



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

23 October, 2001

Southeastern Cave Conservancy, Inc  
c/o Diane Cousineau, Chair  
737 Glass Road  
LaFayette, GA 30728-6736

Dear Southeastern Cave Conservancy, Inc,

Enclosed is the proposed Memorandum of Agreement between the Southeastern Cave Conservancy and Georgia Speleological Survey for the project "Resurvey of Frick's Cave, Walker County, Georgia" for consideration at the 27 October, 2001 SCCi Board Meeting. Included along with the MOA is the application and copies of sample maps of the chief researcher.

Unfortunately, I will not be able to attend the board meeting and I am not sure if there will be a GSS member present to representative the proposal. If you have any questions, please feel free to give me a call at home at (770) 729-1839 or at work at (770) 903-9148, or e-mail me at [btaulenb@usgs.gov](mailto:btaulenb@usgs.gov).

Thank you for your consideration,

Brent T. Aulenbach, GSS Treasurer



**Diane Cousineau, Chair**  
737 Glass Road  
LaFayette, GA 30728-6736

Tel: 706-764-2296  
Email: dcousineau@scci.org

**MEMORANDUM OF AGREEMENT**  
**Between**  
**The Southeastern Cave Conservancy**  
**and**  
**Georgia Speleological Survey**

The Southeastern Cave Conservancy, Inc. (SCCI) and the Georgia Speleological Survey (GSS) enter into an agreement to engage in a resurvey of Frick's Cave, Walker County Georgia.

The period of this agreement is from November 2001 to September 2003.

**Responsibilities of the Georgia Speleological Survey:**

The applicant agrees to follow the protocols outlined in its attached application and to abide by the following restrictions:

- In-cave survey trips will occur only when the Gray Bat colony is not present in the cave.
- Participants will be especially careful to avoid injuring biota (such as the Tennessee Cave Salamander) when having to walk in the stream.
- Care will be taken not to damage or destroy any prehistoric or historic marking on cave walls and ceiling when setting survey stations.
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**Responsibilities of the SCCI:**

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**Attachments:**

- application
- copies of sample maps of chief researcher

**Approved By:**

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(SCCI chair)

\_\_\_\_\_  
(GSS chair)



**Diane Cousineau, Chair**  
737 Glass Road  
LaFayette, GA 30728-6736

Tel: 706-764-2296  
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## APPLICATION

### STUDIES AND PROJECTS INVOLVING SCCi OWNED AND MANAGED PROPERTIES

#### SECTION I: Abstract

The purpose of the project is for the Georgia Speleological Survey (GSS) to produce a complete, high-quality, computer drafted map of Frick's Cave including cross sections, floor detail, and a simplified profile view. The GSS is an internal organization of the National Speleological Society, Inc. with the purpose of exploring, documenting, and studying the caves of Georgia. Since the publication of the existing map, cartographic styles have improved and there has been a significant discovery of an additional 2,000 feet of cave. A high quality map would benefit the Southeastern Cave Conservancy, Inc. as it would identify the cave resources in more detail and further define the hydrology to allow better protection of the cave from pollution. The map would also be useful for other scientific studies performed in the cave.

The project would begin in November, 2001. Two field seasons would be required due to the length of the cave (approximately two miles) with an expected completion of the cave survey in March, 2003 and the completion of the map by the end of September, 2003. The survey will use standard grade 5 survey techniques (using compass, tape, and clinometer). It is the intent of the GSS to try to involve many GSS members and others in both the survey and drafting aspects of the project.

#### SECTION II: Name of Project

Resurvey of Frick's Cave , Walker County, Georgia

#### SECTION III: Applicant

Name of individual or organization Georgia Speleological Survey

If an organization, individual with overall responsibility for the study or project:

Name: Dan Barnick, GSS Chair

Address: 1005 Towne Manor Court  
Kennesaw, GA 30144-2992

Telephone: (770) 514-8862

Fax: \_\_\_\_\_

email: bunchnick@mindspring.com

#### **SECTION IV: Individual Responsible for Conducting the Study or the Project**

Name: Brent T. Aulenbach  
Address: 2294 Marshes Glenn Drive  
Norcross, GA 30071-3073  
Telephone: (770) 729-1839  
Fax: \_\_\_\_\_  
email: btaulenb@usgs.gov

#### **SECTION V: Financial Information**

No funding is requested for this project. If the SCCi request permanent survey stations to be placed in the cave, the GSS will grant the SCCi up to \$100 for the purpose of purchasing equipment and supplies for this endeavor.

#### **SECTION VI: Additional Information about the Study**

Credentials of those conducting the study or project. I have been involved in several project-type surveys over the last ten years involving many different surveyors and multiple survey teams. Some of the more significant projects include Guess Cave, AL, Hurricane Cave, GA, Snake Well, TN, Alabama/Georgia Cave, AL/GA, Stinging Nettle Cave, TN, Fort-Peebles Cave, TN, and Blue Spring Cave, TN. Of these, I have been directly responsible for organizing survey trips and drafting of the maps for Hurricane Cave, GA, Snake Well, TN, Alabama/Georgia Cave, AL/GA (in progress). I have attached reduced copies of two of my more recent high quality electronically drafted maps, "Selected Caves on a Portion of Fox Mountain, Georgia" and "Caves of the Snake Well Complex, Marion County, Tennessee". These maps are likely to be of similar style to the map produced by this project. Note that drafting of the map will involve multiple cartographers.

Other GSS members (and non-GSS members) will be involved with the project. The GSS has a wealth of experience in survey and cartography among its 80 members. It is also the goal of the project to train individuals with little survey experience so that they can be involved. (See restrictions in the methods section below).

A description of the methods to be used: Cave will be mapped using standard grade 5 techniques (compass, tape, and clinometer). Stations will be temporarily marked with flagging tape, rock cairns, or small scratch marks. Flagging tape and cairns will be removed upon the completion of the survey. Sketches will be at a scale of 20 feet to the inch and will include cross sections and high quality floor detail. Running profiles will be done in areas where there is high vertical relief. The GSS will set consistent survey standards (eg. symbology used in sketches, when to measure instead of estimating left and right wall distances). The GSS will appraise the ability of all sketchers to insure that high quality sketches are produced. If the instrument readers are novice, backsights will be done to insure an accurate survey. Survey data will be reduced in a software program (such as Compass) that allows loop closures for survey error assessment .

The GSS is willing to place permanent survey station (such as small bolts with metal tags) at key locations at the request of the SCCi for use of other studies in the cave. The GSS is also willing to do cave inventories provided by the SCCi while surveying.

A description of the data and the format in which it will be reported: Within 30 days of each survey trip, copies of the original survey notes, a brief trip report, and a line plot of the survey will be provided to the SCCi. The final product will be an electronic map drafted in Adobe Illustrator software. Maps can also be exported in common formats such as encapsulated postscript or portable document format. Paper copies of the map will also be provided to the SCCi. Although the map will be printable at different

scales, the map layout and text will be appropriate for printing at a scale of 40 feet to the inch. See attached maps for examples of the quality and style of drafting.

Number of entries: The exact number of survey trips required to map Frick's Cave is not known. The cave is approximately two miles long and additional cave is often discovered during survey projects. Survey trips will be performed during periods when the Gray Bat colony is not present in the cave, defining a typical field season from October through March. Survey trips will be scheduled usually on weekends at intervals of every month or two during this field season. Surface surveys between entrances and other karst features may be done during other portions of the year. Because of the length of the cave, we anticipate that two full field seasons will be required to survey the cave.

Duration of each event: Survey trips can last all day long. There will be no overnight trips.

Number of personnel involved: A maximum of three survey teams will be in the cave per visit. Each survey team will generally have 2 to 3 individuals. A fourth individual may be added to a survey team for the purposes of training new sketchers, photo documentation of the project, installation of permanent survey stations, and for any inventory that may be requested by the SCCi. The maximum number of people in the cave during any day will be 12. The number of different people entering the cave during the project is unknown, but there will be an attempt to involve all individuals that are qualified and interested in participating in the project.

The proposed schedule: The project will begin in November, 2001. Two full field seasons will be required to survey the cave with the survey being complete at the end of March 2003. The final map should be completed six months after the completion of the survey at the end of September, 2003. Unforeseen complications may require an extension to these dates, such as significant additional passages discovered or extended periods of high water levels which prevent reasonable access to portions of the cave.