

ON THE TASMANIAN *MURIDÆ*

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In carrying out investigations concerning the Tasmanian *Muridæ* certain information has been gathered which appears worthy of placing on record.

Since Higgins and Petterd dealt with certain Tasmanian forms in 1882 and 1883 very little attention has been paid to the Tasmanian *Rodentia*. Unfortunately, Higgins and Petterd relied on mere external variations on which to found their species, and many will doubtless merge into synonymy. Further, their type specimens were not preserved.

In the present instance, therefore, we desire to give a list of the Tasmanian *Muridæ* as far as our investigations have shown them, and at the same time to draw attention to the very wide distribution of the introduced *Rattus rattus* in Tasmania. This common form is not only found in the cities and settled areas, but also finds its way far into the bush. Here it takes on new habits, which have the effect of considerably altering the species, as far as external variations go, from the typical form, and care must be taken in regard to identification.

Sub-Order *SIMPLICIDENTATA*.Genus *Hydromys*.

This genus is easily recognised on account of the molars being reduced to two pairs, which is the smallest number among the rodents. The skull lacks the projecting zygomatic plate. The toes are partially webbed.

Hydromys chrysogaster, Geoffroy.

Hydromys chrysogaster, Geoffroy, Ann. Mus. Hist. Nat., p. 90 (1805).

Orange-bellied Water Rat.

Owing to the outstanding characteristics of the genus, its aquatic habits, and distinctive colouration, this species has not become confused with other forms, and the synonymy is simple. It is a fairly common species in localities suitable to its habits.

Genus *Rattus*.*Rattus lutreola*, Gray.

Mus lutreola, Gray, Grey's travels in N.W. and W. Aust. App., p. 409.

Dusky-footed Rat.

The Dusky-footed rat of Tasmania and South-Eastern Australia is usually referred to as *Rattus fuscipes* (= *Mus fuscipes*), but Mr. Oldfield Thomas has pointed out to us that *R. fuscipes* should be retained for the West Australian form, and that the Tasmanian rat is *Rattus lutreola*. It is generally found in the vicinity of water, and can swim well.

Rattus velutinus, Thomas.

Mus velutinus, Thomas, A.M.N.H., IX., p. 415 (1882).

Mus castaneus, Higgins & Petterd, P. & P. Roy. Soc. Tas., p. 183 (1883).

This rather distinctive species shows a general colouration of from grey to chestnut, the ears, feet, and tail sometimes being brownish in colour. We are of the opinion that the type of *Mus castaneus* of Higgins and Petterd was really a male of *R. velutinus*.

Pseudomys higginsii.

Mus leucopus, Higgins & Petterd, P. & P. Roy. Soc. Tas., p. 124, 1882, and 1883, p. 186.

Long-tailed Rat.

This species is one of the commonest rodents of the Tasmanian bush. It is often found high up on the mountains as well as on the plains. Note revised description of this species by Lord (P. & P. Roy. Soc. Tas., 1922, pp. 55-57)

Genus *Mustacomys*.*Mustacomys fuscus*, Thomas.

Mustacomys fuscus, Thomas, A.M.N.H., p. 414, No. 54, 5th Ser. (1882).

Broad-toothed Rat.

This species is remarkable for the exceptional broadening of the molars. As far as is known at present, this species is confined to Tasmania, but fossil remains of a similar form have been found in the Wellington Valley caves of New South Wales.

With regard to other species further research is needed, but the foregoing are the only ones that we propose to recognise as valid indigenous Tasmanian forms, until further research shows the validity of other species.

In 1882 and 1883 Higgins and Petterd described no less than eight new species, as follows:—

1. *Mus grisco-cærulens* (Blue Rat).
2. *Mus leucopus* (Short-tailed Rat).
3. *Mus variabilis* (Swan's Rat).
4. *Mus simsoni* (Simson's Rat).
5. *Mus pachyurus* (Thick-tailed Rat).
6. *Mus castaneus* (Chestnut coloured Rat).
7. *Mus tamarensis* (Tasmanian Water Rat).
8. *Mus tetragomurus* (Quadrangular-tailed Rat).

Of the above we are of the opinion that at least *M. grisco-cærulens*, *M. variabilis*, and probably *M. tamarensis* are synonymous with *R. rattus*. The British Museum specimens of *M. simsoni* show this supposed species to be merely the introduced *M. musculus*.