

# CAVES in an ANCIENT LAND

## 17<sup>TH</sup> INTERNATIONAL CONGRESS of SPELEOLOGY

### SYDNEY, NEW SOUTH WALES 23-30 JULY 2017



The theme chosen for the Congress captures features of the Australian landscape evident in its caves and karst. Proterozoic dolomites (1.4 – 1.8 billion years old) in Australia had not been explored by speleologists until 25 years ago but have now been shown to have significant caves. Jenolan Caves are rightly celebrated as beautiful and one of the first tourist caves to be electrically lit. More recent discoveries at Jenolan demonstrate their antiquity. Mineralization of sediments in the Jenolan Caves has been shown to be 340 million years old, demonstrating the caves were open at this time. Very much younger caves formed in carbonate dunes on the southern coast have shown that dunes less than 250,000 years old contain caves several kilometres in length.

Karst research in Australia has been rejuvenated with the application of many new techniques. New dating methods show that there are Nullarbor speleothems up to 10 million years old. At Chillagoe in North Queensland, detailed studies of speleothems have been done which correlate cyclone (hurricane or typhoon) events in the past 100 years with contemporary historical accounts of damage in coastal areas. The frequency of such events is important in understanding climate patterns and events and to manage the risks from them. Other studies from Southern Australia and New Zealand are elaborating climate histories for comparison with the Northern Hemisphere climate records.

The original descriptions of the marsupial megafauna of Australia were from cave deposits from Wellington, NSW by Sir Richard Owen in the nineteenth century. Caves continue to provide bones to elaborate this history. The Nullarbor caves have had megafauna dated at 3.5 MYa belonging to animals reliant on trees no longer present. The World Heritage Area at Naracoorte Caves in South Australia has contributed to these paleontological studies. The marsupial megafauna is now better known from the study of cave deposits.

These themes of modern speleological study will form part of the Seminar program at the Congress and will be integrated with other exciting new areas of speleological investigation across the world.

The Organising Committee recently hosted the UIS Bureau who toured the Penrith Panthers Congress Facilities and were presented with some of the Congress planning to date. These include plans for the Congress itself, a partners' program, a mid-week trip to Jenolan caves plus pre- and post-congress field trips and caving camps. Detailed information will be provided on the website during 2015.

The organising committee is particularly interested in ideas for the scientific program or inquiries about registration, trip planning etc.

Contact via email: [speleo2017@caves.org.au](mailto:speleo2017@caves.org.au).

Further information: [www.speleo2017.caves.org.au](http://www.speleo2017.caves.org.au)



*The Organising Committee meeting.  
Photo: Nicholas White*