Mammalian and Reptilian Fauna from Emily and Cemetery Bays, Norfolk Island

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ABSTRACT. Large mammal remains described from the prehistoric settlement at Emily Bay consist of elephant seal and turtle. Rattus exulans remains similar to those elsewhere in Polynesia were the only rodent remains found throughout excavations at Emily and Cemetery Bays: there is no evidence that this animal was eaten. A partial dog mandible from Emily Bay is described: it may be prehistoric but neither its date nor osteometry are definitive. An intrusive recent pig is noted.


Mammal and reptile remains were scarce in the excavations at Emily and Cemetery Bays. Identification of all bone recovered was taken to the lowest possible taxonomic level for two reasons: first, to see what animals had been brought by people to the island and second, to see what native animals were available for exploitation.

Our joint authorship of this paper is the result of an amalgamation of Smith’s work on large mammals and reptiles, White’s on rodents from Emily and Cemetery Bays, and Clark’s on a Canis familiaris mandible from Emily Bay.

Large mammals and reptiles

All large mammalian and reptilian remains recovered in the excavations are summarized in Table 1. These consisted of 95 bone fragments and one piece of tooth. The latter was the crown and part of the root of a human maxillary incisor from a depth of 72 cm at Cemetery Bay. The bones were mostly in a dry, friable and fragmentary state that made species identification impossible. Identifications were made by comparison with reference specimens in the Otago Archaeological Laboratories (OAL).

Nearly three-quarters of the number of bones were from Spit 3 in one square of Trench EB97:24 at Emily Bay, and came from the cranium of a Southern Elephant Seal (Mirounga leonina). These included the left frontal bone, right tympanic bulla and numerous unsided fragments from the occipital, parietal, frontal and nasal regions. In size they are closely similar to a sub adult male in the OAL collection.

This identification constitutes the northern-most (29°S) documented occurrence of elephant seal in the Pacific Ocean. The modern distribution of this species is confined largely to subantarctic waters south of c. 40°S (Jefferson et al., 1993: 287), although they formerly occurred as far north...