



# Media Release

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## Ancient Aboriginal Occupation Revealed in Northwestern Australia

Australian archaeologists have announced the discovery of human occupation dating to between 50,000 to 45,000 years ago at Lake Gregory, on the edge of the Great Sandy Desert of northwest Australia. Dates come from a wide range of landscape features making this one of the earliest securely dated sites in Australia.

The find is reported in the December issue of *Australian Archaeology*, the official journal of the Australian Archaeological Association Inc.

Associate Professor Peter Veth, Deputy-Director of the National Centre for Indigenous Studies and Adjunct Professor at the Research School of Humanities at the Australian National University and lead author of the paper, said the discovery was highly significant.

“This is the first evidence of human activity from an open context in the arid northwest of the continent which can be dated to a time before the last great Ice Age,” he said.

The earliest securely dated artefact is what archaeologists commonly refer to as a ‘core’ – a piece of stone from which flakes have been struck to make tools.

It was found *in situ* within a distinctive layer of sediment approximately 1.5m below the ground surface during a pilot excavation project at Lake Gregory during August 2008.

A detailed examination of the core was undertaken by the ANU’s Professor Peter Hiscock, one of the world’s foremost authorities on ancient stone technology.

Professor Hiscock found that the pattern of flake scars appearing on the core was entirely consistent with human stone knapping techniques and could not have been produced by natural processes.

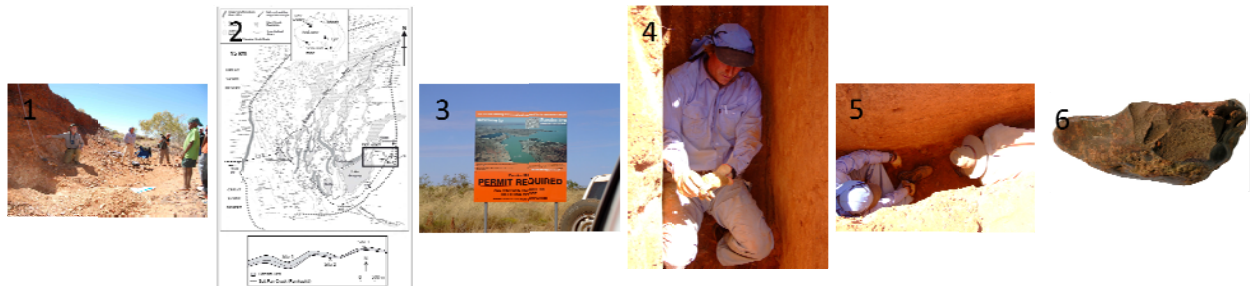
Optically stimulated luminescence (OSL) was used to date the layer of sediment in which the artefact was found. The OSL dating method measures the time elapsed since geological sediments were last exposed to sunlight, effectively providing an estimate of when an object was buried.

“Our analysis of the OSL chronology from Lake Gregory suggests that the core was likely to have been buried during a period when the lake was expanding, somewhere between 45,000 to 50,000 years ago”, Peter Veth noted. “It would appear that someone has collected a cobble from the lake shore, then flaked and discarded the core, which was later covered up by sediment from the expanding lake”. There are other heavily weathered artefacts now exposed in other ancient stream beds in the region which likely date to the same time period.

“As a rich freshwater ecosystem within an arid desert landscape, Lake Gregory is likely to have always been a focal point for human occupation of the region. This large lake is like an ancient rain gauge for the Kimberley. This find has built on three decades of research by Professor Jim Bowler at Lake Gregory – one of the co-finders of the now World Heritage Listed Lake Mungo sites. The team has worked closely with Traditional Owners for Lake Gregory and the Kimberley Land Council’s Paruku Indigenous Protected Area staff.

“There is huge potential here for reconstructing deep-time human and environmental histories for northwestern Australia in collaboration with Indigenous owners,” Peter Veth said.

## Images



1. Major creek section at Parnkupirti - 100,000 years of the history of Lake Gregory - with Jim Bowler, Peter Veth and Mulan community (L to R).

2. Location of the 50,000 year old finds - adjacent Lake Gregory - a freshwater lake in the desert.

3. Aerial view of Lake Gregory - where the groundbreaking finds have been made.

4. Team leader Dr Peter Veth recovering 50,000 year old artefact from deep trench dug into ancient lake muds.

5. History is made - ancient artefact located in deep trench by Dr Mike Smith and Dr Peter Veth.

6. Side view of ancient artefact recovered from gravels - artefacts date from circa 50,000 years ago up to 5,000 years ago.

(full size images available at <http://www.australianarchaeologicalassociation.com.au/media>)

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*The Australian Archaeological Association Inc. (AAA) is the largest archaeological organisation in Australia, representing a diverse membership of professionals, students and others with an interest in archaeology. It aims to promote the advancement of archaeology; to provide an organisation for the discussion and dissemination of archaeological information and ideas; to convene meetings at regular intervals; to publicise the need for the study and conservation of archaeological sites and collections; and, to publicise the work of the Association.*