

STUDIES IN TASMANIAN MAMMALS, LIVING AND  
EXTINCT.

Number V.

*Zaglossus harrissoni*, Sp. nov.

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Plate V.

(Read 13th June, 1921.)

Among some fossil bones recently recovered by Mr. K. M. Harrisson, from a swamp upon King Island, we have found evidence of a giant Ant Eater, that exceeded very considerably in point of size the modern *Monotreme*. The evidence is furnished to us in the form of a nearly perfect right femur, and a very small portion of the proximal end of a humerus. We fortunately possess several femora of the modern animals, collected by Mr. L. L. Waterhouse in January, 1916, during a visit to King Island upon Geological Survey Work, and are therefore enabled to make a direct comparison between the Pleistocene, and the more recent *Monotremes* of that locality. We are evidently dealing with a smaller animal than "*Zaglossus hacketti*," of Western Australia, since that animal was fully double the size of the modern *Monotreme*, in point of femoral and humeral length, in addition to an added robustness of the skeleton generally, but the extent to which it overtopped the Ant Eaters of modern King Island will be appreciated by the following table of measurements.

FEMUR OF GIANT.		FEMUR OF MODERN MONOTREME.	
Total length=72 mm. (2 inches).	(2 13-16)	Total length=53 mm. (2½ inches).	(2½)
Proximal width=30 mm. full).	(1½)	Proximal width=18 mm. approx.).	(¾)
Distal width=35 mm. inches).	(1¾)	Distal width=19 mm. (¾ full).	(¾)
Thickness of shaft=10 mm. full).	(7-16)	Thickness of shaft=5 mm. (3-16).	(3-16).

In life, this Pleistocene Ant Eater was, by estimation, some twenty-six inches in length (660 mm.) and more robust, in proportion, to the largest Tasmanian *Tachyglossus* of

to-day. In view of the fact that isolation from mainland climatic conditions almost certainly enabled the Pleistocene animals to survive, and vary, upon King Island and Tasmania, after their extinction elsewhere, we feel justified in segregating this animal to specific distinction, and have much pleasure in naming it after Mr. K. M. Harrisson, of Smithton, who has manifested such a keen interest in the extinct animals of Tasmania, and generously presented his specimens to our Museums.

#### DESCRIPTION OF THE FEMUR.

The shaft of the femur is nearly flat, as obtains in the *Monotremata* generally, and the head is devoid of an articular attachment for a ligamentum teres, thereby agreeing with mammals as high in the scale as the *Nototheria* from the same locality. The trochanter major is missing, but it evidently did little more than bound the epitrochanterian surface, since its muscular attachment functions are largely carried out by the extensive ridge extending for 35 mm. down the shaft. Both sides of the shaft indicate great muscular conditions, the popliteal fossa is enormous, its crescent shaped area taking the full mass of a large human thumb to fill it, when the latter is strongly pressed to the diaphysis. The rotular trochlea is 25 mm. wide, well marked, and curved only in the vertical direction. The intercondylar fossa is 10 mm. wide, and 9 mm. The *linea aspera* is similar to that of the modern animal, as also are the proportions existing between the internal and the external condyles.

A complete skeleton of one of these animals, obtained from a swamp that has undergone fewer mutations than the King Island lagoons appear to have suffered, would be a welcome addition to our knowledge, and for this desideratum we may yet turn to the Mowbray Swamp at Smithton, and meet with success.

The portion of the humerus is too fragmentary for detailed description or even photographic reproduction. The evidence relating to gigantic Monotremes is largely contained in the following archives:—

#### CLASSIFICATION AND NOMENCLATURE.

Ann. Record Science and Industry, 1876, Page clxxi., in which Gills' use of the name *Zaglossus* predates Gervais' term *Proechidna*.



*Femur of  
Tachyglossus aculeata  
(Enlarged).*



*Femur of  
Zaglossus harrissoni  
(Scott and Lord, 13/6/1921).  
(Enlarged).*

Osteog. Monot. viv. et foss., Page 43, in which Gervais uses the term *Acanthoglossus*.

Bull. Soc. Zool. France, 1881, No. 6, Pages 267-270, in which Dubois uses the name *Bruijinia*.

#### CHIEFLY DESCRIPTIVE.

Krefft, 1868. Ann. Mag. Nat. Hist., Vol. I., Page 113.

Krefft, 1884. Phil. Trans., Page 273.

W. S. Dun, 1895. Rec. Geol. Surv., N.S. Wales, Vol. 4, Part 3, Page 121.

L. Glauert, F.G.S., 1914. Records of the W.A. Museum, Vol. I., Part 3, Pages 244-248, gives Bibliography, Taxonomy, and detailed description of *Zaglossus hacketti*.

#### DESCRIPTION OF PLATE V.

Femur of Giant Ant Eater, *Zaglossus harrissoni* (Scott and Lord, 13/6/1921), from the Pleistocene formation of King Island, contrasted with the femur of a sub-fossil specimen of *Tachyglossus aculeata*, from the sand blow at Cape Wickham, King Island, collected by L. L. Waterhouse, Assistant Government Geologist, 19th January, 1916..