LATE PLEISTOCENE-HOLOCENE OCCURRENCE OF CHAEROPUS (PERAMELIDAE) AND MACROTIS (THYLACOMYIDAE) FROM QUEENSLAND. Memoirs of the Queensland Museum 51(1): 38. Recent collections of vertebrate remains from cave systems in central-eastern and north-eastern Queensland have yielded diverse small-sized mammalian taxa. Within these faunas, four perameloid genera are present and include species of Isoodon, Perameles, Chaeropus and Macrotis. The presence of Perameles and Isoodon in these deposits is not surprising because they occur at the localities in the present day. However, Hocknull (2005) and Price (2004) report on the most easterly extent of Perameles and Isoodon in the fossil record. A new locality has yielded a specimen of Macrotis Thomas, 1887 and is presented herein. The locality (QML1287) is considered to be Late Pleistocene - Holocene in age based on the subfossil preservation of the excavated specimens, distinctly modern associated fauna, and the lack of associated megafauna.

Family THYLACOMYIDAE (Bensley, 1903)

Macrotis sp. (Fig 1)

Locality. QML1287, ‘Dodgey’s Cave’, Dosey Limestone Kart, Broken River Province, 120km NW Charters Towers. Description. QMF41971 is a left M2 with little wear, broken root base. Max. length, 4.66mm; ant. width, 3.42mm; post. width, 2.67mm. Bulbous, sub-rectangular tooth in occlusal aspect, bearing three distinct anterior cusps (protocone, paracone and conical stylar cusp ’?B’); two distinct posterior cusps (metacone and conical stylar cusp ’?D’). Metaconule absent. Open, dumbbell-shaped roots. Anterior cingulum present. Remarks. Identification of the tooth as Macrotis was based on the massively inflated, rectangular-ovoid occlusal crown, dumbbell-shaped molar roots, absence of the metaconule and conical stylar cusps. Muirhead (1994) listed characteristics of the dentition for both species of Macrotis, M. lagotis and M. leucura. Unfortunately, comparative specimens of M. leucura were not available for study, therefore, verification of M. leucura requires additional specimens and a morphometric appraisal of both species’ dentition. Figure 2 illustrates the distributions (recent and fossil) of M. lagotis, M. leucura and Chaeropus ecaudatus. This is the second record of Macrotis in the fossil record of Queensland.

FIG 1. QMF41971, LM2 in occlusal view. Scale bar = 4mm.

FIG 2. Distribution map of fossil and recent populations of A. C. ecaudatus (solid square), B. M. leucura, C. M. lagotis (solid circle) and Macrotis sp. (solid star). Recent bandicoot distributions from Strahan (1998). The massive difference in the ranges of these three taxa when comparing late Pleistocene-Holocene to pre-European distributions indicates considerable contraction into the arid interior during the Holocene. A more detailed chronology of retraction is required to elucidate the factors influencing such a massive decline prior to European arrival, whether they be climatic, biotic and/or anthropogenic.

Literature Cited


