

A NEW SPECIES OF *THYLOGALE* (MARSUPIALIA: MACROPODIDAE) FROM MAPALA ROCK SHELTER, JAYA (CARSTENSZ) MOUNTAINS, IRIAN JAYA (WESTERN NEW GUINEA), INDONESIA

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ABSTRACT

A new species of *Thylogale* (Marsupialia: Macropodidae) has been described on material from an archaeological deposit in Mapala rock shelter, situated at 3996 m in the Jaya Mountains, Irian Jaya, Indonesia. The remains of *Thylogale brunii* and several other mammal species are also present. The faunal material lies above a level dated at 5440 ± 130 BP, but the present status of either species of *Thylogale* in montane western New Guinea is unknown.

INTRODUCTION

From December, 1971 to March, 1972, and in January and February, 1973, the Carstenz Glaciers Expeditions studied the tropical glaciers of the Jaya Mountains, Irian Jaya (western New Guinea), Indonesia. The results of these expeditions have been published by Hope *et al.* (1976). Although the aims of the expeditions were primarily glaciological and geomorphological, a small collection of faunal material was made, including a sample of bones salvaged from the floor of a rock shelter, discovered by an Indonesian mountaineering party. The bones formed part of an archaeological deposit in the rock shelter, and included the remains of a new species of *Thylogale*.

Mapala rock shelter lies at an altitude of 3996 m, close to Lake Larson, about 2 km north of the Northwall of Mt Jaya. It consists of a small overhang beneath a large block of limestone (15 x 15 x 8 m) perched by retreating ice on two small lateral moraine ridges. The site has been described in more detail by Hope, G.S. and Hope J.H. (1976). The archaeological deposit was discovered in February, 1972 when members of the Mapala Club of the University of Indonesia dug away part of the floor to provide more head room in the shelter, which was used as a camp site.

The first Carstenz Glaciers Expedition visited the Mapala camp and collected bulk samples of bone from the excavation spoil, and charcoal and a few bones from the face of the exposed section inside the rock shelter. Three distinct stratigraphic units were recognised in the deposit. The topmost 5 cm consisted of fine red-grey ash with no bone or charcoal. Beneath this was about 27 cm of a very black deposit, rich in bone, charcoal and carbonised twigs. The lowest layer consisted of about 10 cm of grey clayey silts with scattered bones and small fragments of charcoal. This horizon graded into a sterile grey silty clay containing pebbles; probably the basal limestone till. Charcoal fragments from the grey silts gave a C^{14} date of 5440 ± 130 BP (ANU-1015).

The great majority of the bones collected came from the middle layer of the deposit, and apart from the species of *Thylogale* described below included the following: *Zaglossus bruijini*, *Dasyurus albopunctatus*, *Peroryctes longicauda*, *Pseudocheirus cupreus*, *P. mayeri*, *Phalanger* sp., *Thylogale brunii*, *Dendrolagus dorianus*, *Mallomys rothschildi*, *Hyomys goliath* and *Canis familiaris*. These remains, as well as collections of modern mammals from the area, have been discussed by Hope (1976). Other archaeological material from the deposit consisted of a fragment of a chert scraper, a piece of granodior-