

A Technological Analysis of Stone Artefacts



from Allen's Cave, South Australia

About this Project



Hello to the Far West Coast Aboriginal Corporation (FWCAC), all community members and other interested viewers.

With permission from the FWCAC I have had the privilege of analysing stone artefacts used by Aboriginal people who lived in the Allen's Cave region for 40,000 years. The artefacts were excavated in 1969 and 1989–1990.

I hope that you enjoy this slideshow, which describes the main aspects and results of the project.



Simon Munt, 2016

Antiquity and Location



Allen's Cave is located in a desert region on South Australia's Nullarbor Plain.

It is one of the country's oldest archaeological sites.

Humans first arrived there 40,000 years ago—possibly the *first ever South Australians!*

Traditional Owners



Allen's Cave is within the Consent Determination region managed by the FWCAC.

The FWCAC represents 6 entities:

- Mirning Peoples
- Kokatha Peoples
- Wirangu Peoples
- The descendants of Edward Roberts
- Yalata Peoples
- Maralinga Tjaratja (Oak Valley) Peoples

Site Description

Allen's Cave is actually a rockshelter, 18 m long, 10 m wide and 4 m high.

It is named after Allen Stewart, who in the 1960s showed it to Ljubomir Marun, its subsequent first excavator.

Cultural material extends to 4 m deep:

- stone artefacts
- hearths
- faunal remains
- an abalone shell
- a cockle shell



Image courtesy of Scott Cane.

Site Description



Image courtesy of Scott Cane.

This is a trench from Scott Cane's excavation.

As archaeologists dig, they uncover what would have been the floor at different times.

The black spans 0–11,000 years ago.

The orangey-brown goes even deeper than in this photo and spans 11,000–40,000 years ago.

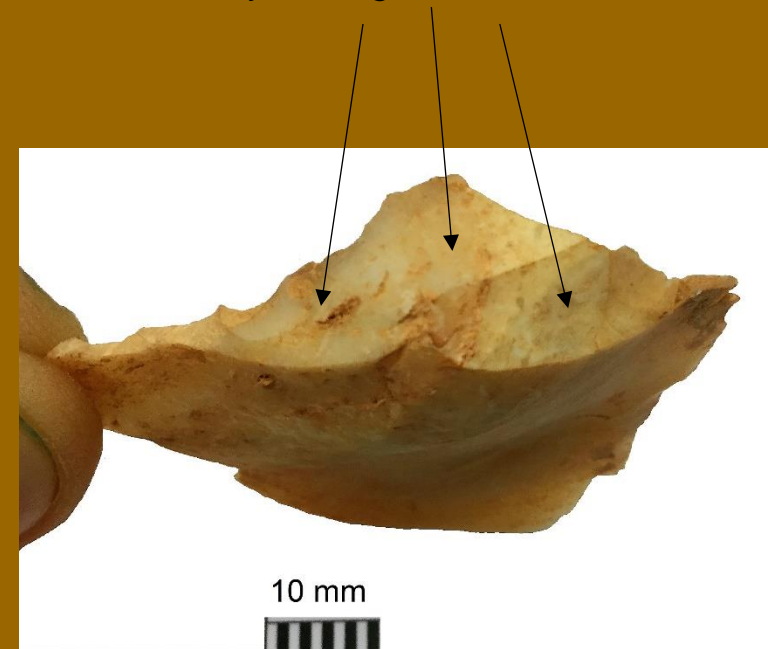
What We Can Learn From Stone Artefacts

The process of making stone tools left tell-tale signs that we can still see today.

We can compare any changes over time. Aboriginal people may have changed the way they made tools because of changes in the climate.

Certain tools were better for particular conditions.

An Aboriginal person deliberately removed three 'flakes' from the top of this stone at Allen's Cave around 16,000 years ago.



Changes in Climate Around Allen's Cave

Since humans first arrived at Allen's Cave, two major changes in the climate occurred:

1. **30,000–19,000 years ago: the toughest period ever**
 - much more arid; much less rain; colder and windier
2. **11,000–8,000 years ago: the best period**
 - still arid but much more rain

Major Aim of This Project

I aimed to compare the artefacts from before, during and after these periods of climate change to see whether Aboriginal people around Allen's Cave changed their stone technology.

This was supported by the FWCAC.

Results

- **No change** occurred as a result of the toughest climate change:
 - same/very similar dimensions, same materials and same manufacturing techniques
- **One significant change** occurred during the best climatic period:
 - 11,000 years ago, a different, non-local material entered the assemblage



This is the first evidence for trade/exchange and/or for travelling much further then bringing back the new material

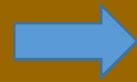


Results



Cultural Advisor for this project, Mr Clem Lawrie, inspecting some of the stone artefacts.

- The non-local stone was not, however, the first change:



abalone shell, 16,000 years ago

- this is the first evidence for use of the ocean
- this was after the toughest climatic period but before the best one



- Most of the 1116 artefacts analysed were very small: around 2 cm x 2 cm.



Conclusions

1. **Environmental** changes did not cause stone technological changes at Allen's Cave.
2. **No** changes in stone technology occurred for the first 25,000–30,000 years.
3. **Social** factors may have instead caused any changes.

Conclusions

Southeast Asia



4. Aboriginal people using Allen's Cave did not need to change their stone technology.

The first people to arrive in Australia came from Southeast Asia 10,000 years earlier.

By the time people reached Allen's Cave they had developed outstanding skills and knowledge for living in desert conditions.

Their stone technology served all their purposes across all environmental conditions. They did not need to change their technology at all.

Further Information

- The FWCAC holds a copy of the completed thesis, which it will distribute according to its cultural protocols.
- The FWCAC holds a poster about the project.
- FWCAC: 62 Poynton St, Ceduna, South Australia 5690; Ph: 86253340.

Acknowledgements

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