Water Sinks Cave System and Owl Cave

Highland County, Virginia

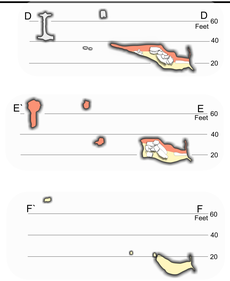
Cave Location Reference Number
Owl Cave 2301
Water Sinks Cave 2302
Total Survey = 14,760 feet = 2.8 miles (July 23, 2008)

Cartography by Phil Lucas
Computer Graphics by Roger Baroody

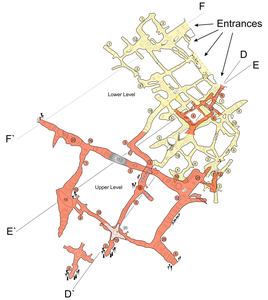
All data in feet; cross sections to scale
Suunto instrument survey

0 100 200
Feet

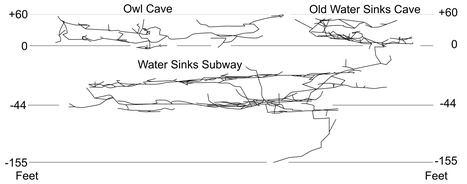
True North



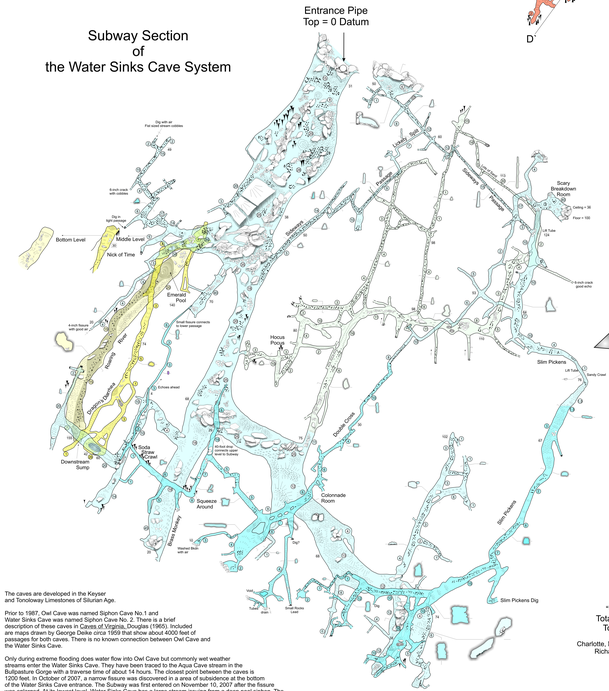
Old Cave Section
Water Sinks Cave System

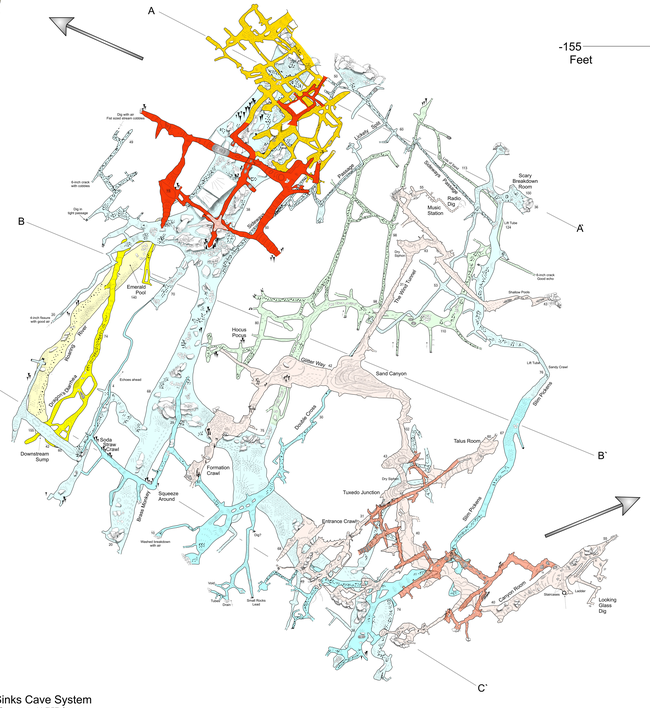


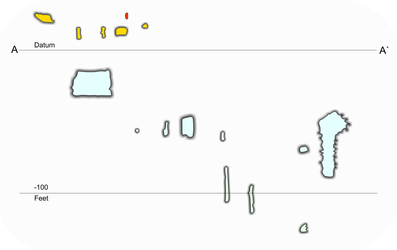
Profile Looking 120° Southeast
and Tilted down 9° to Southeast

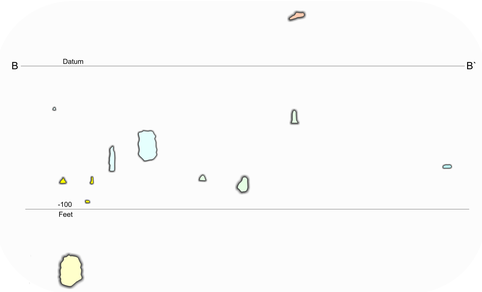


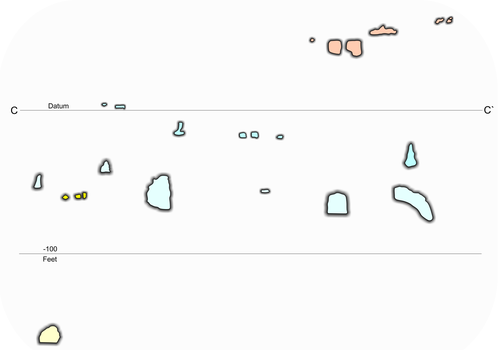
Subway Section
of
the Water Sinks Cave System











Legend

Breakdown: Large, Small
Cobbles
Sand
Clay or Silt
Stalactite
Stalagmite
Column
Flowstone
Flowstone Floor
Rimstone
Stream
Bedrock Floor
Log
Slopes
Floor Ledge
Ceiling Ledge
Dome
Pond
Ceiling Height
Drop Depth
Air Flow
Elevation: Above Datum, Below Datum

Note: Some symbols placed outside passage wall where space is limited.

The caves are developed in the Keyser and Tonoloway Limestones of Silurian Age.

Prior to 1987, Owl Cave was named Siphon Cave No.1 and Water Sinks Cave was named Siphon Cave No. 2. There is a brief description of these caves in Caves of Virginia, Douglas (1965). Included are maps drawn by George Deike circa 1959 that show about 4000 feet of passages for both caves. There is no known connection between Owl Cave and the Water Sinks Cave.

Only during extreme flooding does water flow into Owl Cave but commonly wet weather streams enter the Water Sinks Cave. They have been traced to the Aqua Cave stream in the Bullpasture Gorge with a traverse time of about 14 hours. The closest point between the caves is 1200 feet. In October of 2007, a narrow fissure was discovered in a area of subsidence at the bottom of the Water Sinks Cave entrance. The Subway was first entered on November 10, 2007 after the fissure was enlarged. At its lowest level, Water Sinks Cave has a large stream issuing from a deep pool siphon. The stream flows southeast and is the only stream in Water Sinks Cave that leaves the cave. This stream has also been traced to the Aqua Cave stream. There has been considerable flooding in Water Sinks Cave System. Leaves stuck to stalactites near the entrance in the Subway Section gives evidence that much of the cave has flooded. Water reached a depth of 39 feet above datum at the Water Sinks Cave entrance during an April 2011 flood.

Water Sinks Cave System

Total Survey = 11,757 feet
Total Relief = 241 feet

"Old Cave Section"
Total Survey = 2542 feet
Total Relief = 90 feet
Surveyed by
Charlotte, Matthew, Charles and Phil Lucas
Richard Lambert, Cori Gianuzzi

"Subway Section"
Total Survey = 9215 feet
Total Relief = 162 feet
Surveyed by
Scott Olson, Matthew and Phil Lucas,
Mike Spencer, Gregg Clemmer, Mike Ficco,
John Sweet, Jeff Uhl, Rick Lambert, Frank Marks,
Nevin Davis, Ben Schwartz, Al Grimm, Mike Futrell,
Jean Vargas, Tony Cankie, Jon Lilliestolen

Owl Cave

Total Survey = 3003 feet
Total Vertical Relief = 63 feet
Surveyed by
Phil, Charlotte, Matthew and Charles Lucas
and Brad Blase
from 7/16/1988
to 10/21/1988