

Bringing lost worlds to life

FOSSIL DEPOSITS

Finding pieces from the past

Fossils from the Capricorn Cave system have been known for over 100 years with first collections in 1926 by Dr Heber Longman from the Queensland Museum. The Colosseum Chamber dig pit has been excavated at different stages by Queensland Museum and the University of Queensland. In 1998 Dr Scott Hocknull from the Queensland Museum and Noel Sands from the Central Queensland Speleological Society came to Capricorn Caves in search of potential fossil deposits. While in Colosseum Chamber Scott noticed a trail of small bones on the ground surface that were eroding out and down into a large hole next to the dig pit today.

Why were there so many bones and where were they coming from? The answer was right in front of them. There were owl pellets on the ground surface and an actual owl roosting in the cave at the time. The bones are the undigested parts of animals that owls have eaten and regurgitated into pellets. These have become incorporated into the cave floor deposit.

Giving lessons for the future

Scott and his team returned in 2003 to excavate a small test pit in the centre of the chamber to see how much bone material was in the deposit. The pit was excavated in 10cm increments down to 90cm and was full of bone material. On surveying the rest of the chamber, Scott realised that the entire floor area contained bone material and may be about 2.5m to 3m deep. It is one of the most concentrated owl roost deposits anywhere in Australia.

Material collected throughout excavations from 2003–2012 has been taken to the Queensland Museum and University of Queensland for preparation, sorting and taxonomic identification. These deposits hold significant faunal records for understanding the evolution and extinction of local faunas to past climatic change. The deposit also spans the period before and after human (~60,000 to 50,000 years) and European arrival in Australia and provides an opportunity to distinguish between climatic and human influences on local faunas.

By Rochelle Lawrence and Scott Hocknull (Queensland Museum)

