

LUCAS CAVE UPGRADE OFFICIALLY OPENED

Alan Griffin officially opening the Lucas Cave upgrade. Photo: courtesy JCRT.



The Lucas Cave at Jenolan has been transformed with a spectacular new high-tech lighting system, giving the cave a new look. The cave has also had a painstaking clean from end to end and has undergone a careful overhaul of its fittings to prevent any impact on its delicate formations and rare subterranean life forms. More than 500 lights, 150 circuits and 20km of wiring have been installed in the cave, with a sophisticated computer system controlling the gentle rise and fade of different lights to highlight the cave's impressive features.

The upgrade of the cave was officially opened by Mr. Alan Griffin, Jenolan Caves Reserve Trust Administrator, before a large crowd in the cave, on Saturday 11 September 2004.

To mark the occasion, the NSW Environment Minister, Hon. Bob Debus, issued a press release, which is abstracted as follows:

Mr Debus said while the project would enhance the visitor experience, one of the main aims of the project was to protect the unique formations of the cave.

"Each light has been chosen for its whiteness and minimal heat, reducing the risk of unnatural moss growth and other environmental damage caused by temperature changes," he said.

"New stainless steel hand rails and fittings have also been installed throughout the cave to prevent rust or chemicals from harming the caves or ground water. They replace materials like galvanised pipe which contained toxic cadmium and posed a threat to the cave's resident bats and tiny invertebrates, including rare microscopic crustaceans and tiny spider-like pseudo-scorpions. The cave has also been meticulously cleaned from

top to bottom – a challenging operation in itself when you consider the delicate features of the cave. The cleaning process used pressurised water which had to be carefully recovered to keep any foreign matter from spreading. Lint from the clothing of thousands of annual visitors was one of the main pollutants."

Mr Debus said the Lucas Cave has been lit in various forms since 1894 and the new system had replaced some extremely old and interesting fittings. The new lights replace a system of ordinary incandescent bulbs and fittings –in some cases fashioned from items like beer cans or fruit tins. These items, along with hand-blown glass reflectors and brass fittings dating from the 1890s, have been preserved by Caves staff and are on a display at the Jenolan visitor centre."

Mr Debus said the massive lighting and restoration project would help boost tourist numbers to the Jenolan district and ensure that the cave remained a pristine tourist attraction for generations to come.

"The Lucas Cave is one of the most popular of the nine show caves at Jenolan, with both the highest and widest chambers and visitors will love the difference the lighting and other works makes to this spectacular attraction."

The cave's new lights provide a mix of different types for different effects. Energy-efficient halogen lights create a more three-dimensional look and highlight individual formations, while compact fluorescent lights are used to create low-level glow. In the cave's final chamber, LED clusters have been used for brilliant colours and minimal energy consumption, maintaining a tradition of coloured lighting in the final chambers of all nine of Jenolan's show caves.

Mr Debus said the new computer sequencing system in the Lucas Cave means different formations can be illuminated in time with guides' descriptions, or create the effect of a moving candlelight as guides discuss the techniques of Jenolan's early cave explorers.

"Most importantly, the computer-controlled lighting ensures lights are never on longer than they need to be, saving energy and preventing temperature changes."



Alan Griffin, left, with staff at the official opening of the Lucas Cave upgrade. Photo: courtesy JCRT.