

Abstract

This research is primarily concerned with human-environment interactions on the tropical coast of northern Australia during the late Holocene. Based on the suggestion that significant change can occur within short time-frames as a direct result of interactive processes, the archaeological evidence from the Point Blane Peninsula, Blue Mud Bay, is used to address the issue of how much change and variability occurred in hunter-gatherer economic and social structures during the late Holocene in coastal northeastern Arnhem Land. The suggestion proposed here is that processes of environmental and climatic change resulted in changes in resource distribution and abundance, which in turn affected patterns of settlement and resource exploitation strategies, levels of mobility and, potentially, the size of foraging groups on the coast. Whereas a number of previous archaeological models for coastal northern Australia have used ethnographies as interpretive tools, it is demonstrated that using ethnographies to aid interpretations of the archaeological record is a problematic approach for this specific region. In particular, such an approach has most likely underestimated the nature and extent of variability that may have existed in the late Holocene. Therefore, the focus here is on what the archaeological and ecological evidence can tell us about human behaviour in the late Holocene.

The question of human behavioural variability relative to the climatic and ecological parameters of the last 3000 years in Blue Mud Bay has been addressed by examining issues of scale and resolution in archaeological interpretation, specifically the differential chronological and spatial patterning of shell midden and mound sites on the peninsula in conjunction with variability in molluscan resource exploitation. To this end, the biological and ecological characteristics of *Anadara granosa*, the dominant molluscan species for much of the known period of occupation in the region, are considered in detail, in combination with assessing the potential for human impact through predation. In explaining long-term economic change, the focus has been placed on the analysis of relative changes and trends through time in prehistoric resource exploitation, and their relationship to environmental factors. This research therefore contributes to our understanding of pre-contact coastal foragers by viewing the archaeological record as a reflection of the process of the interaction of humans with their environment. In doing so, an opportunity is provided in which change can be recognised in a number of ways. For example, differential focus on resources, variations in group size and levels of mobility can all be identified. It has also been shown that human-environment interactions are non-linear or progressive, and that human behaviour during the late Holocene was both flexible and dynamic.