

# THE MAMMOTH CAVE UPGRADE

- Robyn McBeath

After seven months of intensive progress, refitting of the Mammoth Cave was complete and everything was on target for self-guiding to commence at the beginning of September. We were almost ready to go. The cave was looking damn fine with its new walkways, CBus Minder lighting system and unique CD audio tour in place. We don't mind saying it was the probably the finest cave redevelopment to ever occur - or so we thought.

Nature's fickle rejoinder was harsher than a critique by Kent Henderson! The deluge came on the morning of July 31, and what a deluge it was! I watched as our new system slowly disappeared beneath the rising depths of the Mammoth Stream, the once-in-a-hundred-year flood. Not in the last 104 years had such a high level of water been recorded in the cave. The water peaked at approximately two and half metres above normal winter levels filling the lower sections of the cave.

Yes, we had some problems. Needless to say, Mammoth's lighting system suffered damage with the power box containing "Minder" (the *brains* of Mammoth) drowning. However, most of our system weathered the biblical flood fairly well. Our battery back-up kept the new lighting going, even though it was two metres under water! It was glowing dimly from the watery depths. At least we knew we'd gotten that right.

Despite the problems, Pete Bell and I took the opportunity to take a freezing dip and checked out opportunities for an "Aqua-Tour." Few, if any, had ever had the opportunity to see Mammoth in its new glory. (Evidence of the flood can be found on the Internet at <http://www.netserv.net.au/cwork/flood/flood.html>)

On that momentous morning water levels started rising at about 8am and had peaked by 11:30am with the lower level boardwalks submerged approximately two metres. By that evening Pete and I were again able to wade through the cave now only in waist-deep water. By the following morning the water was still flowing swiftly through the cave but had receded to normal winter levels.

The flood was certainly unusual for the region. Water levels across the Cape rose at an unprecedented rate as four inches of rain fell over a three hour period. The rain was caused by a tropical low that moved in off the northern Indian Ocean. Such weather patterns are very rare during the winter months in the South-West.

Mammoth is an inflow stream cave situated in the Leeuwin-Naturaliste Ridge in the Margaret River region of Western Australia. The stream flows seasonally, usually from June to December and is fed from a large swampy area three kilometers east of the cave. The water flows through the Mammoth system resurging in the Indian Ocean four kilometres to the west of Mammoth Cave. The cave was closed for a fortnight following the flood in an effort to rebuild the lighting system, and to bring the self guiding back on-line for the planned September opening.

The "Mammoth Cave Guide" audio system will be unique in Australia. Carlsbad Caverns in New Mexico, USA, is the only other cave site in the world offering a similar experience. Through the "Mammoth Cave Guide", *CaveWorks* aims to provide the highest standard audio educational experience for each visitor transporting them through time and space. The audio sound track will provide in effect the "film sound track" to the visitor's visual senses.

Cave visitors don a headset attached to a portable CD player. These units are activated by radio beacons situated strategically throughout the cave providing instant information to the visitor. The system provides hi-fidelity CD audio, with over 80 hours of audio capacity. This allows for varied tours to be developed and stored on the one disk eg. multi-lingual tours, children's tours etc.

Initially only two tours will be on offer from "Mammoth Cave Guide" a general tour and condensed version to cater for visitors with disabilities and those with a limited time schedule. An extended tour is available by accessing a second level of information similar to clicking a hyper-link on a web page. This option will cater for those requesting a greater knowledge of the cave environment. Topics covered are *Fossils of the Mammoth System* by Dr John Long; *Syngernetik Karst* by Ken Grimes and *Carbonate Chemistry* by Andy Spate. Elery Hamilton-Smith features regularly throughout the tour speaking on a diverse range of subjects.

The "Mammoth Cave Guide" provides a data down load facility which allows comprehensive visitor statistics to be collected. For example, the order in which beacons are triggered, the time spent at each stage, and diagnostic facilities. From this information we will be able to fine tune future productions further enhancing the "Mammoth Cave Guide" experience.