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# NEW MAMMALS FROM BRAZIL AND PERU

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Among mammals obtained by the Field Museum before its field work in South America was temporarily discontinued, are a few belonging to species or subspecies not as yet described and named. Eight of these, of which the status seems reasonably certain, are described below. Two new subgenera of rodents, the existence and relationships of which were discovered as a result of the recent growth of American collections of neotropical mammals, are also included. For the use of material for comparison I am indebted to Dr. J. A. Allen of the American Museum of Natural History, New York, Dr. Witmer Stone, Academy of Natural Sciences, Philadelphia, and Mr. Gerrit S. Miller Jr., U. S. National Museum, Washington.

## ***Marmosa impavida neglecta* subsp. nov.**

*Type* from Yurimaguas, Peru. Altitude 600 ft. No. 19636, Field Museum of Natural History. Adult female. Collected September 28, 1912, by Malcolm P. Anderson. Original No. 55.

*Characters*.— Similar to *Marmosa impavida* of central Peru but color of under parts buff instead of soiled whitish; upper parts somewhat paler, especially sides of face and interorbital region; front of hind legs dark brown instead of grayish.

*Color*.— Upper parts in slightly worn pelage russet brown to cinnamon rufous; forehead and interorbital region pale cinnamon; black facial stripe and eye ring well marked, extending nearly to rhinarium; under parts entirely buff, the hairs of the sides of the belly normally with slaty bases, the others self-colored; short-haired part of lower leg dark brown on front and sides; tail uniformly dusky except for slight irregular light markings on under side.

*Skull*.— Very slightly larger than in typical *impavida* and having somewhat smaller mastoid bullae; otherwise similar.

*Measurements*.— Type and two adult paratypes, respectively, measured by the collector: Total length 320, 295, 295; head and body 134, 119, 129; tail vertebrae 186, 176, 166; hind foot with claws 17, 18,

19. Skull of type: Greatest length 37.9; basal length 36.9; zygomatic breadth 19; least interorbital breadth 6.2; nasals  $7.9 \times 3.9$ ; palate length from gnathion 21.4; upper toothrow c to  $m^4$  15.7; combined length  $ms^{1-3}$  6.6.

*Remarks*:— The type locality of *Marmosa impavida* as given by Tschudi is the forest region of eastern Peru between  $10^\circ$  and  $12^\circ$  latitude south. A specimen lately received from this very region indicates that typical *impavida* is appreciably different from the animal of northern Peru. This specimen was collected by M. P. Anderson at San Ramon on the Rio Chanchamayo in the Perené region at about  $10^\circ 60'$  S. lat. and is therefore to be regarded as absolutely typical of *impavida*. It is characterized by rather dark color with a strong admixture of sooty on the upper parts, by pale creamy or soiled whitish under parts except a buffy chin, and by grayish hind legs. The buff-bellied form from Yurimaguas, previously referred to *impavida*, is distinguished from the typical form at a glance.

#### **Holochilus amazonicus** sp. nov.

*Type* from Itacoatiara, Amazon River, Brazil. No. 20136, Field Museum of Natural History. Adult male. Collected May 11, 1913, by Robert H. Becker. Original No. 50.

*Characters*:— A medium-sized species allied to *Holochilus sciureus* of eastern Brazil, but larger with a heavier skull and relatively weak dentition. Similar to *H. guianae* but slightly larger with a longer tail and a heavier more ridged skull.

*Color*:— Upper parts dull ochraceous buff rather heavily mixed with dusky producing a general effect of cinnamon brown; sides brighter than back and becoming ochraceous buff as they merge with the under parts; forehead slightly duller-colored than back; chest and abdomen heavily washed with clear ochraceous buff, the hairs light neutral gray at the base and broadly tipped with ochraceous buff; throat, inguinal region, and inner sides of legs light buff, the hairs usually self-colored but sometimes with grayish bases; ears well-haired, ochraceous buff inside, somewhat darker outside; tail uniformly dusky except a very slight subbasal paleness.

*Skull*:— Decidedly larger and heavier than that of *H. sciureus*;\* rostrum much longer; cheek teeth relatively small and light, about equal in actual size to those of *sciureus*; supraorbital ridges elevated and

\* Figured by Winge under the name *Sigmodon vulpinus* (E. Museo Lundii, pt. III, pl. II, fig. 5, 1888); see Thomas, Ann. & Mag. Nat. Hist., (6), XIX, p. 495, footnote, 1897.

continuous across parietals to outer edges of interparietal; frontals somewhat expanded behind; anterior border of interparietal somewhat concave; palatine foramina large; mesopterygoid fossa extended forward at least to plane of last molars.

*Measurements*:— Three adults, measured by the collector: Total length, 389, 375, 374; head and body, 201, 193, 194; tail 188, 182, 180; hind foot with claw 45, 45, 42. Skull of type: Greatest length 41.2; basilar length 32.5; mastoid breadth 15.2; nasals  $16.3 \times 4.8$ ; interorbital breadth 4.8; length of fronto-parietal suture (between ridges) 8.1; interparietal  $10.8 \times 3$ ; palatine foramina  $8.7 \times 3$ ; diastema 12.5; upper toothrow 7.4.

*Remarks*:— The water rats of the genus *Holochilus* heretofore have been known only from extreme eastern South America, but the taking of an immature specimen in Eastern Peru \* and the discovery of the above described form in the middle Amazon region indicates that their range is much more extensive. Of the described forms, only *H. guianae*, *H. sciureus*, and *H. nanus* are geographically near the one here named. *H. nanus* of the lower Amazon region is so much smaller that it need not be considered. *H. sciureus* (type locality, San Francisco River, Brazil) evidently is closely related but its skull, as figured by Winge, is so much smaller, that there is no doubt of its distinctness. *H. guianae*, from the Kanuku Mts., is described as having the interorbital region flat without elevated ridges, a character not shown by our species. The remaining species of the genus inhabit southeastern Brazil and Argentine and on account of their heavier dentition are well distinguished from the northern forms. Doubtless all the species are very similar in color.

### ***Phyllotis definitus* sp. nov.**

*Type* from Macate, 50 miles northeast of Chimbote, Peru. Altitude 9,000 ft. No. 21125 Field Museum of Natural History. Adult male. Collected Feb. 14, 1914 by M. P. Anderson.

*Characters*:— A large full-pelaged species of relatively deep rich color and with the tail about equalling the head and body in length. Upper parts cinnamon brown mixed liberally with dusky, the rump slightly lighter than the back and the shoulders and nape inclining to grayish; nose, forehead, and sides of face decidedly grayish in definite contrast to the body; inside of ears nearly clear ochraceous, outside with some mixture of dusky; under parts buffy ochraceous, paler and more whitish

\* See Field Mus. Nat. Hist., Pub. 176, Zool., X, p. 167, Apr. 20, 1914.

on the throat and inguinal region, deeper and generally forming a definite ochraceous band across the pectoral region; all the hairs dark slaty at bases; feet buffy white, the forefeet with faint traces of dusky, the hind feet with the proximal fourth more or less ochraceous; tail dusky above, buffy white below.

Skull rather large and stoutly built, with broad nasals, heavy zygomata, and broad teeth; as compared with that of *P. darwini*,\* it is slightly larger, with broader nasals and ascending branches of pre-maxillæ; anterior part of zygomata (infraorbital region) decidedly heavier; mesopterygoid fossa narrower; teeth broader and heavier; incisors especially broad and strong.

*Measurements*.— Type: Total length 263; head and body 131; tail 132; hind foot (c. u.) 28; ear from notch (dry) 22. Skull of type: Greatest length 31.6; basilar length 25.8; zygomatic breadth 17; nasals  $12.4 \times 4.7$ ; diastema 8; palatine foramina  $7.6 \times 2.2$ ; upper toothrow 5.6.

*Remarks*.— Four specimens of this species were taken by Mr. Anderson in the mountains above the Rio Santa. They show but little variation and seem to represent a species quite distinct from any previously described. Their ochraceous ears and grayish heads suggest possible relationship with the *Auliscomys* group, but taken as a whole their characters are those of typical *Phyllotis*. However, it would perhaps not be unfair to look upon the species as a somewhat connecting form between *Phyllotis* and *Auliscomys*. Comparison of cranial characters has been made with *P. darwini* mainly because the skull in that species is of approximately the same size; it is obviously not closely related. A species which may have real relationship is *P. micropus*, which also has dark under parts and a relatively short tail; but this too is well distinguished.

### ***Auliscomys* subg. nov.**

*Type*, *Reithrodon pictus* Thomas.

*Characters*.— Somewhat intermediate between *Euneomys* and *Phyllotis*; upper incisors with slight but distinct grooves near the outer edges of their anterior surfaces; molariform teeth slightly more hypsodont than in *Phyllotis* and with the division of the anterior lobe of the second upper and lower molars persisting throughout a longer period of wear so that these teeth in specimens of average age present three outer angles instead of two; pattern of tooth crowns with angles much less oblique than in *Euneomys*; maxillary suture in front of infraorbital foramen

\* Specimens from Oroya and Junin, probably representing *P. d. posticalis*.



nearly vertical as in *Phyllotis*, not decidedly flexed forward in its lower half as in *Euneomys*; palatal pits and foramina practically as in *Phyllotis*; tail shorter than head and body as in *Euneomys*.

*Remarks*.— Some of the species of this group have been referred to *Phyllotis* and others to *Euneomys* and it is clear that although they have affinities to both, they should have some collective recognition. On the whole, they have more of the characters of *Phyllotis* than of *Euneomys* and it seems best therefore to regard the group as a subgenus of *Phyllotis*. The species referable to it with certainty are: *Phyllotis sublimis* Thomas, *P. pictus* Thomas, *P. boliviensis* Waterhouse, *P. b. flavidior* Thomas, and *P. decoloratus* sp. nov.

***Phyllotis (Auliscomys) decoloratus* sp. nov.**

*Type* from Tirapata, Dept. Puno, Peru. No. 16500 American Museum of Natural History. Adult female. Collected October 21, 1900, by H. H. Keays.

*Characters*.— Similar to *Phyllotis pictus* but smaller and paler; somewhat similar to *P. boliviensis* but decidedly smaller, especially the ears and feet, and with the color of the ears and the rump more contrasted with that of the body. General distribution of color practically as in *P. pictus* but paler throughout, the rump inclining to buffy rather than tawny, the head and shoulders a paler grayish and the feet entirely white without traces of ochraceous; inside of ears pale ochraceous buff well-contrasted with the surrounding grayish, but much paler than the rich tawny of *P. pictus*.

Skull decidedly smaller and relatively narrower than that of *P. pictus*; upper incisors distinctly grooved and rather pale in color.

*Measurements*.— Type and adult male topotype, respectively: Total length 178, 216; head and body 95, 114; tail 83, 102; hind foot 23, 25; ear from notch (dry) 17, 18. Skull of type: Greatest length 26.6; basilar length 20.9; zygomatic breadth 15.4; least interorbital breadth 4.2; nasals 10.4×4; breadth of braincase 12.6; diastema 7; palatine foramina 6.4×2; upper toothrow 5.1.

*Remarks*.— I am indebted to Dr. J. A. Allen for the privilege of examining the type and several additional specimens of this species from the collection of the American Museum of Natural History. These were at first supposed to represent *P. boliviensis*, but examination of the original description of that species in connection with a topotype kindly loaned by Mr. G. S. Miller, Jr., of the United States National Museum indicates that this is far from the case. *P. boliviensis*, as

stated by Waterhouse, has very large ears and a more uniform coloration than *P. pictus* and *P. decoloratus*. The ear in the single topotype available measures approximately 25 mm. in length whereas in the largest of eight specimens of the species here described it measures only 18 mm., a difference of nearly forty per cent. Specimens from San Antonio and Crucero, Peru, are somewhat brighter in color than those from Tirapata, but are otherwise similar.

**Akodon ærosus baliolus** subsp. nov.

*Type* from Inca Mines, Inambari River, Peru. Adult male. No. 20108 Field Museum of Natural History. Collected Aug. 11, 1900, by H. H. Keays.

*Characters*:— Similar to *Akodon ærosus* as represented by specimens from northeastern Peru (Moyobamba), but darker, more blackish, in color. General color above blackish bister or mummy brown, the rump rather more blackish than the anterior parts; lower parts correspondingly dark and showing less contrast than in *ærosus*. Skull averaging rather shorter with broader braincase and shorter nasals; otherwise similar to that of *ærosus*.

*Measurements*:— Type: Total length 190; tail 83; hind foot (dry) 25. Skull of type: Greatest length 28; basilar length 22.7; zygomatic breadth 14.7; breadth of braincase 13.4; nasals 9.8×3.3; interorbital constriction 5.7; palatine foramina 5.9×2.2; upper toothrow 4.8.

*Remarks*:— The slight characters distinguishing this form are constant in the small series examined and the great distance between its range and that of typical *ærosus* lends probability to the inference that larger series would be equally constant. In the thousand miles or more between southern Ecuador, the type locality of *ærosus*, and southern Peru, where the present form is found, there is much country not yet visited by naturalists and records of this species are few, but there can be little doubt that it has nearly or quite continuous range along the east base of the Andes from Ecuador to Bolivia.

**Dasyprocta nigriclunis** sp. nov.

*Type* from São Marcello, upper Rio Preto, Bahia, Brazil. No. 20746 Field Museum of Natural History. Adolescent female. Collected March 23, 1914, by Robert H. Becker. Original No. 559.

*Characters*:— A very distinct species with jet black nape and rump and hairy ferruginous ears; hairs of nape elongated to form a slight nuchal crest; size medium; general relationship probably with *Dasy-*

*procta prymnolopha*, but coloration differing in many respects, notably in the banded instead of clear yellowish or rufescent hairs of the sides of the rump.

*Color*.—Elongated hairs of nape and rump glossy black, the basal half of the hairs dark quaker drab, in some cases with one or two bands of pale buffy; hairs of top of head, face, sides of body, and proximal part of legs sharply banded black and buffy or ochraceous, the light bands paler and narrower anteriorly, especially on the sides of the shoulders, lighter, more ochraceous, and broader posteriorly on the sides of the rump; fore and hind legs mostly banded also, but narrowly; inner side of hind legs with a narrow line nearly clear buff; maxillary region and chin creamy buff; middle of throat with hairs broadly buff-tipped and with dark drab bases; hairs of chest ochraceous without dark bases, the same color extending along the abdomen on each side of a narrow central line of white; sides of abdomen banded ochraceous and drab; fore and hind feet black, finely sprinkled with ochraceous; front and inner sides of ears thickly clothed with rich ferruginous hairs; a thick tuft of bristly black hairs over each eye.

*Skull*.—Somewhat smaller and narrower than that of *Dasyprocta aguti*; palate narrow; palatine foramina narrow and slitlike; jugal relatively broad posteriorly but narrow anteriorly and without any pronounced tendency to the development of an angle or postorbital process; infraorbital opening of lacrymal canal at base of incisor narrow and constricted in the middle, much smaller than in other species; supraoccipital rather narrow; teeth about as in *D. aguti*.

*Measurements*.—Type, measured in the flesh by the collector: Total length 511; hind foot 113. Skull of type: Greatest length 96.2; basilar length 72.7; zygomatic breadth 43.9; least interorbital breadth 26.5; mastoid breadth 33.2; nasals  $32.3 \times 15.5$ ; length of palate 35.8; width of palate at middle of second molar 6.6; diastema 22.7; depth of jugal in middle 4.5; upper toothrow \* (alveoli) 18.2.

*Remarks*.—Of the described species of *Dasyprocta*, the only one approaching this very distinct new form is *Dasyprocta prymnolopha*, supposed to have come originally from Guiana. Although no specimens of *D. prymnolopha* are at hand, descriptions of that species, of which the best seems to be that given by Waterhouse,† indicate that there are many characters distinguishing it from the above described form. In typical *prymnolopha*, as described, the black rump is bordered on each side by clear golden or chestnut, the long rump hairs are yellow-

\* Milk premolar still present but permanent tooth in place and visible beneath it.

† Mamm. II, p. 380, 1848.

ish at the base, the ears are thinly haired and dusky, and in the skull the jugal has a well-developed postorbital process. In all of these respects *D. nigriclunis* is markedly different, the sides of the rump being mixed tawny and black, the long rump hairs are dark drab at the base, the ears are hairy and light ferruginous in color, and in the skull the jugal shows scarcely an indication of a postorbital process. The type of *D. nigriclunis* is slightly immature, for although the last molar is up in place and somewhat worn, the milk tooth is still in the last stages of functional condition. It is possible that an older individual might show some development of a postorbital process of the jugal, but this is rendered improbable by the fact that in various of the yellow-rumped species it is well marked in specimens younger than the type of *nigriclunis*.

**Caviella** subg. nov.

*Type, Cavia australis* Geoffroy & D'Orbigny.

*Characters*:— Intermediate, in a broad sense, between *Cavia* and *Galea*, having certain general cranial characters of *Cavia* and dental characters of *Galea*; palatine foramina large and roughly triangular, their length at least half the diastema; orbital branch of maxillary continuous as in *Cavia*, not broadly interrupted by lacrymal as in *Galea*; palate with a central ridge and deep lateral channels; rostral and interorbital region nearly flat, not laterally sloping; lateral boundary of rostrum formed almost entirely by the premaxillae, the shelflike development of the maxillaries found in *Cavia* and *Galea* being so reduced that the lower border of the infraorbital foramen is clearly visible when the skull is viewed from directly above; incisors projected well beyond the nasals, unpigmented as in *Cavia*; cheekteeth closely similar to those of *Galea*, the enamel loops of the middle teeth nearly equal in size and the posterior loop with no angle on its outer side.

*Remarks*:— Examination of a considerable series of skins, skulls, and skeletons of various species usually referred to *Cavia* and *Kerodon* indicates that a natural arrangement of generic and subgeneric groups requires some changes in the application of names. The name *Kerodon* should be restricted to one species, *Kerodon rupestris*, which not only differs from the others in habits, in external characters, and in cranial characters, but in important skeletal characters. Chief of these are the narrow and rounded instead of flattened sternum, the thick, heavy, and depressed spinous processes of the lumbar vertebræ, the large neural spine of the axis fully overlapping the first cervical, and the transverse processes of the atlas which are singly instead of doubly perforated on

their inferior surfaces.\* Numerous less obvious peculiarities of the skeleton of *Kerodon rupestris* appear on close comparison.

The remaining species may be divided into three groups of sub-generic rank, *Cavia*, *Galea*, and *Caviella*. *Cavia* has long been in use, *Galea* (type *G. musteloides*) has been regarded as a synonym of *Kerodon*, and *Caviella* has not heretofore received a name. Although *Cavia* has frequently been regarded as generically distinct from the species now included in *Galea*, the fact that several of the characters of *Cavia* and *Galea* are combined in *Caviella* strengthens the conclusion that the conditions may best be expressed by one generic and three subgeneric names. A synopsis of the entire group based on the most convenient and obvious characters is as follows:—

Sternum narrow and rounded.

Genus KERODON

Species: *Kerodon rupestris* Maximilian

Sternum broad and flat.

Genus CAVIA

Orbital branch of maxillary continuous; incisors unpigmented.

Posterior enamel loop of middle cheekteeth decidedly larger than anterior and deeply indented on its outer border.

Subgenus CAVIA

Species: *Cavia porcellus* Linnæus, † *C. aperea* Erxleben, *C. aperea azaræ* Wagner, *C. rufescens* Lund, *C. rufescens guianæ* Thomas, *C. rufescens pamparum* Thomas, *C. rufescens venezuelæ* Allen, *C. cutleri* Bennett, *C. atahualpæ* Osgood.

Enamel loops of middle cheekteeth approximately equal in size and shape.

Subgenus CAVIELLA

Species: *C. australis* Geoff. & D'Orbigny, *C. mænas* Thomas, *C. niata* Thomas, *C. niata pallidior* Thomas.

Orbital branch of maxillary broadly interrupted by lacrymals; incisors pigmented.

Subgenus GALEA

Species: *C. musteloides* Meyen, *C. boliviensis* Waterhouse, *C. boliviensis leucoblephara* Burmeister, *C. boliviensis littoralis* Thomas, *C. auceps* Thomas, *C. spixi* Wagler, *C. palustris* Thomas, *C. wellsi* sp. nov.

\* This character is shared with *Cavia*, but sharply distinguishes from *Galea*; no skeleton of *Caviella* has been available.

† Domestic guinea pig; syn. *C. cobaya*.

**Cavia (Galea), wellsi\*** sp. nov.

*Type* from Saõ Marcello, junction of Rio Preto and Rio Sapaõ, Bahia, Brazil. No. 20783 Field Museum of Natural History. Adult female. Collected March 19, 1914, by Robert H. Becker. Original number 533.

*Characters*.— Similar to *Cavia spixi* from the *catanga* of eastern Brazil, but very slightly darker in color and markedly different in cranial characters, the skull being shorter and broader and the audital bullae larger.

*Color*.— Fresh, unworn pelage: Upper parts wood brown and dusky finely punctulated, the hairs of the anterior part of the body deep mouse gray basally and with two or sometimes three annulations of wood brown and dusky distally; hairs of posterior part of the body paler basally, between mouse gray and light mouse gray of Ridgway; a light eye ring (tulleul buff) with a very slight interruption at the anterior canthus of the eye and a broadening at the posterior canthus which continues with slight admixture of dusky to the base of the ear and thence above the ear to a definite postauricular spot which is whitish on its lower side; inside of ears well clothed with buffy hairs; hairs of maxillary region with broad avellaneous tips, those of the lower throat similar but with narrower tips and with the dark basal color somewhat exposed; chin and fore-throat, chest, belly, and inside of legs creamy white, a few of the hairs along the median line without dark bases; upper side of fore and hind feet pale wood brown or buffy.

*Skull*.— Similar to that of *C. spixi*, but broader, and more heavily ridged; audital bullae decidedly larger; ascending branches of pre-maxillæ broader and more spatulate; supraorbital border from lacrymal to squamosal more elevated, especially anteriorly; lacrymal and maxillary arm of zygoma broader and heavier; posterior border of lacrymal with a nearly semicircular orbital process; interparietal small and triangular; palatine foramina short and relatively expanded; palatine very slightly pitted and joining maxillary evenly instead of at an angle; mesopterygoid fossa rounded in front; basioccipital narrow; foramen magnum high and narrow; cheekteeth relatively heavy; front of incisors creamy buff, paler than in *C. spixi*.

*Measurements*.— Type: Total length 234; hind foot 51. Skull of type: Greatest length 57.5 (59.2); † basilar length 45.5 (46.1); zygomatic

\* Named for James W. Wells, author of *Three Thousand Miles Through Brazil*, and explorer of the Rio Preto in 1874.

† Measurements in parentheses are those of a specimen of *Cavia spixi* (No. 20289), from Jua, near Iguatu, Ceara, Brazil.

breadth 33 (30); interorbital breadth 12.2 (12.4); nasals  $22.5 \times 8.8$  ( $22.5 \times 8.8$ ); width of nasal branch of premaxilla 2.7 (1.3); interparietal  $7 \times 4.2$  ( $11 \times 5.2$ ); width of audital bulla at point of greatest inflation 10 (8.6); diastema 14.2 (15.8); length of palate 24.5 (25.3); palatine foramina  $5.7 \times 2$  ( $7 \times 1.2$ ); upper tooththrow (crowns) 13.2 (12.1).

*Remarks:*— The external differences between this form and *Cavia spixi* are very slight and perhaps inconstant, but the cranial characters are numerous and marked. Specimens from the state of Ceara, Brazil, have been used to represent *Cavia spixi* for present comparisons although Wagler's original description of that species states that the type was obtained by Spix on the Amazon River. The name *spixi* has been applied invariably by subsequent authors to the species of the arid interior *catanga* districts of northeastern Brazil in the states of Bahia and Ceara. This region was traversed by Spix and Martius and in fact the only mention of a cavy to be found in the account of their travels occurs in a list of the animals of the Campos Geraes de San Felipe which is a dry *catanga* region lying just east of the present settlement of Januaria, Bahia. They spent considerable time in this region and especially mention hunting there and collecting a number of animals.\* The cavy is listed under the native name *prehá* and is referred to *Cavia aperea* but it is more than likely that the species of this region is the one which is here regarded as typical *spixi*. In fact, until evidence to the contrary is forthcoming, it seems necessary to disregard Wagler's statement of locality, and to assume that the type came from this part of the state of Bahia. Without examination of the type, this seems to be the only course possible, for no specimens agreeing with the original description are known from the Amazon Region unless those described as *Kerodon palustris*, from the lower Tocantins River, be regarded as such. In separating *palustris* from *spixi*, Thomas mentions no localities for *spixi*, but it seems inferred that the name was applied to the animal from Bahia and Ceara.† *C. palustris*, as described, differs from *spixi* and *wellsi* in lacking a postauricular spot and in having small audital bullae.

#### **Eptesicus diminutus** sp. nov.

*Type* (dry skin and skull) from Saõ Marcello, Rio Preto, Bahia, Brazil. No. 20971 Field Museum of Natural History. Adult male. Collected March 23, 1914, by Robert H. Becker.

*Characters:*— Similar in general to *Eptesicus hiliarii* but smaller with a particularly small light skull and a relatively slender tragus. Color

\* Spix and Martius, *Reise in Brasilien*, II, p. 542, 1828.

† See Thomas, *Ann. & Mag. Nat. Hist.*, (8), VIII, p. 608, June, 1911.

paler than in *E. hilarii*; hairs of back, head, and sides of neck broadly tipped with Mars brown effecting uniform coloration of the upper parts and entirely concealing the deep blackish brown basal color; under parts mostly pale wood brown or Isabella color with the dark brown basal color slightly exposed in a prepared skin; hairs of the inguinal region bordering the interfemoral membrane soiled creamy without dark bases.

Ears slightly thinner than in other species of *Eptesicus*; tragus relatively slender, somewhat attenuated, and less blunt at the tip than in *E. hilarii*; terminal tail vertebrae exerted as in *hilarii*.

Skull small and light, decidedly smaller throughout than in *E. hilarii*; braincase much less elevated posteriorly, its depth in front only slightly less than behind; facial portion of skull relatively long; teeth as in *E. hilarii*, but smaller.

*Measurements*:— Type, measured by collector: Total length 88; tail vertebrae 37; hind foot 10; forearm (from dry specimen) 35.7; pollex, with claw 4.7; third metacarpal 33; fourth metacarpal 33; fifth metacarpal 31.9; tibia 14.3; calcaneum 13.6; tragus, from anterior base 4.5. Skull of type: Greatest length 14.3 (15.5);\* basal length 13.9 (15) interorbital constriction 3.3 (3.8); zygomatic breadth 9.4 (10.1); breadth of braincase 6.6 (7.2); palate length, including spine 5.7 (6.5); breadth between tips of canines 3.1 (3.6); depth of braincase (inion to basioccipital) 5.2 (5.8); upper toothrow, including canine 5.1 (5.7); breadth of third upper molar 1.8 (2); lower toothrow, including canine 5.6 (6.).

*Remarks*:— Bats from various parts of South America usually assigned to *Eptesicus hilarii*, and perhaps representing a number of recognizable subspecies, vary somewhat in size, but so far as known all have decidedly larger, heavier skulls and teeth than the one above described. Although this species has the forearm only slightly shorter than in some specimens referable to *hilarii*, its skull is so markedly different that it does not seem probable that it will prove to be a geographic form of *hilarii* but rather a wholly distinct species which may be found at localities inhabited also by typical *hilarii*. Two specimens from Lagoa Santa, Minas Geraes, Brazil, have been used to represent *E. hilarii*. Another from Itacoatiara near Manaus on the Amazon evidently belongs to the same form. *E. dorianus*, *E. arge*, *E. andinus*, *E. magellanicus*, and *E. montanus* all appear to be forms equalling or exceeding *E. hilarii* in size.

\* Measurements in parentheses are those of a specimen (No. 20742) of *E. hilarii* from Lagoa Santa, Brazil.













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