



Georgia Speleological Survey
c/o Brent T. Aulenbach, Treasurer
195 Windy Court
Lilburn, GA 30047-6442

5 February, 2002

Buddy Lane, SCCi Frick's Cave Property Manager
40 Hidden Brook Lane
Signal Mountain, TN 37377-2063

RE: Georgia Speleological Survey 19 January, 2002 Trip Report for Resurvey of Frick's Cave, Walker County, Georgia

Dear Buddy,

The third day of surveying in Frick's cave was held by the Georgia Speleological Survey (GSS) on Saturday, 19 January, 2002. There were eleven participants making up three survey teams. Meeting time was 9:30 am. Because it was raining, we utilized the gazebo for changing and the orientation. Survey teams started into the cave at 10:15 am.

One team was made up of Brent Aulenbach (sketcher), ET Davis, Debby Johnson (ghost sketcher), and Wm Shrewsbury. This team entered the Little Frick's entrance and proceeded to the significant side passage that was not surveyed on the first trip. The survey was started at 10:45 am. There was some difficulty finding the closest tie-in station so a station down the passage had to be used. The first 200 feet of the passage was belly crawls interspersed with a few low hands and knees sections. The remainder of the passage was generally hands and knees crawlway. There was a lead at the end of the survey. It required one to twist 90 degrees in a short distance which neither ET or Brent were able to do. A smaller caver might fit without modifying the passage. Just passed this constriction there is a small alcove one could almost stand up with a small amount of water entering.

While surveying in this section of the cave, water levels unexpectedly rose in a 2 foot wide, 3 foot high, 30 foot long mud tube which almost resulted in the team becoming temporarily trapped in the cave. While surveying down into this passage, there was less than 2 inches of water on the floor and a small amount of water was noted flowing into it at both ends of the passage. At this point, ET was doing lead tape and thought that the passage was ending. It was decided that Debby Johnson would turn around at this point so she could finish polishing her earlier sketches, make her way out the belly crawl, and wait for us where we started the survey. It turned out that the passage continued another

150 feet and we finished surveying at 3:10 pm. When we returned to the 15 foot high dome at the end of the tube approximately 1.5 hours later, ET slid down the mud slope and splashed into a pool that was not present earlier. Wm then leaned down to look into the tube to discover that the water level in the tube had risen significantly. It was decided that I would check things out first as I was the only one with a cave suit on. I immediately started in and realized that the passage was not sumped as there was air going through the passage. I called back to say the passage was passable, but for ET and Wm to hurry. After about 15 feet, the air space went from 4 inches to 2 inches and I had to turn on my back. I took a breath and quickly scooted through the remainder of the tube and then made sure everyone else got through okay, which they did. Though apparently Wm dislocated his hip while turning in the tube and had a painful exit from the cave.

It turns out that this passage is the lowest spot in the cave. There was no evidence that this passage was going to flood as it was not really a stream passage and it had no flood debris. It had rained the previous night and continued to rain while we were in the cave. The water entering both ends of the tube did not significantly increase. Apparently, the rise of water in this passage was due to groundwater levels rising. This passage approaches the dry surface streambed to the north of the cave. This streambed probably flows only in very wet conditions when the ability for the stream to sink and flow through Frick's Cave is exceeded. The water rose approximately 2 feet in 1.5 hours. A few more minutes, the passage would likely have been sumped. I don't think that the water level would have risen high enough that we would have been in danger of drowning, but we would have had to wait quite a while for the water to go back down. Water always rises a lot faster than it goes down. Flood danger will be noted on the map at this location.

After the three of us met up with Debby, we made our way out of the cave and exited at approximately 4 pm. Due to Wm's injury and the fact that three of us were soaked, we decided not to go over to the main portion of Frick's Cave and continue surveying as originally planned. A total of 24 survey shots were taken for 588.0 feet of survey.

The second team was made up of Nancy Aulenbach, Paula Ledbetter (sketcher), Allen Padgett, and Karen Padgett. They started surveying at 10:25 am. They surveyed the Bat Room which turned out to be quite complex. The team did a very thorough job. The room was mapped on larger graph paper to allow the room to fit on a couple of pages. A climbing lead was noted. Notes were made about locations of stations from the histoplasmosis study. One loop was connected into existing survey in the junction room below the Bat Room and four loops were surveyed in the Bat Room. All loop closures were very accurate. A total of 37 survey shots were taken for 1109.6 feet of survey. The team exited the cave at approximately 5:30 pm.

The third team was made up of Scott Fee, Tom Moltz, and Terry Ragon (sketcher). They started surveying at 10:30 am and surveyed upstream from the junction room below the Bat Room. One loop was surveyed which had a good loop closure. The one side passage near the end of their survey was also mapped. The team noted about a one inch rise in the stream level from the time they went in to the time they exited the cave. A total of 25

survey shots were taken for a total of 890.3 feet of survey. They finished up the survey at 4 pm and exited the cave at 4:20 pm.

A total of six loops were surveyed which provides an estimate on the accuracy of the survey (see attachment). All but one closed within 2%, which should be considered quite good.

I was very pleased by the efforts made by the participants. Paula and Terry did a very nice job sketching. Debby ghost sketched, in which she sketched along with the survey team at her own pace. She had some sketching experience and said this was a very helpful experience and she did a good job. Although we did not have any new surveyors involved on this trip, we did have seven new participants for a total of 18 different participants in the three days. Unfortunately, I did have to turn a few people away as more people wanted to participate than I could take. I signed up people based on the order that they contacted me. I told the people who I turned away that I would give them priority for getting on the next trip that they could attend. Some of these people have since signed up for the upcoming survey trip.

Scott Fee took some digital photographs on this trip and some of these are available on the GSS website at <http://www.caves.org/survey/gss/>.

Brent Aulenbach was designated by the head SCCi Frick's Cave Property Manager as the SCCi representative.

The survey currently stands at 207 survey shots and 6,149 feet surveyed. After excluding surface surveys, spray shots and setup shots, the cave has been resurveyed to approximately 1 mile long and 102 feet total vertical extent. The vertical extent is much greater than the vertical extent of 31 feet which is currently listed in the GSS Cave Listing.

The next trip has been scheduled for 9 February, 2002. The GSS would like to schedule a trip in March, but are concerned with early arrival of gray bats due to the warm winter.

Also, please note that Nancy and I have moved. The new address is at the top of this letter. Our new home phone number is (770) 279-7674.

Respectfully Submitted,

Brent T. Aulenbach, Frick's Cave Resurvey Project Coordinator

Cc:
Diane Cousineau, SCCi Chair
Dan Barnick, GSS Chair
Debby Johnson

Paula Ledbetter
Terry Ragon
Brian Williamson

Attached:

Copies of all survey notes

Copy of existing map with passages mapped thus far highlighted

Survey data files from Compass

Reduced station locations from Compass

Loop closures from Compass

Line plot of cave from Compass