

Georgia Speleological Survey c/o Brent T. Aulenbach, Treasurer 2294 Marshes Glenn Drive Norcross, GA 30071-3073

7 December, 2001

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

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

Dear Buddy,

The first survey trips to Frick's cave were held by the Georgia Speleological Survey (GSS) on the weekend of 1 & 2 December, 2001. On Saturday, 1 December, there were seven participants making up two survey teams. Meeting time was 9:30 am. After an orientation including a handout (attached) we started the survey at 10:30 am.

One team was made up of Brent Aulenbach (sketcher), Nancy Aulenbach, Alan Cressler, and Benjamin Theune (new surveyor). This was Benjamin's first survey trip and he learned how to set stations and read instruments. First an overland survey was completed between the main Frick's Cave entrance and the Little Frick's entrance. The survey of the cave was then started at the main Frick's entrance. A passage not on the existing map was surveyed just inside the entrance to the right. This connected via a small belly crawl to the Potato Room. The first portion of the main streamway up to the breakdown pile was then surveyed including all side passages including the Potato Room. From the breakdown pile, the decorated passages leading towards the Little Frick's section of the cave were mapped. The survey was stopped approximately 75 feet before the connection to Little Frick's as the team was not prepared to get totally wet and muddy at this point. A total of 51 survey shots were taken for 1604.7 feet of survey (including overland survey, A survey). The team finished surveying at 7:05 pm and exited the cave at 7:10 pm.

The second team was made up of Paul Aughey, Shari Lydy, and Brian Williamson (sketcher). They surveyed in the Little Frick's portion of the cave. A good station was set at the connection to the main portion of Frick's Cave. It appears that this is too small for most people and will have to be connected from the other side. The main passage in Little Frick's was surveyed to its end. The smaller passage on the west still needs to be

surveyed. A total of 42 survey shots were taken for 1053.8 feet of survey (including several splay shots, B survey). The team finished surveying at approximately 6 pm.

On Sunday, 2 December, there were six participants making up two survey teams. Meeting time was 8:30 am. After an orientation we started the survey at 10:05 am. One team was made up of Allen Padgett, Karen Padgett, and Brian Williamson (sketcher). They surveyed in the wide main streamway from the breakdown pile to the beginning of the room that has passages that lead to the Bat Room and the 15' pit entrance. One side passage was missed and will have to be surveyed on the next trip. A total of 13 survey shots were taken for 467.4 feet of survey (C survey). The team finished surveying at approximately 2:30 pm.

The second team was made up of Brent Aulenbach (sketch), Obadiah Brooks (new surveyor), and David Holliman (new surveyor). Both Obadiah and David learned how to use instruments and Obadiah learned how to set point. Some smaller passageways off of the breakdown at the main streamway were connected in. Then the room that has passages that lead to the Bat Room and the 15' pit entrance was mapped using a perimeter survey. Stations were set and clearly marked so that all passages from this room could easily be mapped. A total of 15 survey shots were taken for 435.2 feet of survey (A and C survey). The team finished surveying at 3:35 pm and exited the cave at 3:45 pm.

E.T. Davis, one of the SCCi Frick's Cave Property Managers, was also in the cave both days and provided help to the survey teams. Buddy Lane and E.T. Davis also took some pictures of the cave survey on Saturday. Brent Aulenbach was designated by the head SCCi Frick's Cave Property Manager as the SCCi representative for both days.

Historic and prehistoric markings and remains along with bat guano piles were noted on the sketches. Alan Cressler has made a separate cave archeology report of findings (attached). It was very important to check new instrument readers by doing backsights. By the end of the day, the new instrument readers became proficient. A total of six loops were surveyed (attachment). All but one closed within 2%, which should be considered quite good. The other loop will have to be checked for errors.

I was very pleased by the efforts made by the participants. A lot of cave was surveyed, but more importantly, the cave is being mapped at a high quality. It was great to have new surveyors involved and all three showed great enthusiasm. It was difficult to have two new surveyors on one team as it was hard to help teach them and sketch at the same time, especially starting out in a more difficult crawling passage where it was not easy to crawl up and help. They did a good job learning and by the end of the day they became much more proficient and faster. I think we had a good turnout, especially considering the short notice. I had many people respond that they would like to help on future trips even though they could not make this first trip. The survey currently stands at 121 survey shots and 3,561 feet surveyed. After excluding surface surveys, spray shots and setup shots, the cave is slightly over 3,000 feet long and 59 feet total vertical extent.

Alan Cressler took GPS readings of the three entrances on Sunday, 2 December, 2001 using a NAD27 datum:

Entrance 1: 34° 46′ 31.3" N, 85° 25′ 13.4" W, ±15 feet Little Frick's: 34° 46′ 32.6" N, 85° 25′ 14.4" W, ±20 feet Pit Entrance: 34° 46′ 32.0" N, 85° 25′ 19.4" W, ±15 feet

The next trip will be scheduled for sometime in January.

Respectfully Submitted,

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

Cc:

Diane Cousineau, SCCi Chair Dan Barnick, GSS Chair Brian Williamson

Attached:

Copies of all survey notes
Copy of existing map with passages mapped thus far highlighted
Orientation handout
Survey data files from Compass
Reduces station locations from Compass
Loop closures from Compass
Line plot of cave from Compass
Cave archaeology report

Frick's Cave Archaeology Report

By Alan Cressler 12/3/01

I joined the Fricks Cave Resurvey Project last weekend (December 1-2). My Contribution to the project, as usual, had two purposes. In addition to helping with the cave survey, I was conducting an archaeological resource inventory. My last visit to the cave was December 4, 1997. I have gained a great deal more experience in looking for subtle indicators of prehistoric visitation. I used the periods between survey shots to closely examine the areas of the cave where we were working. On December 1, I joined Brent Aulenbach, Nancy Aulenbach, and Benjamin Theune as a survey team. We began the A1 survey line at the main entrance. E.T. Davis was also present for parts of the day. Just inside the entrance, on the right near the ceiling, is a low crawlway. In breakdown at the beginning of this crawl I located a small animal bone awl. This small artifact could have been moved to this location by a cave rat but showed no evidence of gnawing. At the base of the entrance climb there is a muddy sediment platform between the low rock wall at the right edge of the stream and the right cave wall. On this sediment slope, I located several aquatic gastropod shells (two species). All of them had the ends broken off which indicates use as a food item. I located a small mussel shell which was most likely a food item. A small limestone? tempered pottery sherd with possible surface texture was also located in a drip area. This sherd will have to be cleaned and examined under magnification to determine temper. Temper material can help define an age range for the artifact. Brent noted locations of these artifacts on the sketch. He also noted the location of prehistoric petroglyph panel number one on the map. Historic features such as the low rock walls and stucco associated with the potato storage room were also noted. Prehistoric petroglyph panel number two was noted on the sketch near station A28. Continuing into the cave, we took the survey into the first side passage on the right at the first breakdown impasse. I am calling this passage the "Little Fricks Connection Passage" for lack of a better name. In this passage, there is a major side passage on the left that leads to a very nice formation area. In both of these passages, I located numerous bundle torch stoke marks. Bundle torches were the preferred lighting source for prehistoric cave explores in southeastern caves. The most common torch material was river cane (Arundinaria sp.). Other plant material may have supplemented the bundles. To remove excess charcoal from the burning end, the torch was struck against the wall. This often left a characteristic cluster of carbon marks. In some cases the actual circular pattern of the cane can be seen. I did find a two small circular patterns on a vertical mud coated piece of breakdown that represents cane. The charcoal that falls to the floor from this action is what is often radiocarbon dated to determine

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the cave was prehistorically explored. There are thousands of charcoal pieces related to stoking the torches. These are an important and often overlooked cultural resource that are easily destroyed by modern cave explorers. I will say that most of this sometimes difficult passage was prehistorically explored with a flaming torch and most likely bare feet. I looked carefully for barefoot human footprints but unfortunately the most likely areas had been effected by modern foot traffic.

December 2, Paul Aughey and I did not join a survey team but stayed in close proximity to the upstream team. I also photographed several of the definitive stoke marks in the side passageas well as some of the better historic signatures and dates near the "Bat Room" junction. I located a single stoke mark cluster on the left wall just before the "Bat Room" junction. I also observed some heavily patinated finger marks in a clay bank. These are very old but it is hard to say if the act was prehistoric. We have seen prehistoric clay removal in other caves. Continuing upstream, I located a single stoke mark cluster on the right wall of a parallel side crawl passage over 1000 feet from the entrance. Paul and I went back to the entrance to again carefully search for cultural material. An additional aquatic bivalve shell fragment and a few aquatic gastropods shells were found. The most remarkable find was made along the left wall just inside the entrance. I located two well worn human premolars in a gravel matrix within the flood level. These teeth most likely represent a prehistoric human burial. This was predicted based on the interpretations of the artwork found within petroglyph panel number two. Two images within that panel have been interpreted as "toothy grins" which have been associated with cave burials in other caves in Tennessee.

All of the cultural materials found within the entrance zone are in high traffic or flood areas and were collected and located in a safe place to prevent potential damage or loss from flooding.