

yellow, covered with small spots and a few blotches along the lateral line. Dorsal fin with oblique transverse bars. Caudal colourless, with the ends of the rays yellow, and a few indistinct transverse bands.

Geographical Distribution. Up to the present time this species has been recorded from the coasts of Greenland and Iceland. It is common off Spitzbergen and on the shores of North-western Europe as far south as the Cattegat. In the North its range extends certainly as high as 80° . Collett observes that along the coast of Norway it appears to be rather a common fish in most localities.

Irrespective of the interesting fact of this fish being new to the British fish-fauna, it is likewise remarkable for the two elongated caudal rays, which give to this male specimen a different appearance from that of previous figures and descriptions. This fish will form an addition to the Zoological Museum of the University of St. Andrews, which Professor McIntosh is taking so much pains to enlarge and improve.

10. On a Collection of *Muridæ* from Central Peru.

By OLDFIELD THOMAS, F.Z.S., Natural History Museum.

[Received June 17, 1884.]

(Plates XLII.-XLIV.)

During the years from 1870 to 1873 the well-known Polish traveller M. Constantin Jelski obtained the present fine collection of *Muridæ* for the Warsaw Museum, and it is to the Director of that Museum, Prof. L. Taczanowski, that I owe the opportunity of working out this most interesting series of Sigmodont Rats and Mice.

The specimens were all collected in that part of Central Peru which is contained in a triangle of which Lima, Junin, and Huanta form the three apices, the greater part of them coming from Junin itself.

Prof. Taczanowski has furnished me with the following notes on the stations at which the *Muridæ* were collected:—

“*Junin.*—Region of the ‘puna,’ or mountain grass-land, close to the lake of the same name, called also Lake Chinchacocha, one day distant from Tarma, the capital of the Department Junin. The lake is situated in the centre of a marshy prairie abounding in small lakes and streams, and covered in many places with thick patches of rushes.

“*Amable Maria.*—Farm situated between the streams of Chanchamayo and Anamayo, at a little distance from the river Tutumayo, at an altitude of about 2000 feet above the sea.

“*Maraynioc.*—A farm close to the source of the Aynamayo, near the valley of Chanchamayo.”

The present paper is practically a continuation of that read before this Society in 1882, when the collection obtained by M. Stolzmann in the extreme north of Peru was described, this still larger series

from a different locality enabling us to increase somewhat our scanty knowledge of the Peruvian Muridæ.

The collection consists of no less than 92 specimens, belonging to 12 species, of which one belongs to *Holochilus*, one to *Rheithrodon*, and the remainder to *Hesperomys*, representing the subgenera *Rhipidomys* (1), *Oryzomys* (3), *Calomys* (1), *Vesperimus* (1), and *Habrothrix* (4). Of these, one species, *Rheithrodon pictus*, is new; and two, *Hesperomys laticeps*, var. *nitidus*, and *H. bimaculatus*, var. *lepidus*, represent new varieties of species already described. Good series of specimens of each of the new forms are in the collection, so that their characters and variability, so far as occurs at a single locality, can be fairly made out.

In the subgeneric names used in 1882 I simply accepted the groups as defined by Baird¹, and used by other authors up to the present time; but on a closer investigation I find that the subgenera proposed by Waterhouse² in 1837 should stand to a much greater extent than was allowed by Baird, who merely went upon Waterhouse's descriptions, without seeing any specimens of such subgenera as *Phyllotis*, *Calomys*, or *Scapteromys*, each of which is fully entitled to the same rank as the other groups.

The following are the subgenera into which the unwieldy genus *Hesperomys* may be most satisfactorily divided:—

RHIPIDOMYS, Tschudi.—Form myoxine; tail long, hairy, pencilled at the tip; feet very short, broad, with large sole-pads; mammæ 1 or 0-2=6 or 4; interdental palate-ridges 5 or 6.

Skull with the cranial portion very large as compared to the facial; interparietal large; supraorbital margins ridged; palatal foramen of medium length.

Teeth large, their pattern as in the larger *Oryzomys*.

Species:—*H. leucodactylus*, Tsch. (type), *H. latimanus*, Tomes, *H. pyrrhorhinus*, Wied., *H. sumichrasti*, De Sauss., and (?) *H. bicolor*, Tomes.

Range. Amazonian Subregion, Ecuador, and Peru.

ORYZOMYS, Baird.—Form murine; tail long, scaly; feet long; soles quite naked; mammæ 2-2=8; interdental palate-ridges 5.

Skull generally strongly made; supraorbital edges and palatine foramina various.

Teeth with broad, low, complex crowns, the folds in which remain until old age.

Species:—*H. palustris*, Harl. (type), *H. angouya*, Desm., *H. albigularis*, Tomes, *H. galapagoensis*, Waterh., *H. longicaudatus*, Benn., *H. spinosus*, Thos., &c., &c., nearly 30 in all.

Range. Southern United States to Cape Horn, most numerous in the more tropical districts.

¹ Mamm. N. Am. p. 454 (1859).

² P. Z. S. 1837, p. 20.

CALOMYS, Waterhouse.—Form cricetine; tail short, hairy; fur very long and soft; feet small and slender, soles thickly hairy; mammæ 2-2=8.

Skull slightly made; interparietal very narrow from before backwards; interorbital edges square; palatine foramina long.

Teeth as in the smaller *Oryzomys*.

Species:—*H. bimaculatus*, Waterh. (type), *H. elegans*, Waterh., and *H. gracilipes*, Waterh.

Range. From Peru across the continent southwards to Buenos Ayres and Bahia Blanca.

VESPERIMUS, Coues.—Form murine; tail medium or long, thinly hairy; ears and feet large; mammæ 1-2=6.

Skull generally lightly made, with large interparietal, rounded or square supraorbital margins, little developed anterior plate of zygoma root, and long palatine foramina.

Teeth with low complicated crowns, the folds generally alternating on the two sides of each tooth.

Species:—*H. leucopus*, Raf. (type), *H. californicus*, Gamb., *H. aztecus*, De Sauss., *H. cinereus*, Thos., *H. taczanowskii*, Thos., &c., &c., about 10 in all.

Range. North America, southwards to Peru.

ONYCHOMYS, Baird.—Form arvicoline; tail and ears very short; fore feet very large, with elongated claws; hind feet short, with hairy soles and only four sole-pads; mammæ 0-2=4.

Skull and teeth much as in *Vesperimus*.

Species:—*H. leucogaster*, Wied. (type), and *H. torridus*, Coues.

Range. Southern United States.

SCAPTEROMYS, Waterhouse.—Form murine; tail long and hairy; feet unusually long; thumb with a claw instead of a nail.

Skull and teeth much as in *Habrothrix*, but upper part of infraorbital foramen larger, anterior plate more prominent, and teeth broader and heavier.

Species:—*H. tumidus*, Waterh. (type), *H. tomentosus*, Licht.

Range. La Plata.

PHYLLOTIS, Waterhouse.—Form murine; tail of medium length, hairy; ears very large; feet short, soles naked; mammæ 2-2=8; interdental palate-ridges 5.

Skull with large interparietal, square or slightly beaded supraorbital margins, long palatine foramina, and very prominent zygomata.

Teeth as in *Habrothrix*.

Species:—*H. darwini*, Waterh. (type), *H. boliviensis*, Waterh., *H. griseoflavus*, Waterh., and *H. xanthopygus*, Waterh.

Range. Patagonian Subregion.

¹ Apud Peters, Abh. Ak. Berl. 1860, p. 147.

HABROTHRIX, Waterhouse.—Form arvicoline; tail short, thinly hairy; fur generally long and soft; ears and feet short; soles naked; thumb with a nail; $mamm\ae\ 2-2=8$; interdental palate-ridges 4.

Skull with long facial portion, very small interparietal, rounded supraorbital margins, and long palatine foramina.

Teeth with high conical crowns, the folds in which soon wear out, leaving a simple indented outline.

Species:—*H. longipilis*, Waterh., *H. olivaceus*, Waterh., *H. xanthorhinus*, Waterh., &c., &c., about 20 in number.

Range. Patagonian Subregion; northwards on the west to Ecuador, and on the east to South Brazil.

OXYMYCTERUS, Waterhouse.—Like *Habrothrix*, but with a nail instead of a claw on the thumb, and with an elongated muzzle.

Anterior plate scarcely developed, its edge slanting.

Species:—*H. nasutus*, Waterh. (type), *H. hispidus*, Pict., *H. rufus*, Desm., &c.

Range. South-Brazilian Subregion.

Megalomys, Trouess.¹, founded on *H. pilorides*, Pall., seems to me to fall within the genus *Holochilus*, Bdt., and not to be a true *Hesperomys* at all.

Tylomys, Peters (*Neomys*, Gray), should, on the other hand, be certainly allowed separate generic rank, chiefly on account of its very peculiarly shaped infraorbital foramen, which is of the same breadth above and below, and to which there is no projecting external anterior plate of the zygoma-root, the outer wall of the foramen being absolutely cut back instead of projecting forwards. The remarkable supraorbital ledges are also quite unique. (See Peters's figures, MB. Ak. Berl. 1866, p. 404.)

By the above arrangement it will be seen that the name *Calomys* is restricted to the small group to which it was originally applied by Waterhouse; that *Oryzomys*, which hitherto was supposed to include only two North- and Central-American species, really contains the great mass of the South-American muriform Vesper-mice to which *Calomys* has been commonly applied; and that the range of Dr. Coues's subgenus *Vesperimus* extends down as far south as Peru, since it contains the two species *H. cinereus* and *H. taczanowskii*, formerly placed by me with much doubt in *Rhipidomys*, but which I now think must either be referred to *Vesperimus* or be made the types of a new subgenus, a course which I am unwilling to adopt without absolute necessity.

With regard to the geographical aspect of M. Jelski's collection as compared with that of M. Stolzmann's, the more southern locality of the former results in the dropping out of the Ecuadorean and Amazonian species, such as *Hesperomys latimanus*, *pyrrhorhinus*, *taczanowskii*, and *albigularis*, and the appearance of such Chilian and Patagonian forms as *Rheithrodon pictus*, *H. scalops*, *H. xanthorhinus*,

¹ 'Le Naturaliste,' 1881, p. 357.

and *H. bimaculatus*; the general tendency being to a disappearance of the tropical and northern Mouse- and Dormouse-like subgenera *Rhipidomys*, *Vesperimus*, and *Oryzomys*, with the appearance and increase of the Vole- and Hamster-like *Habrothrix* and *Calomys*—a change that is curiously paralleled in the Old World by the gradual supersession of *Mus* and *Myoxus* in favour of *Arvicola* and *Cricetus*, as we go northwards from tropical to temperate and arctic regions.

As in the former paper, the measurements of a series of specimens is given in most cases; but this time in millimetres, which are used in deference to universal custom, although, in the case of small mammals, they are scarcely so convenient for practical working as the inches and tenths hitherto employed.

The species not obtained by M. Stolzmann are distinguished by an asterisk, while their number in the paper on his collection is placed after the names of those that were contained in it.

1. HOLOCHILUS (NECTOMYS) APICALIS, Peters. S. No. 3.

a to *g*. Seven immature specimens. Amable Maria and Maraynoic.

2. *HESPEROMYS (RHIPIDOMYS) LEUCODACTYLUS, Tsch.

a, *b*. Two specimens, *b* from Amable Maria, 2000 feet.

	Head and body.	Tail.	Hind foot ¹ .	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a</i> . ♀	150	198	34.5	42.5	16.5	34.0
<i>b</i> . ♀	127	178	33.0	38.4	15.5	31.0
[<i>H. latimanus</i> , Tomes, ♀. 123	165	28.0	35.5	12.7	30.0]	

Skull-dimensions.

	Total length.	Basal length ² .	Zygom. breadth.	Molar series.	Back of inci- sors to m ¹ .
<i>b</i>	35.8	33.2	19.5	6.9	9.2
[<i>H. latimanus</i> . . .	34.5	32.0	18.4	5.5	8.9]

	Palatal length ³ .	Palatal foramen.	Interorbital constriction.	Basal axis ⁴ .	Lower jaw ⁵ .
<i>b</i>	18.0	7.5	6.0	11.1	20.9
[<i>H. latimanus</i> . . .	16.6	6.8	5.6	11.0	19.0]

Fur rather crisp, and of medium length. General colour above brownish grey, below white, the bases of all the hairs slate. Dark

¹ Without claws.

² From the front of the præmaxillæ to the most posterior point of either of the occipital condyles.

³ From the front of the præmaxillæ to the end of the bony palate.

⁴ From the central point of the posterior edge of the basioccipital to the anterior edge of the lower surface of the basisphenoid (not præsphénoid, as accidentally stated P. Z. S. 1882, p. 65, footnote). This measurement gives the combined lengths of the basioccipital and basisphenoid, that of the præsphénoid being unattainable unless the skull is bisected.

⁵ Bone only.

colour of back continued down on to the metacarpals and metatarsals. Ears without a projection. Tail quite unicolor, dark brown, clothed throughout with elongated hairs, forming a distinct pencil at the tip. Feet broad, the pads very large and smooth; the proximal two so broad as to touch each other. Fifth hind toes reaching to the middle of the second phalanx of the fourth. Mammæ six; one pectoral and two inguinal pairs. Interdental palate-ridges six.

Two specimens in the collection, undoubtedly referable to Tschudi's species, show such differences from the specimen from Huambo, named by me in 1882 *H. leucodactylus*, that I am inclined for the present to consider that, after all, Mr. Tomes's species *H. latimanus*, with which M. Stolzmann's specimen agrees, should remain as a good species, and is not synonymous with *H. leucodactylus*, as I had considered it.

Judging only from the specimens I have seen, *H. leucodactylus* may be distinguished from *H. latimanus* by its larger size (see dimensions above), especially its much larger feet, its more bushy tail, larger teeth, both absolutely and relatively (see skull-dimensions), and by the presence of six instead of five interdental palate-ridges (see Plate XLIV. figs. 6 & 7). It is of course possible that specimens will yet be found intermediate between the two forms, in which case they will again have to be united.

3. HESPEROMYS (ORYZOMYS) LATICEPS, Lund. S. No. 4.

a to *l*. Twelve specimens. Junin and Amable Maria.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a.</i> ♂	127	123	30.5	37.0	17.8	30.0
<i>b.</i> ♂	127	126	30.6	37.0	17.5	30.0
<i>c.</i> ♀	126	125	29.0	34.0	16.5	29.8
<i>d.</i> ♀	118	118	29.2	33.0	17.0	28.4

**HESPEROMYS LATICEPS*, var. *NITIDUS*, var. nov. (Plate XLII. fig. 1.)

a to *r*. Eighteen specimens, mostly young. Junin and Amable Maria.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a.</i> ♀	123	149	30.9	34.0	17.8	28.4
<i>b.</i> ♀	121	135	30.6	34.0	17.0	28.4
<i>c.</i> ♂	118	133	31.3	34.3	17.8	27.7
<i>d.</i> ♂	118	148	32.0	35.0	18.8	30.4
<i>e.</i> ♂	117	135	29.9	34.0	19.0	27.4

These specimens are readily separable at sight from the ordinary *H. laticeps*, more resembling *H. albigularis*, Tomes, or *H. vulpinoides*, Schinz, in their general appearance; but a closer examination shows

that the points of difference between them and *H. laticeps* are all such as are explainable on ordinary climatic grounds, supposing that their home is hotter than the places in which *H. laticeps* ordinarily lives.

They are characterized by their dark rich rufous colour, apparently pure white bellies, though the hairs are slate-coloured at their bases, longer tails, bicolor for their proximal inch, proportionately longer hind feet, and larger ears. Their skulls are quite similar to those of the true *H. laticeps*.

In this variety we have, so to speak, the commencement of a species, which appears to be gradually becoming differentiated from another common and widely-spread form, and which will possibly in the future become more and more distinct from its parent, as the individuals representing the intermediate stages die out, until it is itself worthy to rank as a separate species.

[*HESPEROMYS (ORYZOMYS) GALAPAGOENSIS*, Waterh.

Two skins of this species were obtained by M. Stolzmann at Tumbes in North Peru, but were not sent to me in time to be included in my account of his collection. As the occurrence of this species on the mainland has not been hitherto published, I take this opportunity of recording the fact of its presence in Peru. There are also two specimens of it in the British Museum, collected by Mr. Fraser in Ecuador.]

4. *HESPEROMYS (ORYZOMYS) LONGICAUDATUS*, Benn. S. No. 6.

a to *c*. Two specimens (*a* and *b*) from Amable Maria, 2000 feet, and one (*c*) without special locality.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a.</i> ♀ . .	83	112	22·1	23·0	12·2	20·4
(?) <i>c.</i> ♂.	84	100	23·0	23·6	11·0	21·0

Specimen *c* is of a much lighter colour than usual, and differs in certain other unimportant respects from ordinary *H. longicaudatus*, but may be considered for the present to represent only a pale variety of that species.

5. *HESPEROMYS (ORYZOMYS) SPINOSUS*, Thos. S. No. 7.

a. Amable Maria. *b.* No special locality.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a.</i> ♂	86	104	22·6	25·4	13·2	21·0
<i>b.</i> ♂	84	97	22·4	24·6	11·6	19·8

These specimens are in every respect like the types of this interesting species, described from M. Stolzmann's collection.

6. *HESPEROMYS* (*CALOMYS*) *BIMACULATUS*, Waterh., var.
LEPIDUS, var. n. (Plate XLII. fig. 2.)

a to *f*. Six specimens. Junin.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a</i> . ♂	76	34	17.0	24.0	14.5	20.8
<i>b</i> . ♂	77	..	17.8	24.1	14.5	20.3
<i>c</i> . ♂	70	38	17.5	22.3	13.7	19.0
<i>d</i> . ♂	68	35	16.2	..	12.5	19.8
<i>e</i> . ♀	71	38	17.7	22.8	14.0	20.4
<i>f</i> . ♀	59	33	16.2	21.0	12.2	18.0
[Co-type of <i>H. bimacula-</i> <i>tus</i> ♀	58	50	16.2	20.4	12.2]	

Skulls.

	Total length.	Basal length.	Zygom. breadth.	Molar series.	Inc. to m ^l .	Palat. length.	Palat. foram.	Interorb. constr.	Basal axis.	Lower jaw.
Of <i>b</i> . ♂	23.9	21.9	13.5	3.6	6.0	11.9	...	4.0	7.1	13.1
<i>e</i> . ♀	23.1	21.2	12.7	3.6	5.8	11.2	5.0	4.0	7.1	13.0
[<i>H. bimacu-</i> <i>latus</i> ..	23.4	...	12.0	3.4	5.9	11.2	5.5	3.9

Fur remarkably long, soft and silky. General colour dull fawn, somewhat darker on the centre of the back, through the intermixture of numerous long black hairs. Fur all over the body slate-coloured for three quarters of its length, the tips of the hairs yellow on the upper surface and pure white on the belly. Feet and tail wholly snowy white.

Ears (Plate XLIV. fig. 12) very large, oval, without projection, covered inside and out with short, yellowish-brown hairs; laid forward they reach considerably beyond the anterior canthus of the eye. Tail uniformly hairy, the scales almost entirely hidden. Soles (Plate XLIV. fig. 13) hairy for their proximal two thirds, the pads small and crowded towards the distal end of the sole. Fifth hind toe (without claw) reaching to the middle of the first phalax of the fourth. Claws very small, both before and behind, almost buried in the hair on the toes. Mammæ 8—two pectoral and two inguinal pairs. Interdental palate-ridges five in number.

Skull light and delicate; frontal outline markedly convex; supra-orbital edges square, but not ridged. Interparietal very narrow antero-posteriorly, but stretching right across the skull. Palatal foramen longer than molar series.

This variety may be distinguished from the true *H. bimaculatus*, Waterh.¹, by its rather larger size, much longer and differently shaped ears (see Plate XLIV. figs. 12 & 14), its shorter tail, much longer fur, slate-mixed instead of pure-white belly, and by the entire absence of supraorbital ridges on its skull. Comparative measurements both of spirit-specimens and skulls are given above.

There are in the collection six specimens of this form, which is interesting as belonging to the rare and little-known subgenus

¹ P. Z. S. 1837, p. 10; Voy. 'Beagle,' Mamm. p. 43, pl. 12 (1839).

Calomys (s. s.), of whose subgeneric validity there can be no question, although, judged by the skull only, it might be joined with the great mass of *Hesperomyes* to which I apply the name *Oryzomys*. However, its members are so different externally from any of the other Vesper-mice (see the subgeneric diagnoses given above), that it is certainly worthy of the rank originally given it by Waterhouse. The only species belonging to it are *H. bimaculatus*, *gracilipes*, and *elegans*, to which some authors would perhaps think *H. lepidus* should be added as a distinct species; but without seeing more specimens of the true *H. bimaculatus*, I do not care to describe the present form as more than a geographical variety of that animal.

7. *HESPEROMYS* (*VESPERIMUS*) *CINEREUS*, Thos. (?) S. No. 10.
a. One specimen, Maraynioc.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
a. ♂ imm. . .	89	124	29·2	31·5	16·5	26·2

A single immature male, in a bad state, is possibly referable to this interesting species. It differs from the type, however, in having the tips of the hairs rufous instead of grey, in its even more hairy ears, and in its perfectly unicolor tail—characters often of specific importance, but not sufficient to justify the description of a new species from an immature specimen only. The skull and hind foot of the typical specimen from North Peru are figured in Plate XLIV. figs. 2-5.

8. **HESPEROMYS* (*HABROTHRIX*) *SCALOPS*, Gay, Chili, Zool. i. p. 108 (1847). (Plates XLIII. fig. 1, and XLIV. figs. 1, 15, and 16.)

Nine specimens: a to g, Junin; h and i, Maraynioc.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
a. ♀	112	76	21·6	28·2	15·5	26·5
b. ♀	104	76	21·3	27·3	13·0	25·2
c. ♀	100	74	21·6	27·3	13·4	24·1
d. ♂	98	61	21·3	27·9	14·5	24·0
e. ♂	93	67	21·8	27·9	14·5	23·4
h. ♂	92	71	21·8	27·3	14·5	24·0

Skull-dimensions.

	Total length.	Basal length.	Zygom. br.	Molar series.	Inc. to m ^l .	Palat. length.	Palat. foram.	Interorb. constr.	Basal axis.	Lower jaw.
Skull of e. . .	28·1	26·0	14·0	3·8	7·4	12·7	6·1	4·6	8·3	15·2

Fur soft, of medium length. General colour dark grey, tinged on the back with chestnut. Muzzle and face, ears, feet, and lower side of tail rich rufous, forming a marked contrast to the general grey colour. Ears thickly haired, rather narrow, without a projection; laid forward they just reach to the centre of the eye. Tail hairy, bicolor, dark brown with a tinge of chestnut above, pale rufous-yellow below. Belly dull grey. Soles naked, flesh-coloured,

the pads large and prominent. Thumb with a large and prominent nail, but not a claw. Other fingers with very long claws, 4 to 5 millim. in length. Fifth hind toe, without claw, reaching to the middle of the first phalanx of the fourth. Mammæ 8, two pectoral and two inguinal pairs.

Skull rather narrow; upper margin of the orbit rounded, quite without ridges; interparietal remarkably small, only 4 millim. in breadth and $1\frac{1}{2}$ in an antero-posterior direction. Incisive foramina reaching to the first fold of the anterior molars. Incisors pale yellow above, nearly white below. Muzzle rather long and low, only 4.2 millim. in height at the anterior end of the palatine foramina. Lower jaw very thin and slender, only 7 millim. from the top of the coronoid to the tip of the angular process. Coronoid higher than condyles.

This species seems to be a house-haunting one, as the two Maraynioc specimens are labelled by M. Jelski as domestic Mice.

Gay's specimen had a tail only 50 millim. in length, but his description of the coloration is too exact to admit any doubt that the present is really his species.

H. scalops, owing to its elongated claws, was placed in the subgenus *Oxymycterus* by its describer, but, just as in the case of *H. megalonyx*, Waterh., the skull proves it to belong to *Habrothrix*, of which it is by far the most brightly marked member.

9. *H. (HABROTHRIX) OLIVACEUS*, Waterh. S. No. 12.

a, b. Two specimens. Maraynioc.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a. ♂</i>	81	74	19.8	24.0	12.7	22.8
<i>b. ♂</i>	86	89	20.5	25.6	15.2	22.9

These two specimens, like those, quite similar, collected by M. Stolzmann, I refer to *H. olivaceus*; but larger series from different localities are needed before the exact relations between *H. olivaceus*, *arenicola*, *obscurus*, *caliginosus*, and the other Vole-like Vesper-mice of the Patagonian subregion can be properly made out.

10. *H. (HABROTHRIX) CALIGINOSUS*, Tomes(?). S. No. 13.

a to m. Thirteen specimens. Junin and Amable-Maria.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a. ♂</i>	108	82	23.1	28.1	15.5	25.9
<i>b. ♂</i>	105	84	22.3	27.9	15.7	25.6
<i>c. ♂</i>	104	—	22.6	27.9	14.5	26.1
<i>d. ♀</i>	102	82	21.6	26.9	14.5	24.1

In 1882 I placed, with considerable doubt, some specimens under Mr. Tomes's *H. caliginosus*, and in the same way I now refer these specimens, which are quite identical with those of M. Stolzmann,

to that species. It should, however, be noted that there is in the Museum collection a species, represented by three specimens, agreeing *externally* quite as well as these with Mr. Tomes's description, but whose skull is wholly different, and proves it to belong to the subgenus *Oryzomys*. To which of these two species therefore the name *caliginosus* is really referable is a question which can only be settled by an examination of Mr. Tomes's type.

11. * *HESPEROMYS* (*HABROTHRIX*) *XANTHORHINUS*, Waterh.

a to *c*. Three specimens. Junin.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a.</i> ♂	76	57	17·8	22·6	10·5	20·0
<i>b.</i> ♂	75	57	17·7	21·8	11·5	20·5
<i>c.</i> ♀	73	57	17·7	21·3	12·0	19·4

This is the most northern locality yet recorded for *H. xanthorhinus*, which has been hitherto only obtained from Chili and Southern Patagonia.

12. * *RHEITHRODON* *PICTUS*, sp. n. (Plate XLIII. fig. 2.)

a to *k*. Eleven specimens. All from Junin.

	Head and body.	Tail.	Hind foot.	Forearm and hand.	Ear- conch.	Muzzle to ear.
<i>a.</i> ♀	121	91	25·1	34·0	21·4	29·9
<i>b.</i> ♀	109	89	24·1	29·7	19·5	28·5
<i>c.</i> ♂	109	88	24·3	31·0	18·3	28·0
<i>d.</i> ♂	108	91	26·6	33·0	18·3	26·6
<i>e.</i> ♂	108	90	24·9	31·6	18·8	27·8
<i>f.</i> ♂	107	90	25·4	29·9	20·4	26·6
<i>g.</i> ♂	103	91	25·4	30·6	19·0	27·9
<i>h.</i> ♂	102	82	25·3	29·4	19·3	25·4
<i>i.</i> ♂	(<i>c</i>)100 ¹	75	24·1	29·0	18·8	—

Skull-dimensions.

	Total length.	Basal length.	Zygomatic breadth.	Molar series.	Inc. to m ¹ .
Of <i>i.</i> ♂	28·0	26·5	17·0	5·6	7·1
	Palatal length.	Palatal foramen.	Interorbital constriction.	Basal axis.	Lower jaw.
	14·7	7·0	4·1	8·6	17·2

Fur long, soft and silky, with very numerous longer black or grey hairs intermixed. Upper side of head and neck clear grey, the hairs slate-coloured for seven eighths of their length, then whitish, with their extreme tips black. This grey gradually becomes darker and more grizzled on the shoulders, while on the back the white of the hairs gradually becomes more and more rufous until the rump is

¹ Skull out.

a rich bright chestnut-colour. Belly hairs slate-coloured, with pure white tips. Feet pure white. Tail thickly haired, though not pencilled, sharply bicolor, dark brown above, and pure white on the sides and below. Ears thickly covered with shining yellowish grey hairs. An inconspicuous white spot both above and below the base of each ear.

Ears large and rounded; laid forward they just cover the eyes; no projection on the anterior margin. Feet slender; the fourth toe the longest, fifth barely reaching to the end of the first phalanx of the fourth; soles naked; foot-pads smaller and more prominent than in *R. chinchilloides*. Mammæ 8—two pectoral and two inguinal pairs. Interdental palate-ridges 5; smooth posterior palate commencing between the second and third molars.

Skull (Plate XLIV. figs. 20 & 21) with the essential characters of that of *R. chinchilloides*, but the frontal outline less arched, the nasals shorter and narrower, and the interparietal narrower from before backwards. Upper edge of orbit not beaded. Anterior palatine foramen reaching to opposite the second projection of m^1 .

The nearest ally of this species is of course *R. chinchilloides*, Waterh., from which it may be distinguished by its larger ears, slenderer feet, and wholly different coloration, while of the true *Hesperomyes*, *H. xanthopygus*, Waterh., agrees most nearly in colour and proportions with it, but may be readily distinguished by its plainer colour, narrow convex teeth, and much longer tail.

EXPLANATION OF THE PLATES.

PLATE XLII.

- Fig. 1. *Hesperomys laticeps*, var. *nitidus*, p. 452.
2. *H. bimaculatus*, var. *lepidus*, p. 454.

PLATE XLIII.

- Fig. 1. *H. scalops*, p. 455.
2. *Rheithrodon pictus*, p. 457.

PLATE XLIV.

- Fig. 1. Palate of *Hesperomys scalops*.
2-5. Skull and hind-foot of *H. cinereus*.
6. Palate of *H. latimanus*, p. 452.
7-9. Palate, skull, and hind foot of *H. leucodactylus*, p. 452.
10-13. Skull, hind foot, and ear of *H. bimaculatus*, var. *lepidus*, p. 454.
14. Ear of *H. bimaculatus*, typ. var., p. 454.
15-16. Skull of *H. scalops*, p. 455.
17-18. Skull of *H. spinosus*, p. 453.
19-21. Hind foot and skull of *Rheithrodon pictus*, p. 457.

11. On the Rhynchota collected by the late Mr. W. A. Forbes on the Lower Niger. By W. L. DISTANT.

[Received June 17, 1884.]

The small Rhynchotal portion of the Entomological collection made by the late Mr. W. A. Forbes on the Lower Niger having been placed in my hands for identification, with a request that I



Thomas, Oldfield. 1884. "On a Collection of Muridæ from Central Peru."
Proceedings of the Zoological Society of London 1884, 447–458.
<https://doi.org/10.1111/j.1096-3642.1884.tb02857.x>.

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