Shell midden mapping in Pumicestone Passage

Stage 1 2019-20

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In 2018, Kabi Kabi First Nation received Queensland Government Land and Sea Country funding through Bunya Bunya Country Aboriginal Corporation for family members to map and monitor midden heaps from Beachmere to Noosa.

Turnstone Archaeology sponsored the project with inkind support for training and reporting.









## Aims

to train Kabi people to monitor, analyse and interpret these cultural features

to contribute to employment and cultural heritage protection plans for the Marine Park and its National Parks (including eco-cultural tourism enterprises).



And help agencies, such as QPWS to be able to spend time with local Kabi Kabi for two-way learning. Aboriginal shell middens are among the most important archaeological and cultural heritage sites in Queensland.

Middens are time capsules providing information about climate change, coastal morphology and transformation, Aboriginal environments and land use, food sources and other marine resources.



## What is a shell midden?

- a collection of discarded shell from shellfish collected by Aboriginal people over millennia for food
- either mounds or lens of densely packed shell or scatters of shell often in association with bone, fishbone and ooliths, charcoal and other organic materials, together with stone artefacts.
- Most are located close to marine sources of shellfish.



-6000 BP

Changes to Bribie Island during late Pleistocene and Holocene sea levels. (Strong in press 2021 after Hall 1990)



20

kilometres

40

Stone tools as environmental markers – can bungwall processors tells us about past environments?





# New stone tool type – oyster picks!"







#### Stylised layout of stone arrangement

Possible indication of Aboriginal oyster farming



### Results

- A total of 63 shell middens were located and mapped by the Kabi Shell Midden Mapping program.
   Of these, 22 were previously unregistered midden sites
- A total of 38 DATSIP registered middens were identified and ground truthed. Some of these relate to sites recorded by Stockton (1978)
- Of concern for the Kabi People, however, is the discrepancy in how the DATSIP sites accurately
  record the historic Stockton site locations. There are a number of DATSIP sites that either have
  been lost or are incorrectly located.

In addition,

- 36 midden sites were identified with associated stone artefacts
- Three scarred trees (one historically dated to 1901; the other two probably cultural) were recorded.
- A dugong hunting site was located
- Two stone walled hearths were identified
- A new stone-walled fish trap was identified
- A potential oyster breeding site stone arrangement was identified. This appears to be Aboriginal in origin. However, it may relate to an increase site.
- Two other stone arrangements are likely to be inter-tidal increase sites.

## Shellfish species occurrence across 63 sites

	Total
Shellfish species	occurence
Andara trapezia (cockle)	50
Saccostrea glomerata (oyster)	51
Pyrazus ebeninus (whelk)	46
Polinices spe (sand snail)	7
Donax deltoides (eugarie)	3



## Threats to midden heaps











#### Recommendations

- 1. Funding to support continuing mapping
- 2. Inclusion in DATSIP database
- 3. Protection for shell middens at greatest risk
- 4. Weed and wild animal control
- 5. Scientific dating of middens



Chart showing percentage of threats to shell middens

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