

'A big jump': People might have lived in Australia twice as long as we thought

The result of 11 years of research suggests that human habitation could stretch to 120,000 years

Paul Daley

11 March 2019



'Mungo Man, his remains discovered in a dry water bed in the Willandra Lakes district of New South Wales, lived some 42,000 years ago' Photograph: Lisa Maree Williams/Getty Images

Extensive archaeological research in southern Victoria has again raised the prospect that people have lived in Australia for 120,000 years – twice as long as the broadly accepted period of human continental habitation.

The research, with its contentious potential implications for Indigenous habitation of the continent that came to be Australia, has been presented to the Royal Society of Victoria by a group of academics including Jim Bowler, the eminent 88-year-old geologist who in 1969 and 1974 discovered the bones of Mungo Lady and Mungo Man, the oldest human remains found in Australia.

Mungo Man, his remains discovered in a dry water bed in the Willandra Lakes district of New South Wales, lived some 42,000 years ago. He was a modern human or homo sapien, Indigenous to Australia, who was buried with sophisticated funerary rites including the use of fire and ochre.

Earlier contentious scientific research that pointed to human habitation in Australia up to 120,000 years ago – including in the Kimberley – has been largely dismissed.

The new research at Moyjil (Point Ritchie), at the mouth of the Hopkins River at Warrnambool, south-east Victoria, relates to the presence of fire, small black stones and scattered shell middens around steep cliffs.

The research is presented in an article, released by CSIRO publishing, titled *The Moyjil Site, South-West Victoria, Australia: Fire And Environment In A 120,000-Year Coastal Midden – Nature or People*. Its co-authors are David Price from the University of Wollongong, John Sherwood from Deakin University and Stephen Carey from Federation University, Ballarat.

The article's abstract reads: "Thermal luminescence analyses of blackened stones provide ages in the ... range ... 100-130 ka [thousand years], consistent with independent stratigraphic evidence and contemporaneous with the age of the surface in which they lie. The distribution of fire-darkened stones is inconsistent with wildfire effects. Two hearth-like features closely associated with the disconformity provide further indication of potential human agency. The data are consistent with the suggestion of human presence at Warrnambool during the last Interglacial."

There is some evidence, though not yet conclusive, of a designated "place of fire" at the site, the paper says, though "the validity of the human connotation of 'fireplace' remains to be established".

"The evidence is consistent with the features being a substantial 'place of fire', but can it be described as a 'fireplace' with the human connotation of that term?", the academics ask.

They write, based on 11 years of research at the site, how the evidence indicates that the blackened stones were collected and "heated in a situation reminiscent of a hearth".

"In summary, although no single line of evidence precludes natural fire, taken collectively the case for exclusion is strong. Humans are obviously capable of these processes, of carrying fuel to a cliffed shoreline and repetitive burning at the same place," the article concludes.

"The prospect, however, of humans in that locality at 120 ka [years ago], although consistent with evidence presents more questions than answers. Who were they? Why here and not elsewhere? Why no legacy of any toolkit, no traces of food let alone human remains? In the absence of bones, stone flakes or any independent trace of people, the notion of occupation at 120 ka currently remains difficult to credit. However, marine shells, stones in unexplained depositional context and fire resemblance to hearth, successively diminish the possibility of a natural explanation. That absence leaves the currently unlikely option of human agency as the most likely alternative."

The research was undertaken collaboratively with Eastern Maar Aboriginal Corporation, Gunditj Mirring Traditional Owners Aboriginal Corporation and Kuuyang Maar Aboriginal Corporation.

While still tentative and very cautious in its conclusions and accepted implications, the archaeological research at Moyjil points to the possibility of an Aboriginal connection to country that stretches to twice that of the accepted 60 millennia, which already renders Indigenous continental occupation the longest continuous civilisation on Earth.

“For some, an acceptance of human presence in Australia 120,000 years as a *possibility* may now tentatively advance to one of *probability*. For most, the question of Australia’s occupation at that time remains highly contentious. Different people will attach different levels of significance to the various lines of evidence presented here,” the researchers conclude.

“In the meantime, despite the lack of conclusive evidence, the pendulum in Nature-People controversy has swung in one direction. The mere suggestion of people near 120ka rises an entirely new set of questions in the exploration of Australia’s human story.”

Jim Bowler has spent his long life exploring Australia’s human story. He is no stranger to controversy.

Of his latest collaborative research, Bowler says, “It presents the probability of people here on coastal Victoria 120,000 years ago. If correct, that would double the time of human occupation. That is a big jump to make. It will not be widely accepted until the evidence is definitive. Aware of that limitation, we have put this current evidence to the public. Each may make up their own minds.

“While the evidence for people remains circumstantial, the 120,000 year age [in the archaeological evidence] is set in concrete. If it was 60,000 years, readers would have no doubt it was people. But 120,000 is a different problem! For my part, I am convinced. However I respect the scepticism of others, at least until the next stage of examination is complete. And I shall not be there for that event. At my age and stage, it is already past time to bow out.

“This work of the past 11 years awaits long-time judgement. You be the jury!”

• *Paul Daley is a Guardian Australia columnist*