Molluscs and Echinoderms from the Emily Bay Settlement Site, Norfolk Island

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ABSTRACT. The Emily Bay archaeological molluscan fauna as an ensemble is almost entirely intertidal in its natural occurrence, with seven species preferring sand or mud substrates and 13 species preferring hard substrates. The only exceptions are the pelagic cephalopods *Nautilus* and *Spirula*. The gastropod species *Nerita atramentosa* is dominant in both numbers and by weight.

The rocky intertidal platform was the focus of mollusc collecting. The four most common species derive from this zone and habitually cluster in colonies, which would have made them a preferred prey.

Among the many factors that may have contributed to eventual abandonment of Norfolk Island, a scarcity of easily harvestable coastal marine resources would probably have been significant.

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It is assumed that those food resources on Norfolk Island that could be collected by people immediately on arrival would have been of great importance to Polynesian settlers. The availability and ease of collection of shellfish would have been an important factor, therefore, in the initial viability of settlement on Norfolk Island.

The molluscs that appear in the archaeological material reflect the natural environment of Norfolk Island, which is notable for its restricted range of suitable molluscan habitats (Anderson and White, *Approaching the Prehistory...*, this vol.). The greatest density of species occurs in the intertidal zone, but on Norfolk Island soft shore intertidal areas are

restricted largely to the Kingston lagoon and only rocky shores are extensive.

Shellfish collection

The year-round abundance of mollusc resources is their greatest asset for people, and in times of scarcity of other resources they assume a greater significance in the diet (Higham, 1996; Meehan, 1982; Meighan, 1969; Swadling and Chowning, 1981). Shellfish therefore represent a stabilising factor in food procurement. In addition to their food value, mollusc shells can be raw material for artefacts.