

A WORD FROM MALAYSIA

- Steve Reilly

The development of Gua Tempurung cave in Malaysia is proceeding rapidly. The first 1400 metres of the cave should be operational by May. The structural engineers are Australian, many of the fittings are Australian, but most of the work is being done by Indonesians. Being a big cave enables the platforms to be designed to curve like bananas offering every visitor a front row, unimpeded view of the main galleries. Seating is going to be installed so visitors can rest at one main cavern and sit back and enjoy the light show. The structures are all made of mild steel and concrete. The steel has a three pack water-repelling paint with a sealant painted on before the steel enters the cave. Much of the pathway is elevated above the floor.

A Programmable (PLC) light system will offer lighting flexibility. Each platform and many places in between, will have a touch pad control with 16 inputs. Guides can simply select one button that will dim up a set light sequence of all lights at times that are programmable or they can switch on lights separately. In fact you can turn on any light from anywhere you wish. Tours can be tracked by watching a mimic panel in the main office that has a cave map facade with a LED indicating lights corresponding to every light grouping in the cave. An armoured cable containing 10 strands (twisted pairs) will carry information from phones, flood sensors (probe and rain gauge) and whatever monitoring equipment we decide to install in the cave.

The last two years have seen remarkable advances in light reflector efficiencies, and many of these advanced lights are from Australia. They will allow Gua Tempurung to be seen without using massive

flood lights. One cavern is full of minerals that exhibit multi-colour fluorescence under ultraviolet light. The minerals were buried deep but have been exposed by tinminers and guano collectors. Numerous ultraviolet lights will highlight these minerals in one small cavern with stringent measures to ensure visitors or guides cannot sustain damage to their eyes. I can rave on about the cave, but won't!!

The guide training, adventure tours and marketing start very soon. I have joined the *Malaysian Nature Society* (MNS) and have seen many beautiful caves. There are many planned cave developments over here and many people are asking for help. However, the destruction of caves by concrete companies and uncontrolled visitation is heart breaking. There is a small band from MNS and WWF who are doing their best to be heard and are very proactive. Nonetheless, the sheer pace of development in Malaysia seems to be consuming all flat ground (which usually occurs around limestone towers). The towers are removed for an unquenchable thirst for concrete and aggregate.

I have found a couple of cave reserve managers in Malaysia who will hopefully come to New Zealand for the ACKMA Conference at Waitomo. One is doing a plan of management for a large cave national park and he has a few caves that will be developed.

If you love caves you must visit Mulu Caves in Sarawak, East Malaysia, before you die. The sight of two million bats leaving the worlds largest cave passage was a religious experience for me.