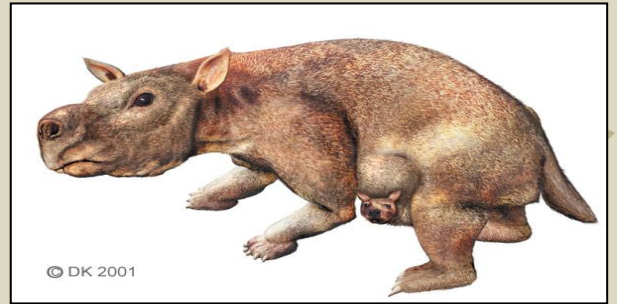


Expeditions

FOSSIL HUNTING AT LAKE CALLABONNA

In what has become an annual event we joined forces with senior archaeologists from the National Museum and UNE. This year's expedition began with a search for elusive diprotodon fossils on the shores of Lake Callabonna.



“We’re going to look for what?” I asked Dr Mike Smith. Mike is one of Australia’s leading archaeologists and fortunately, he’s very good-natured and patient.

“Diprotodon fossils,’ he said, for the second time.

It was the obvious question, but I just had to ask it: “What’s a diprotodon?”

Mike, as usual, went into extraordinary detail in his reply, but, rather than risk your eyes glazing over, I’ll give you a shortened version.

Diprotodon australis is the world’s largest marsupial discovered to date and was once widespread over much of Australia. ‘Diprotodon’ literally means ‘two forward teeth’, referring to its paired, tusk-like incisors. The molar teeth are fist-sized and designed for slicing and crushing coarse vegetation.



There are several diprotodon fossil sites in Australia, but the most celebrated is Lake Callabonna, in South Australia.

The fossils at Lake Callabonna indicate that diprotodons continued to exist in the increasingly arid environment until at least 20,000 years ago – possibly much more recently than that.

The relative density of the Lake Callabonna fossils suggests a gradual accumulation of remains from animals that visited spring-fed waterholes in the drying landscape.

It’s possible that the mythical ‘bunyip’ in Australian aboriginal stories relates to the diprotodon, which was still around, if on its way to extinction, when the original Aborigines arrived Down Under. Their folklore describes the bunyip as an evil spirit that dwells in creeks, swamps and billabongs, and has a terrifying, bellowing cry. The Aborigines avoid water sources where they believe a bunyip might live.

Many white settlers also claimed encounters with the bunyip. Most descriptions of the bunyip portray a creature with a hairy horse-like head and large body.

Lake Callabonna

Five scientific expeditions to Lake Callabonna have been undertaken in the 120 years since their discovery by Europeans, but only two made extensive collections: the original South Australian Museum expedition in 1893 and the joint Smithsonian Institution, American Museum of Natural History and South Australian Museum expedition in 1970.

There has been no official site check-up in the last 25 years, so we were joined in our expedition by the South Australian Museum's Dr Philip Jones and Chris Nobbs.

The South Australian Lake Callabonna fossils provide evidence of a much wetter climate, when much of what is now arid inland Australia was once a vast inland sea. Plant materials such as callitris cones found alongside the fossils are indications that the area was once forest or woodland. Today, Lake Callabonna is a link in the chain of dry salt pans that curve around the northern end of the Flinders Ranges from Lake Torrens to Lake Frome, where the tallest leaf-bearing plant is the odd courageous saltbush.



I'd imagined that it wouldn't be too difficult to find the fossil site, because we had a latitude and longitude 'fix' made in 1983. Hmmm. There was no commercially available GPS technology back then, but surely a sextant sun-sight with flat-terrain horizon would be accurate enough to narrow the search area to an hour's drive around the Lake perimeter, followed by a short walk. True enough...in dry conditions.

A week before we arrived at Lake Callabonna the heavens opened on this arid, salt-crusted wasteland. Grey-foliaged depressions turned into swamps and the thin surface membrane gave little separation from the slippery black silt below. We drove as close to the site as we dared, then it was time to tramp.

We've walked around salt lake edges many times before, but this was a fresh experience. Some areas were relatively dry and provided good footing, while in other places the white crust gave way without warning and in went our booted feet. The black ooze built up on boot soles until it reached a critical mass that felt like 10kg, before it fell off with a 'plop' and the recoating process started all over again.

After five hours of this exhausting slog the archaeologists suddenly became activated – or as activated as scientists ever seem to get. They dropped to their knees and came up with a few pieces of yellow-brown tubular stuff that they informed us was ... wait for it: diprotodon tooth enamel.



Now I don't know about you, but when I go fossil hunting I expect to come across the reclining skeleton of some ancient beast, all nicely laid out for inspection. I don't expect to be overjoyed at the prospect of handling the result of prehistoric pyorrhoea.

Still, the archaeologists were happy and that was the purpose of the exercise.

All through this trip I'd been concerned that after the story was published the property owners around Lake Callabonna would be plagued by visitors wanting to share our experience, but there didn't seem to be a high risk of this happening.

My feelings were shared by our guide through the many private property tracks we'd negotiated en route to this dental-detritus site. John McEntee is quite an amazing man, although he appears mystified as to why people think so.

Erudition at Erudina



John McEntee is an enigma. When I rang him on the satellite phone to get directions to his property, Erudina, en route to Lake Callabonna, he sounded like the archetypical Outback grazier, speaking in drawn-out words that came disguised by a thick back-country accent.

But John's delivery was almost digestive and, as I found out an hour later when we met up with him, not caused by the satphone messages passing through the ether.

His unusual voice delivery probably has much to do with the fact that John McEntee is a wordsmith, a lexicologist, in the purest sense. As well as being well versed in at least two Aboriginal languages and the co-author of two books on Aboriginal flora and fauna names, John understands word meanings from dozens of global languages, modern and ancient.

John's interest in Aboriginal languages was born during his school days in Adelaide. He searched out word lists and went to the old Aborigines to learn the phonetics. I threw some Aboriginal words at him in what I thought was my best, authentic accent and, following a deprecatory intake of breath, he corrected my pronunciation.

"I don't do the conversational thing very well," said John. "The phonetics and grammar are more my interest."

After a hard day in the vast drought-blasted paddocks that make up Erudina Station John comes home to play Baroque piano music that he taught himself. John's musical ear was tuned from a hand-made 'guitar' he built as a youngster, using tennis racket catgut for strings and a plywood sound box around the racquet frame.

**John's interest in
Aboriginal languages
was born during his
school days in
Adelaide.**

John is also deeply involved in the history of the northern South Australia region and anything you need to know about the successive Dog Fences John can provide.

If you really want to pick around in the mud for long-dead diprotodons John McEntee knows where they are, but you'll need South Australian Museum permission first.

Dr Mike Smith is a veteran desert archaeologist, with many years of fieldwork under his belt.



He has an intellectual passion for the detective work of archaeological research, and has spent more than 30 years painstakingly sifting the sands of Australian deserts to reconstruct their human and environmental history.

Mike's previous appointments include the post of field archaeologist with the Northern Territory Museum in Darwin and Alice Springs, research fellow in the Research School of Pacific and Asian Studies at the Australian National University, and lecturer in archaeology in the Department of Archaeology and Anthropology at the Australian National University.

Mike joined the National Museum of Australia in 1996, initially as head of the People and Environment section and later as director of Research and Development.

Mike is currently director of Research and Development at the National Museum of Australia in Canberra and an adjunct professor at the Centre for Resource and Environmental Studies, ANU.

Mike is author, co-author or editor of five books and his work is represented in major scientific journals. He has also written for leading literary journals and the print news media and is an editor of the National Museum's scholarly journal, *reCollections*.

Mike is a Fellow of the Australian Academy of the Humanities and of the Society of Antiquaries in London. In 2006 the Australian Archaeological Association awarded Mike the Rhys Jones Medal for Outstanding Contribution to Australian Archaeology.

Landies in the Lake Callabonna landscape

Land Rover kindly provided vehicles for the Lake Callabonna diprotodon fossil expedition. One machine was the latest Land Rover Defender and the second vehicle was a V6 turbo-diesel Range Rover Sport. Making a trio of Land Rover products was our own Discovery 3.

Initially, the two archaeologists, Dr Mike Smith and Dr June Ross, packed their not inconsiderable pile of field equipment into the cavernous rear of the Defender and kicked off driving in the Range Sport, but soon developed an acute separation complex at being removed from their scientific gear. Two days into the long drive from Canberra they moved into the Defender. That's quite a product shift.



"Oh, yes, we liked the Range Rover very much," said June Ross. "But there's something about the Defender's basic approach to bush vehicle design that appeals to us."



June is a farm girl from way back, so the Defender's decidedly 'no-frills' cabin layout struck a chord. Mike Smith has been rattling around Australia's backblocks in conventional Outback machines, from windowless EA Falcons driven by Aboriginal guides to square-rigged Japanese 4x4s, so he also appreciated the Defender's spartan interior, albeit without the familiar push-out ventilation panels and with an air conditioner that actually works.

The swap suited our Adventure Video team, Robyne and Stan Gruz, who own a much-loved 45-Series known affectionately as 'the farmer's truck'. But they were happy to slip into the powered, heated, leather-clad front seats of the Rangie Sport and wind up the volume in the Harmon-Kardon sound system to hear ABBA the way they don't even hear it on the home stereo.

With a couple of people-to-vehicle matches that seemed heaven-made, we headed off to the Lake Callabonna slime.



The drive from the blacktop at Yunta along well-graded gravel to Erudina Station was a doddle for the Landies, as were the property tracks around the lower reaches of the Lake. However, we were all grateful for powerful traction control when we hit the slippery stuff.

The three Landies progressed with little driver effort as their TC systems corrected incipient slides – more than we can say for Philip's and Chris's SA Museum Troopy that required some deft arm work at times.

