

# EMINENT KARST SCIENTISTS VISIT CENTRAL QUEENSLAND

– Ann Augusteyn

Hosting Associate Professor Armstrong Osborne and his team of eminent European cave scientists for three weeks marked a significant episode in the scientific analysis of the formation of Capricorn Caves. Armstrong and his team (partially funded by the Marie Curie Fellowship) are working on the concept of hypogene speleogenesis – which he kindly translated for us – *that caves form by the action of water rising from below, rather than form from the action of sinking surface water.*

One consequence of hypogene speleogenesis is that climate would not be a major factor in cave development. Very little research has taken place in our patch of limestone so guides rely on the 'hand me downs' for interpretation. We await the results and analysis of Armstrong's work with eager anticipation and look forward to more discussion on the search for the ultimate truth!

We would like to record our thank to Armstrong Osborne, Dr Andrzej Tyc from University of Silesia (Poland), and Karst Research Institute scientists Dr Nadja Zupan Hajna and Dr Bojan Otonicar from Slovenia for their willingness and patience in not only sharing their knowledge and enthusiasm with our guides but presenting it in a comprehensible style. We also shared some very pleasant 'cultural' evenings!

## Footnote:

Capricorn Caves were not affected by inundation in the recent Rockhampton floods but the economic impact was severe due to the cutting of major highways and airport access during the traditional busy Christmas holiday period. For the first time in twenty years we have closed Capricorn Caves for renovation work on cave bridges and visitor facilities. As I write we now anxiously await the impact of cyclone Yasi.

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Local News

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**SECRET CAVE BUSINESS:** Associate Professor Armstrong Osborne and Doctor Andrzej Tyc have spent the past three weeks surveying caves in the region as part of a long-term research project stretching from Australia to Europe. PHOTO: CHRIS ISON C110 1110-8

## Cave researchers turn theories upside down

**BELIEVE** it or not, the Capricorn Caves are very similar to those in Poland around 60 or 70 million years ago.

This prompted two of Europe's leading karst and geomorphology experts to shed the winter woollies and ply their trade right here in the tropics.

Along with Associate Professor Armstrong Osborne from Sydney University, Bojan Otonicar from the Karst Research Institute in Slovenia and Andrzej Tyc from the University of Silesia in Poland

have spent the past three weeks studying various cave and karst formations at the Capricorn Caves.

Interestingly enough, it's the first time the caves in Central Queensland have been seriously researched since the 1880s.

"We are reviving this work. The science of caves is much more common in Slovenia," Associate Professor Osborne said.

As part of a joint three-year study, the trio hope to shed a little more light on exactly

**CAVE RESEARCH**

- The Capricorn Caves have developed international interest;
- Top researchers have spent the past three weeks studying the caves;
- They have passed on their expertise to the region's tour guides as they continue their study in Europe;
- To discover the Capricorn Caves phone 4934 2883 or go to [www.capricorncaves.com.au](http://www.capricorncaves.com.au)

how these magnificent chambers were formed and how they'll be shaped by the elements in the future. Professor Osborne said they were looking for caves that boast similar land-

scapes and features to some European caves, but in a vastly different climatic setting. "Our work is based on the theory that caves were formed from water travelling

from bottom to top, rather than top to bottom," he said.

Meaning that the long-held belief that the caves were formed by rainwater trickling through cracks and crevices and slowly dissolving the limestone could, in fact, be somewhat upside down.

"That's the theory so we're looking at and measuring features that might show which direction the water moved, geological structures and things like that," Professor Osborne said.

Indeed the good doctor is no stranger to ground-breaking discoveries; he was integral member of the research team that studied the Jenolan Caves, in Central New South Wales, which are in fact the oldest discovered open caves in the world.

"The weather is nice and warm and everyone is so friendly," Mr Tyc said.

Professor Osborne described their passion for studying caves as "a four dimensional puzzle ... you get hooked".