

**The Sarawak Museum Journal****Vol. LXII No. 83****December 2006****ISSN: 0375-3050****E-ISSN: 3036-0188**

Citation: P.J. Piper and R.J. Rabett. (2006). A Report on a Small Assemblage of Animal Bones Recovered from Panguma Cave, Niah. The Sarawak Museum Journal, LXII (83): 45-58

A REPORT ON A SMALL ASSEMBLAGE OF ANIMAL BONES RECOVERED FROM PANGUMA CAVE, NIAH**P.J. Piper and R.J. Rabett****INTRODUCTION**

During the 2003 archaeological field-season at Niah (Barker et al., 2003), an opportunity arose to explore a small cave system located in the main Gunung Subis massif within the Niah National Park. The entrance to this cave, known as Panguma, is situated in the steep east face of the limestone massif some 40 m above the rainforest floor, and high enough to overlook the present-day forest canopy (Fig. 1). The cave can only be reached by a steep footpath from the base of the cliff, supplemented by a short ladder at the top. There is a hut at the cave mouth, occupied at the time of our visit by guards employed by the birds' nest concessionaire, Mr Nuar bin Haji Jaya.

A REPORT ON A SMALL ASSEMBLAGE OF ANIMAL BONES RECOVERED FROM PANGUMA CAVE, NIAH

by

P.J. Piper and R.J. Rabett

INTRODUCTION

During the 2003 archaeological field-season at Niah (Barker *et al.*, 2003), an opportunity arose to explore a small cave system located in the main Gunung Subis massif within the Niah National Park. The entrance to this cave, known as Panguma, is situated in the steep east face of the limestone massif some 40 m above the rainforest floor, and high enough to overlook the present-day forest canopy (Fig. 1). The cave can only be reached by a steep footpath from the base of the cliff, supplemented by a short ladder at the top. There is a hut at the cave mouth, occupied at the time of our visit by guards employed by the birds' nest concessionaire, Mr Nuar bin Haji Jaya.

During a preliminary visit to Panguma in April 2003, the Earl of Cranbrook noticed a small assemblage of whole and fragmented pieces of bone contained in (and partly overflowing from) a black plastic bag, placed in a concavity in a large boulder close to the main entrance of the cave. The cave guards had no information on the origin of the bones, or the reason for the keeping or placement of them. In discussion with the guards, Cranbrook concluded that guano collectors were the likely source of the assemblage. It appeared that the bones had been extracted from sediments at the entrance to Panguma or on the expansive sheltered rock terrace adjoining, during recent years, and set aside.

Cranbrook's brief observations of the contents of this faunal assemblage whilst at the cave site indicated that it contained the

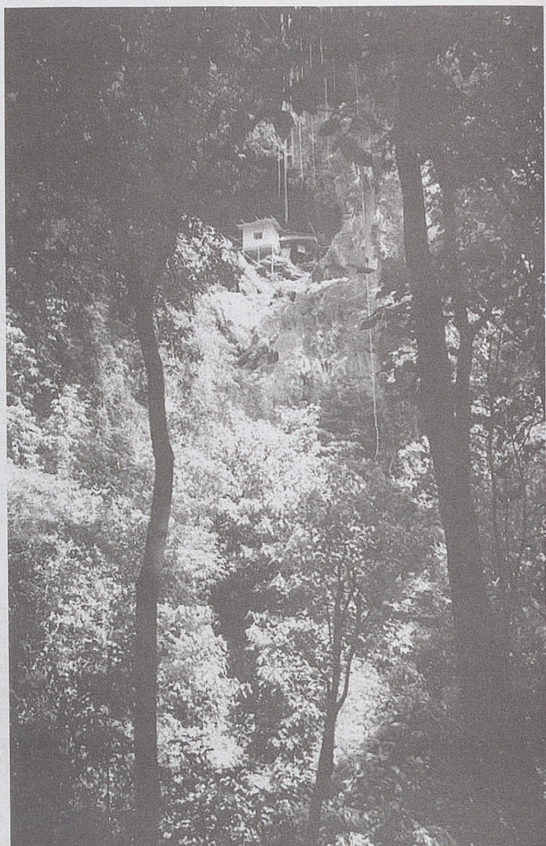


Fig. 1: A view of the entrance of Panguma Cave from the forest floor.

remains of large ungulates and other vertebrate taxa that could not have entered the high cave entrance independently. The inference was that at least a portion of the animals represented in the bone accumulation must have been transported to the site from the forest floor, most probably by people, as is the case in many other cave mouths in and around the Niah massif.

With these thoughts in mind and with the kind permission of Mr Nuar, the bones were subsequently removed from Panguma for closer examination. A preliminary study of the assemblage was carried out in the environmental laboratory facilities at the Niah National Park museum by the authors and the Earl of Cranbrook. An additional and more detailed analysis of the bones was performed by PJP in the Department of Archaeology and Ancient History at the University of Leicester in the UK.

This paper describes the results of the taxonomic identification and taphonomic analyses of the bones from Panguma Cave.

The Results of the Taphonomic and Palaeoecological Study

In total, the assemblage consisted of 421 fragments of bone, of which 128 (30%) could be identified to vertebrate Class or lower taxonomic level (Table 1). The remaining 293 bones consisted primarily of rib, vertebrae and long bone fragments, plausibly all from large mammals, and none incompatible with the identifiable material.

Species Representation: Eleven different taxa could be identified in the assemblage. The most common species was the pig (*Sus* sp.) accounting for 65 (51%) of all identified bone fragments. Medway (1978) used molar and pre-molar tooth dimensions to distinguish between the indigenous bearded pig (*Sus barbatus*) and the introduced domestic pig (*Sus scrofa*) in the archaeological record from Niah cave. However, the limited number of damaged teeth and predominance of post-cranial elements in the assemblage makes differentiation of the two species for the Panguma material impracticable. Thus, herein the pig remains will remain