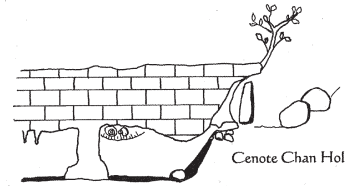


Cenote Chan Hol

Sistema Toh Ha



Total passage mapped and surveyed: 15,760 ft

Exploration history

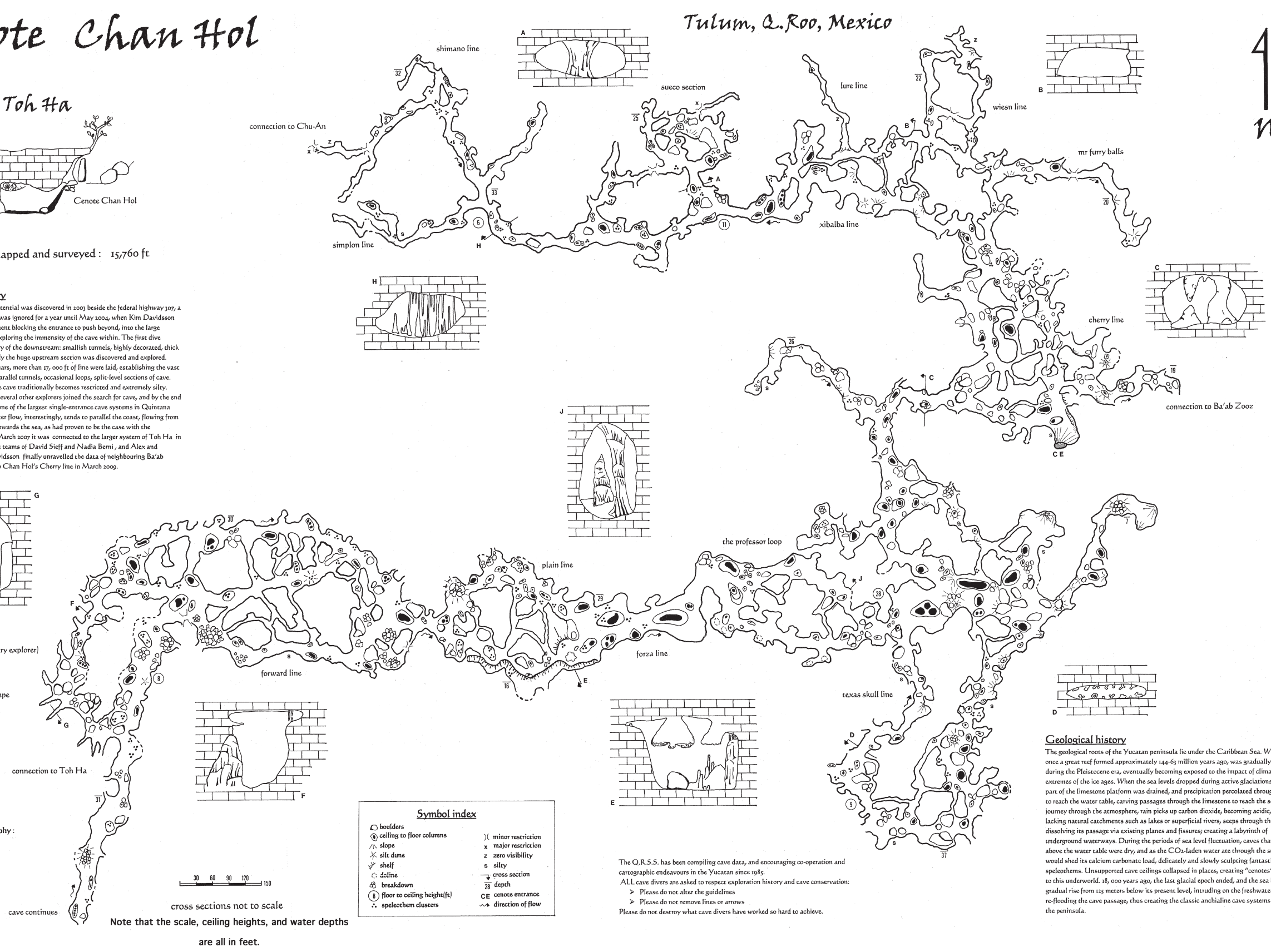
Chan Hol's cave-diving potential was discovered in 2003 beside the federal highway 307, a tiny silted-in collapse that was ignored for a year until May 2004, when Kim Davidsson cleared enough of the sediment blocking the entrance to push beyond, into the large entrance room, and begin exploring the immensity of the cave within. The first dive undertaken led to discovery of the downstream: smallish tunnels, highly decorated, thick sedimentation; consequently the huge upstream section was discovered and explored. Over the following three years, more than 17,000 ft of line were laid, establishing the vast and fantastic Forza Line, parallel tunnels, occasional loops, split-level sections of cave. Beyond the main tunnel the cave traditionally becomes restricted and extremely silty. Chan Hol expanded, and several other explorers joined the search for cave, and by the end of 2006, at 17000 ft, it was one of the largest single-entrance cave systems in Quintana Roo. The direction of water flow, interestingly, tends to parallel the coast, flowing from S-W to N-E, rather than towards the sea, as had proven to be the case with the neighbouring systems. In March 2007 it was connected to the larger system of Toh Ha in a collaboration between the teams of David Sieff and Nadia Berni, and Alex and Thorsten Kampe. Kim Davidsson finally unravelled the data of neighbouring Ba'ab Zooz, and connected it into Chan Hol's Cherry line in March 2009.

Explorers:

Kim Davidsson (primary explorer)
Nadia Berni
David Sieff
Brian Kakuk
Alex and Thorsten Kampe
Robbie Schittner

Mapping and cartography:

Nadia Berni
2009



Note that the scale, ceiling heights, and water depths are all in feet.

Symbol index	
○ boulders	⌋ minor restriction
⊙ ceiling to floor columns	x major restriction
△ slope	z zero visibility
⋆ silt dune	s silty
▽ shelf	→ cross section
⊖ decline	⊂ depth
⊘ breakdown	⊕ cenote entrance
⊙ floor to ceiling height(ft)	→ direction of flow
⋆ speleothem clusters	

The Q.R.S.S. has been compiling cave data, and encouraging co-operation and cartographic endeavours in the Yucatan since 1985.
ALL cave divers are asked to respect exploration history and cave conservation:
➤ Please do not alter the guidelines
➤ Please do not remove lines or arrows
Please do not destroy what cave divers have worked so hard to achieve.

Geological history

The geological roots of the Yucatan peninsula lie under the Caribbean Sea. What was once a great reef formed approximately 144-63 million years ago, was gradually uplifted during the Pleistocene era, eventually becoming exposed to the impact of climatic extremes of the ice ages. When the sea levels dropped during active glaciations, the upper part of the limestone platform was drained, and precipitation percolated through the rock to reach the water table, carving passages through the limestone to reach the sea. On its journey through the atmosphere, rain picks up carbon dioxide, becoming acidic, and lacking natural catchments such as lakes or superficial rivers, seeps through the stone, dissolving its passage via existing planes and fissures; creating a labyrinth of underground waterways. During the periods of sea level fluctuation, caves that were above the water table were dry, and as the CO₂-laden water ate through the stone it would shed its calcium carbonate load, delicately and slowly sculpting fantastic speleothems. Unsupported cave ceilings collapsed in places, creating "cenotes", entrances to this underworld. 18,000 years ago, the last glacial epoch ended, and the sea began a gradual rise from 125 meters below its present level, intruding on the freshwater table, and re-flooding the cave passage, thus creating the classic anchialine cave systems throughout the peninsula.

Cenote Chan Hol (part of Sistema Toh Ha)
Tulum
Quintana Roo
Underwater Speleology, v. 38, no. 2, 2011
AMCS Activities Newsletter 34, p. 61, 2011