

DESCRIPTIONS OF HITHERTO UNDESCRIBED
ANTECHINI AND MURIDÆ INHABITING TAS-
MANIA.

By EDMUND THOMAS HIGGINS, M.R.C.S. Eng., and WILLIAM
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[Read 9th October, 1882.]

When the late Mr. Ronald Gunn's paper on the Mammalia of this Island was published, some 30 years since, in the Transactions of the Royal Society of Tasmania, only three species of Antechinus, and three of Mus, were recorded as having been found in Tasmania.

The descriptions of the Muridæ are excessively short, but sufficient for the recognition of the species. Since then nothing has been done on the subject, until Mr. Thomas' paper describing two new Muridæ. One belonging to a new genus, Mastacomys, appeared in the June number for this year of the *Annals and Magazine of Natural History*. Knowing from observation that other species inhabiting this Island were still undescribed, we have for some time past been engaged in procuring all the small mammals we could; and have the honour of laying before the Royal Society our first paper containing descriptions of three new Antechini and four Muridæ, and hope shortly to supplement it. From the dense damp nature of the scrubs, and the peculiar hilly conformation of the country, almost every district is likely to produce distinct species. Being anxious to make our work as complete as possible, we are desirous of obtaining specimens from every part of the Island, and shall therefore take it as a special favour if the members of the Society will use their utmost endeavours to supply us with materials for this purpose.

ANTECHINUS ROLANDENSIS, ♂.

Ears very short, clothed with adpressed dark hairs; fur long and soft, reddish at the tips, bluish-grey at the base; paler on the posterior third of the body, with scattered black hairs; under surface dark ashy-grey; head clothed with short stiff hairs of a greyish-brown colour, slightly tinted with fulvous brown; two darker stripes extend from nose to eye; fore and hind feet clothed with short adpressed hairs of a yellow tint; under sides of feet thickly tuberculated, the tubercles transversely striated; whiskers long and black; tail short, covered with short dark-brown hair above, paler on the under side.

Length from tip of nose to root of tail ...	$7\frac{1}{2}$	inches.
„ of tail	$2\frac{5}{8}$	„
„ from nose to ear	$1\frac{1}{2}$	„

Length of ear.....	$\frac{5}{8}$	inches.
" of fore feet and claws.....	$\frac{5}{8}$	"
" of hind feet and claws....	$1\frac{1}{8}$	"
" of skull.....	$1\frac{3}{8}$	"
Width of skull.....	$\frac{3}{4}$	"
Length of nasal bones.....	$\frac{1}{6}$	"
" of lower jaw.....	$1\frac{1}{8}$	"
Circumference of chest.....	$3\frac{1}{2}$	"

In size approaches *A. Swainsonii*, but differs from it in the colour of its fur, in the colour of its feet, shorter tail, and greater width and convexity of the zygomatic arches. Found in the neighbourhood of Mount Roland, by Mr. E. Higgins, of Kentishbury.

ANTECHINUS LEUCOGENYS, ♂.

Ears moderately long, sparsely covered internally, and thickly externally with dark-brown hair; whiskers dark-brown and white, and of a moderate length; fur very long, rufous brown, interspersed with darker hairs. Hair on the head bluish-grey at the base, yellow in the middle, and dark-brown at the tips, producing a variegated appearance; lips margined with white; *chin white*; the hairs on the under surface pale yellowish-brown, the tips white; fore feet and portion of leg white; hind feet white; tail brown, with scattered dark hairs; hind feet with numerous transversely striated tubercles; form exceedingly slender.

Length from tip of nose to root of tail ...	$3\frac{1}{2}$	inches.
" of tail.....	$3\frac{1}{4}$	"
" from nose to ear.....	1	"
" " to eye.....	$\frac{5}{8}$	"
" of ear.....	$\frac{1}{2}$	"
Width ".....	$\frac{3}{8}$	"
Length of fore feet and claws.....	$\frac{3}{8}$	"
" of hind feet and claws.....	$\frac{5}{8}$	"
" of skull.....	$1\frac{1}{8}$	"
Width ".....	$\frac{9}{16}$	"
Length of nasal bones.....	$\frac{7}{16}$	"
" of lower jaw.....	$\frac{3}{4}$	"

In its measurements this species approaches to *Albipes* and *Murina*, but differs from both by its exceedingly slender form, the colour of its fur, and by the *white chin*, which is so especially characteristic in this species, which was obtained by Mr. A. Simson, of Launceston, at Ringarooma, and kindly placed at our disposal. The soles of hind feet thickly covered with small tubercles. This species therefore belongs to Gould's subgenus *Podabrus*.

ANTECHINUS NIGER, ♀.

Form very robust; ears large and wide, internally and externally thickly covered with short, dark-brown hairs, and

having an indentation at about one-third from the lower margin; fur dense, and moderately long; on the upper surface of a very dark-brown colour, and *thickly* interspersed with long black hairs; under surface of a brownish-grey; upper surface of tail rather thickly covered with short, dark-brown, almost black hair, rather paler on the under surface; fore and hind feet covered with short, close set, brown hair, almost black; palms and soles of feet very dark; fore feet have five prominent striated tubercles, and are furnished with remarkably long claws; hind feet have six prominent transversely striated tubercles; whiskers of moderate length, and almost black.

Length from tip of nose to root of tail.....	5 $\frac{1}{4}$	inches.
" of tail.....	3 $\frac{1}{8}$	"
" from nose to ear.....	1 $\frac{3}{8}$	"
" " to eye.....	$\frac{3}{4}$	"
" of ear.....	1 $\frac{11}{16}$	"
Width " 	1 $\frac{11}{16}$	"
Length of fore foot and claws.....	1 $\frac{11}{16}$	"
" middle claw.....	1 $\frac{11}{16}$	"
" hind foot and claws.....	$\frac{7}{8}$	"
Circumference of chest.....	4 $\frac{1}{8}$	"
Length of skull.....	1 $\frac{1}{4}$	"
Width " 	1 $\frac{11}{16}$	"
Length of nasal bones.....	1 $\frac{1}{2}$	"
Length of lower jaw.....	(Not given).	

This most interesting species differs from all its described congeners in Tasmania and Australia by its extremely robust form, the powerful build of its feet, by the extremely long claws of the fore feet, and the dark, almost black appearance of its fur. To Mr. Sultzberger, of the Upper Piper, we are greatly indebted for this beautiful Antechinus.

MUS GRISEOCÆRULEUS, ♂ and ♀.

Ears naked, and moderately long; whiskers 2 $\frac{1}{2}$ inches long, black; fur long, bluish-grey, passing at the sides into pale, ashy-grey, which colour extends over the entire under surface; feet clothed with short, yellow hairs; tail sparsely covered with short stiff hair of a black colour; scales freely showing through.

Length from tip of nose to root of tail.....	7 $\frac{1}{2}$	inches.
" of tail.....	6 $\frac{3}{4}$	"
" from nose to ear.....	1 $\frac{1}{2}$	"
" " to eye.....	$\frac{4}{5}$	"
" of ear.....	$\frac{7}{8}$	"
" of fore foot and claws.....	1 $\frac{3}{8}$	"
" of hind foot " 	1 $\frac{3}{8}$	"
" of skull.....	1 $\frac{1}{2}$	"
Width " 	1 $\frac{7}{8}$	"
Length of nasal bones.....	1 $\frac{3}{8}$	"
" lower jaw.....	1 $\frac{1}{8}$	"

"Blue Rat" of the colonists; widely distributed over the

northern portion of the Island; has been obtained at Kentishbury, Deloraine, and Launceston. In half grown specimens the under surface is sometimes quite white; supraorbital ridge extends to occipital crest; coronoid process thin, narrower, less curved, and more acuminate than in *Mus decumanus*; condyloid process longer, and thin; posterior angle rounded and broad; descending ramus deeply emarginated.

Fig. 2.—Lower jaw of natural size.

2*a.*—Superior molars magnified.

MUS LEUCOPUS, ♀.

Ears long and patulous, internally sparsely, and externally thickly covered with short, dark, almost black hair; whiskers rather full, black and white hairs, $2\frac{1}{4}$ inches in length; nose grey, extreme tip nearly white; fur long, soft, dark-brown, tipped with pale fulvous brown, slightly paler at the sides, passing into dirty ashy-grey underneath; tail long, upper surface clothed with short dark hair, interspersed with paler hair; under surface covered with *white* hair, concealing the scales; fore and hind feet white.

Length from tip of nose to root of tail.....	5 $\frac{3}{4}$ inches.
" of tail.....	3 $\frac{3}{4}$ "
" from nose to ear.....	1 $\frac{1}{2}$ "
" " to eye.....	5 $\frac{3}{8}$ "
" of ear.....	3 $\frac{1}{4}$ "
Width ".....	1 $\frac{1}{2}$ "
Length of fore foot and claws.....	3 $\frac{1}{4}$ "
" hind foot and claws.....	1 $\frac{1}{2}$ "
" of skull.....	1 $\frac{1}{2}$ "
Width ".....	3 $\frac{1}{4}$ "
Length of nasal bones.....	4 $\frac{1}{2}$ "
" of lower jaw.....	2 $\frac{5}{16}$ "
Circumference of chest.....	(Not given).

Principally noticeable by the pure whiteness of entire under surface of tail; supraorbital ridge absent; coronoid process short and pointed; condyloid process pointing backwards; posterior angle short, and slightly acuminate; descending ramus moderately emarginate. Obtained by Mr. E. Higgins, of Kentishbury, near the Minnow River.

Fig. 4.—Lower jaw, natural size.

4*a.*—Superior molars magnified.

MUS VARIABILIS, ♂.

Ears rather large, broad, very rounded at the apices, and almost naked; whiskers dark-brown, almost black, with intermingled white hairs $2\frac{1}{2}$ inches long; fur dark bluish-grey on the back, gradually becoming paler towards the under surface; feet brownish; tail thickly covered with short, dark-brown hairs, through which the scales are visible.

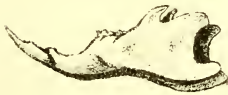
♀.—Fur rather long and soft, on the back of a fawn



1



2



3



4



5

2 a



3 a



4 a



5 a



LIST OF FIGURES, TASMANIAN *MURIDÆ*.

- Fig. 1.*—Lower jaw of *Mus decumanus*.
,, 2.—Ditto of *Mus griseocæruleus*.
,, 2*a.*—Superior molars of ditto, magnified.
,, 3.—Lower jaw of *Mus variabilis*, natural size.
,, 3*a.*—Superior molars of ditto, magnified.
,, 4.—Lower jaw of *Mus leucopus*, natural size.
,, 4*a.*—Superior molars of ditto, magnified.
,, 5.—Lower jaw of *Mus Simsoni*, natural size.
,, 5*a.*—Superior molars of ditto, magnified.
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colour; the base of the hairs bluish-grey, with numerous black hairs scattered throughout; the fur gradually pales to white on the entire under surface, where the hairs are perfectly white to their base; fore feet very pale fawn colour; hind feet white. In all other respects the female resembles the male.

Length from tip of nose to root of tail.....	8 inches.
" of tail.....	8 "
" from nose to ear.....	$1\frac{7}{8}$ "
" " to eye.....	1 "
" of ear.....	$\frac{3}{4}$ "
Width " 	$\frac{3}{4}$ "
Length of fore foot and claws.....	$\frac{3}{4}$ "
" hind foot and claws.....	$1\frac{3}{8}$ "
" skull.....	$1\frac{3}{8}$ "
Width of " 	$\frac{1}{8}$ "
Length of nasal bones.....	$\frac{1}{16}$ "
" lower jaw.....	$1\frac{1}{8}$ "

Supraorbital ridge very prominent, extending as far back as the occipital crest; palatine openings long and narrow; coronoid process rather short and acuminate; condyloid process inclined backwards; posterior angle rounded, narrow, and long; descending ramus deeply emarginate.

Fig. 3.—Lower jaw, natural size.

3a.—Superior molars magnified.

From Mr. Swan, of St. Leonards, to whom we are indebted for the specimens, we learn that these rats are of many colours. For this reason we have selected the specific name.

Mus SIMSONI, ♀.

Ear moderately long, clothed internally and externally with short brown hairs, which are rather darker on the outer surface; whiskers moderately long, dark-brown; fur greyish-brown, interspersed with darker hairs; under surface of a paler tint; face bluish-grey; chin white; fore and hind feet clothed with short yellowish-white hairs; tail moderately clothed with pale-brown hair; scales distinctly visible; base of tail thickened.

Length from tip of nose to root of tail.....	$2\frac{5}{8}$ inches.
" of tail.....	$2\frac{7}{8}$ "
" from nose to ear.....	$\frac{3}{4}$ "
" " to eye.....	$\frac{3}{8}$ "
" of ear.....	$\frac{1}{2}$ "
Width " 	$\frac{3}{16}$ "
Length of fore foot and claws.....	$\frac{1}{4}$ "
" hind foot and claws.....	$\frac{5}{8}$ "
" of skull.....	$\frac{7}{16}$ "
Width " 	$\frac{1}{2}$ "
Length of nasal bones.....	$\frac{1}{4}$ "
" lower jaw.....	$\frac{1}{2}$ "

No supraorbital ridge; condyloid process very convex ante-

riorly; a deep sulcus between it and the coronoid process, which is rather short; posterior angle very short, and slightly acuminate; descending ramus deeply emarginate.

To Mr. A. Simson we are indebted for this species, which was found by him in some abundance at Ringarooma, and have pleasure in naming it after him, as a slight acknowledgment of his kindness in having so liberally given it, as well as the *Antechinus leucogenys*, to us.

Fig. 5.—Lower jaw, natural size.

5a.—Superior molars magnified.

Species of *Antechini* now known to inhabit Tasmania:—

- Antechinus Swainsonii*, Waterhouse, Ann. and Mag. Nat. Hist. 1840, p. 300.
 „ *minima*, Temminck, Mon. de Mam, Vol. 1, p. 50.
 „ *leucopus* Gray, Ann. and Mag. Nat. Hist., 1842, p. 261.
 „ *Rolandensis*, Higgins and Petterd.
 „ *leucogenys*, „ „
 „ *niger*, „ „

Species of *Muridæ*:—

Mus setifer.

„ *penicillatus*.

„ *fuscipes*.

„ *velutinus*, Thomas, Ann. and Mag. Nat. Hist., June, 1882.

Mastacomys fuscus, Ann. and Mag. Nat. Hist., June, 1882.

Mus griseocæruleus, Higgins and Petterd.

„ *leucopus*, „ „

„ *variabilis*, „ „

„ *Simsoni*, „ „

DESCRIPTION OF A NEW SPECIES OF FISH, CAUGHT NEAR EMU BAY, TASMANIA.

BY ROBT. M. JOHNSTON, F.L.S.

[*Read 14th November, 1882.*]

LOPHOTIDÆ.

TÆNIOIDEI, PART., Cuvier.

Body elongate, strongly compressed, naked; eye lateral; cleft of the mouth narrow, with the dentition feeble; vent