

# Baler shell knives in northern Australia: A comparative study of archaeological, experimental and ethnographic data

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## Bio

Fiona Hook is a PhD candidate in the archaeology department at the University of Western Australia. Fiona is investigating Aboriginal people's maritime adaptations in the Carnarvon Bioregion over the last 50,000 years.

Sean Ulm is Professor of Archaeology at James Cook University. Sean's research focuses on persistent problems in the archaeology of northern Australia and the western Pacific where understanding the relationships between environmental change and cultural change.

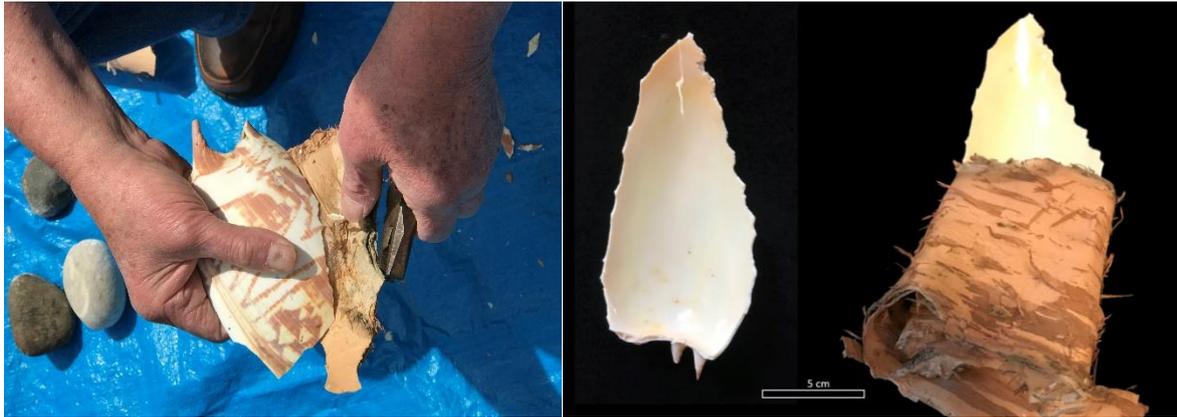
Kim Akerman is adjunct professor at the University of Western Australia, Kim has been involved in Australian Aboriginal studies since 1967. Kim has a particular interest in Aboriginal material culture and is experienced in replicating objects made from stone, shell and bone.

Richard Fullagar is a professorial research fellow at the University of Wollongong. Richard has contributed to understanding the function of stones tools, particularly by enhancing and developing methods of microscopic use-wear and residue analysis.

## Abstract

This paper explores the archaeological evidence for the making of baler shell (*Melo* spp.) knives found in the late Pleistocene/early Holocene deposits in Boodie Cave on Barrow Island, northwest Western Australia. While such knives have been reported in surface midden contexts the archaeological signature of baler shell knife manufacture as not been described and these artefacts are rare. This study aims to determine how the knives were made, characterise the manufacturing debris and investigate how they were used using three sets of data – Barrow Island knives, knives made by *Kaiadilt* people and experimentally made knives.

This presentation will discuss these three data sets in detail. In the 1960s Tindale both filmed and collected knives and their manufacturing debris made by the *Kaiadilt* on Bentinck Island in the Gulf of Carpentaria. In late 2018 Fiona Hook and Sean Ulm recorded the collected knives held in the South Australian Museum. Using this ethnographic information, a series of knives were made by Kim Akerman. The experimentally made knives were used in butcher and woodworking experiments to capture usewear patterns. The ethnographic and experimental data was then compared with the Boodie Cave knives. This paper will discuss the initial results of the analysis showing that the experimentally made knives have been key to understanding manufacturing debris patterns, providing the basis for possible identification of shell knife manufacture in the Boodie Cave deposits where whole knives were not found.



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