like we just started caving.

The map shows a dotted line passage, with the words "continues 500 feet." Hmm, I step to the alcove in the back wall of the room and see a low belly crawl. 500 feet of that? I don't think so. Instead, I head to the left slope. The ceiling is stained black in

places. This must be the cave's main bat roost. Only a smattering of pipistrelles now, though. Must be maternal grey colonies in the summer.

We have plenty time for the Jewel Room. Everyone is still fairly fresh. We moved fast so there was never any fear of getting cold from the watercrawl. I'm perfectly comfortable but damp. Our group moved quickly without any slowdowns in the watercrawl, so no one really had the opportunity to get cold. If you have a large group, however, and people struggle to make it through the Keyhole, then it wouldn't take too much



Top: Steve Potter climbs through the gate at Hunter's Cave (photo by Jay Kennedy).

Above: Danny Stark heads into the first watercrawl at Hunter's Cave (photo by Jay Kennedy).

imagination to envision cavers stalled on their stomachs in water. So it's probably best to keep groups small for Hunter's Cave.

We turn into the passage that heads to the Jewel Room, and almost immediately we're crawling. It's sometimes hands-and-knees crawling. But more frequently the passage is annoyingly just short of hand-and-knees-crawling height. I try rolling but you

can't do too much of that or you'll leave yourself dizzy. Every time I think I'm going to be able to stoop walk for a few feet, I smack into the ceiling. This passage keeps flirting with us, promising more height and then taking it away. It's sapping my energy. We continue the crawl for 500 feet. Then the passage twists left. We're there.

The passage is only about four feet high, but now we can easily crawl and occasionally stoop walk. We're now looking at the most formations that we've seen in the cave. A wide column sits in the middle of the passage. Many smaller columns and stalag-



Above: Gary Johnson and Jay Kennedy head out of Hunter's Cave (photo by Matt Kuehnert).

mites serve as obstacles. I crawl past these formations. Some of the other group members seem content just to say they made it this far and not push any further. I take a little peek at the formations and then return. White flowstone drips down the center column. Very nice.

The trip back out of the crawlway is murder. My muscles are starting to rebel. Maybe my falls on the ice took their toll. Whatever the case, I feel beat up and the

crawling is sapping my energy. I felt so good just an hour ago. We're finally out of the passage, and I can walk again. The passage remains walking height for a few hundred feet anyway, and then we're back at the watercrawl. Once again, I find I can float on my back, and it's easy. Maybe even pleasant. I push my way through the crawl. And then we come up out of the water. Where do we go? Here's a crawlway but it looks ... I don't remember seeing so little air above the water. What's going on? I start to crawl into the passage, and it becomes nasty. Little head room. This can't be right. I back out.

Steve and Matt yell that they have a passage. They found the Keyhole. On the way into the cave, the Keyhole is easy to find. But on the way back out of the cave, it's tucked down a twisting passage. A watery crawl seems like the main passage, but the air above the water has dwindled to only six inches. I suspect this is what happens to many visitors to Hunter's Cave. They mistake the low passage as the way out and they squeeze through it. Yes, you can squeeze through it. As a matter of fact, after I backed out, J.P. dove in and crawled through in nothing flat. But this is the type of situation that would make many people swear the water level had gone up by several inches while they were in the cave. Melting snow. Rain. Whatever. I'm not saying these things don't happen. But I suspect many of the stories about people encountering raised water levels on the trip out of Hunter's Cave can simply be traced to the low passage beside the Keyhole.

We squeeze through the Keyhole and join J.P. on the other side. Ten minutes later we're standing by our backpacks and our dry clothes. But now there's a little matter of a lock ...

I shed my cave pack and gloves and slosh through the water to the gate. The moment of truth. Certainly I was just being paranoid earlier. I drop to my knee and peer up through the gate bars. Where's the lock? It's not easy to see past the bars. I lean over further and twist my neck. Well, there's part of the lock. But I can't make out the combination. Did I put the lock on backwards or something? I lean over further and drop my knee into the water. Surely they built the gate so you can see the lock from the inside. I can see part of the lock, but I can only make vague guesses at the numbers. I reach up inside the lock box and try to spin the dial. It moves. What does it say now? I can't read it. I grab the lock but I can't see it

when it's in my hand. I spin the dial again. I still can't read it. How am I supposed to dial the combination when I can't see what I'm doing? How can this be?

I can hardly see the lock let alone dial the combination. Finally, it dawns on me what's happening. I'm wearing my bifocals. These are my standard caving glasses. But the rest of the time I wear trifocals. I'm struggling to read the lock at this distance. My eyes need the third focal length. The near and far of the bifocals aren't working for this intermediate distance. Maybe if someone with younger eyes was looking at the lock ... That has to be it. I yell for J.P. and Danny. They're the youngest in our group. "Can you see the combination numbers," I ask J.P. He peers up through the gate bars at the lock. He squints and shifts back and forth. "Yes," he says. I give him the numbers and he reaches for the lock. I can't bear to watch. If he can't dial the combination, we're in big trouble. I walk away and let J.P. and Danny work the lock. A few seconds later, J.P. yells "Got it!" and I breathe a big sigh of relief.

We change into our dry clothes and pack up. Anybody who's been caving with me knows I'm just about the slowest person on earth when changing clothes and packing up. Looks like Jay's not much faster. Jay and I are last, along with Matt. Meanwhile, Danny and J.P. and Steve are out of the cave and heading up the hill. I lock the gate while Matt helps me with my pack. Then we're standing at the creek, ready to climb up to the trail. I can see Danny, J.P., and Steve. They're already far up the hill, almost to the trail. They're making good headway. So I guess it's possible to climb the hill. Maybe we'll survive this trip yet.

Matt's the smart one in our bunch. He has attachments for his boots, Yaktrax, that strap across the tread and provide him with traction. He's not sliding around at all. He's going slow. But he's not slipping. Meanwhile, Jay and I are taking baby steps. We're taking an oblique angle on the hill, trying to work our way across the hill at the least steep route possible. But at the angle we're going, we might just miss the trail and end up caught below a rock outcrop. It's going to be very close. Little room for error.

Matt takes a much steeper path. Soon he's standing on the trail. Jay and I have reached the no-man's land between the weeds/rocks and the trail. The final 50 feet. This is the toughest part. It's pure ice, with no footholds. We gingerly step forward, turning our angle of ascent farther away

from the trail that's waiting above. The outcrop is right in front of us now. We have to change our angle back the other direction or we'll miss the trail entirely. This is unforgiving helmet-hard ice. I put my foot down and it slips away sideways. Down I go on my hip. Ow! I spin and start to slide down the hill, but I grab some weeds and stop. Can I stand up? I climb to a knee and then I crawl forward to a small rock. I get my boot on the rock. Traction! And stand up. That's all it takes. A rock. Doesn't have to be big. It just has to provide a break from the ice.

Jay's lagging a little behind. He's really struggling with the climb. Our backpacks make us top heavy. We're each probably carrying 30 to 40 pounds. Wet caving clothes. Wet boots. Cave pack. Helmet. It all adds up. I look up the hill. J.P., Danny, and Steve are out of view. They must be way up the trail. We're losing daylight. I estimate we've got about an hour till sunset. We have to make it up the trail by then. The only thing worse than trying to climb this icy hill now is trying to do it after sunset. We've still got a half mile to go.

I have to concentrate on every step forward. I'm looking for rocks. They're my salvation. Enough rocks peek through the ice to provide occasional traction. I find another rock and step up. I'm on the trail. I made the trail! Whew! I feel like I've got it made now. The trail is steep but it's nothing compared to the ice on the hill below. But soon the rocks give out and I'm on solid ice again. No choice but to work my way up the ice. I'm looking ahead for more rocks when ... fffft! I slip sideways. I spin and wham! I'm on my back. That really hurt. The backpack sort of acquired a whiplash motion and slammed me hard into ice. I hear a slow grinding sound and see one of my water bottles slipping away down the hill. I reach out and grab it. Yikes. I'm right on the edge of the trail and slipping ever so slowly away. I find a rock and stop sliding. Then I'm on my knees and trying to rise.

Matt helps me stand again. I've got to get some of these Yaktrax. They're great. They're like coils pulled across the soles of his boots. He's not slipping at all. I try to step forward, but I'm still on the verge of slipping back down the hill. I step forward on the ice and suddenly I'm thrown sideways as my right foot slips out. Ow! I'm on my side, and there goes the water bottle. It's skittering down the hill. At first, I think I'll have to go get it. But it keeps going and picking up momentum. It's bouncing down

the hill and through the weeds and past the trees. I can't see it any longer, but I can hear it. It's headed all the way to the bottom of the hill. No, it's out of the question that I try to get it. I'll have to head back in the spring to look for it. That's the best I can do. No way am I going back down now. Aww, it leaked anyway.

I rise to my feet and try stepping forward again. This time I find a rock. As I step forward, I find another rock. And another. Whamm! Jay's down. He's looking drained. I shout "Are you okay?" He says, "Yeah." But



feel like I've got it made now. I'm still on ice, but the slope is tolerable now. I can always find rocks or gashes in the ice. Gradually, the hill gives way to level land and we struggle forward. The end is in sight. We continue forward and the trailhead comes into view. I breathe a major sigh of relief. We survived. We made it up the damn hill!

Now we're laughing. What else can you do? We meet Steve and J.P. and Danny and trade stories about the hike up the hill. We laugh some more. Wow. This is a trip I

I can tell the ice is beating him up. Usually, he's never at a loss for jokes. But now he's quiet. This is serious stuff. Each step has my full attention. I can't afford to slip anymore. Jay's heading into the weeds alongside the trail. The weeds provide a little more traction. I'm finding more rocks now and stay on the trail. And now I'm finding occasional small gashes in the ice. More traction. I'm doing better now. You have to respect the ice. If you give it your full attention, you can stay upright. But let your attention waver for a second and you're a goner.

Matt graciously hangs with Jay and me as we inch up the hill. This is brutal stuff. We keep at it. Baby steps. We're gonna make it. Jay is moving very slowly, very carefully. He wants to make sure he doesn't fall again. I

Above: After a day of caving in Hunter's Cave, Jay Kennedy and Gary Johnson head back to the trailhead (photo by Matt Kuehnert).

won't soon forget. The bruises last about a week. The tingling sensation in my left hand doesn't go away. I get it x-rayed. And the doctor recommends a bone scan. He says I most likely have nerve damage. It lingers for three months and then my hand is okay again.

If you go to Hunter's Cave in the winter (and the cave is only open from November through March), and it has snowed within the last few weeks, you need to seriously consider augmenting your traction. Consider yourself forewarned. ●