

AN ANALYSIS OF MOUND FORMATION AT MILINGIMBI, NORTHERN TERRITORY

Andrew Roberts

This Master of Letters thesis presents a summary of archaeological and geomorphological research that has a bearing on the study area, Milingimbi, northeast Arnhem Land. It determines that the archaeological sites on the island are comparable to coastal sites found elsewhere in the north. In doing so it details the results of previous archaeological work undertaken at Milingimbi (McCarthy and Setzler 1960; Mulvaney 1975; Warner 1969) and presents data on six sites that were investigated on the island in 1989–90.

This thesis primarily reviews some of the agents of mound formation that may affect the interpretation of coastal archaeological sites in Australia. In particular it looks at features associated with the behaviour of some mounding and burrowing animals that are found at Milingimbi, including the Orange Footed Scrub Fowl (*Megapodius reinwardt*), the Horn Eyed Ghost Crab (*Ocypode ceratophthalma*) and the Monitor Lizard (*Varanus punctatus*). It also examines the discard and mounding behaviour of the Yolngu and Anbarra people of Arnhem Land in terms of interpreting the past (Meehan 1982).

Data are presented on one hundred and eighteen sites recorded at Milingimbi in 1989–90. Sites are assessed in relation to a number of factors including location, vegetation, species representation, condition, matrix, stone tools and hearths. Sites in the study area appear to have at least seven different manifestations and these can be attributed to a number of different variables (including the activities of scrub fowls).

Finally this thesis assesses the role of the scrub fowl in the formation of archaeological features at Milingimbi as suggested by Stone (1989, 1991). It suggests that a range of bioturbators operate on sites in different areas and that locational details are prime determinants. The evidence at Milingimbi for the creation of mounds by the scrub fowl is limited to areas that were or are thickly forested by semi-deciduous vine thickets. Deposits utilised by these animals for the incubation of eggs are however demonstrably different to the deposits built by hunter-gatherers although it is apparent that overlaps exist that need further clarification based on taphonomical analysis.

REFERENCES

- McCarthy, F.D. and F.M. Setzler 1960 The archaeology of Arnhem Land. In C.P. Mountford (ed.), *Records of the American-Australian Scientific Expedition to Arnhem Land. Vol. 2, Anthropology and Nutrition*, Ch. 5. Melbourne University Press: Melbourne
- Meehan, B. 1982 *Shell Bed to Shell Midden*. Australian Institute of Aboriginal Studies: Canberra
- Mulvaney, D.J. 1975 *The Prehistory of Australia* (Revised edition). Penguin Books: Harmondsworth
- Stone, T. 1989 Origins and environmental significance of shell and earth mounds in northern Australia. *Archaeology In Oceania* 24(2):59–64
- Stone, T. 1991 Two birds with one stone: a reply. *Archaeology In Oceania* 26(1):26–27
- Warner, W.L. 1969 *A Black Civilisation: A Social Study of an Australian Tribe* (Revised edition). Peter Smith: Gloucester, Mass.

Degree and University: Master of Letters, Department of Archaeology and Palaeoanthropology, University of New England.

Date submitted/accepted: April 1991.

Copies held: Archaeology and Palaeoanthropology Department, UNE, Armidale NSW; AIATSIS Library, Canberra ACT; Anthropology Department, NTU, Casuarina NT; Northern Territory Museum of Arts and Sciences, Darwin NT; Milingimbi Community Council Inc.

Present affiliation: Department of Anthropology, Northern Territory University, GPO Box 40146, Casuarina NT 0811.

PREHISTORIC ABORIGINAL SETTLEMENT AND SUBSISTENCE IN THE COOLOOLA REGION, COASTAL SOUTHEAST QUEENSLAND

Ian J. McNiven

This PhD thesis examines Holocene Aboriginal settlement and subsistence behaviour for the Cooloola region, coastal southeast Queensland. It focuses upon methodological problems of systemic site interaction and theoretical issues of human responses to spatial variations in resource structure. The study is based upon the results of surveys (site and non-site) and excavations, and represents Stage 2 of the Cooloola Region Archaeological Project (CRAP).

Two major chronological phases are identified. Recent Phase sites (ca 900 BP – 100 BP) are represented by a complex of shell middens and shell scatters located up to 12 km inland from the present shoreline. These sites demonstrate specialized exploitation of marine shellfish and fish species. Stone artefact assemblages are dominated by local raw materials and bevel-edged tools (bevelled pounders). Early Phase sites (ca 5500 BP – 2300 BP) are dominated by large stone artefact scatters exhibiting exotic raw materials and a greater variety of implement types (eg bevel-edged tools, backed blades, bifacial points).

Recent Phase middens are restricted mostly to the estuarine resource-rich southern and northern parts of Cooloola. These areas not only exhibit all of the recorded ceremonial/ritual (eg 'bora ring', burial) sites across the region, but also correspond to the locations of historically-recorded Aboriginal groups and activities during the 19th century. I argue that such site patterning demonstrates the potential effects of resource productivity upon spatial organization of Aboriginal social, ceremonial and subsistence activities.

A detailed land-use model, consisting of eastern (oceanic) and western (estuarine) settlement-subsistence sub-systems is generated for northern midden sites. Both sub-systems comprise coastal base camps and associated ephemeral rainforest and/or swamp plant food foraging camps scattered across adjacent inland areas.

Initial occupation of Cooloola some 5500 years ago is associated with a localized adaptation of an existing coastal settlement-subsistence system which had been advancing westwards across the continental shelf with the postglacial marine transgression. I suggest, based on the presence of bifacial points and tula adzes, that historically-recorded inter-regional social alliances between southeast and southern central Queensland may have had their beginnings soon after this time.

Recent Phase occupation of the region is associated with increases in both Aboriginal activity and the relative exploitation of local resources (eg shellfish, stone). Such changes may have followed changes in socio-political organization which saw the development of more localized or regionalised residential groups culminating in the organizational patterns observed by Europeans last century.