

# **Report of October Meeting 2012**

## **Royal Society**

### **Southern Highlands Branch**

**Speakers: Professor Patricia Vickers-Rich**  
**Personal Chair, Palaeontology,**  
**Monash University,**  
**Melbourne.**

**Dr Tom Rich,**  
**Curator of Vertebrate Palaeontology, Museum Victoria, Melbourne.**

**Peter Trusler, Melbourne freelance artist and Zoological science**  
**graduate, Monash University.**

The Southern Highlands Branch meeting of 20 October 2012 was held at 4.00pm in the Performing Arts Centre, Chevalier College, Burradoo. An audience of 50 welcomed the trio to this unusual event. Professor Vickers-Rich and her husband Tom had both delivered fascinating lectures to the Southern Highlands branch on previous occasions. Now with the recent publication of their latest book, *The Artist and the Scientist: Bringing Prehistory to Life*, it was decided to invite their artist and co-author Peter Trusler to describe his methodology of scientific realism for which he is internationally known, and which truly brings prehistory to life.

Palaeo-illustrator Trusler described his approach to determining the appearance of an extinct animal, telling how he reconstructed the head of *Palorchestes* from fossil evidence. The skull fragment of *Palorchestes* was a remarkably fragile specimen, made up of incredibly large chambers and thin walls of bone. From his knowledge of anatomy, Trusler developed a good understanding of the three-dimensional shape of the skull, and was then able to compare it with modern animals to study the types of muscle systems that operated over the bone surfaces of the head. The images he showed as his model progressed to suit the data were remarkable.

*Palorchestes* was a most unusual animal, with a strange large flexible nose and probably manipulative lips which formed part of its feeding adaptations. Its eyes were right up at the top of the animal's head. Questions remain about the function of the nose. It may have allowed an increased sense of smell, or it may have been used to produce interesting vocalizations. Whatever the case, Trusler's scientific realism techniques have produced excellent stimulus material for further research to take place.

Thomas Rich's presentation concerned a time when Australia was joined to Antarctica, which was located close to where we find it today. Thus, south-eastern Australia was well within the Antarctic Circle of the day. Thomas Rich's research is conducted over an area

of approximately four square kilometers of the Victorian coast, where he continues to locate and identify polar dinosaurs between 106 million and 120 million years old .

Much of Patricia Vicker-Rich's research is being done overseas. Her field areas include south-west Africa (particularly Namibia in a joint program with the Namibian Geological Survey), the Eastern European Platform including the White Sea and Siberia (in conjunction with the Palaeontological Institute of the Russian Academy of Sciences), north-west Argentina, and the Flinders Range of South Australia (with the South Australian Museum).

Peter Trusler's work has featured in numerous popular and scientific publications, and collections of his illustrations are widely held in the National Geographic Society Collection, Washington, the Australia Post Philatelic Collection, Melbourne, the Institute of Vertebrate Palaeontology and Palaeo-anthropology, Beijing and many others. He has twice been awarded the Lanzendorf Palaeo Art Prize by the Society of Vertebrate Palaeontology.

Anne Wood