

A RECENT RECORD FROM NEW SOUTH WALES OF THE RUFOUS RAT-KANGAROO, *Aepyprymnus rufescens* (Gray) (MACROPODIDAE)*

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Many small marsupials in Australia have become extremely rare, among them the rufous rat-kangaroo, *Aepyprymnus rufescens* (Gray). This is the largest species of the Potoroinae, and was once plentiful on both sides of the Great Dividing Range in New South Wales (Gould 1863). Up to 1867 it occurred as far west as the junction of the Murray and Darling rivers. Since that date, the available records show that its range became restricted to the north-eastern part of the State, i.e. from the Queensland border to lat. 33°S., and from the coast inland to long. 139° 30'E. (Marlow, unpublished data). Until this year it had not been recorded in New South Wales since 1929.

In the course of the author's survey of the status of marsupials in this State, the skull was received of a rufous rat-kangaroo, which had been killed by a domestic cat on February 12, 1957, and been taken to a house about 4 miles north of Ecclestone, near Dungog. The approximate locality in which the animal was caught is 32° 12' S. and 151° 29' E., and is in an area where an extensive tract of rain-forest is bordered by cleared savannah woodland, in the mountainous region around Barrington Tops. This skull, which is numbered 099 in the author's collection, was identified by the short broad nasals which are expanded posteriorly, together with the complete posterior palate with its small irregular vacuities as described by Thomas (1888).

The dentition clearly indicates that this skull is from a juvenile. The third upper premolar, p^3 , is still *in situ*, and is 6.8 mm long and has four vertical grooves. Posterior to p^3 is the deciduous premolar, dp^4 , 6.2 mm long, of the form described by Tate (1948). The permanent premolar, p^4 , had not erupted and after being dissected out was found to be 7.6 mm long with about eight ill-defined grooves on its labial surface. Of the molar series, m^1 had erupted, m^2 is still enclosed in its

* Manuscript received July 25, 1957.

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alveolus, while m^3 and m^4 are not detectable. The dentition of this specimen is shown in Figure 1.

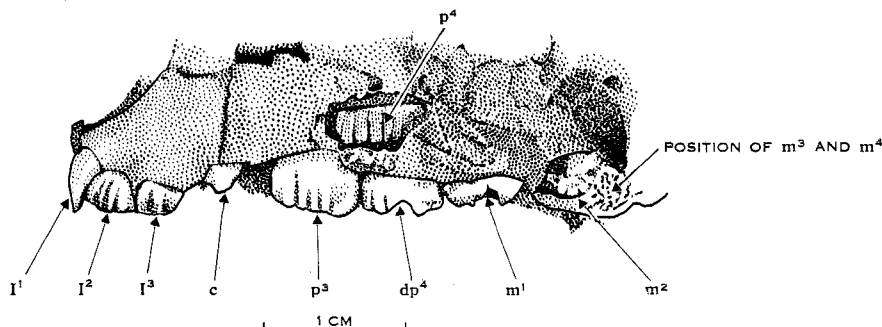


Fig. 1.—Dentition of juvenile *Aepyprymnus rufescens*.

The dimensions of this juvenile skull and those given by Thomas (1888) for the adult type specimen are compared in Table 1.

TABLE 1
COMPARISON OF ADULT AND JUVENILE SKULL MEASUREMENTS

Measurement	Type (Adult ♂) (mm)	099 (Juvenile sex unknown) (mm)
Basal length	73.5	52.0
Maximum width	50.0	*
Nasal length	32	22.4
Nasal breadth (greatest)	17	12.3
Interorbital constriction	15.5	13.3
Palate length	49	34
Palate breadth (outside m^2)	28.5	18.8
Anterior palatal foramen	3.5	3.2

* Unobtainable due to fracture of squamosals.

It is gratifying to know that *A. rufescens* still persists in New South Wales, even though it is obviously very rare.

The author would like to express his thanks to Mr. Lindsay Hopson of Eccleston who sent in this valuable specimen, and to Mr. L. Marshall of C.S.I.R.O., Canberra, who drew Figure 1.

References

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