

Thornton's Cave (Sumter County Bat Cave) Sumter County, Florida

Cartography by Lee Florea, May 2006.
4/8-29/06 survey by Lee Florea, Cara Gentry
Bogdan Onac, Limaris Soto, Tom Turner.

Datum: Tangerine Entrance - E1, Station A0.

(WGS 84 / NAD 83)
Latitude: N28°40'41"
Longitude: W82°15'06"
Datum Elevation: 14.4 m (msl)
Surveyed length: 314.8 m
Surveyed depth: 1.7 m

Station elevations in meters (msl).

Cave is formed within the
Eocene Ocala Limestone.

Cave is on private property.



0 5 10 Meters
Cross sections to scale.

Key To Features

Entrances designated by an "E" followed by a number.

	Sediment floor		Change in ceiling height
	Water		Change in floor height
	Large breakdown		Dripline
	Small breakdown		Direction of water flow
	Bedrock pillar		Direction of slope
	Skylight entrance		Survey station
	Entrance pit		Ceiling height (m)
	Organic debris		Mineralization (flakes)
	Guano deposits		Mineralization (stalactites)

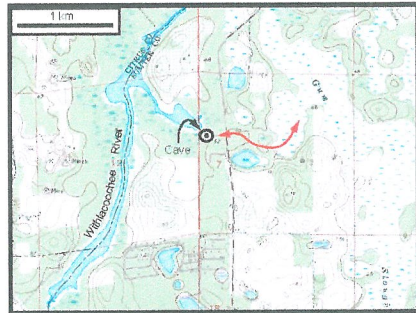
IMPORTANT NOTE -
The section of cave east and south of station B9 is seasonally sumped at the ear-dip when pool elevations exceed 13.5 m (msl).

CAVE HYDROLOGY -

Thornton's Cave acts as an estevelle. When the elevation of the Withlacoochee River is below the cave entrance, water drains from Gum Slough to the west through the cave and into the river (figure at right).

When the river elevation exceeds the elevation of the cave entrance, water flows east from the river, into the cave, and recharges Gum Slough.

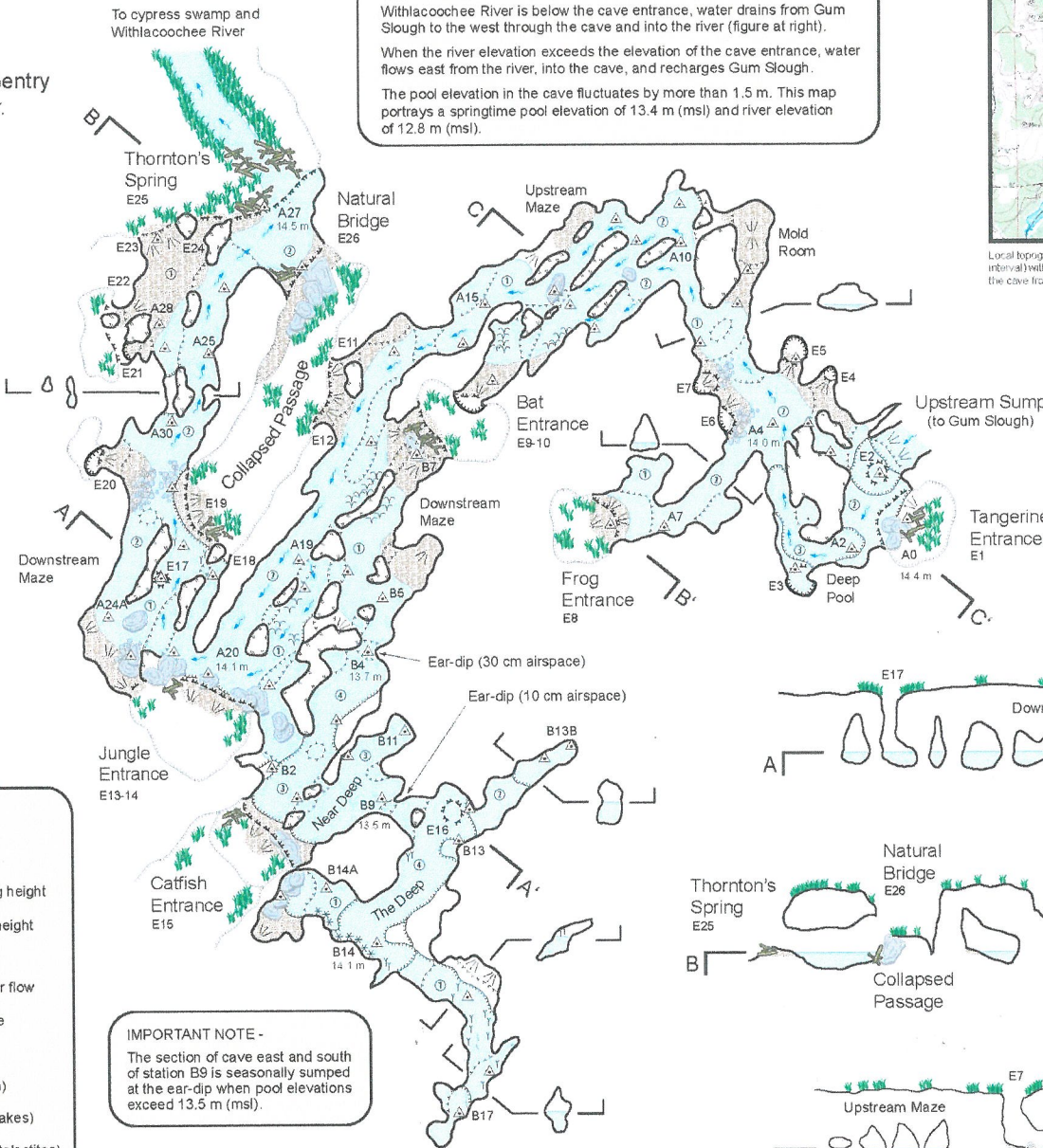
The pool elevation in the cave fluctuates by more than 1.5 m. This map portrays a springtime pool elevation of 13.4 m (msl) and river elevation of 12.8 m (msl).



Local topographic map (Hobbs and Vahoo 7.5 minute quadrangles - 10 ft contour interval) with the location of Thornton's Cave and bi-directional flow of water through the cave from the Withlacoochee River and Gum Slough (red arrow).



Manuel Ebers and Matt Katch near station A18 (Alan Crossler)



Cross Sections

