Helictite Cave

Highland County, Virginia

Virginia Speleological Survey Reference Number 3311

Total Surveyed Length = 7.08 miles; Depth =205 feet

Cross sections to scale.

Suunto compass and fiberglass tape begun March 16, 1996 and completed, as shown, September 8, 2002.

Cartography by Phil Lucas

Computer Graphics by Roger Baroody

(March 11, 2009)

Survey Team Members

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Legend

Floor Detail
- Breakdown: Large, Medium, Small
- Sand
- Silt/Mud
- Mud Cracks
- Bedrock

Slopes & Ledges
- Slopes
- Long Slope
- Ledges: Floor, Channel
- Pits
- Ceiling
- Dome Pit
- Dome

Formations
- Helictites
- Stalactites
- Stalagmites
- Flowstone
- Columns
- Crystals
- Drill Holes

Hydrology
- Stream & Flow
- Temp. Stream
- Pool
- Temp. Pool

Passage
- Continues, too small
- Continues, not explored

- Ceiling Height (20)
- Pit Depth [25]
- Elevation Below Datum 135
- Notable Fossils
- Air Flow
- Mud Bricks

NOTES

The cave is developed in Licking Creek and New Creek units of the Helderberg Limestone.

The entrance was opened by digging in the bottom of a small steep sided sink on the northeast side of the much larger Water Sinks sinkhole.

The 7.08 miles of surveyed passage form a complex maze of joint controlled passages that extend a lateral distance of 2400 feet to the northeast along a northeast plunging anticline.

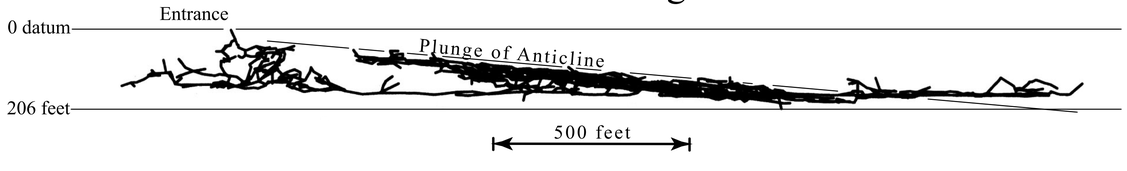
The cave has two distinctive levels; the Streamway, developed in the New Creek Limestone extends generally northeast, and the Canyon Maze, complex of joint controlled interconnected canyons generally 10 to 15 feet wide and 20 feet high. The canyons are almost entirely developed within the cherty beds of the Licking Creek Limestone. Thick, brittle chert beds in several locations have collapsed in large unstable piles. The beds are black in color, sharp-edged and bring an appearance to the passages that look manmade rather than natural.

The ceilings of the canyons are generally flat with ripples marks from the time of deposition being prominent in many places.

In many locations are outstanding displays of invertebrate Devonian fossils such as brachiopods, corals, gastropods, and crinoids.

The Slickenside Room is where collapse has separated beds along a bedding plane to expose large areas of slickensides formed by bedding plane slippage on both the floor and the ceiling.

There are striking displays of helictites, spar, cave pearls, and other speleothems concentrated in several locations.

Helictite Cave has been placed on Virginia's Significant Cave List (Virginia Cave Board) as a very significant in the following categories; geologic, hydrologic, esthetic, atmospheric, paleontology, and length.

Profile Looking West