



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

18 February, 2002

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

RE: Georgia Speleological Survey 9 February, 2002 Trip Report for Resurvey of Frick's Cave, Walker County, Georgia

Dear Buddy,

The fourth day of surveying in Frick's cave was held by the Georgia Speleological Survey (GSS) on Saturday, 9 February, 2002. There were twelve participants making up three survey teams. Meeting time was 9:30 am. An orientation was given to all participants and new surveyors were taught how to read survey instruments. Then the survey teams started into the cave at 10:30 am.

One team was made up of Brent Aulenbach (sketcher), Bruce Brewer, Eric Crisp (new surveyor), and Will Summer. This team's task was to clean up survey in the vicinity of the main stream trunk passage.

First was a resurvey of shot A9 to A10. When the data was entered into COMPASS to reduce the survey data, it was discovered that the front and back sights were 8 degrees off instead of 2 degrees off as I had thought when surveying in the cave. It was discovered that there was more than a 5 degree deflection of the compass in the vicinity of station A9. There appeared to be some iron staining of the ceiling above the station. It is also possible that some iron-containing artifact is buried underneath the station. The discrepancy between front and back sights were resolved by lining up the stations from a distance.

Next, a few additional survey stations were set in the entrance area to refine the passages under the breakdown block in the entrance, along the far wall of the entrance, and the location of a 30 foot long side passage inside the entrance. Then a couple of shots were taken to close a loop between stations A20 and A26 in the main streamway before the first breakdown pile. The group then looked for a side passage along the southern wall of the main streamway between the first breakdown pile and what I will now call "The

Junction Room". (The Junction Room is the large breakdown leading up to the Bat Room.) This side passage was on the original map, but has not yet been resurveyed. Although some flat rooms were found, it was decided to leave this for another trip as there were more critical passages on our list to survey on this day.

Next the side loop on the south end of The Junction Room was surveyed. Then the passage below the 15' Pit Entrance was surveyed. A good point was placed below the pit to connect in from the surface later.

The group finished up the day by surveying in the tie in between Frick's and Little Frick's. Although no one could fit through the connection, the survey was tied into the station set from the Little Frick's side. A 30' long, low, decorated room was found via a climbup above the connection room and was sketched but not surveyed, as half the survey team had already been sent out ahead. A total of 25 survey shots were taken for 582.5 feet of survey.

A second team was made up of Jim Campbell (new surveyor), Scott Carmine, Kelly Norwood (sketcher), and John Stembel. They started surveying from a major passage split in the southern portion of the cave. They surveyed the first portion of the dry eastern passage going further into the cave. A total of 32 survey shots (H survey) were taken for 640.75 feet of survey including three loops. The team exited the cave at 5:20 pm.

The third team was made up of Kim Bigioni, Wm Shrewsbury, Ben Theune (fairly new surveyor) and Jerry Wallace (sketcher). The team was not able to find the marked survey station at their assigned starting place. It is likely that the flagging got washed away by the stream. The team improvised and started their survey at the same place as the second team and surveyed the stream passage downstream towards the entrance. This resulted in a hanging survey which will have to be tied in on the next trip. They started surveying at 12:00 pm. A total of 20 survey shots were taken for a total of 510.5 feet of survey including three loops. They finished up the survey at 4:05 pm and exited the cave at 4:45 pm.

After exiting the cave, Kim, Wm, Terry Bigioni, and I went up to the 15' Pit Entrance to measure the pit and tie the station at the bottom of the pit to the surface. The total pit depth was measured at 33.7 feet. The first section of the pit could be climbed down via a chimney to a ledge approximately 15 feet from the bottom which explains the name on the original map. For all practical purposes though, the drop would be done from the surface and should be referred to as a 34 foot pit.

A total of nine loops were surveyed on this trip which provides an estimate on the accuracy of the survey (see attachment). All but one loop closed within 2%, which should be considered quite good. The large loop closed between Frick's Cave and Little Frick's was 13.0 feet in 1378.8 foot long loop for a 0.9% error.

I was very pleased by the efforts made by the participants. Kelly and Jerry did a very nice job sketching. We had two new surveyors and one fairly new surveyor (who had learned

on a previous trip). Nine of the twelve people who participated had not been on a trip before. So far, 27 different people have participated on the project in four days of trips. Although I did not fill up the trip until the night before the trip, I unfortunately had to turn a few new surveyors down as I already had three inexperienced people signed up. I had one of the sketchers that I had lined up drop out two days before the trip and had to scramble to get someone else to help out. Luckily, Kelly Norwood was able to fill in with short notice.

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

The survey currently stands at 284 survey shots and 7,882.7 feet surveyed. After excluding surface surveys, spray shots and setup shots, the cave has been resurveyed to approximately 1.3 miles long and 131 feet total vertical extent. The total vertical extent of the cave has probably been determined with the 15' Pit Entrance being the highest point in the cave at 107 feet above the main entrance and the mud tube in Little Frick's (that floods) being the lowest point at 24 feet below the main entrance.

The next trip has been scheduled for 9 March, 2002.

Respectfully Submitted,

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

Cc:

Diane Cousineau, SCCi Chair

Dan Barnick, GSS Chair

Kelly Norwood

Jerry Wallace

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